

## Symbolic consumption in digital games: an analysis model

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### Abstract

The article presents the *Analysis Model of Symbolic Consumption in Digital Games*, developed with theoretical and methodological contributions from the Semiology of Social Discourses, Game Studies, and the Communication Model as a Symbolic Market. From the study of the production of meanings by players in digital entertainment games, the elaboration of the model developed the idea that symbolic consumption results from a succession of articulated movements ranging from reception *sensu stricto* to appropriation. Developed and applied in research that focused on the consumption of meanings of health, the model allowed not only to highlight the networks of meanings, but also that these networks intertwine discourses of physical and virtual life and that the different ways in which the senses are

consumed vary according to different contexts and forms of player involvement. The methodological development allowed the creation of analytical categories for the study of symbolic consumption.

**Keywords:** Communication. Symbolic consumption. Discourse analysis. Digital games. Analysis model.

## Introduction

Studying the productive cycle of the senses, in its permanent dynamics, requires concomitant methodological development, based on emerging empirical objects and different theoretical contributions. New media add new challenges to analysis, which are accentuated in the case of digital games, particularly due to their specificity as a media and their constant and accelerated transformation. With this article, we aim to present the *Analysis Model of Symbolic Consumption in Digital Games*, developed and applied in the doctoral thesis “*Is health life? Symbolic consumption in digital entertainment games*” (CARVALHO, 2020), which focused on the consumption of health senses, studying digital entertainment games. We consider the premise that these games, which receive the largest investments and are distributed to large markets across the globe, are relevant cultural products, producers of senses, that compete for a place in the imagination and in social practice.

The work that enabled the creation of the Model of Symbolic Consumption in Digital Games began in the master’s thesis “*Senses of health in digital games*” (CARVALHO, 2016), when we studied the production of senses of health in the popular and critically successful games *BioShock* and *Deus Ex: Human Revolution*. The understanding that, in the communication process, senses are produced, circulate, and are consumed by interlocutors (ARAUJO, 2002) leads to a multidimensional analytical perspective, which can focus on the specific movements of this process. Thus, in the master’s research we studied the senses of health from the analytical perspective of production, carrying out an analysis of the game device through game sessions performed by the researcher, who simultaneously took on the role of player (CARVALHO; ARAUJO; VASCONCELLOS, 2018). The analysis revealed these games as a rich and elaborate space for the production of health senses, which can emerge from both fictional aspects and game rules and mechanics, in an intertwined and complementary functioning (CARVALHO, 2016).

Continuing this work, in doctoral research the analytical perspective shifted to symbolic consumption, bringing the player into the scene, as an important part of the productive circuit of senses as the game device, or perhaps even more important, if remember that, without at least one player, there is no way a game can happen (CARVALHO, 2020). We chose to analyze the consumption of health senses by players through the development of a methodological path that, when tested, resulted in the construction of the *Analysis Model of Symbolic Consumption in Digital Games*. In this article, in addition to presenting the model, we address its theoretical-methodological construction.

The *Analysis Model of Symbolic Consumption in Digital Games* considers the player’s relationship with the game to be a communicational relationship. Its foundation is in the field

of Communication, combining theoretical-methodological contributions from the Semiology of Social Discourses with an appropriation of the more recent field of Game Studies, which supported the specific characteristics of the games to be considered.

The Semiology of Social Discourses refers to Pinto's (1994) approach, who formulates three postulates: the *infinite semiosis* makes us understand that any object can be endowed with meanings, functioning as the crossing point of several chains of interpretants that refer to each other in an infinite way, forming a large network of senses; the *enunciative heterogeneity* is opposed to the idea of the uniqueness of the subject as the empirical author of a text, as the subject is not a source of meaning, but a passing point in the circulation of senses within the network of discursive practices; In turn, the postulate of the *political economy of the signifier* reminds us that every object is a cultural phenomenon produced in a given historical context, which "must be studied as a communication phenomenon based on the production/circulation/consumption of senses" (PINTO, 1994, p. 16)<sup>1</sup>.

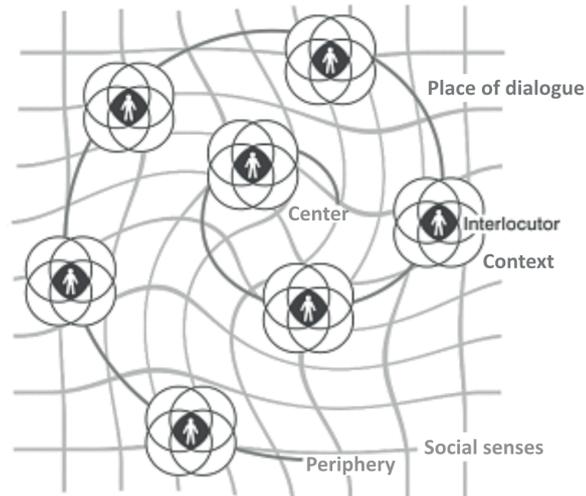
In Games Studies, we opted for a framework of multidisciplinary studies where intersections with Communication are found, but which differ from research in other disciplines by placing games and the activity of playing as a central theme and not just as mere examples (FRAGOSO; AMARO, 2018). Through Game Studies, we understand the challenge of studying games not only as objects, but as processes that only occur with the participation of players (AARSETH, 2001). Through Bogost's (2007) concept of *procedural rhetoric*, we understand how, through the rules and mechanics of the game, this rhetoric corresponds to the most specific form of sense production in games. This concept complements the more focused look at digital games by Juul (2005), who explains that modern games are made up of fictional worlds and real rules. While its rules exist in the "real world", are objective and mandatory, the game's environment and narrative are completely fictional.

## Theoretical elements of the model

From here, we will present the parts that make up the model, focusing on its theoretical foundation, until we arrive at the visual representation of the complete model. We begin, however, by presenting another model that we appropriated, the *Model of Communication as a Symbolic Market*, by Araujo (2002, 2004), which articulates postulates and approaches from the Semiology of Social Discourses and was the main source of the theoretical bases of our analytical proposal. (Figure 1).

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1 All the quotes originally written in Portuguese have been freely translated.

**Figure 1** – Model of Communication as a Symbolic Market

Source: Araujo (2004, p. 173, own translation).

One of the foundations of this model is the work of Verón (1993) who, in his theory of sense, considers this as the result of a productive system constituted by an articulation between production, circulation and consumption. For the author, a theory of the social production of senses could not be limited to a study only on production, otherwise it would not be possible to understand the process of social semiosis.

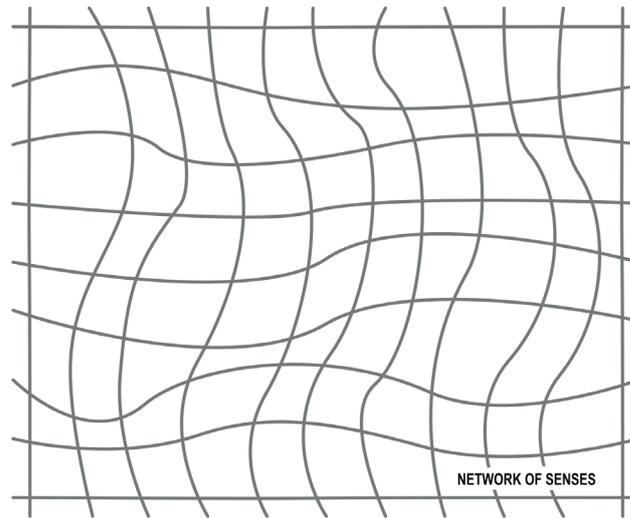
Articulating these and other conceptual elements that already exist in other theoretical frameworks (particularly coming from the work of Bourdieu, Foucault, Maingueneau and Barbero), Araujo (2002, p. 288, own translation) formulates that

Communication operates in the manner of a market, where social meanings – symbolic goods – are produced, circulate, and are consumed. The people and discursive communities that participate in this market negotiate their merchandise – their own way of perceiving, classifying, and intervening in the world and society – in search of symbolic power, the power to constitute reality.

Based on the *Model of Communication as a Symbolic Market*, we will now highlight one of its elements to begin the presentation of the parts that constitute the new model that we are proposing in this article. In Figure 2, the drawing represents the network of meanings, where social meanings are produced, circulate, and are consumed (in the specific case we are dealing with, during the interaction between player and game), as “a mesh of threads, whose undulating trace seeks characterize the continuous transformation of the senses, in their circulation

process.” (ARAUJO, 2004, p. 170). This network creates connections between all the other elements that will be presented below.

**Figure 2** – Network of social senses



Source: made by the authors.

Returning to the *Model of Communication as a Symbolic Market*, this operates on the assumption that communication is carried out through continuous and multidirectional flows of information and knowledge between interlocutors, with these flows being determined by different contexts, seen as sets of variables that enable, in an articulated manner, the existence of a text or a discourse (ARAUJO, 2002, 2004, 2009). The author chooses four contexts as most relevant:

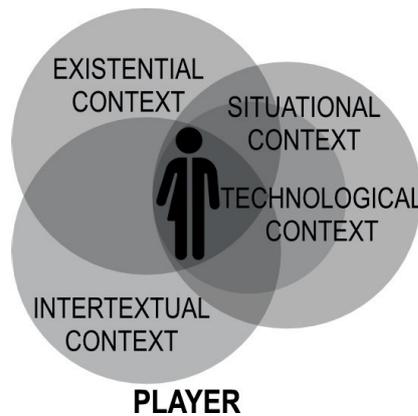
- i. the *existential context* concerns the constitution of the interlocutors as people in the world: their life history, gender, class, age, group identity, etc. Despite being specific to each interlocutor, it is socially constructed;
- ii. the *textual context* deals with the contiguity relationship between texts on the same spatial or temporal surface. The position of a text in relation to those close to it is part of the conditions for the production of meanings;
- iii. the *intertextual context* is constituted by dialogical relationships between texts, like the previous one, but which do not depend on physical or temporal proximity. The intertext varies with the knowledge and experience of each interlocutor, thus establishing a link between the existential and intertextual context and expanding the possibilities of polysemy of texts;

- iv. the *situational context* refers to the social place from which the interlocutors speak and participate in the dispute of meanings, at the time of the interlocution. Social place largely defines a person’s right to speak and have their speech considered legitimate.

To prepare the *Model for Analysis of Symbolic Consumption in Digital Games*, we made an adaptation of this typology of contexts. The *textual context* disappears, as we consider that during a game session, players are immersed in a virtual environment where the contiguous texts that appear are within the game itself. Therefore, we consider that the game covers all contiguous texts.

As for the *situational context*, at its core a specificity can be perceived that stands out in the relationship between players and the game, but due to its importance it also received the status of context: the *technological context*, a contribution from the work of Vasconcellos, Carvalho and Araujo ( 2017), for which this context designates the factors related to technology that influence the game experience, such as the technical characteristics of the equipment used, the peripherals for interaction, the use of codes, among other features (Figure 3).

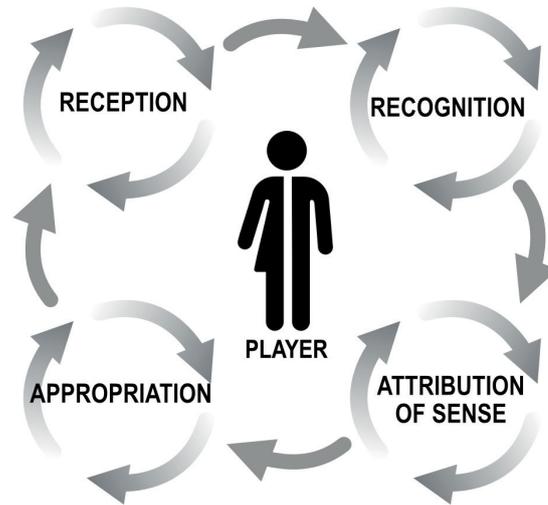
**Figure 3** – Player contexts



Source: made by the authors.

While in dialogue, players consume meanings in a process resulting from four articulated movements: *reception, recognition, attribution of sense and appropriation*<sup>2</sup> (Figure 4).

<sup>2</sup> The perception of symbolic consumption (one of the poles of the productive communication system) as resulting from a succession of articulated movements that goes from reception (initial movement) to appropriation (final movement), has been an idea defended by Inesita Araujo in classes and processes of academic orientation, as well as its methodological application in research, and is consolidated in the methodology that resulted from her post-doctoral, which has not yet been published.

**Figure 4** – Movements of the process of consumption of senses

Source: made by the authors.

For our purposes, the concept of *reception* does not correspond to the dominant approach in the so-called “reception studies”. Here, “reception” refers only to the initial movement of the consumption of senses by the interlocutors, equivalent to the first moment of contact between people and the texts intended for them. In the case of games, this is the moment when players meet the game. In this movement of receiving a game, the articulation between the existential, situational, and technological contexts assumes relevance, as players will be conditioned by their preferences, their motivation to play and their relationship with technological devices.

In the movement of *recognition*, the validation and acceptance of statements occurs with the sensitive interference of the intertext, conditioning the senses by activating the experience and prior knowledge of the interlocutor players. This movement is codetermined, then, in a more accentuated way, by intertextual and existential contexts. Players’ attempts to assign a genre to a game or to compare it to other games highlight the intertextuality in recognition, also associated with the players’ tastes and experience<sup>3</sup>.

The movement of recognition is consolidated by the *attribution of sense* by the interlocutors to the speeches received and recognized, their themes and objects, an action that configures the third movement. Contrary to the idea of meaning immanent in the code, we consider that senses are not pre-constituted, but rather shaped in the discursive process, in social relations, shaped by contexts (PINTO, 1994). In games, the attribution of senses occurs not only in the textual

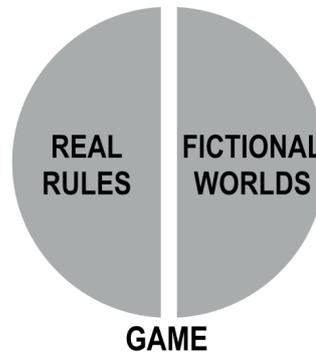
<sup>3</sup> Genres can be seen as more than a way of grouping works that have similarities between them, being understood as a communicability strategy, a cultural fact permeating between the logics of the production system and the logic of uses (MARTÍN-BARBERO, 2009). For our purposes, the notion is taken as another way in which players recognize games.

and visual content of the game, but also in contact with its operating rules. The existential and situational contexts are key at this stage. The places of dialogue that players can occupy when playing are determinant of the way in which this movement occurs.

Finally, it is in the *appropriation* movement that interlocutors, people, and social groups make the symbolic goods offered to them their own. Making something your own means converting what was received into knowledge and practices, having the possibility of incorporating it into your own life (ARAÚJO, 2009). Appropriation appears as the final movement of the consumption process, as a moment in which interlocutors incorporate senses into their own discursive practices. The existential and intertextual contexts co-determining the appropriation of senses by the players stand out here. Previous movements are also conditions of appropriation. Even if not in a fixed way, each movement will determine the next movement, as it is part of its conditions of consumption of senses. In them, we consider the active role of interlocutors as producers of senses and not as a repository that merely hosts the texts intended for them.

To consider digital games in the model, it was essential to seek theoretical support from Game Studies. One of the bases was the formulation by Juul (2005), according to which games are made up of *fictional worlds* and *real rules*.

**Figure 5** – Digital games



Source: made by the authors.

While its rules exist in the “real world”, are objective and mandatory (losing the game, for example, is a real-world event), the game’s environment and narrative are fictional. In this combination, the fictional aspect contextualizes the rules, which would otherwise be too abstract, while the rules lead players to perceive and experience how the fictional world works (JUUL, 2005). We adopted Lévy’s (1996) notion that the real is not opposed to the virtual. Therefore, when we deal with game worlds as virtual worlds, this category does not exclude the real dimension of these worlds, which according to Juul is manifested in the rules of the games.

For Juul (2005), the presence of rules is mandatory for something to be called a game, while it is possible for a game be called a game if it has no fictional world. However, most modern digital games present the player with fictional worlds, sometimes called “settings”. The author explains that, for the game to make sense as a game, the rules must be mandatory, clear, and objective, but that the fictional world is often attractive because it is optional, ambiguous, contradictory, and incoherent. The fictional world can influence the way the player understands the rules, giving clues about how they work or reinforcing their messages through fiction. At the same time, although rules and fiction may be formally separated, the player’s experience during a game is determined by both at the same time.

A concept that values this real dimension of games is Bogost’s (2007) *procedural rhetoric*, which presents it as the most specific, and most powerful, form of sense production in games. Combining the formulations of the two authors, procedural rhetoric would be the sense production activated from the real dimension of a game, that is, from the player’s relationship with the rules, mechanics and procedures established by the game. Although they are not recent concepts, we insist on highlighting them, so that the specificities of games are not erased by the appeal of their fictional worlds, which are more easily recognized because they are explored by other media considered traditional, such as literature and cinema.

## Methodological elements of the model

So that we could experiment with the analytical proposal of the model, we delimited and analyzed a *corpora*. We call it *corpora* because it was not formed a homogeneous *corpus*, but a *corpora* composed of a set of *corpus* of different natures.

In the example of our research involving players of *BioShock* and *Deus Ex: Human Revolution*, we formed the *corpora* by texts produced by players. We separated it into three different types: a *corpus* formed by the text produced in an analysis of the games carried out by a researcher in the dual position player and analyst (hereinafter player-analyst)<sup>4</sup>; a *corpus* made up of player videos published on YouTube; a *corpus* made up of interviews with players. We realize that it is important that the *corpora* are made up of a diversity of *corpus* types so that the analysis of each one can give us access to the four movements of symbolic consumption, whose emphasis will be different, due to the difference in the nature of the texts.

The game device analysis of the first *corpus* put us in contact mainly with the movements of reception and recognition typical of the contexts of the analyst-player, who equipped herself with theoretical and methodological instruments to play and analyze. From this analysis,

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4 This analysis was carried out in a master’s degree research, where the researcher played and analyzed the game device as a text, having as its theoretical foundation the perspective of the social production of meanings. More details about this analysis were published in *A saúde em jogos de entretenimento: análise da produção de sentidos em dois jogos digitais (Health in entertainment games: analysis of the production of meanings in two digital games – Own translation)* (CARVALHO; ARAUJO; VASCONCELLOS, 2018).

parameters emerged for the formulation of thematic operational axes, which were applied in the following analysis.

The analysis of the *corpus* made up of video recordings of players published on YouTube, in addition to putting us in contact with the movements of reception and recognition in new contexts, enabled a greater emphasis on the movement of attributing senses. The methodological assumption is that the analysis of these videos allows us to enter the study of semiological consumption through the observation of the attribution of senses by the players themselves, as the videos record players simultaneously playing and narrating. Here, we also consider that these videos are part of an enunciative modality specific to content created for YouTube, which aims to attract and entertain an audience. We choose videos published on YouTube because they were identified as a relevant type of video among social practices involving digital games.

The third *corpus* resulted from interviews with players, guided by an unstructured script that was enriched with results from the analyzes of the previous two *corpus*. We choose this *corpus* based on the assumption that, talking about the theme and the object outside the moment in which they are playing, players tend to show marks of the senses that have already been sedimented at some level, thus giving us access to the movement of appropriation.

A theoretical-methodological support for our elaboration is in the framework of Discourse Analysis, understood as the activity of “describing, explaining and critically evaluating the processes of production, circulation and consumption of senses” (PINTO, 2002, p. 11) linked to cultural products in a society.

Given the great diversity of Discourse Analysis approaches, we opted for Pinto’s (2002) approach, which points to a context-dependent analysis; critical in the philosophical sense; aware of the opacity of the text and the presence of forces that shape it; not focused on content interpretation; works comparatively; do not use statistical techniques in comparison; and works with formal marks as they appear on the textual surface without resorting to translations.

According to this perspective, cultural products are taken as texts, which are empirical forms of the use of any language, including verbal (oral or written), visual and/or other semiotic systems that are at work within social practices. By observing such texts, considering them part of social practices inserted in contexts (production conditions), we gain the ability to analyze texts as discourses (PINTO, 2002).

Discourse and text, as well as material referents, are theoretical concepts with methodological value. Based on Verón, (2004), we can say that “text” designates a set of significant materials; in turn, “discourse” can be understood as a set of texts, located in specific times and contexts, with the notion giving centrality to the idea of social production of meanings. On an empirical level, to analyze discourses it is necessary to analyze their texts, which are “those objects that we take from the flow of the circulation of meaning and

that we take as a starting point” (VÉRON, 2004, p. 71) to carry out a discursive analysis. The text is not limited to writing, being a set of statements that can include a wide variety of significant matters.

According to Verón (2004), the analyst must be interested in the readings that had a certain discourse as their object, in their meaning effects or, analytically speaking, in the grammars of consumption. These grammars are formed by a set of rules that describe operations. The analyst’s work consists of reconstituting such grammars based on the selected significant sets and describing discursive operations.

For the analysis of the *corpora*, we work on marks on its textual surface following Verón (2004), who points out that the analyst’s work consists of reconstituting grammars (of production or consumption) starting from the selected significant sets and describing discursive operations. Marks are not limited to linguistic ones but involve broader and non-homogeneous units. The analyst’s challenge is to be able to detect the traces of discursive operations and reach their production conditions, revealing the discursive mechanisms that organize social practice. It is then up to this professional to choose a set of textual marks that indicate the existence of such traits (VERÓN, 2004).

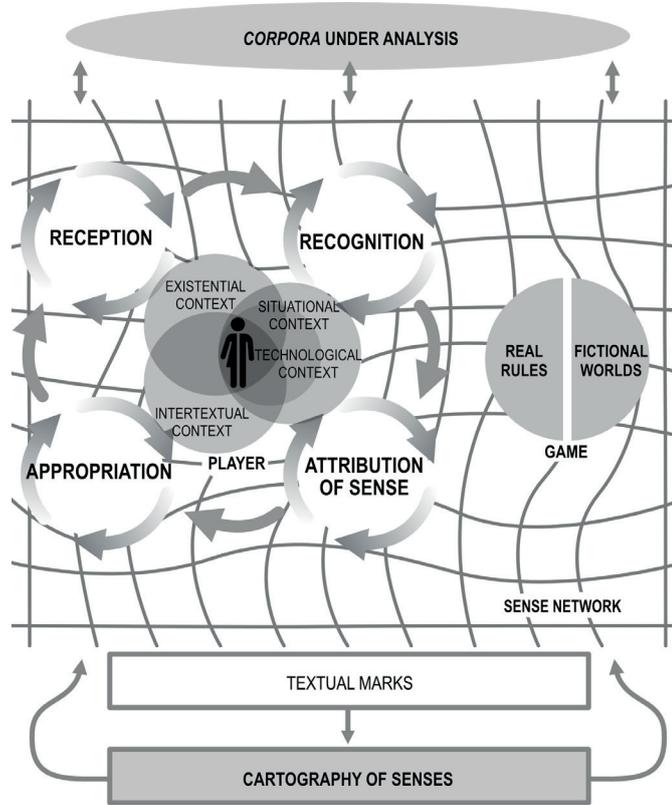
We will not dwell on the topic of marks, as it is not the objective of this article, we only indicate that the marks that gained importance in our analysis were in the order of full words and verbs (related to actions in the game) (MAINGUENEAU, 1997), and of forms of silence (ORLANDI, 2007).

The work on marks in the text was present throughout the analysis and was one of the bases for the construction of maps as part of the analytical process. The model analysis and production process vigorously included the visual representation of findings in the form of maps. However, more than a visual representation of results, the visual creations constituted their own form of analysis, whose product – the maps – simultaneously contributed to the perception of similarities and deviations in the comparison of the specific findings of the *corpora*. The analysis, therefore, was woven like cartography, through the successive construction of maps of symbolic consumption.

## **Visual representation of the Analysis Model of Symbolic Consumption in Digital Games**

The *Analysis Model of Symbolic Consumption in Digital Games* has its complete visual representation (Figure 6), with each part of its design having a representation of a theoretical principle or the methodological path presented.

**Figure 6** – Model for Analysis of Symbolic Consumption in Digital Games



Source: made by the authors.

The set represents the process of symbolic consumption in the player’s relationship with the game. Both the game and the player are a passing point in the circulation of senses within the network of discursive practices. The game device is understood as consisting of fictional worlds and real rules. The articulation of the player’s contexts co-determines the conditions of symbolic consumption. Symbolic consumption unfolds into four subsequent movements: reception, recognition, attribution of sense and appropriation. The *corpora* must be analyzed according to their textual marks, to be reduced into elements that can be visually represented in the form of a cartography of senses.

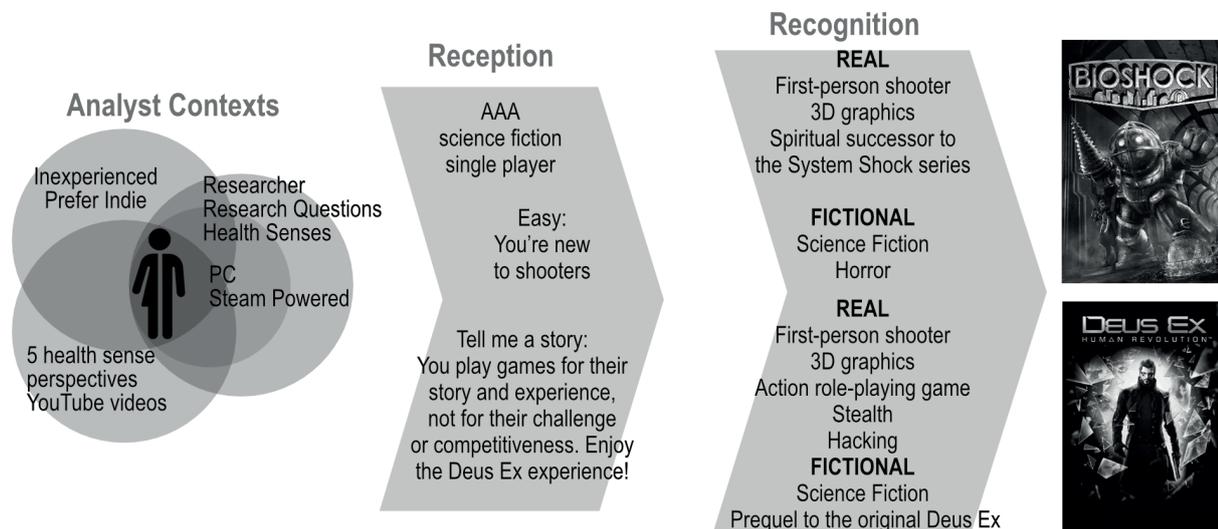
### Maps as an analysis process

The *Analysis Model of Symbolic Consumption in Digital Games* was applied in doctoral research and its resulting maps can be found in Carvalho’s thesis (2020). The

cartography was formed by four types of maps: consumption conditions, fictional dimension, real dimension, and involvement dimensions. Considering that the *corpora* was made up of three *corpus* (analyst texts, videos and interviews), we created maps referring to each of these *corpus* for each of the four types of maps, totalling twelve maps. The authors designed the maps using the Adobe Illustrator application. Below, we illustrate the creation of these maps with some examples.

The maps of consumption conditions highlighted the players' existential, intertextual, situational, and technological contexts, the movement of reception and the movement of recognition for each *corpus*. One example of this kind of maps is on Figure 7.

**Figure 7** – Example of map of discursive consumption conditions of interlocutors

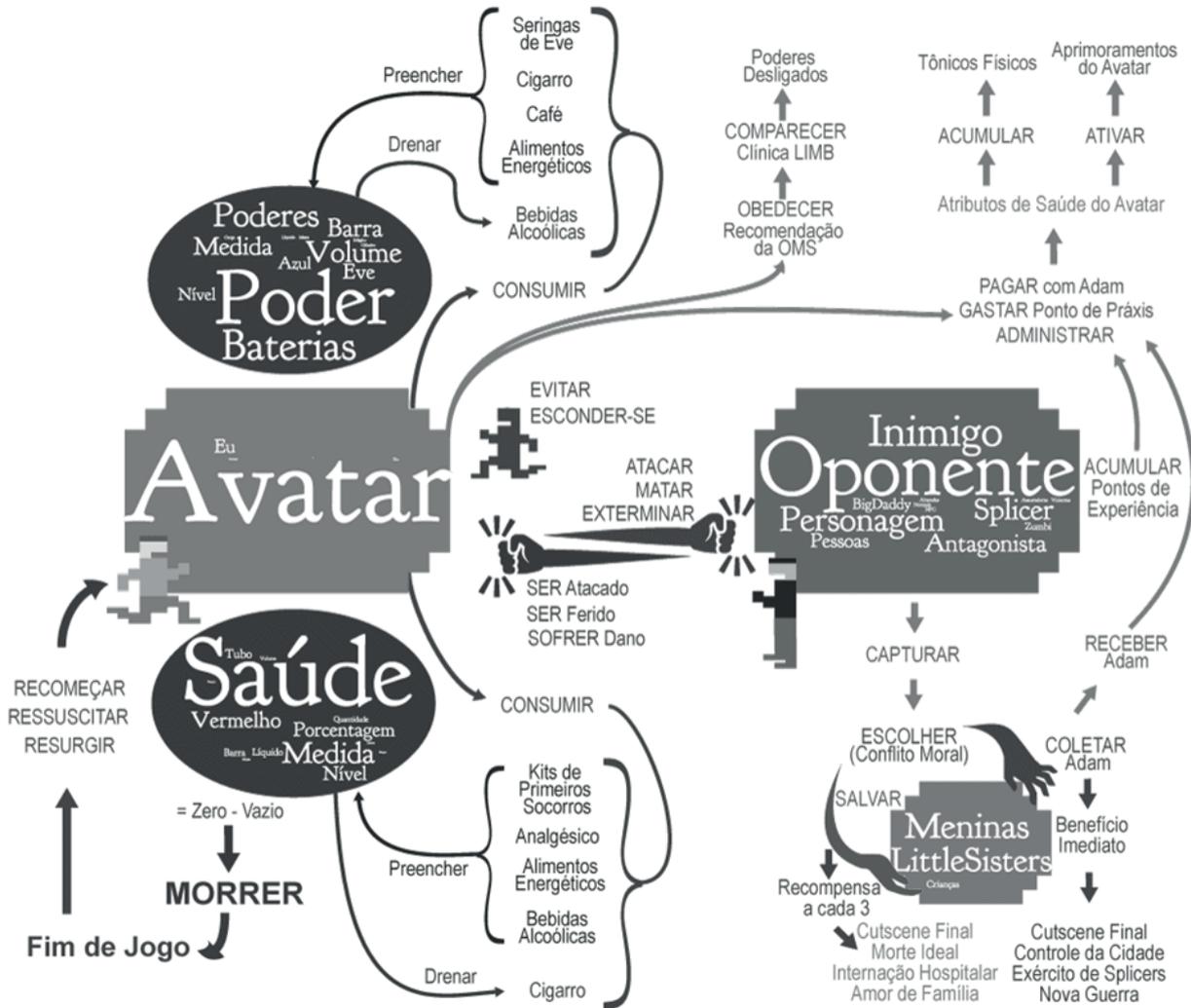


Source: Carvalho (2020, p. 125, own translation).

We created the fictional dimension maps and the real dimension maps in accordance with Juul's (2011) view that, although it is possible to make a distinction between the fictional and real dimensions in a game, these dimensions work in an intertwined way and reinforce each other. In this way, the maps of the fictional dimension prioritized the findings regarding the fictional dimension of the games, while the maps of the real dimension were constructed to visualize aspects of game rules and mechanics, the players' choices and the words used by them to describe. For example, we have a map referring to the fictional dimension (Figure 8) that highlights players' words to form a network of senses related to health that emerged from fictional aspects such as setting, narrative and representations.



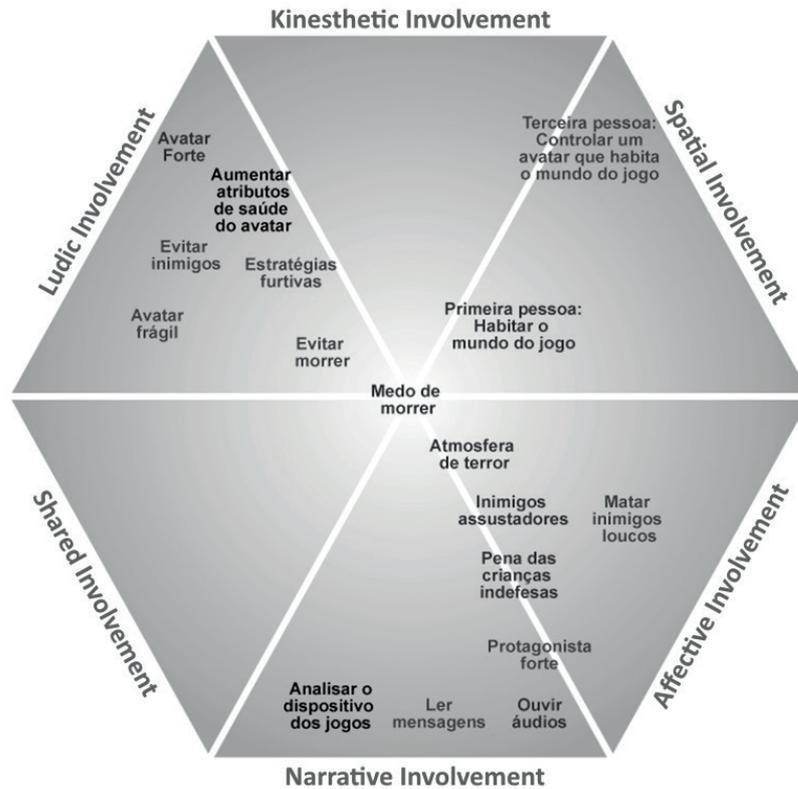
Figure 9 – Example of a map of the real dimension of games



Source: Carvalho (2020, p. 154).

Finally, the involvement dimension maps used Calleja’s Player Involvement Model (2011) to highlight the player’s involvement with the game and return to certain significant findings that cross both the real and fictional dimensions (Figure 10). The contribution of this model was fundamental to an analysis that involves symbolic consumption, as it was an instrument to address the player’s relationship with the game. The Player Involvement Model divides the different types of involvement into six dimensions: kinesthetic involvement, spatial involvement, shared involvement, narrative involvement, affective involvement, and ludic involvement.

**Figure 10** – Example of player engagement dimension map



Source: Carvalho (2020, p. 172, own translation).

The elaboration of these maps in conjunction with the previous ones favored the observation and gave more clarity to the perception that the differences related to the dimensions of the player's involvement with the game affect the networks of senses that are activated or produced in the game, more specifically the senses of health.

## Conclusion

We proposed the *Analysis Model of Symbolic Consumption in Digital Games* as a way of accessing the discursive consumption process, whenever players are playing digital games on the scene. For its construction to be possible, vigorous work of methodological creation and experimentation was necessary, with the production of heterogeneous *corpora* and analysis based on map construction.

We can say that this model provides an understanding of the process of symbolic consumption, through players' observation. This is an observation that considers the players'

contexts and divides the consumption process into four successive movements: reception, recognition, attribution of sense and appropriation.

The resource of constituting *corpora* made up of distinct textual sets proved to be laborious, but fruitful, as it allowed us to perceive the many nuances of the different types of players and, more than that, to understand these nuances as important conditions for the production of symbolic consumption. The drawing of maps added an important visual aspect to this process, in addition to operating as an organizer for the analysis, resulting in a cartography of senses that covers all the elements described in the model.

The model takes into account the specificities of games. Considering that virtual worlds also have their own modality of real existence, the production of senses within game worlds also concerns the production of senses in other aspects of people's real lives. However, this model was not proposed to be used in research that addresses issues of behavior change that games could cause in players. Another type of approach and other methods would be necessary for this.

While playing, people immerse in a world with its own procedures and often repeat the procedures of other well-known games. Experience with other games constitutes a relevant intertext, which influences the way people play new games, make choices, and consume senses.

One of our main conclusions is that the relevant contexts for studying the consumption of senses by players do not only concern virtual worlds; they also include the existence and intertexts external to games. When they are inside the worlds of these games, people activate senses that were appropriated from their intertexts outside the games. When playing, people also trigger values and beliefs that circulate outside the virtual environment, which influence the gaming experience and symbolic consumption.

In this way, the model helps to highlight the networks of senses and observe that these networks intertwine discourses of physical and virtual life, in which one feeds back to the other in a continuous flow, and that the different ways in which the senses are consumed also vary according to different contexts and forms of player involvement. Even though it is positioned at the analytical pole of symbolic consumption, the model helps to observe, in a very particular universe, the idea that inextricably intertwined processes of production, circulation and consumption of senses are underway in the productive cycle of senses.

The model proposal came from concerns about the potential of digital games as new spaces for communication, which can also address health. This is a model proposal, which still needs to be tested on other objects and *corpora*, to prove its relevance. Far from representing an end point, through this model we suggest new paths and possibilities to continue investigations into games as media.

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### **Authors' contribution**

Carvalho, F. G.: conceptualization, investigation, formal analysis, writing – original draft, writing – review and editing; Araujo, I. S.: conceptualization, writing – review and editing; Vasconcellos, M. S.: writing – review and editing.

### **Data availability**

The authors confirm that the data supporting the findings of this study are available within the article and references.

### **Conflict of interest**

The authors declare no conflict of interest.

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