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The Transdisciplinary Encounter of Narratology and Visual Art in MMORPGs

Abstract: The aim of this paper is to present and analyze visual elements of MMORPG (Massively Multiplayer Online Role-playing Game) storyworlds as important aspects of both world-building and the immersion capacity of virtual worlds. MMORPGs are characterized by multi-user environments called 'open worlds', in which maps and geography of space play an important role. Geography and maps that represent these geographical forms in the game play a significant role in creating the *worldness* of virtual space and the narratives located in them. The same goes for the features of architecture, natural or outer space expanses. Visual elements contribute to the narrative in numerous ways, which is analyzed in detail using a transdisciplinary approach – the narratological apparatus and especially the shift towards postclassical narratology. Another, but not less important visual aspect that will be presented in the paper is the importance of character appearance, as well as clothing (armors) and equipment in the context of building character identity for themself (the player) and the way they present themselves to other players. All of these aspects indicate that visual space (geographical and architectural) as well as visual characteristics of the characters have an important role in storytelling, supporting the transmedial praxis of contemporary narrative forms.

Keywords: transdisciplinarity; transmediality; MMORPGs; visual storytelling; storyworld; visual art.

Since the beginning of mass gaming in the 1970s all the way to this day, video games have become (and remained) the media, cultural practice, art, and creative industry that is continuously developing. The growth and development are not only related to the scope and diversity of their production, demographic variety, and number of players, but also to the advancement of software and hardware capabilities that support games. Until the present day, an almost photorealistic quality of the visual experience has been attained, while artificial intelligence has been perfected to support complex narratives (plot, characters, gameworld space portrayal). The popularity of games, especially MMORPGs (Massive Multiplayer Online Role Playing Games) that

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encompass features and possibilities of other game genres, may be explained by the fact that they provide a broader and richer spectrum of interactivity, diverse narratives and immersion into storyworlds, satisfying the need for social connection, playing and maintaining social roles and relationships. Another reason why these games are so popular and interesting to study is their "range of story worlds and openness to the appropriation of other, autonomous texts, transtextual and transmedial links, quotations and allusions to artworks and works of popular culture".[1]

The approach we will apply in the analysis fits the concept of post-classical narratology, first used by David Herman (1997). Although post-classical narratology is oriented primarily toward the context (ideological, philosophical, social, political etc.), origin and reception of a narrative, we will analyze another important aspect of the post-classical approach – unfurling of possibilities, ranges and means of expression of the narratives themselves to other types of art, primarily visual ones – in order to point out transmediality as important praxis of contemporary narrative forms and transdisciplinarity as valuable methodological approach for studying new narrative strategies.

This paper will attempt to determine the relation between narrative and visual elements, how they complete each other and how they intertwine (in the categories of maps, architecture, concept art, character design and gameworld) to create gameworlds that occupy the attention of large numbers of players.

The concept of gameworld that will be used in this paper is actually a stand-in for the term storyworld coined by Marie-Laure Ryan.[2] In both cases (storyworld/ gameworld), the term entails the characteristics of the world (worldness) described by Lisbeth Klastrup and Susana Tosca.[3]

The visual identity of a gameworld should satisfy certain expectations. For example, if a game falls into the epic fantasy genre its visual elements (character clothes and weapons, the appearance of settlements) should match this genre. Likewise, a gamer will not expect a spacecraft to land in the middle of an epic narrative, or for the characters, architecture, objects etc. to appear futuristic. Therefore, certain genres also carry certain visual codes which, apart from encouraging the narrative logic and fulfilling the player's *horizons of expectations*,[4] create an appropriate logic of the gameworld in which the narrative is developed. A visually well-designed space – which can be identified with convincing game space in certain context – enables a higher quality immersion, a higher narrative potential and player activity. Don Carson notes that

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[1] Biljana Mitrović, "Šekspir i video-igre," in: *Šekspir i transmedijalnost*, ed. by Nevena Daković, Ivan Medenica, and Kristina Radulović (Beograd: Fakultet dramskih umetnosti, 2017), 63.

[2] Marie-Laure Ryan, "Story/Worlds/Media: Tuning the Instruments of Media-Conscious Narratology," in *Storyworlds across Media: Toward a Media-Conscious Narratology*, ed. by Marie-Laure Ryan and Jan-Noël Thon (Lincoln and London, University of Nebraska Press, 2014), 25–49.

[3] Lisbeth Klastrup and Susan Tosca, "Game of Thrones: Transmedial Worlds, Fandom and Social Gaming," in *Storyworlds across Media: Toward a Media-Conscious Narratology*, eds. Marie-Laure Ryan and Jan-Noël Thon (Lincoln and London, University of Nebraska Press, 2014), 295–314.

[4] See Hans Robert Jauss, *Estetika recepcije: izbor studija*, trans. Drinka Gojković (Beograd: Nolit), 1978.

video game designers should use the techniques of *environmental storytelling*: "The story element is infused into the physical space a guest walks or rides through. It is the physical space that does much of the work of conveying the story the designers are trying to tell […] Every texture you use, every sound you play, every turn in the road should reinforce the concept"[5] – each element that doesn't belong disturbs the immersion and burdens the narrative.

Space in the Narrative and Narrative Space

Most MMORPGs follow the same narrative structure – there are multiple separate narrative levels that share the same space/map where they take place. The central narrative – through which one "progresses" through the game storyline and whose completion leads to the end of the predefined narrative line, consists of episodes/missions that in conjunction represent a rounded text that asks the player to perform certain actions in a determined order, i.e., to actualize the determined scenario in a specific space. "Going through" all of the missions leads to the end of the essential narrative of the game and, even though this does not exhaust the gameplay possibilities (the missions can often be repeated), this ending is considered the completion of the game. On this level, the freedom to improvise movement and the player's impact on the narrative is limited and they perform the set of actions in specific spaces (we will discuss their features later). Some side actions and quests need not be completed to "pass through" the central narrative and, in some cases, a player may choose which one of them they will complete and in which order. These structures provide a greater freedom of choice to players regarding where they will go and which activities they will perform in a certain geographic area (or part of the universe). The third option is for the player to freely direct the avatar on the map, explore, interact with friendly computer-generated characters (NPC[6]) or fight against animals or fantastic beings that inhabit the area they move through – often the same area where missions and quests are carried out. These decisions that constitute small narrative structures represent the largest degree of freedom that players have at choosing space, as well as the order and rhythm of the series of events. We need to keep in mind that gameplay is an important element on the narrative–space relationship level, determining that some activities are related exclusively to certain spaces: e.g., a certain type of interaction (conversation, sale, purchase, exchange of gameworld goods, dancing, communication, and arrangements between players in the same team as well as computer-generated characters is possible in cities, villages, and camps). However, fighting can only be done in other, "open" spaces. Some spaces and actions in them represent start-end points of certain parts of the narrative – missions and quests most often start in towns and are activated by communicating with computer-generated characters. Also

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[5] In Henry Jenkins, "Game Design as Narrative Architecture," in *The Game Design Reader: A Rules of Play Anthology*, ed. by Katie Salen and Eric Zimmerman (Cambridge: The MIT Press, 2006), 676.

[6] Non-player character.

in these locations, players agree for their avatars to "go through" a certain part of the set story together and protagonists of a shorter or longer narrative sequence are determined. The gameworld is organized in such manner that cities, villages, and camps, as well as regions between them, feature permanent events that are outside players' control – computer-generated characters talk to each other, move, fight, trade; wild animals, fantastic creatures or future antagonists perform certain actions. Players can observe these actions while their avatars are not active. Therefore, players become viewers immersed in the 3D environment of the gameworld, but they do not act in it, which contributes to the experience of the gameworld as an environment that exists and functions by its own rules, independent of the player who is only a guest, a viewer, or a passerby in it.

Concept Art

Concept art represents an important part of the video game visual identity formation, planning and creation. The role of concept art in video game design is the same as that of a storyboard in the creation of an animation or film. They both facilitate planning and indicate all the changes that precede the complex act of realization.

Laurie Taylor[7] claims that concept art creates a visual structure of the game and sets out the elements of the gameworld and the characters, creating style separation between them and other video games. Unlike concept art in the film industry, which is being created before the movie filming begins, the video game concept art is an integral part of pre- and post-production. As a structural and representative segment of the visual identity of the game, concept art forms the basis for the addition and building of the narrative elements (characters and their gear, locations). Also, concept art (similar to the narrow definition of a motif in literature theory) is used in game advertisements, previews, reviews, packaging, fan art, sequels, game walkthroughs, booklets, etc. Taylor notices that concept art: "forms the base structure that each game, individually or as it exists within and as a series, […] becomes the super structure from which each game unfolds and into which each game enfolds itself."[8]

In the first video games, the purpose of concept art was to add another dimension to the game design, i.e., to create an *image* of the gameworld. In the early stages of development, video games were not visually attractive as technology wasn't advanced enough yet, so concept art served as a more complex and rich visual representation – a detailed elaboration of the gameworld.

Therefore, concept art creates the basic structure for the world design that unites all dimensions of a video game, so that all its aspects and the aspects of its sequels represent the part of a visual entirety, which supports and maintains coherence and stability of the gameworld and narrative elements.

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[7] Laurie Taylor, "Networking Power: Videogame Structure from Concept Art," in *Videogames and Art*, ed. by Andy Clarke and Grethe Mitchell (Chicago, Intellect Books, 2007).

[8] Ibid., 226.

Visual Style

The visual identity of a video game requires the choice of a visual style. This is an important segment, since two games of the same genre and similar game mechanics, professions/classes/races of characters (e.g., warriors, monks, druids, mages, dwarves, elves etc.), as well as their quests and missions (e.g., capturing a fort, gathering ingredients for a magic potion, saving a princess etc.) may seem completely different just because they are visually represented in a different way (i.e. compare *Guild Wars* and *World of Warcraft*).

Aki Jarvinen highlights three graphical styles: photorealism, caricaturism and abstractionism.[9] Photorealism is a graphical style that mimics reality. The photorealistic reproduction of reality is an increasingly popular style in video game design that is developing alongside technology. Modern video games have extremely developed graphics with almost perfect simulations of objects, as well as the real-world flora and fauna. This graphical style has two subcategories: televisualism and illusionism. The first imitates TV aesthetics, mostly that of multi-camera sports broadcasts with instant replay. The other style entails a photorealistic representation of objects, characters, and other living beings in a fantastical world that a player would not be able to encounter in real life (e.g., dragons, monsters, various character races and classes, etc.). Caricaturism is a graphical style that represents main traits – the "essence" of a character or an object – by (over)emphasizing their – dominant characteristics. Even though video games with a caricatural graphic representation of the world and characters seem like cartoons, their content is often not intended for very young players (*World of Warcraft*). Abstractionism is an abstract approach to the visual representation of the gameworld that doesn't represent objects or living beings from the real world. The abstract graphical style in the narrow sense is rarely used in game design as it is not commercial enough, especially for MMORPGs.[10]

Maps

MMORPGs entail large and developed worlds that more or less rely on those from the real world (e.g., each continent in *Guild Wars* corresponds to one of Earth's continents – Europe, Asia, Africa; *EVE Online* encompasses endless space etc.). At the same time many MMORPGs are based on the adventure genre, which entails travel and also contributes to getting to know the gameworld.

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[9] In Simon Egenfeldt-Nielsen, Smith Heide, Pajares Jonas, and Susana Tosca, *Understanding Video Games: The Essential Introduction* (London: Routledge, 2008), 122.

[10] This is different from the abstraction of space and objects in early games, such as a square "ball" in *Pong* or the linear movement in *Space Invaders*, which represent the graphical limitations of their time. However, *Minecraft*'s retro 8-bit style can be counted in this category, though its inclusion is borderline and provided this is not a complete abstraction, but a graphic simplification.

'What distinguishes the cultural genre of computer games from others such as novels and movies, in addition to its obvious cybernetic differences, is its preoccupation with space' this practice takes two forms: 'As spatial practice, computer games are both representations of space (a formal system of relations) and representational spaces (symbolic imagery with primarily aesthetic purpose)'.[11]

Maps also provide a unique, encompassing visual representation in a horizontal plane[12] unlike the 3D representation of the player's immediate surroundings. Map sizes and details vary, and games usually have multiple views: the entire gameworld, the parts that the player has already visited and revealed and the parts that immediately surrounds the player. Apart from the topography, they usually also show enemy (e.g., marked as red dots) and ally (e.g., green dots) locations and movement, locations of resources and the direction toward desired goal (arrows), thereby representing navigation through the world and providing additional knowledge and information necessary to play and create the gameplay in a visual manner. Therefore, maps represent an important, direct, and encompassing virtual representation of the gameworld that is built and written throughout the entire game with other – narrative means.

Game Space

Georgia Leigh McGregor draws a parallel between video game space and architecture: "Game space is architectural in all sense of the word. Game space is a man-made construction, a built space often composed primarily of architectural elements."[13] McGregor claims that video games are simulations of space and, as such, they do not produce new patterns of space utilization, but constantly repeat basic patterns from reality (adding to those already established in the epic or science fiction literature, film and comic tradition). These patterns represent players' actions in a certain environment, and the virtual space architecture is there to guide, enable or prevent certain actions.

Further analyzing the video game architecture, she notes that there are dominant patterns of space utilization that do not exclude each other, namely *challenge space*, *contested space*, *nodal space*, *codified space*, *creation space* and *backdrops*.[14]

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[11] E. Aarseth 2001 [online] in Marie-Laure Ryan, Kenneth Foote, and Maoz Azaryahu, *Narrating Space / Spatializing Narrative. Where Narrative Theory and Geography Meet* (Columbus: The Ohio State University Press, 2016), 104–5.

[12] See chapter "Space, Narrative and Digital Media," in ibid., 101–37.

[13] Georgia Leigh McGregor, "Situations of Play: Patterns of Spatial Use in Videogames," in *Situated Play*, Proceedings of DiGRA 2007 Conference, 2, http://www.users.on.net/~georgia88/Situations%20of%20Play%20-%20Patterns%20of%20Spatial%20Use%20in%20Videogames%20-%20Georgia%20Leigh%20McGregor.pdf, acc. on April 8, 2021.

[14] Ibid., 3.

In real life, *challenge space*[15] would represent the space set aside for physical activity, such as children's playgrounds, jogging paths, and recreational equipment in parks etc. In video games the entire architecture or landscape of a seemingly ordinary place, such as a room or a forest, can turn into an adversary or an obstacle. The challenge space in this case is an environment that directly engages the player and forms the gameplay (PvP arenas and battlegrounds, dungeon labyrinths that always lead to the boss who owns/guards treasure).

In daily life, the space challenge of moving through a city is met by using GPS systems, (Google) maps, etc. Video games with complex spatial solutions work the same way: there are maps that direct players through virtual space (arrows or dots appear on the maps showing direction, or there are other methods that point out places that may be relevant to the gameplay: the locations of enemies or NPCs that have certain roles, from the assignment of quests to selling/buying items, doing favors for players, etc.). Environmental challenge as a type of challenge space often appears in games in the form of complex landscapes (forest, stream, hill), multitudes of roads that may not all lead to the goal, complicated room/labyrinth layouts etc.

In reality, *contested spaces*[16] would represent spaces where a contest is being held: a war zone, sports field, arena etc. In video games, these spaces are formed in different ways: the acquisition of resources (e.g., planets used for ore mining in *EVE Online*, farming[17] zone like *Underworld* in *Guild Wars*), conquering and controlling the whole space or a part of it, or winning in PvP[18] arenas. The common feature in all these spaces is that the conflict is reflected through fights against foes, whether they are computer-generated (mobs in PvE)[19] or other players (in PvP). The architecture and landscape in this case represent environments where the conflict is taking place and may entail spaces from reconstructions of historical cities to completely imaginary scenery taken from transmedial worlds created in other media (*Star Wars: The Old Republic*, *The Lord of the Rings Online*) or purposefully created for a specific game, with main elements recognizable from genres (epic fantasy: *World of Warcraft*, *Guild Wars* or science fiction: *EVE Online*).

Nodal spaces[20] in video games represent architecture/landscapes that reflect social patterns of space utilization. These patterns contribute to the spatial structure of the game, making it recognizable and close to the player. In the physical world, certain activity is expected and takes place in certain spaces (e.g., apartment or office buildings). These patterns are further reflected in the distribution of rooms within the buildings themselves, as well as the organization of urban environments (e.g.,

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[15] Ibid.

[16] Ibid., 4.

[17] Farming – (gaming) repetitively performing the same or similar activities in order to obtain material goods, which is not directed toward the progress through the narrative or an exploration of the game world. See Biljana Mitrović, "Information as a Product, Necessity and Prerogative in Digital Environment: The Case of Virtual Worlds," *Media dialogues / Medijski dijalozi* 9, 2 (2016): 91.

[18] Player *versus* player.

[19] Player versus environment.

[20] McGregor, "Situations of Play: Patterns of Spatial Use in Videogames," 5.

residential, or industrial zones). Therefore, spaces are divided in accordance with the social activities that characterize them. Nodal architecture and landscapes define the location of certain video game activities (e.g., going to a forge to make/repair weapons/armour) without influencing the outcomes of these activities. In the same space, during different quests, action is tied to the location where it may take place (e.g., you may run into and kill orcs in an orc outpost). Therefore, the architecture forms recognizable structures and facilitates functioning in complex virtual spaces, which is why nodal spaces patterns are most used in RPGs[21] and MMORPGs: nodal structures complement the recognizable parts of the narrative that are repeated and easily combined in accordance with the rules and logic already familiar to the players from the previous playing experience.

The physical world architecture is interpreted as a system of signs, so the *codified spaces*[22] are video game spaces that symbolize something without a special form (e.g., signs on maps in PvP that mark places with some strategic functions). Architecture and landscape in this context do not represent the space of experience but information on, e.g., resources. Codified spaces do not directly influence gameplay but have an associative effect on players and are most frequently used in strategy video games.

Real-life architecture entails space that is in a constant process of (re)building and change. This pattern also appears in video games as *creation space:*[23] the player creates game space or its parts through the gameplay. The architecture and landscape in the creation space not only represent the game environment, but also the space that the user can play with. (Space stations in *EVE Online*, player-built houses and settlements in *World of Warcraft*).

Backdrops[24] are the surrounding architecture or landscape that cannot be traversed or interacted with. Backdrops as such do not exist in reality, since movement through space and interacting with it are always possible. However, McGregor gives the view from a train, car, etc. as an example of something like backdrops in reality, while, in games, the examples include mountain cliffs, bodies of water (that cannot be sailed on or swum in etc.) that correspond to scenography in theatre or film.

Avatar

> The body is one of the first, and often the first and decisive element in the formation of the idea of a person's identity. In the virtual world space, the players set their computer-generated characters or 'bodies' – avatars.[25]

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[21] Role-playing game.

[22] McGregor, "Situations of Play: Patterns of Spatial Use in Videogames," 6.

[23] Ibid.

[24] Ibid., 7.

[25] Biljana Mitrović, "(Post)humanizam u digitalnom okruženju: kultura i video-igre," in *Humanizam, kultura ili iluzija?* ed. by Aleksandra Vraneš and Ljiljana Marković, book 1 (Beograd: Filološki fakultet Univerziteta u Beogradu, 2015), 230.

The degree of immersion in the gameworld and identification – in the context of empathy – depends on the relationship that the player forms regarding the avatar they created in the game.

The appearance as a representational quality (interesting in this case due to the orientation towards the visual elements of the games) does not only boil down to physical appearances. It also includes different options, among which the player chooses those that will be attached to the character at the beginning of the game, such as gender, profession, and physical appearance. Furthermore, features can be developed based on the initial choices (e.g., a ranger can perfect the use of a bow and arrows, but not wielding of a hammer or a two-handed sword); types of armour or clothing may be used by a certain profession or a class (which affects the limited repertoire of possible visual identities that can be ascribed to the character in advance) as well as attributes that the player choses on their own (i.e., name, guild allegiance). The degree of identification also depends on the choice of the manner/type of playing: whether the character wants to play a role (role-playing), experience the world and the predefined narrative (PvE), compete/battle with other PvP players, or to farm.[26] In the former case, the avatar must match the supposed character in profession, appearance and name, actualizing the "narrative/imaginative form of empathy".[27] In this case, the player does not identify with the character, but they must construct the entire identity of the character in relation to the storyworld, minding every element of his/her appearance.

On the other hand, avatars often carry equipment (weapons) and clothing (armour) that show their accomplishments. The character appearance types and designs become "text" that can be "read" to learn about player's successes (e.g., a sword that can only be won in a particularly demanding part of the game, an armour made of a material that takes a long time to acquire and with a great difficulty, etc.). Hence, the imperative to acquire the best/most expensive armour, which often does not represent the best protection and benefits it provides in battle, but often carries an exclusively visual/aesthetic effect and a sign of prestige.[28]

If the player only uses the avatar to farm or collect material goods in the game, the character "turns into a depersonalized tool",[29] whose appearance/equipment is only oriented toward the most efficient acquisition of goods.

Avatar clothing and armour are governed by the rules and logic known in the costume theory and practice:

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[26] Compare ibid., 255–56.

[27] Ibid., 256.

[28] For detailed analysis of the relationship between the avatar appearance and equipment on one hand and the MMORPG playing process/material aspects, see Mitrović, "Information as a Product, Necessity and Prerogative in Digital Environment: The Case of Virtual Worlds," 81–96.

[29] Ragnhild Tronstad, "Character Identification in World of Warcraft: The Relationship between Capacity and Appearance," in *Digital Culture, Play, and Identity: A World of Warcraft Reader*, ed. by Hilde G. Corneliussen and Jill Walker Rettberg (Cambridge, London: The MIT Press, 2008), 255.

> Costume is closely related to movements and representations of the body, and at the same time it is an essential part of performing arts and, as such, it is a part of social and cultural practice. Costume design plays an important role in the process of understanding the interpretation, definition, re-examination of the presence or absence of the performer and their representation in the context of performance. […] Costume activates the creation of a whole set of cultural, social and individual meanings.[30]

As far as sex and gender of an avatar is concerned, in many games the avatar's sex does not affect strength, endurance and other abilities, but is just a visual feature (female and male avatars are equally good at wielding heavy or big objects, equipment and weapons, regardless of the height and body form). On the other hand, in some games, such as *Black Desert Online*, certain professions are exclusively bound to specific genders (e.g., there are no female ninjas or male beast tamers). Some of the hypertrophied visual features have also become the characteristics of modern epic fantasy genres, especially in video games and, as such, they can be treated as general places that meet the expectation horizon. In other words, even in the event where the games offer different body forms, age (e. g. adding wrinkles, gray hair, etc.), physical flaws, facial asymmetry, disproportional body form etc., it is more common in gameworlds to meet avatars that fit the stereotype of young, strong, and typically scantily clad characters as consistent following of the genre convention.

In the context of new media theory, an avatar might therefore be interpreted only as a communicative graphic representation that testifies of its purpose and the player's activities. In this manner primarily graphic, but also narrative elements that relate to the building of an avatar complete each other by creating various identities via transformation, reflection and mirroring of the physical world and other, transmedia narratives.

Conclusion

The analysis of visual aspects of video games and the attitude of the visual art towards the narrative given here is not intended to be exhaustive, but just to lay out and list as many aspects of visual storytelling strategies as possible. Post-classical narratives, like those of MMORPGs, show a high degree of correlation – matching, completing, and upgrading visual and narrative elements. In other words, the classical narrative strategies of a linguistic-textual narrative building in new media environment are supported and united with graphic representations of gameworlds. Therefore, the analysis and classification of visual elements must be approached with

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[30] Marija Tavčar, "Costume as Wearable Technology," in *Going Digital: Innovation in Art, Architecture, Science and Technology in Digital Era*, Third International Conference on Digital Age Proceedings, ed. by Ružica Bogdanović, (Beograd: STRAND-Sustainable Urban Society Association, 2018), 29.

the same methodological and typological precision we use for aspects of classic storytelling, thereby expanding the understanding of narrativity and the narrative text.

This confirms that the use of the term "text" in the context of video games, especially MMORPGs, corresponds to the Latin origin of the word, interpreted as the interweaving of various influences, meanings, functions, and practices of expression that build a unique narrative and that all these aspects must be considered while building and analyzing storyworlds.

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