A multimodal approach for video game analysis: the concept of Dispositions Applied to Japanese Role-Playing Games (JRPGs)

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André Matumoto[1]

Abstract

This article proposes the concept of Disposition for multimodal video game analysis, focusing on the Japanese Role-Playing Game (JRPG) genre. We conceptualize games as artifacts that orchestrate multiple semiotic modes while simultaneously depending on player volition to activate their semiotic resources. The study is grounded in Systemic-Functional Linguistics (Halliday; Matthiessen, 2014) and its application in multimodal studies (Bateman; Wildfeuer; Hiippala, 2017), to which we incorporate some perspectives from Game Studies (Fernández-Vara, 2015; Jørgensen, 2013; Sicart, 2008). This integrated framework provides methods and categories for demonstrating the productivity of the Disposition concept in video game analysis. To illustrate this approach, we analyzed the *Battle* Disposition in the Action-JRPG *Summon Night: Swordcraft Story* (Flight-Plan, 2003), one of the six defining Dispositions in JRPGs.

Keywords: systemic-functional linguistics; multimodality; game studies; Japanese role-playing games.

1 Universidade de São Paulo (USP), São Paulo, São Paulo, Brasil; andrematumoto@usp.br; https://orcid.org/0000-0003-3544-3576

Uma abordagem multimodal para a análise de video games: o conceito de Disposições aplicado aos RPGs japoneses (JRPGs)

Resumo

Este artigo propõe o conceito de Disposição para a análise multimodal de videogames, em particular do gênero JRPG. Concebemos jogos como objetos que articulam múltiplas modalidades semióticas e, ao mesmo tempo, dependem da volição do jogador para mobilizar os recursos semióticos disponíveis. Baseamos nossa proposição na Linguística Sistêmico-Funcional (Halliday; Matthiessen, 2014) e em suas abordagens à multimodalidade (Bateman; Wildfeuer; Hiippala, 2017), conectando-as aos Estudos de Jogos (Fernández-Vara, 2015; Jørgensen, 2013; Sicart, 2008). Esse quadro teórico integrado fornece um conjunto robusto de métodos e categorias para demonstrar a produtividade do conceito de Disposição. Para ilustrar a proposta, analisamos a Disposição *Battle* no JRPG de ação *Summon Night: Swordcraft Story* (Flight-Plan, 2003), tomando-a como uma das seis disposições fundamentais que caracterizam o gênero JRPG.

Palavras-chave: linguística sistêmico-funcional; multimodalidade; *game studies*; jogos japoneses de interpretação de papéis.

Introduction

Dungeons & Dragons (D&D) (Gygax; Arneson, 1974) was the first of what was later known as RPGs, or *role-playing games* (Burn, 2023, p. 319). At first, this genre was confined to *tabletop gaming*, or games played with dice, pen, and paper. Later, however, RPG enthusiasts and video game developers explored how to recreate some of the design choices found in D&D on computers, establishing the CRPG, or *Computer Role-Playing* genre. In the 1980s, North American games such as *Wizardry* (Sir-Tech, 1981) and *Ultima* (Garriott, 1981) were among the first CRPGs. They went on to influence Japanese developers, whose cultural milieu birthed the JRPG genre, or Japanese RPG (Picard, 2021, p. 532).

To define, broadly, what JRPGs are, we draw on the chapter "Single-Player Computer Role-Playing Games" by Douglas Schules, Jon Peterson, and Martin Picard (2018, p. 114). According to the authors, western players created the label 'JRPG,' based on perceived differences in gameplay and narrative structure between Western – often of North American or European origin – and Japanese games. Specifically, players noticed that Japanese RPGs are usually more linear, narrative-focused and offer fewer customization options, whereas Western RPGs (WRPG) are less linear and emphasize character and world exploration. Currently, the term may be employed to refer to games that display said traits, instead of their geographical origin. Therefore, a game may be classified as a JRPG but be developed in another country.

Aside from the distinction between WRPGs and JRPGs, we can further categorize JRPGs into three sub-types: Turn-based, Action-based, and Strategy. Turn-based JRPGs organize their combat in turns, similarly to board games such as chess; Action-based JRPGs provide real-time combat; lastly, Strategy JRPGs present large-scale battles, with multiple combatants on a battlefield. This distinction is important, for our purposes, because we consider that, although the concept of Disposition presents categories applicable to the three subgenres (Matumoto, 2025), there are important particularities for each of them. In this article, we will focus primarily on Action-JRPGs, whose real-time combat informs many of the semiotic choices present.

In this article, we will discuss JRPGs, primarily Action-JRPGs, from a multimodal and procedural perspective. To better define what this genre encompasses, we developed the concept of 'Disposition,' a proposal grounded on systemic-functional linguistics that allows us to describe JRPGs in six sets of semiotic resources.

We define Dispositions as historically established, conventional sets of semiotic resources orchestrated for a specific function. We use the label 'Disposition' for two reasons: first, within the video game medium, these resources are multimodally and procedurally organized through code; second, they rely on a player's volition to actualize them in performance and play. As structural patterns, they both constrain and facilitate design within a genre (Giddens, 1984) (Matumoto, 2025). In doing so, they operate the specific ludic possibilities made available to the player.

To delineate the concept of Disposition, as well as the relevant semiotic resources, we ground our approach in Systemic-Functional Linguistics (henceforth SFL), whose proximity to several multimodal approaches, such as Social Semiotics (van Leeuwen, 2005), makes it apt for describing an inherently multimodal artifact. SFL, thus, provides an extensive range of categories to describe the functions of any given semiotic resource. To better align with our objectives, we will also rely upon game studies[2], which, as we will show in the analysis, offer categories compatible with SFL.

As stated, six Dispositions characterize JRPGs, which are the following: Battle, Menu, Communication, Overworld, Haven, and Dungeon[3]. Each has its own semiotic configuration and meaning-making potential. In this article, we center on the Battle Disposition, concerned with combat instances between *Agents*, or, in other words, Avatars, characters controlled by the player, and NPCs (*non-player characters*), controlled by the game itself. To illustrate how this Disposition operates, we analyzed the game *Summon Night: Swordcraft Story*

2 In Matumoto (2024), we discuss most of the categories presented herein, focusing on *Final Fantasy* (Square, 1990), another JRPG. In Matumoto (2022), and Matumoto and Gonçalves-Segundo (2022a, 2022b), we also propose categories for video game analysis from a social-semiotic standpoint.

3 For a detailed discussion of the six Dispositions, cf. Matumoto (2025).

(Flight-Plan, 2003). We chose this game because, given its release date and technological limitations, it allows us to compare JRPGs' design and technological choices in terms of the earliest titles, from the 1980s, to the most contemporary ones, from the 2020s.

The article is organized as follows: first, we describe the corpus; then, we discuss methodological choices, as well as the categories of analysis; then, we move on to the analysis of *Summon Night*. Based on the data obtained, we compare it with other JRPGs. Finally, there are the closing remarks.

Corpus description

Summon Night: Swordcraft Story (henceforth SN) (2003) is an Action-JRPG developed for the handheld platform Game Boy Advance by the Japanese company Flight-Plan and published by Atlus in North America. In the game, the player controls either a male (default name Cleru) or a female (default name Pratty) Avatar.

The Avatar chooses a familiar, called Summon Creature, to aid them in the upcoming tournament to determine the next Craftlord, an honorable title in the game's world. Aside from fighting, the aspiring candidates are expected to smith their own weapons. Therefore, the game's 10 days consist of the Avatar participating in the tournament, while also investigating a Labyrinth filled with enemies and resources, the city of Wystern, where the tournament takes place, and other locations, accessible as the game progresses. In Table 1, we provide a video to exemplify how the game works:

Table 1. SN in action

https://youtu.be/lxYnTcrSNkg?si=hAMFsn_Dk0PnFHUN&t=1622
Source: LongplayArchive and DeShelly (2023).

Aside from the fact that it was made by Japanese developers, it is possible to identify in SN, some recognizable traits of the JRPG genre, such as the *anime*-inspired art style, fantastic setting, linear, and gradual progression and limited character customization (the player can choose the Avatar's gender and name, but not its physical attributes, for example).

Methodology

This section outlines the theoretical and methodological framework that underpins this study. The objective is to present and justify SFL as our main theoretical framework, which relates to the theory's connection to approaches to multimodality. We will also delineate how Game Studies intersect with our proposal, regarding the Procedural mode. Finally, we will define which aspects of video games our approach lends itself to, as well as which types of meanings we will highlight in this article.

SFL, idealized by M.A.K. Halliday, is the main framework for our proposal. It conceives language as a social semiotic system, in which meaning arises from functional choices. The theory emphasizes that language operates through systems, organized as options, enabling speakers to select forms based on context to fulfill three *metafunctions*, or inherent functions to language: ideational (language as representation), interpersonal (language as exchange) and textual (language as message) (Halliday; Matthiessen, 2014, p. 30; Webster, 2019, p. 35, 37). In this article, we will analyze how *Summon Night* employs several semiotic resources to create ideational and textual meanings. Further along this section, we will provide our rationale for this methodological choice.

Moreover, SFL is a linguistic theory that lends itself to understanding not only the verbal mode but semiosis in general. Halliday's works, especially *Language as Social Semiotics* (1978), went on to inspire Social Semiotics, an approach that, as the name implies, concerns itself with meaning-making processes as social practices. Social semiotics borrows methods and categories from SFL and therefore offers systemic-functional based descriptions for other semiotic modes, such as the pictorial and acoustic modes (cf. Kress, 2010; Kress; Van Leeuwen, 2001; van Leeuwen, 1999).

Aside from social semiotics, there is also Multimodal Systemic-Functional Linguistics, whose principles align more closely to SFL's methods. SFL also influences other multimodal approaches, such as John Bateman's corpora-based multimodal approach (Jewitt; Bezemer; O'Halloran, 2016, p. 31, 123).

Therefore, SFL and its multimodal counterparts provide several methods and categories to analyze meaning-making processes in multiple semiotic modes. Among them, we will focus on verbal, pictorial, and acoustic modes. We will also highlight the procedural mode

(Hawreliak, 2018), inherent in games, whose discussion requires us to outline which aspects we will emphasize in SN.

Since video games are intrinsically multimodal, but also ludically motivated, our approach must consider the fact that the game is made whole when someone plays it, the *player*. Therefore, it is important to establish that our objective is to describe the *potential* games afford, which will be actualized by a player. This potential is the affordances that the combination of modes and semiotic resources present in the game, and that all players who experience the game will have contact with. To better differentiate these two halves, we will refer to the game as an artifact as 'game' and the game as an experience as 'play.' We will emphasize the 'game,' the object that precedes the act of playing.

We will call 'Procedurality' the interactive, ludic, meaning potential present in games. It refers to the fact that games are not static objects; they often work based on *code*, which determines which outputs relate to which inputs. Since players may offer countless inputs, the game must be built in a way that restricts player interaction while rewarding inputs that are expected by the code and game design. Procedurality, unlike other modes, is not "seen" by itself; it relies on other modes to work as its interface, but it is experienced during the act of play. As such, by understanding how each mode works, we can determine how procedurality, or the procedural mode, fits in the multimodal ensemble. To analyze it, we will rely on the concepts of Mechanics (Sicart, 2008, 2016) and Rules (Fernández-Vara, 2015; Salen; Zimmerman, 2012).

In turn, to understand how the other semiotic modes relate to procedurality, we mainly draw on the works of Kristine Jørgensen (2008, 2013, 2017), which offer a comprehensive account of how the pictorial, verbal, and acoustic mode interacts with one another in video games. In other words, we may analyze how these semiotic modes may interface the Procedural mode, which then allows the player to interact with the Game and, through their performance, create the 'play.'

As stated, we will direct our attention to ideational and textual meanings in video games. Currently, video games lack systemic-functional descriptions; however, there are works that draw either from Social Semiotics or Multimodality in general to analyze video games[4]. Since our objective is to describe the 'game,' not the 'play,' we consider apt the analysis of how the game establishes events and how it organizes these events into a cohesive flow. In the first case, we narrow our sights to Ideational meanings, which relate

4 For example, Jason Hawreliak (2018) proposes the 'Procedural mode,' from which we borrow the label, but not the definition (cf. Matumoto, 2025), mostly due to the fact that the author draws their definition of 'mode' from Carey Jewitt (2009, p. 282), while we base our definition on John Bateman, Janina Wildfeuer and Tuomo Hiippala's approach (2017, 2020). In turn, Óliver Pérez-Latorre, Mercè Oliva, and Reinald Besalú, in the article "Videogame analysis: a social-semiotic approach" (2017), describe video games in metafunctional terms. The distinction between our proposal and the author's lies in the fact that we propose individual categories for each semiotic mode, while the authors propose that several modes may align in their functions.

to the Participants, Processes, and Circumstances. In the second, we focus on Textual meanings, which concentrate on how the game organizes its resources coherently. These two parts are inherent to the game's design. This means all players, under normal circumstances, will interact with these meanings. Therefore, they allow us to understand the latent structure of the game as an artifact.

Regarding the Interpersonal metafunction, we relate it to the relationship between player and game. The game assigns roles to the player and, likewise, assigns roles to itself. Thus, Interpersonal meaning is realized when the game, as an object, becomes a participant in a practice, or play. Therefore, although developers imbue games with multiple potential roles the player may embody, players are free to delineate countless "play projects." Since we will focus on the game as object, the meaning potential of play will not be our main concern, and thus, interpersonal meaning will also not be analyzed.

Analytical categories

In this section, we introduce the analytical categories we employ in the analysis. We will first discuss Systemic-functional categories, followed by social-semiotic, multimodal, and game studies' categories.

Systemic-functional linguistics

From SFL, aside from the metafunctional principle, we also rely on the TRANSITIVITY system, located on the ideational metafunction. It provides several categories to describe and classify the Participants, Processes, and Circumstances – the events, the things involved in said events, and additional information that characterizes the events and things present – in a given artifact (Halliday; Matthiessen, 2014, p. 213). It is a relevant system for our discussion because, as we conceive Dispositions, specific Processes characterize each one of them.

For example, the Battle Disposition is concerned with combat. In systemic-functional terms, it deals with *Material Processes*, in which we have a Participant doing something to another. The first Participant is the *Actor*, while the second is the *Goal*. As we will see in the following sub-section, we can also analyze images in terms of the Processes and Participants depicted. Lastly, Circumstances often relate to information added to the Processes or Participants, such as the time or way the event took place.

Social Semiotics

From Social Semiotics, we rely especially on the systems present in the Grammar of Visual Design (GVD) (Kress; Van Leeuwen, 2021). For ideational meanings, we will also

describe Processes; however, they function differently in images. Firstly, Gunther Kress and Theo van Leeuwen differentiate between *narrative* and *conceptual representations*: narrative representations are characterized by the presence of a *vector*, "which represent aspects of reality in terms of unfolding actions and events, processes of change, transitory spatial arrangements and so on" (2021, p. 55); conceptual representations lack a vector and represent Participants "in terms of their more generalized and more or less stable and timeless essences" (2021, p. 76).

Regarding Textual meaning, we will focus on Composition and its systems. Composition provides coherence and meaningful structure for images and other space-based modes. It organizes ideational and interpersonal meanings through INFORMATION VALUE, FRAMING, and SALIENCE (van Leeuwen, 2005, p. 274). INFORMATION VALUE creates meaning based on the region something occupies in the image. For example, often, when we place something in the center, we perceive it as more important than other elements in the peripheries. FRAMING refers to explicit and implicit separation between elements. In other words, it creates relations of belonging and exclusion between semiotic resources. Lastly, SALIENCE refers to strategies the meaning creator may employ to highlight an element in the composition. These resources are, among others, size, positioning, and color (Kress; Van Leeuwen, 2021, p. 181-182).

Multimodality

From Bateman, Wildfeuer, and Hiippala's (2017) approach to multimodality, we will utilize the concept of Canvas. Canvas is a mode's materiality that allows for the inscription of meaningful deformations. A Canvas may be classified based on several criteria, both material and ergodic, the work required for it to be interactive. In Table 2, below, we provide an overview of these criteria:

Table 2. Canvases' feature

Category	Type	Description
Dynamic and static	Materiality	If a Canvas, as time goes by, changes independently of the consumer, it is dynamic; otherwise, it is static.
2D or 3D	Materiality	A Canvas may support depth (3D) or not (2D). It bears mentioning that a 2D Canvas may emulate three-dimensionality; however, it must employ specific techniques to do so.
Transience	Materiality	Canvas may offer perpetuity for the inscription, as in the case of writing, or not. For example, speech is only accessible at the time of inscription, but not afterward. For our purposes, a Canvas is permanent if it is present as long as the Disposition is accessible.
Role	Materiality	Canvas may ascribe distinct roles to the consumer, from observer to participant, in the meaning-making process.

Immutable Ergodic	Work	The consumer may explore the artifact; however, they cannot change the artifact's structure. For example, we are free to roam on a website, but we cannot affect the site's inner workings and page organization.
Mutable Ergodic	Work	In these cases, the consumer may modify the content and structure of the artifact inscribed in the canvas.

Source: created by the author, descriptions based on Bateman, Wildfeuer, and Hiippala (2017)

Game Studies

From Game Studies, regarding the procedural mode, we will employ the concepts of Mechanics and Rules. Mechanics (Fernández-Vara, 2015; Sicart, 2008, 2016) are the "verbs" provided by the game for the player or for itself, or, in other words, what are the Processes the agents, either the Avatars or NPCs, may trigger based on their inputs. The second is Rules, which assign structure to game elements. Rules restrict and potentialize what any agent may do and how the gameworld behaves. Thus, they are connected to mechanics: mechanics determine what the agents *can do*, while rules determine how these actions connect with one another (Egenfeldt-Nielsen; Smith; Tosca, 2024, p. 122; Salen; Zimmerman, 2012, p. 25). For example, in SN, melee attacking is a *mechanic* available for avatars and NPCs. The rules state that, if a character is hit enough times, the Battle will end, either in victory for the avatar or a Game Over. Thus, we can analyze the game either focusing on its Processes or its overall structure.

Aside from Mechanics and Rules, we also ground our approach on Jørgensen's interfacial typology. In *Gameworld Interfaces* (2013), the author proposes a comprehensive description of the ways pictorial, acoustic, and verbal resources are used in video games. Regarding pictorial and verbal resources, we have three sets of categories: *emphatic* or *ecological*, *superimposed* or *integrated*, and *ludically* or *fictionally* motivated. The acoustic mode, given its particularities, is described slightly differently. In Jørgensen (2008, 2017), the author analyzes sound as *ecological* or *emphatic*, *ludically* or *fictionally* motivated, and *player-generated* or *environment-generated*.

For our purposes, we will use the word *oriented* instead of *motivated*, since *motivated* is a commonly used label in Social Semiotics. We will also not differentiate between *ludically* and *fictionally* oriented. Since we will not focus on the games' fiction, we will analyze the semiotic resources as either *ludically* or *non-ludically* oriented. Finally, regarding the acoustic mode, we will differentiate between *agent* and *environment-generated* sound, considering both avatars and NPCs as Participants. In Table 3, we list a description of each category.

Table 3. Interfacial categories

Category	Description
Emphatic	An emphatic semiotic resource highlights something in the gameworld that is not a part of it. For example, to signal that a character has something to say for the avatar, a speech bubble may appear above their head.
Ecological	Unlike emphatic resources, ecological ones function as part of the gameworld. Thus, it often corresponds to the way information exists in the physical world.
Superimposed	Superimposed elements appear, often, as a 2D layer above the environment that offers multiple types of information, such as health bars, icons, menus, or cursors.
Integrated	Integrated elements, on the other hand, belong in the environment's geometry, not as a 2D layer above it. Both elements represented as part of the game world (e.g., the characters) or not (e.g., speech bubbles) are integrated as long as they are mapped in the environment's geometry, not "above" it.
Ludically-oriented	An interfacial resource is ludically oriented when it affects the way the player interacts with the game. For example, in SN, bigger weapons are often less nimble than smaller ones, or, in other words, they take longer to attain an 'active' state, in which they are allowed to interact with the opponents. However, they are stronger and, usually, offer more reach to the player. Thus, the weapon type affects several aspects of the gameplay.
Non-ludically-oriented	In turn, non-ludically-oriented resources do not affect the game itself, but they may affect the player's *experience*, or play. For example, in SN, both the male and female avatars play the exact same. However, there are slight text changes — to account for their gender — as well as slight changes in the avatar's relationships with other characters. Furthermore, the choice between male and female may affect how the player engages with the game. Thus, the choice relates more to the narrative and player experience than how the game operates.
Agent-generated	Encompasses all audio cues generated by agents, either avatars or NPCs. Usually, it matches the Processes triggered by the Participants, in systemic-functional terms.
Environment-generated	Encompasses all audio cues generated by the environment, or, in other words, the Circumstances of the event.

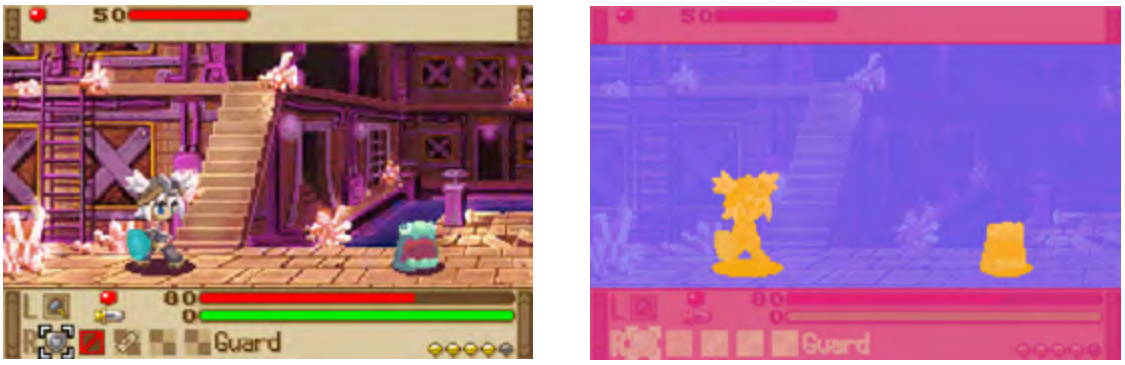
Source: created by the author, descriptions based on Jørgensen (2013)

Analysis

In this section, we will analyze SN's Battle Disposition. First, we display a screen capture and the description of the canvases, followed by the analyses of ideational and textual meanings. Finally, we propose a systematization of our findings.

To analyze SN's Battle Disposition, we start with a screen capture, displayed in Figure 1. On the left side, we display the game as it appears to the player; on the right, we provide a color-coded organization of the Canvases:

Figure 1. Battle Disposition in SN[5]



Source: Flight-Plan (2003), modified.

We propose four major text-pictorial Canvases. On Table 4, we list their description:

Table 4. Canvases on SN

Color	Canvas' name	Description
	Background	Pictorial scenery, serves as Circumstances to the battle.
	Agents	Pictorial representation of the avatar (left) and NPCs (non-playable character) (right). Respectively, the character controlled by the player and by the game itself.
	Informational	Text-Pictorial representation of the information related to the agents; for example, their HP (health, or hit points) and the avatar's weapon durability.
	Commands	Pictorial listing of available actions, aside from attacking, moving, or jumping, for the current battle.

Source: created by the author.

5 The chosen colors are based on the "Nickle_five" (Steenwyk; Rokas, 2021) palette, to which we added seven additional colors, all colorblind friendly. For that, we used the resources found in the sites Colorgorical (Gramazio, 2016) and Viz Palette (Lu; Meeks, 2019).

Regarding the acoustic mode, in Table 5, we have a video example of the Battle Disposition in action.

Table 5. SN's Battle Disposition

https://youtu.be/lxYnTcrSNkg?si=5C31Vmi1ty0b2OB4&t=1938

Source: LongplayArchive and DeShelly (2023).

We conceive two acoustic Canvas: one relates to the **Music** ( ); the other relates to the **Sound Effects** ( ), generated, for example, from the attacks. Lastly, there is a **Procedural Canvas** ( ), which we will discuss in detail later. In the following section, we analyze the Ideational meaning potential and how it relates to each Canvas.

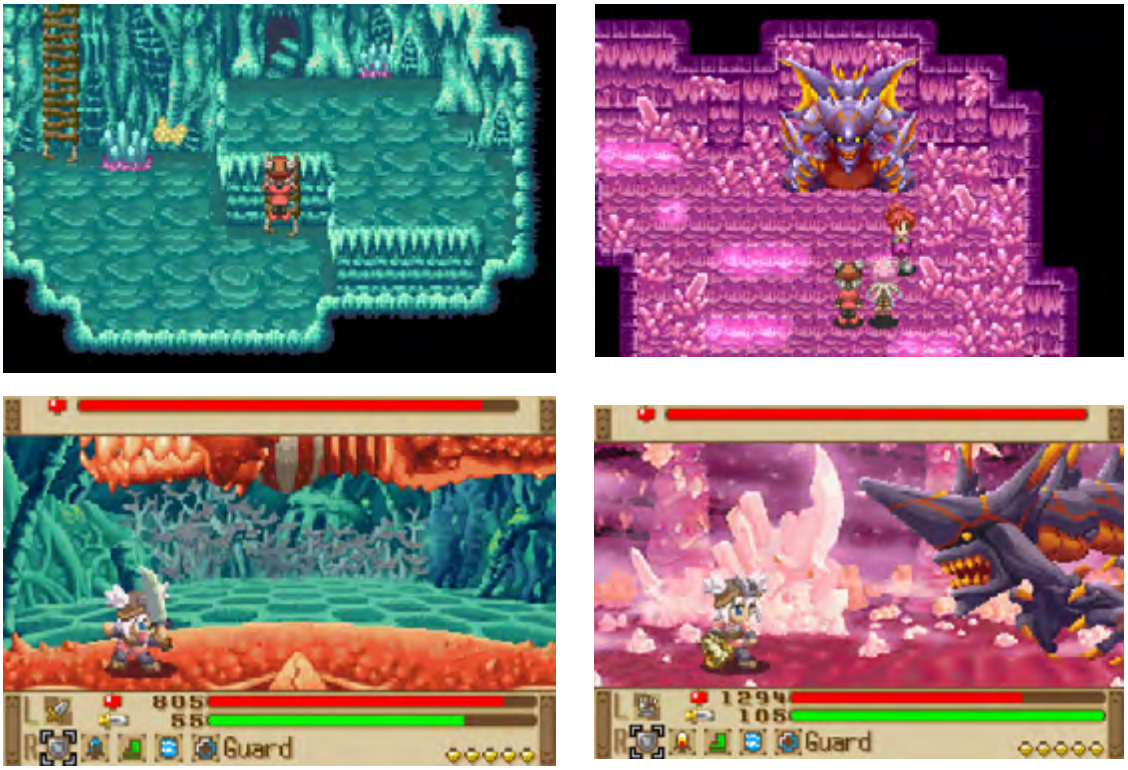
Ideational meaning analysis

As stated, Ideational meaning refers to the representation of things, events, and circumstances of these things and events. In the game, there is an event, specifically, a *Material Process* (or *Action Process*, in the pictorial mode), which features Actors and Goals.

Given the game's interactive and dynamic nature, avatars and NPCs may constantly swap roles, from Actors to Goals and vice versa. In the Battle Disposition, the Participants are realized pictorially in the **Agents Canvas** ( ). They are also verbally realized in the **Informational Canvas** ( ), which presents additional information, or *elaborates*, in SFL terms, the pictorial Canvas. Above the Informational Canvas ( ), we have the **Commands Canvas** ( ), a pictorial interface that allows the avatar to perform various functions, such as healing or using spells.

Regarding the Circumstances, the **Background Canvas** ( ) corresponds to the place in which the combat[6] takes place. It bears mentioning that, depending on the avatar's location on the Dungeon Disposition, the Background will change, which shows a way Dispositions may relate to each other, as seen in Figure 2:

Figure 2. Dungeon-Battle pairing in SN



Source: Flight-Plan (2003)

Regarding the acoustic mode, we focus on the Sound Effects ( ). As seen in the video on Table 5, specific sounds match the pictorial Process. We can define them as Interactive audio. According to Karen Collins, video game audio may respond to players' actions. This type of audio encompasses both Interactive audio, which reacts to player actions, and adaptive audio, which responds to game states (Collins, 2008, p. 139).

Considering that Avatars and NPCs are *agents*, we could define Interactive audio as sound effects that relate to the Process agents perform; then, Adaptive audio may relate to the

6 We could also consider the weapon the avatar wields as a Circumstance, similarly to an adverb, which modifies how the attack was executed. For simplicity's sake, and due to the game's multimodal nature, we will consider anything used by the Actors/Goals as part of them, at least in the non-verbal modes.

Circumstances, which include ambient sounds. These categories, therefore, relate either to the Participants and the Process they initiate or to the Circumstances of the event.

One last Canvas with Ideational Potential is the Procedural Canvas ( ). We can utilize the concept of Mechanics (Sicart, 2008, 2016) to describe and analyze how the *inputs* provided, both by the player and by the game itself, generate *outputs* that are *interfaced* by the pictorial, verbal, and acoustic modes.

Since SN is an *action JRPG*, oftentimes the game instantly matches the player's physical inputs: if the player presses right on the Control Pad, the avatar moves in this direction; if they press the A button, the character attacks, and so on. Therefore, we could say that the pictorial representation of the avatar ( ) interfaces the Procedural Canvas ( ) since they work in tandem during gameplay.

Another argument in favor of this approach is the potential for agents to collide with one another. Unlike the background, which is non-interactive, the avatar and NPCs are endowed with an invisible procedural 'body' that is distinct from their pictorial representation. This 'body' defines the physical space they occupy for gameplay logic. When they touch, the agents collide and stop ('*collision detection*'). Since this body is 'invisible', its presence must be communicated through interfacial modes. These collision areas also dictate combat; when an agent's attack *hitbox* (the area that can potentially hurt the opponent, which usually corresponds with their weapon or projectile) intersects with an opponent's *hurtbox* (a type of hitbox for receiving damage), it registers a successful hit.

The agents may also collide against invisible barriers (fittingly called "invisible walls"). In SN's case, if the player hits the limits of the space, they will be unable to continue moving. If they keep moving in that direction, they may flee the encounter. This is another argument in favor of considering the Procedural Canvas ( ) as merged with the Agent's pictorial representation ( ).

To better understand how these different Canvases relate to one another, we propose the following visual representation (Figure 3). The first one shows how the Pictorial and Text-pictorial Canvas relate to one another; the second shows a pictorial representation of the Battle Disposition in SN:

Figure 3. Canvas Distribution in SN's Battle Disposition

Source: Flight-Plan (2003), modified.

In comparison to Figure 1, we added the Procedural Canvas ( ), as well as the acoustic Canvases ( ) ( ). In accordance with our analysis, the Agent Canvas ( ) is the interface to the Procedural Canvas. The Acoustic Canvas, especially the Sound Effects ( ), on the other hand, although often related to the Processes, as stated, may also accompany the game pause status (which we could consider as Adaptive audio). Likewise, the music is pervasive throughout the Disposition. Thus, we conceive them as "covering" the whole combat.

Textual meaning analysis

Most of what we established in the previous section carries over to the analysis of the textual meanings in SN's Battle Disposition. First, we may start with the Pictorial mode, as it is the easiest to reproduce in an article, a static medium. For that, we ground our description on Composition and its systems.

Firstly, regarding the system of INFORMATIONAL VALUE, the Battle Disposition establishes a dichotomy between the center and the upper and lower regions. The center corresponds to the pictorial representation of the events. The upper region relays information about the NPC(s), while the lower region relays information about the avatar. There is also a dichotomy between the right and left regions. Usually, battles start with the avatar in the left region, while enemies start in the right. During the battle, the agents may move around and reconfigure this dichotomy, but it is relevant to point out that it is the starting point of this Disposition. Also worth noting is the fact that the information of the avatar mostly tends towards the left region. Even the HP bar, which comprises mostly the center and right area, as it depletes, moves towards the left side. These considerations are important

not only for the overall structure of the Disposition but also for the ludic potential of the game: developers must consider that a player will play the game, and, as such, the interfacial resources must facilitate such an endeavor.

Explicit FRAMING further emphasizes this dichotomy, especially between the center and the upper and lower regions. The frame lines distinguish between information and events, which also includes distinguishing between ecologically integrated resources and superimposed emphatic resources, as seen in Figure 4, below.

Figure 4. Framing in SN's Battle Disposition

Source: Flight-Plan (2003), modified

Regarding the SALIENCE of the semiotic resources, the Avatar and NPCs are more than likely to be the focus of attention of the player. Therefore, strategies such as detailing – the characters are more detailed than the informational areas –, positioning – in the center – and color contrast – between the agents, the background, and the brownish informational areas – all work in tandem to highlight the resources relevant to play. Further, it is worth noting that the informational elements – such as the HP bar – also use color and framing to highlight them, which, again, relates to the player experience. Thus, we could consider salience as a strategy employed by the developers to help the player focus on what is most important in a real-time brawl.

Regarding the acoustic mode, music is the most salient resource for textual meaning. Specifically, we notice that musical changes often denote dispositional changes or game state changes. In SN, the music that plays during the exploration of the Dungeons is interrupted by the Battle Disposition theme when combat starts. When the avatar is victorious, a specific fanfare plays, accompanied by the result screen. This demonstrates that, even though music does not *cause* dispositional change, it is a *cue* that the change has happened. Therefore, it relates to the way the game organizes its Dispositions.

Lastly, procedural textual meaning can be related to Rules. Rules, as stated earlier, constrain (limit and enable) the player's interaction possibilities. Regarding the Battle Disposition, we could describe the defeat and win conditions as follows: "if one of the

battling sides can no longer fight (Health Points, HP = 0), then the Battle Disposition ends; if the avatar wins, the player may continue playing; if the NPCs win, the game ends (Game Over); the player then has to load a previous saved state and continue from there". Although *mechanics* are the means to reach win and lose conditions, we can textually analyze the actual *results* because they determine how the Disposition structures the events. In the example provided, depending on the way the battle unfolds, different possibilities trigger. Therefore, procedural meaning is inscribed in the *code*, whose conditionals dictate what *inputs* lead to what *outputs* and *results*.

Textually, then, we concern ourselves with how the resources relate to one another and how developers employ them to meaningfully create the play progression and flow the player follows as they play. In the case of the Battle Disposition, this involves not only how the resources work in the Disposition itself, but also how the game allows the player to access Battle and leave it as well. Regarding the Procedural mode, there are other rules that dictate the structuring of the Battle Disposition but are only accessible through the game's *code*. Given the aims and limitations of this paper, we will not discuss the technical aspects of the game, but the example provided allows us to peer into this mode and how it is organized for play.

Systematization

Based on the analysis, we can categorize Canvases based on their material and work requirements – ergodic – as well as their interfacial features. In Table 6, we list an overview of the Canvases' structure:

Table 6. Canvases' features

Canvas	Name	Materiality	Ergodic	Interface
	Background	Static, 3D, Permanent, Observer	Immutable	Ecological, Integrated, non-Ludic
	Agents	Dynamic, 3D, Permanent, Participant	Mutable	Ecological, Integrated, Ludic
	Informational	Dynamic, 2D, Permanent, Participant	Mutable	Emphatic, Superimposed, Ludic
	Commands	Static, 2D, Permanent, Participant	Mutable	Emphatic, Superimposed, Ludic
	Music	Dynamic, ∅, Permanent,	Immutable	Emphatic, non-Ludic
	Sound Effects	Dynamic, ∅, Transient	Mutable	Emphatic, Ludic
	Procedural	Dynamic, —, Permanent, Participant	Mutable	—

Source: created by the author.

Defining the Battle Disposition

Based on SN's analysis, we can surmise that the Battle Disposition concentrates on the Material Process, in which avatar(s) and NPC(s) function as both Actors and Goals. They face one another in combat until one of the sides emerges victorious or flees. Ideationally, the verbal and pictorial modes are realized, prototypically, by three canvases: one for the Participants; one for the Circumstances; and, lastly, one for information related to the Participants. Since the Participants are pictorially realized, so are the Processes. Acoustically, the sound effects canvas often correlates with the Processes triggered by the agents. Lastly, procedurally, we can analyze the Mechanics, or the actions afforded to the Participants. Textually, it is common for the superimposed canvases to be framed differently from the integrated canvases, which are often the focus of the game, usually through SALIENCE and INFORMATION VALUE. The music canvas provides the player with cues regarding dispositional changes and, less commonly, game state changes. Lastly, rules define how the game's procedurality – the agents' actions – lead to different game states, which often relate to, but are not limited to, win and loss conditions.

Conclusions

This article demonstrates that the concept of Disposition is productive to analyze video games. The categories herein employed also show how linguistics, in this case SFL, and approaches to multimodality may be useful in game studies, echoing Bateman, Wildfeuer and Hiippala's perception on how multimodality and game studies may benefit one another (2017, p. 336).

Furthermore, our results fit in a still nascent branch of multimodal studies (Stamenković; Jaćević, 2019, p. 277), but also show the productivity of analyzing video games as ludically oriented artifacts, in which the player's interaction is paramount to make them whole.

Lastly, the scope of this study opens possibilities for further inquiry. Firstly, Dispositions may allow us to better describe JRPGs as a genre, moving away from impressionist descriptions to more systematic approaches, which consider the game's many systems and semiotic resources. It also opens the possibility of analyzing how the player's interaction creates a myriad of meanings, based on the way they interact with said systems and resources.

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