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# From Literary Narrative to Video Game Narrative

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## ABSTRACT

Videogames have become a technological application that goes beyond entertainment; their participation in sociocultural processes is much more interesting and profitable than one might think. They have evolved from their original mission of amusement to other fields such as social, cultural, medical, and other categories that fall into serious games. Indoamerica University students generate videogames based on the contents they receive, however, there has not been a deep emphasis on narrative during the design process. For this reason, it is intended to define a model that allows relating literary and videogame narratives, to involve narrative design within the creative process. Based on classroom experiences, academic work and the result of the products delivered by the students, an analysis was made that determined that the story is present but is not immersed in each of the elements that can be seen from the gameplay. Based on this, bibliographic research was made regarding literary narrative and its relationship with the narrative design for the videogame, considering the significant contributions of Clara Fernández, Adrián Suárez, Jesse Schell, Scott Rogers, Oliver Pérez, among others. This work presents a model of the relationship between literary and videogame narratives, aimed at analyzing the narrative design present in the students' works. It is intended to automate this model into an easy-to-apply tool to determine the relevance of narrative design in existing and future projects.

**Keywords:** Literary narrative, Videogame narrative, Player experience

## INTRODUCTION

### New Narrative Discourses

Throughout the history of mankind, human beings have been creators and builders of life and its stories. They have learned to write and with it they have kept facts and events that involved their daily life. From the caves of Altamira, as substrates of cave paintings, we have gone through papyrus, parchment, cloth, paper, to digital devices, capable of storing large amounts of information, stories, events, images, and sounds, etc. These substrates have made the stories preserve the social, cultural, scientific, and economic knowledge of the people. Nowadays stories are not only told through a formal literary structure, there are stories that have other types of media and other ways of being narrated, an example of this are the videogames. These new creative products are a living representation of the reality we live in, a mixture of fable, narrative, technology, culture, entertainment, fun, among others, as stated by (Fernández-Vara, 2019).

Videogames are part of the new digital narratives, they are narrative discourses like literature and cinema, which show the reality of the medium that produced it, Lotman calls this reality the semiosphere. (Lotman and Navarro, 1996). Considering this, (Pérez Latorre et al., 2010) believes it is important to approach a study of the videogame and its design from a narrative perspective, as any other narrative text that produces semiosis.

### **Narratology**

Narratology is a discipline worked by several researchers of narrative discourse. In his dictionary of narratology, defines it as the discipline that studies the nature, form and functioning of narrative through its structural elements and their relation to the narrative. These important elements are identified as: narration, narrator, characters, space, time and events, which support the story told through a narrator in space and time (Bal and Boheemen, 2009).

Several studies on videogames have been carried out entirely or partially from this discipline. The videogame, regardless of being built from a story, at the moment of playing it, inevitably creates in the player an innate narrator of the individual experience, of the interaction with the game.

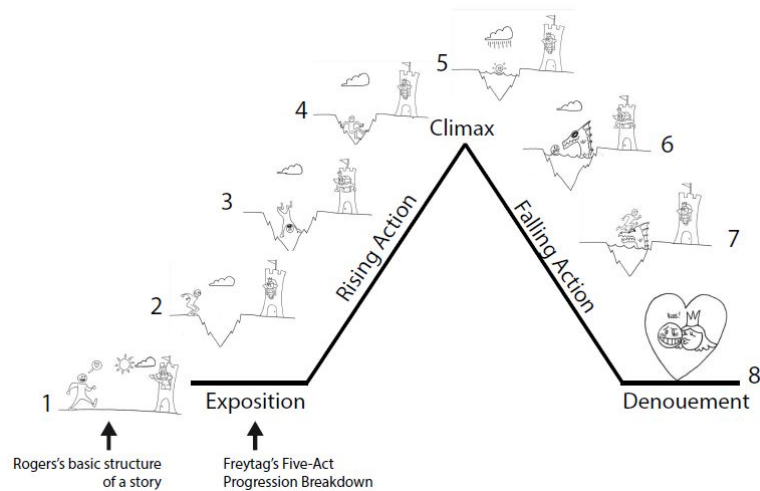
Oliver Pérez, videogame researcher, states that narratology is fundamental and essential in these new narratives, it is applicable to all types of videogames, where the level of narrativity and the narrative component of the game experience allow the construction of the plot in the mind of the player (“Interview Óliver Pérez: Ludología, videojuegos y gamificación,” 2014).

### **Videogames as Narratives**

The videogame is a narrative structure, which is built within a semiosphere and manifests itself as a communicative product. It emerges from the combination and interaction of several types of traditional and technological discourses. As a narrative structure, its backbone is the story and the way it is told.

Gustav Freytag, a German dramaturge, studied the dramatic structure of literary works and identified a model capable of defining how plot is structured in narrative. This model is known as Freytag’s Pyramid. Based on the points of this pyramid structure, Kremers, in his book *Level Design*, proposes the Five-Act Progression’s in *Level Design*, which is a reaffirmation of the pyramid model in the actions of the character in each level of the game (Kremers, 2009).

Another important work where it is stated that a videogame always has a narrative, whether or not it starts from it, is the one proposed in the book *Level Up*. Where through a theoretical-graphical description of 8 steps, the basic structure of the story is visualized. In which the character makes the narrative journey in the videogame (Rogers, 2014). This description (see Figure 1) coincides with Kremers and Freytag.



**Figure 1:** Freytag's & Rogers's narrative model comparative.

### Narrative Analysis in Videogames

Indoamerica University students have been developing videogames as part of their training, have conducted research on the subject and published applications in mobile application stores.

This work is oriented to design a narrative analysis model, based on the experiences obtained in classes, the review of the state of the art in terms of narrative and videogames, to later apply it to the products generated by the students.

### METHODOLOGY

This section describes the methods used in this paper. Starting from the review of relevant literature regarding the design and analysis of videogames, as well as the narrative from its origin to its application in these media. In this context it is important to ask ourselves the question, what is the relationship between literary narrative and video game narrative? To answer this question, it was necessary to understand the different positions on literary narration and its real incidence in the video game. In this sense, it was essential to start with a documentary approach, from the bibliographical research of topics related to relevant studies, to literary narratology and videogame narratology. From this, four outstanding authors and their studies were selected, which coincided with the proposed theme. This allowed a comparative analysis of their proposals and the delimitation of an important theoretical structure for the development of this work (see table 1).

Thanks to the teaching experience and the bibliographic review, the formal elements that relate the literary narrative with the video game were identified, as well as the narrative experience that the player can have. For this reason, an initial guide was created and tested on several videogames. For this purpose, the Scrum methodology was used (Schwaber and Sutherland, 2020), with the objective of achieving fast and relevant results through permanent

**Table 1.** Comparative analysis of the structure of video games with a narrative focus.

Author	Structure	Description	Comments
Clara Fernández	1. Context 2. Game Overview 3. Formal elements	- Game context - General description, main elements - Formal elements: design, technical parameters, player experience.	- Overly long format - Focuses on the narrative without going into depth - Descriptive analysis document
Scott Rogers	- One-Sheet - Ten-Pager - Beat chart	- One-Sheet: General game information. - Ten-Pager: Central axis of the video game - Beat chart: structure for each level	- Step-by-step description - Relationship between literary, graphic, and video game narratives - GDD
Ernest Adams & Joris Dormans	- Concept stage - Elaboration Stage - Tuning Stage	- Concept stage: general idea, target audience, role of the player. - Elaboration Stage: Mechanics, levels, story, prototypes. - Tuning Stage: Adjustment stage, design evaluation.	- Experimental versions of the game; trial-and-error - From the development stage, tests are carried out with different types of prototypes - The tuning stage allows adjustments to be made to mechanics and game-play
Jesse Schell	- Basic elements. - Player experience. - Indirect controls. - proposed lenses	- Basic elements: mechanics, aesthetics, story, and technology. - Mental skills that make the game possible: modeling, focus, empathy, and imagination. - Indirect controls: sense of freedom focused on objectives. - Lenses: analysis of each step of the design to fine-tune it.	- Important elements for the design of the video game are covered. - Includes story for creating compelling characters and narrative: string of pearls and story machine. - focuses on the player experience.

modifications. Based on the above, the construction process of the guide was carried out with videogames developed by the students during the last 5 years.

With all the described process, we proceeded to the construction of a descriptive-evaluative model of the relationship between the literary narrative and the narrative of the videogame. This structure exposes, in a clear way, elements and structural narrative relationships that contribute to the best playability of the videogame through the story. In addition, it shows the irreducible axes that allow the player-narrator to have all the tools to build the plot once the gameplay process of the interactive story is finished.

**Table 2.** Structure of the model for the narrative analysis of videogames.

Step 1 – Context	Table 3
Step 2 – Literary Narrative	Table 4
Step 3 – General Description	Table 5
Step 4 - Relationship between literary narrative and videogame narrative	Table 6

**Table 3.** Context.

STEP 1: CONTEXT									
Game title									
Game platform	platforms on which the game runs								
Target age of players	Example 15-21 (target audience)								
Genres	Shooter / walking simulator	[ ]	Actions and arcade	[ ]	Strategy	[ ]	Role-player	[ ]	
	Sports	[ ]	All simulation	[ ]	Adventure	[ ]	Puzzle	[ ]	
A summary of the game's story, focusing on gameplay	Yes	[ ]	No	[ ]	Distinct modes of gameplay	Yes	[ ]	No	[ ]
Unique selling points	Highlight cool and unique features-game play style, game modes, cool features								
Competitive products	list similar competitive products								
Number of identifiable levels	How many levels can be seen in the video game								

## RESULTS

The model presented here is oriented to the analysis of the narrative within a videogame, for which it is necessary to take all the available information of the product, play it several times and try to fill in the steps to follow (see Table 2).

### Step 1. Context

In this step, the generalities of the video game are identified, considering the structure proposed by (Fernández-Vara, 2019) and One-Sheet proposed in the Game Design Document of (Rogers, 2014), it is intended to contextualize the video game before analyzing the narrative present in it (see Table 3).

### Step 2. Literary Narrative

Step 2 shows the literary narrative and its elements as outlined by Bal (Bal and Boheemen, 2009). The story, the presence of the narrator, the characters as acting elements, spaces, time, and events are identified. This structure builds the diegesis (Genette, 1989), that is, the fictional world from which the story emerges. It is important to identify them to determine their presence throughout the videogame (see Table 4).

### Step 3. General Description

This step incorporates general information about the video game (see Table 5). The first section identifies the world where the story is told, the levels and the organization of it. We have taken into account the considerations regarding the world worked by Henry Jenkins and the organization of the game space by levels developed by Jesse Schell (Schell, 2019). The type of argument is related to the narrative, for this purpose the contributions of (Pérez Latorre et al., 2010) and (Schell, 2019). The rules section defines the


**Table 4.** Literary narrative.

**STEP 2: LITERARY NARRATIVE**

<b>Story</b> A Few short paragraphs about the story: beginning, middle, and ending, mentioning the setting, the characters, and the conflict. What can be found or described from the video game	Narrator	Extradiegetic		Intradiegetic		
		Homodiegetic [ ]	Heterodiegetic [ ]	Homodiegetic [ ]	Heterodiegetic [ ]	
	Character / Actant (Describe those you can identify)	Main character	Protagonist	Antagonist	deuteragonist	
		Secondary character				
		actant objects				
	Space	list the spaces you can observe - - -				
	Time	Describe the chronological time (if it exists)				
		Time of day				
		Times described in story				
	Events	list of the events you can observe according to story - - -				

**Table 5.** General description.

**STEP 3: GENERAL DESCRIPTION**

	Level	Game space organization					
		Linear	Grid	Web	Point in space	Divided space	dimension
World (Place a check mark under the appropriate space type)	Level 1						e.g., 2D
	Level 2						
	Level ....						
Argument type	String of pearls	Linear [ ]		Linear branched [ ]			
	Story machine	Arboreal [ ]		Simple red [ ]			
Rules (Describe rules you can identify)	Operational rules	Describe					
	Constitutive rules	Describe					
	Implicit rules	Describe					
Identification of the visible elements of the video game based on labeled maps Put below a screenshot of some scenes of the videogame with labels to identify relevant elements. An example is shown.							
				A Main character B Enemy D Church under construction F Power ups recollected G Lives H Environment			

structure of the videogame and they end up narrating the story, these attributes have been very well worked by (Salen and Zimmerman, 2003). Finally, maps with labels are used to help identify game elements and their location, based on the methodology proposed by (Kremers, 2009).

**Step 4. Relationship Between Literary Narrative and Videogame Narrative**

This is the part where it is detailed what happens in each event, this step must be repeated for each identifiable level in the video game. Several sections

**Table 6.** Relationship between literary narrative and videogame narrative.

STEP 4: RELATIONSHIP BETWEEN LITERARY NARRATIVE AND VIDEOGAME NARRATIVE						
	Criteria	Description of the elements of the video game and the relationship with the literary narrative.	Null	Low	Med	High
<b>Formal Structure</b>	<b>Title</b> It is relevant to the narrative, even if it does not exist	e.g., No title shown				
	<b>Event</b>	Narrative event that you can identify				
	<b>Protagonist</b> Is it related to literary narrative?	Comment about protagonist				
	<b>Antagonist</b> Is it related to literary narrative?	Comment about antagonist				
	<b>Goal</b>	Describe the goal you identify				
	<b>Environment</b>	Describe the environment you see in the level				
	<b>TOD Time of day</b>	Night/Day/other				
	<b>Hazard</b>	Describe the hazards you find				
	<b>Enemies</b>	List the enemies you identify				
	<b>Power ups</b>	List the power-ups you identify				
	<b>New abilities, weapons, or gear introduced/unlocked</b>	Describe if you find any of these items				
	<b>Bonus material found in level</b>	Describe if you find bonus material				
	<b>Music track</b> music and sound effects fit the narrative	Describe your interpretation of this element				
	<b>HUD</b>	Describe the HUD elements displayed				
<b>Sense of freedom based on Indirect controls.</b>  how these can be observed within the video game as a contribution to the narrative.	<b>Constraints</b>	Describe Indirect control: Constraints as a contribution to narrative				
	<b>Goals</b>	Describe Indirect control: Goals as a contribution to narrative				
	<b>Interface</b>	Describe Indirect control: Interface as a contribution to narrative				
	<b>Visual Design</b>	Describe Indirect control: Visual design as a contribution to narrative				
	<b>Characters</b>	Describe Indirect control: Characters as a contribution to narrative				
	<b>Music</b>	Describe Indirect control: Music as a contribution to narrative				
<b>Flow</b>	Does the level have clear objectives?					
	Contrasting with the story, are the player's objectives close to it?					
	Are there elements that distract the player from achieving the objectives of the level?					
	Is a balance between the increase in challenges and the skills attained by the player?					
	Is there feedback on the player's activities?					
	Is the narrative clear with the video game diegesis?					
<b>Mechanics</b>	Does the player-narrator engage with the narrative constructed by the developer?					
	Does the gameplay of the level guarantee player engagement in the first 15 seconds?					
	Do these mechanics affect the narrative? (Only check if the mechanic is present)					
	<b>Physics</b>	Describe physics mechanics you identify				
	<b>Economy</b>	Describe economy mechanics you identify				
	<b>Progression</b>	Describe progression mechanism you identify				
	<b>Tactical maneuvering</b>	Describe tactical maneuvering mechanics you identify				
	<b>Social interaction</b>	Describe social interaction mechanics you identify				

have been placed that allow to assess the presence of the narrative in each of these. The first section, taken as a reference the proposal of (Fernández-Vara, 2019) has been labeled as Formal Structure, contains basic narrative criteria and others taken and adapted from the Beat Chart (Rogers, 2014). A section is established for the sense of freedom, these parameters are closely related to narrative and are based on the indirect controls recommended by (Schell, 2019). The next section is dedicated to the flow, theory worked by (Csikszentmihalyi, 2009) in which many favorable elements have been considered for this model, they have been taken and adapted from the lenses proposed by (Schell, 2019). Finally, the mechanics have been considered, as these are the ones that are present in the gameplay, for this purpose the structure of (Adams and Dormans, 2012) has been taken (see Table 6).

Step 4 must be applied for each level; the criteria are evaluated based on the history described in step 2. The results obtained are placed in a summary table (see Table 7) that allows to determine the aspects to be improved to achieve the best experience for the player.

**Table 7.** Results of the assessment of the video game narrative.

	Null	low	med	high
Formal structure				
Freedom sensation				
Flow				
Mechanics				
<b>Total</b>				

## CONCLUSION

In this article, a narrative analysis model was proposed to be applied to the videogames developed by the students. This model was developed based on the contributions of major research and systematizing the experiences of several projects.

The proposed criteria were discussed in workshops with experts in the topics discussed with the participation of students, this helped to refine the proposal, until obtaining a document that can be applied in a simple way in the work done.

Considering narrative design in students' future videogames can guarantee works of better acceptance by the public. Having a narrative analysis model allows to determine how much the narrative fits in the videogames worked on to improve them in favor of their playability.

It is intended in future works to improve this model to include it in the videogame design process and thus obtain better products; it is also expected to automate this model so that the results are obtained immediately.

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