



## ANALYSIS OF THE IMPACT OF GRAPHIC DESIGN ON SPATIAL FICTION IN DIGITAL GAMES THROUGH EMBLEMS

### DİJİTAL OYUNLARDA GRAFİK TASARIMIN MEKÂN KURGUSUNA ETKİSİNİN AMBLEMELER ÜZERİNDEN İNCELENMESİ

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#### Abstract

This study investigates the influence of graphic design elements—specifically emblem designs—on the spatial construction and narrative of digital game environments. Graphic design plays a central role in digital games, impacting everything from gameplay to marketing, and becomes especially important in shaping atmosphere and storytelling through in-game spaces. The research focuses on emblem designs featured in three games: Euro Truck Simulator 2's Greece DLC (2024), which represents European cities in a truck simulation context; Cyberpunk 2077, a futuristic role-playing game; and GTA: San Andreas (2004), which centers on gang culture in 1990s America. These emblematic visuals are analyzed using semiotic methods within a case study design, supported by a theoretical framework developed for the study. The findings reveal that emblem designs contribute meaningfully to both the cultural narrative and spatial fiction of game worlds. The study aims to highlight the role of graphic design in enriching game environments and narratives, offering insights that contribute to the broader literature on visual communication in digital games.

**Keywords:** Graphic design, Emblem, Digital game, Game space, Narrative.

#### Öz

Bu çalışmada, dijital oyun mekanlarında grafik tasarım ürünlerinin mekân kurgusuna ve oyunun anlatısına etkisinin, dijital oyun mekânını şekillendiren grafik ürünlerden biri olan amblemler üzerinden incelenmesi amaçlanmıştır. Dijital oyunlar dahilinde grafik tasarım ürünleri, oyunun oynanışından reklamına kadar pek çok aşamasında oyunun en önemli unsurlarındandır. Bu unsur oyun mekânları söz konusu olduğunda mekân üzerinden anlatıyı ve ortamı şekillendirmeye yardımcı olabilmektedir. Bu çalışmada; Avrupa şehirlerinin ele alındığı bir tır sürme simülasyonu olan Euro Truck Simulator 2 adlı oyunun Yunanistan DLC'sinin (2024), fütüristik bir rol yapma oyunu olan Cyberpunk 2077 ve 90'ların A.B.D.'sinin çetelerini konu alan GTA: San Andreas (2004) adlı oyunların mekânlarında yer alan amblem tasarımları, göstergebilimsel çözümleme yöntemiyle incelenmiştir. Çalışma durum çalışması deseni olup, çözümleme sırasında ayrıca oluşturulan kuramsal çerçeveden de yararlanılmıştır. Araştırmanın grafik tasarım öğelerinin oyunun anlatısına ve mekân kurgusuna etkisinin örneklendirilmesi ve açıklanması açısından önemli olduğu düşünülmektedir. Araştırma sonucunda, amblem tasarımlarının dijital oyun mekânlarının kurgusuna ve oyun anlatısına kültürel düzeyde doğrudan etki yapabildiği görülmüştür. Çalışmanın, dijital oyunlarda grafik tasarımın yerinin ve öneminin anlaşılması açısından literatüre katkıda bulunması beklenmektedir.

**Anahtar Kelimeler:** Grafik tasarım, Amblem, Dijital oyun, Oyun mekânı, Anlatı.



## INTRODUCTION

Graphic design products constitute a key component of digital games, appearing at every stage and exerting a significant influence on the shaping of the game itself. For example, while we beginning to play a game, the first visual element we interact is game's icon or emblem. As the game starts, an introductory screen typically displays the game's logo and an opening sequence. Once loaded, a graphical user interface (GUI) appears, allowing players to start the game, adjust settings, and access saved data. These elements, all products of graphic design, accompany players until gameplay begins. Beyond the initial interface, various graphic design elements continue to shape the in-game environment, depending on the game's theme and concept. Directional graphics guide players, while billboards, posters, logos, packaging, and signage enhance realism by mirroring everyday visual culture. These elements not only contribute to immersion but also help define, structure, and add detail to the game world, making them integral to digital game design.

Emblem designs, characterized by strong symbolic power and functional representation, play a crucial role in shaping and defining game environments. As visual symbols representing institutions, products, brands, or businesses (Toktaş, 2021, p. 7), emblems serve not only as markers but also as meaning-making elements within digital spaces. Designed to convey abstract concepts in a tangible form, emblems encapsulate multiple layers of meaning. Beyond identifying a location or entity, they act as visual signifiers, contributing to the overall narrative and atmosphere of the game world.

This study examines the role of emblems in shaping the meaning of game environments, using the digital simulation game Euro Truck Simulator 2 and an action-adventure game GTA: San Andreas as a case study. The games was selected due to its cities being designed based on real-world locations and incorporating key visual elements—such as architecture, graphics, and landscapes—that define those cities and their geographical context. Accordingly, the research problem is defined as: “How do emblem designs in digital game environments contribute to spatial coherence and meaning?”. The second section establishes a theoretical framework, discussing the relationship between space and narrative in digital games, as well as concepts related to graphic design, corporate identity, and emblem design. The third section outlines the research methodology, including the study's scope, sample, and assumptions. The fourth section presents the findings, along with interpretations and discussions. Finally, the study concludes with results and recommendations based on the research.

## CONCEPTUAL FRAMEWORK

### Space and Narrative in Digital Games

Space is a fundamental concept that defines locations where various activities take place, both in daily life and within digital games. Emerging from the coexistence of multiple elements, space represents one of humanity's most essential cultural constructs, facilitating organized social interaction (Erol, 2022, p. 229). In digital games, spaces serve as virtual environments where gameplay unfolds, making them an indispensable component of game design. The historical development of in-game spaces dates back to early video games such as Space War (1962), created by Steve Russell, which utilized a two-dimensional movement axis (Kara, 2018, p. 37). Over time, visual illusions and single-perspective techniques enabled the perception of three-dimensionality within game environments. By the 2000s, fully three-dimensional spaces became widespread, allowing for the depiction of realistic architectural structures, cities, and immersive environments (Kara, 2018, p. 42). However, the degree of realism in game spaces varies depending on the game's content, narrative, and thematic requirements.

Narrative, within the context of games and game environments, defines the flow and storyline of a game. The game's core idea, mechanics, and progression are structured around its narrative. In broad terms, a narrative encompasses all discourses that describe an event or situation. In digital games, narratives can be entirely fictional or inspired by real events (Öncü, 2023, p. 157). Regardless of complexity, every digital game contains a narrative, which integrates players into a predetermined storyline. As Evren states, "A player operates within a pre-programmed virtual world, following a structured system to successfully complete the game" (2017, p. 269). Since narratives are designed in advance, they play a central role in shaping game environments and interact dynamically with them. Through narrative, elements within the game space—such as structures, objects, and character interactions—are

determined. Moreover, implicit narrative details can be embedded within the environment, making the story visible through spatial and design elements (Gülle, 2025, p. 55).

Academic studies on narrative often discuss its impact on shaping space and the relationship between narrative and environment in digital games. In his study on narrative in games, Ip categorizes the evolution of storytelling in four stages (2010): In the early period (1970–80s), games relied on entirely text-based narratives; in the 1980s–90s, simple narratives emerged, evolving into deeper storytelling with graphical advancements, cutscenes became widespread and reinforcing linear storytelling by the 2000s; and after this period, branching narratives, environmental storytelling, and character-driven dialogues became prominent. Ip's research highlights the role of technological progress in diversifying game narratives and emphasizes the importance of environmental storytelling. Jones (2008), in his study on narrative differences between game genres, contrasts linear and open-world (sandbox) narratives. He notes that: Linear games follow a sequence of pre-determined missions, where players are guided by the narrative. In open-world games, players freely explore maps, select missions at their discretion, and uncover the story through environmental elements, allowing them to create their own narratives. Jones' study is significant in demonstrating how open-world games allow players to construct narratives based on space and environmental elements. Domsch (2019) explores the relationship between space and narrative in sandbox games, emphasizing their increasing popularity due to the lack of movement restrictions. He argues that open-world narratives expand through spatial storytelling, marking one of digital games' most notable contributions to narrative art. Bizzocchi (2006) introduces an analytical framework for games and storytelling, defining the game environment as the "storyworld." He identifies five core components of game narratives: character, emotion, narrative interface, micro-narrative, and space. According to Bizzocchi, spatial storytelling plays a central role in narrative development within games.

Research focusing on the relationship between space and narrative demonstrates a reciprocal interaction: just as the game environment shapes the narrative, the narrative also defines the game space and its details. Elements within the game space are structured in relation to the game's theme and narrative, forming the overall setting. Whether derived from reality or not, all components of the game space are designed and constructed within the narrative framework. Players engage with the narrative through the environment and its affordances. As Sayilgan and Sayilgan (2013, p. 96) state, "For the player to decide where to navigate within the game space, how to proceed, and how to interact with the virtual environment, they must constantly decode and interpret the objects, spaces, texts, and icons placed by the designer." Given that spatial elements function as meaningful codes, each component within the environment holds semantic significance. Roads, terrains, architectural structures, objects, vehicles, and tools serve as indicators of the space's narrative meaning. Similar to the real world, graphic design elements facilitate interaction with the game environment, marking and reinforcing meaning. Emblems, in particular, contribute directly to the narrative by representing, introducing, and signifying various spatial components. Examining the definition and depiction of emblem designs within their spatial-narrative context is crucial for this study.

### **Graphic Design and Emblem as Meaning Creators of Game Space in Digital Games**

Graphic design elements play a crucial role in digital games, interacting with players at various points and serving as indispensable components of the gaming experience. From a game's visual identity to its start screens, main menus, and in-game environments, graphic design facilitates communication between the player and the game. As Okur, Kızıl, and Atamaz (2024, p. 12) state, "In the gaming industry, graphic designers are responsible for character and environment design, interface design, and logo creation. They also contribute by providing feedback and ideas throughout the development process." Graphic designers play a key role in multiple areas, including logo and emblem design, graphical user interfaces for opening screens and menus, promotional materials such as posters and social media visuals, and in-game environmental graphics that aid player navigation and comprehension. In daily life, spatial graphics, warning signs, and symbols enhance wayfinding and recognition—functions that similarly enable players to experience and understand game environments (Okur & Kızıl, 2023, p. 9). A study by Okur and Aygenç (2017) involving 200 players found that, alongside narrative and environmental realism, graphic design elements had the greatest impact on task completion success.

These elements help players recognize locations, access information, interpret spatial characteristics, and navigate game environments. Such functions are essential for gameplay and the perception of narrative coherence. Alongside graphic design elements such as information designs, signages or direction designs, emblem designs shape game spaces too by making meanings visible. As fundamental components of corporate and visual identity, emblems represent specific places or entities while reinforcing their significance within the game environment.

Emblems, unlike logos, often incorporate images, symbols, or stylized abstract forms, enabling them to convey universal meanings. This characteristic makes emblems powerful visual communication tools capable of representing an organization and carrying its associated meanings. Emblems serve to materialize abstract concepts and play a key role in defining societies. Additionally, they integrate a company's field of activity, scale, and production identity into a single visual form (Parlak, 2014, p. 155-156). Stylized emblem designs, when combined with color, become carriers of a coherent semantic structure. Colors, as significant representational elements, function as universal symbols in design, transforming into informative tools (Yalur, 2021, p. 483). Alongside photographs, symbols, signs, and text, colors act as meaning-conveying elements in the design process (Kaptan & Sayın, 2020, p. 806). Similarly, Huang and Wang (2024, p. 232) argue that meaning in graphic design emerges through visual elements, symbols, and colors, facilitating communication. These insights highlight the role of color in the creation and transmission of meaning within emblem design. Ultimately, form, typography, and color stand out as the fundamental components that shape an emblem and grant it semantic depth.

In emblem design, meaning and semantic depth hold significant importance. "In emblem design, the representation of semantic content and form relies on concrete or abstract indicators associated with a specific place or institution" (Bozhüyük, 2021, p. 360). By making an organization's meanings visible, emblems serve as a medium for visual communication. "In the process of using symbols to convey an institution's defining characteristics, abstract components intended to be highlighted in institutional identity must be materialized. All the explicit and implicit meanings conveyed by the emblem should align with this identity, providing clues and aiding its interpretation" (Erşanlı Taş, 2024, p. 21). Through images, symbols, colors, and signs, emblems visually represent an institution or organization. For this representation to be effective, certain design principles must be observed. Ceylan (2016, p. 317) identifies these principles as originality, simplicity, and aesthetics. Originality ensures distinctiveness and uniqueness, while simplicity enhances clarity, recognition, and adaptability across various surfaces and sizes. Bayraktaroğlu and Çalış (2011, p. 10) also emphasize that simplicity contributes to memorability and comprehension. Aesthetic appeal, achieved through creativity and innovation, further strengthens an emblem's visual impact. Erşanlı Taş (2024) expands this framework by adding applicability, which refers to an emblem's ability to retain its clarity and meaning across different contexts and dimensions. Özderin (2019, p. 198) similarly highlights the need for an emblem's form to be visually engaging while maintaining a straightforward and comprehensible structure. Taken together, originality, simplicity, applicability, aesthetics, and clarity emerge as key qualities in emblem design. These attributes enhance an emblem's communicative power, enabling it to better represent its organization and effectively convey cultural and institutional meanings. If an emblem incorporates cultural codes and symbolism, it can also reflect the characteristics of its environment and cultural context.

In digital game environments, the construction of meaning is closely linked to the design of the space and the objects within it. These objects shape the narrative and characteristics of the environment, enhancing the player's experience. "One of the most critical roles of space in digital games is to evoke various associations in players' minds. These associations can carry abstract or symbolic meanings" (Albayrak, 2023, p. 11). Such symbolic meanings manifest in the details that shape the environment. Emblem designs are among the key elements that make these symbolic meanings visible within the space. Logos and emblems designed to represent an institution or organization, when integrated into physical spaces, not only serve as identifiers but also act as carriers of cultural codes, contributing to the meaning of the environment. Furthermore, as in the real world, high-quality emblem and logo designs can enhance the visual appeal of urban environments, making streets more aesthetically pleasing (Canpolat, 2023, p. 57). In addition to their visual function, emblems within game environments also

serve as significant symbolic elements that reinforce the game's narrative. The emphasis on visual design in games brings the concept of imagery to the forefront, where spatially created images contribute to new narratives and the symbolic nature of spaces (Arslan, 2022, p. 220). Through these functions, emblems not only represent specific locations within the game world but also contribute to the interpretation of space, the formation of its identity, the transmission of cultural codes, and the reinforcement of the game's narrative.

## METHOD

This study explores how emblem designs contribute to narrative construction and meaning-making in game environments. Using semiotic analysis, it examines the emblems of in-game companies where players load and unload cargo in Euro Truck Simulator 2 (ETS2), the emblems of radio stations in GTA: San Andreas, and company emblems in Cyberpunk 2077. The reason for selecting emblem designs from three different game worlds as the research corpus is to examine how emblem design contributes to the spatial construction of games with different narratives and types across a broad temporal spectrum. The emblems selected in the games were chosen for the following reasons: in ETS2, company emblems convey meanings related both to the game's main theme and to the cultural fabric of specific countries; in GTA: SA, radio station emblems reflect a broad spectrum of 1990s American culture; and in Cyberpunk 2077, the emblems incorporate symbols tied to the game's central theme and to cultural codes drawn from the real world. By analyzing games produced in different periods, the study aims to explore the impact of emblem design on game space through two distinct titles released twenty years apart. Also examining the emblems from three different game gives chance to make comparison between these game worlds. Conducted as a qualitative study with a holistic single-case design, it provides an in-depth analysis of influencing factors and their interactions (Yıldırım & Şimşek, 2016). The research sample consists of 5 company emblems from the games, selected through convenience sampling. Emblems were analyzed within a conceptual framework, incorporating symbolic color meanings (Becer, 2014; Yazıcıoğlu, 2017). To ensure internal reliability, the study follows a structured framework for analysis and interpretation (Yıldırım & Şimşek, 2016, p. 275).

Semiotics—the selected method for analyzing the emblems—is a discipline that systematically examines the meaning conveyed by communication methods and visual elements. According to Ertan and Sansarcı, it "analyzes all cultural phenomena as communication processes and facilitates meaning-making by enabling the interpretation of various systems" (2016, p. 21). It explores the fundamental components of communication—sender, message, and receiver—while also examining how symbolic meanings shift across cultures (Ersan & Aras, 2023, p. 60). Rıfat defines semiotics simply as "scientifically analyzing and describing the functioning of sign systems" (2009, p. 12). As a modern analytical method, semiotics gained prominence through the works of linguists such as Saussure, Peirce, and Barthes. Barthes' semiotic analysis framework revolves around two levels of meaning: denotation and connotation (Elden & Okat Özdem, 2015, p. 164-165). Saussure's model conceptualizes meaning-making through two components: the signifier and the signified (Yılmaz & Kır, 2025, p. 43). In semiotic analysis, visual elements in communication are examined to reveal their multiple layers of meaning. Kaptan and Sayın emphasize that meaning in graphic design emerges through the relationship between visual signs (2020, p. 806). Similarly, Huang and Wang state that semiotic analysis in graphic design systematically examines symbols and visual elements to determine how they convey meaning, helping designers communicate messages more effectively (2024, p. 233). Given these perspectives, this study employs semiotic analysis to interpret the role of emblem designs as narrative and meaning-making elements within game environments. This study assumes that emblem designs, as graphic design elements, play a key role in shaping the meaning and narrative of game environments. A limitation of the research is that the sample is drawn only from three games. However, the study is significant in understanding the role and importance of graphic design elements in constructing spatial meaning and narrative within digital games.

To ensure internal validity, expert opinions were obtained from two faculty members specializing in graphic design and working in universities' graphic design programs regarding the 15 semiotic analyses conducted. As Başkale (2016, p. 24) notes, "In this process, the expert critically evaluates the research design, collected data, their analysis, and the writing of the results, providing feedback to the

researcher.” Before soliciting feedback, the theme and content of the study, as well as the subject matter of the games from which the emblems were drawn, were explained to the experts, and their voluntary participation and consent were secured. Subsequently, a meeting was held with the participation of the researchers, during which the semiotic analyses were presented and explained in sequence. Finally, the experts’ recommendations, recorded in notes taken during the session, were compiled, leading to the deletion and addition of codes as necessary.

## FINDINGS AND DISCUSSION

### Findings on Emblem Designs in the ETS2 Greece DLC

The Greece DLC, released by SCS Software for ETS2, expands the game to mainland Greece and several islands. It integrates architectural, geographical, and cultural elements, enhancing realism through region-specific graphics such as billboards, signage, and road markings. The DLC features localized industries, introducing eight sectors—construction, automotive, olive farming, hospitality, transportation, food production, and cotton farming—offering industry-specific cargo transport. (Truck Simulator Wiki, 2023).

**Table 1.** Semiotic analysis of the emblem of "Eliarchos" in the Greece DLC.


	Sign	Signifier	Signified
	Symbol	Olive	Fruit, health, naturalness, Mediterranean, oil, nutrient, durability
	Color	Green	Naturalness, freshness, life
	Color	White	Purity, honesty, renewal
	Typography	Serif, script, uppercase	“Olive tree”, tradition, healing

Table 1 presents a semiotic analysis of the emblem of Eliarchos, an olive products company introduced in the Greece DLC of ETS2, operating exclusively in Greece. The emblem features a green olive integrated into the logo as the letter “O.” Olive farming is a significant industry in Greece’s Mediterranean climate, reflected in the game through this company. The emblem conveys meanings of health, naturalness, freshness, life, purity, and healing, reinforcing associations with olive cultivation and the Mediterranean environment. Through its emblem and logo, the company integrates these cultural and environmental symbols into the Greece DLC.

**Table 2.** Semiotic analysis of the emblem of "Artemia" in the Greece DLC.


	Sign	Signifier	Signified
	Symbol	Artemis	Nature, vegetation, goddess, mythology, healing
	Symbol	Circle	Harmony, life, perfection
	Color	Red	Life, energy, passion
	Color	White	Purity, honesty, renewal
	Typography	Serif	“Artemis”, tradition, mythology, goddess

Table 2 presents a semiotic analysis of the emblem of Hotel Artemia, a hospitality company introduced in the Greece DLC of ETS2, operating exclusively in Greece. The emblem features the head of Artemis, the Greek goddess of wildlife, vegetation, healing, hunting, fertility, and chastity, set against a circular backdrop, with the company’s name positioned to the right. As one of eight newly added companies, Hotel Artemia highlights Greece’s tourism potential and cultural heritage. The emblem incorporates mythological symbolism into the game’s narrative, conveying meanings of nature, mythology, healing, life, harmony, energy, passion, and renewal.

**Table 3.** Semiotic analysis of the emblem of "Icaria" in the Greece DLC.


	Sign	Signifier	Signified
	Symbol	Wing	Speed, transportation
	Color	Yellow	Energy, life, idealism
	Color	Blue	Wisdom, confidence, strength
	Typography	Sans, italic, uppercase	“Icarus”, mythology, speed, modern, futuristic

Table 3 presents a semiotic analysis of the emblem of Icaria, a logistics company introduced in the Greece DLC of ETS2, operating exclusively in Greece. The company's name derives from Icarus, the son of Daedalus in Greek mythology, who perished after flying too close to the sun with wax wings. Additionally, the Greek island of Ikaria, which shares this mythological origin, is suggested as the company's namesake. The emblem features a stylized yellow wing in the background, symbolizing Icarus' flight and integrating cultural meaning into the game's narrative. The emblem conveys notions of speed, energy, idealism, and strength.

**Table 4.** Semiotic analysis of the emblem of "Lefko" in the Greece DLC.


	Sign	Signifier	Signified
	Symbol	Cotton	Agriculture, textile, abundance, fertility
	Symbol	Circle	Harmony, life, perfection
	Color	Blue	Prestige, comfort, confidence
	Color	White	Purity, honesty, freshness, cotton
	Typography	Sans serif, uppercase	"White", modern, confidence

Table 4 presents a semiotic analysis of the emblem of Lefko, a cotton products company introduced in the Greece DLC of ETS2, operating exclusively in Greece. The emblem features three cotton bolls against a circular background. The white represents cotton, while the blue reflects the Greek flag. By incorporating cotton, a key sector in Greece's economy, and national colors, the emblem reinforces cultural identity within the game. It conveys meanings of fertility, abundance, agriculture, life, prestige, comfort, confidence, freshness, and purity.

**Table 5.** Semiotic analysis of the emblem of "Sygomidi" in the Greece DLC.


	Sign	Signifier	Signified
	Symbol	Circle	Harmony, life, perfection
	Symbol	Ox	Power, abundance, endurance, determination
	Symbol	Spike	Harvest, abundance, life cycle
	Symbol	Farm	Crop, abundance, product, agriculture
	Color	Light green	Freshness, life, organic
	Color	Dark green	Wealth, masculinity, naturalness
	Typography	Greek, sans serif, uppercase	"Harvest", agriculture, crop, abundance

Table 5 presents a semiotic analysis of the emblem of Sygomidi, an agricultural products company introduced in the Greece DLC of ETS2, operating exclusively in Greece. The emblem features a dark green circle with a light green field, an ox, and two wheat stalks, symbolizing agriculture. These elements convey meanings of life, power, abundance, endurance, product, freshness, and naturalness. The green tones reinforce associations with farming and fertility. The logo, written in the Greek alphabet, along with the emblem, integrates agricultural themes and cultural identity into the game's setting, enhancing its narrative depth.

### Findings on Radio Station Emblem Designs in the GTA: San Andreas

Grand Theft Auto: San Andreas is an action-adventure game released by Rockstar Games in 2004. The game's narrative primarily follows Carl Johnson (CJ), who returns to his former hometown of Los Santos in the early 1990s after the murder of his mother, and undertakes various missions in an effort to restore order in his neighborhood (Murray, 2005, p. 92). The in-game map includes three major cities. Among them, Los Santos is inspired by Los Angeles (Arslan, 2022, p. 221); San Fierro draws from San Francisco; and Las Venturas is modeled after Las Vegas. In his study, Kızılkaya (2010) asserts that GTA: San Andreas reproduces an imperialist perspective in a sociopolitical context, visualizes violence, adopts a male-dominated and white bourgeois ideology reflective of the United States, and ultimately, through its narrative elements, reiterates the discourse of the dominant ideology in the U.S. In light of these observations, it can be argued that the game depicts many features of 1990s America, the period

in which the narrative is set. One method through which this depiction is achieved is the visualization of emblem designs belonging to various in-game businesses and their integration into the game environment.

**Table 6.** Semiotic analysis of the emblem of "Radio Los Santos" in the GTA: San Andreas.

	<b>Sign</b>	<b>Signifier</b>	<b>Signified</b>
	Color	Green	Wealth, masculinity, life, Grove Street
	Color	Brown	Wealth, richness, safety, belongingness
	Typography	Radio, sans serif, uppercase	Tradition, roots, past
	Typography	Gothic, uppercase	Latin, mid-ages, gang culture, ethnic roots, tattoo, gang members
	Symbol	Pistol	Violence, safety, crime, street culture, gangster
	Symbol	Ammo	Violence, safety, crime

Table 6 presents a semiotic analysis of the logo and emblem of “Radio Los Santos,” one of the radio stations featured in GTA: San Andreas. The colors used in the logo and emblem reference Grove Street, one of the in-game gangs, and evoke themes of belonging, masculinity, and wealth. The gun and bullet forms symbolize gang wars, street culture, subcultures, gang affiliations, and representations of violence. The Gothic typeface used for the “Los Santos” text serves as a cultural reference point, alluding to various ethnic groups, Latin culture, gang identity, and hip-hop culture.

**Table 7.** Semiotic analysis of the emblem of "Radio Los Santos" in the GTA: San Andreas.

	<b>Sign</b>	<b>Signifier</b>	<b>Signified</b>
	Color	Blue	Vitality, life, optimism
	Color	White	Purity, honesty, renewal
	Color	Black	Power, strength, prestige
	Typography	Sans serif, bold	Dynamism, movement, tradition
	Symbol	Disco ball	Dance, nightlife, 80's, retro, disco, funk culture, Afro-American music, diversity
	Symbol	Background belt	Dynamism, movement, youth

Table 7 shows the semiotic analysis of emblem “bounce FM” in GTA: San Andreas. The Bounce FM logo in GTA: San Andreas visually captures the energy and cultural identity of the funk, soul, and disco music it features. Its rounded, slanted typography and bold blue-black color scheme evoke rhythm and liveliness, while the disco ball-like background reinforces associations with 1980s dance culture. These elements together signify themes of joy, nostalgia, and celebration, rooted in African-American musical traditions.

**Table 8.** Semiotic analysis of the emblem of "Radio X" in the GTA: San Andreas.


	<b>Sign</b>	<b>Signifier</b>	<b>Signified</b>
	Color	Blue	Power, balance, masculinity
	Color	Black	Power, strength, seriousness, rebellion
	Typography	Sans, uppercase	Industrial, bold, subculture, collage aesthetic, timeless
	Symbol	Radio tower and signals	Dance, nightlife, 70's, retro, Afro-American music, diversity, counterculture
	Symbol	Background belt	Dynamism, movement, asymetry

Table 8 shows the semiotic analysis of “RADIO:X” emblem in GTA: San Andreas. The Radio X logo and emblem in GTA: San Andreas employs black-and-white contrast and minimalist forms to reflect the rebellious, alternative identity of the station. The central image -a stylized broadcast tower with concentric signal waves- signifies non-mainstream dissemination of sound, resonating with the underground ethos of alternative rock culture. The bold, industrial-style typeface of “RADIO:X” in blue reinforces a sense of assertiveness and resistance.

**Table 9.** Semiotic analysis of the emblem of "Radio X" in the GTA: San Andreas.


	Sign	Signifier	Signified
	Color	Pink	Warmth, comfort, passion, energy
	Color	Black	Night, mystery, nightlife
	Color	White	Light, pureness, clear
	Typography	Serif, bold, uppercase	Traditions, readability, elegance
	Symbol	Apartments	City life, dentistry, people, metropolitan area
	Symbol	Nightsky	Fun, nightlife, togetherness, emotion, escapism

Table 9 presents a semiotic analysis of the emblem of CSR 103.9, one of the radio stations featured in GTA: San Andreas. The emblem predominantly features dark tones, along with symbolic elements such as a night sky and high-rise buildings. When analyzed semiotically, the colors and symbols evoke references to the R&B and soul music culture of the United States, vibrant nightlife, Afro-American cultural identity, and deep musical roots. These references effectively integrate the cultural richness of 1990s America—central to the game's narrative—into the visual language of the radio emblem.

**Table 10.** Semiotic analysis of the emblem of "K-Rose" in the GTA: San Andreas.


	Sign	Signifier	Signified
	Color	Red	Life, passion, courage, emotions
	Color	Green	Nature, harmony, fertility, rural life
	Color	Yellow	Energy, happiness, joyfulness, summer
	Typography	Slab serif, bold, uppercase	Traditional, bold, past
	Symbol	Rose with leaves	Love, passion, romance, American county culture, mothers, lovers, melancholy, break-up

Table 10 presents a semiotic analysis of the emblem K-Rose in GTA: San Andreas. The emblem of K-Rose employs Western-style typography and a rose symbol to evoke themes of rural American culture and emotional storytelling. The rose serves a dual function: as a literal floral icon and a feminine symbol, referencing motifs of love, loss, and nostalgia common in country music. Its soft visual contrasts with the genre's often melancholic or harsh lyrical content.

### Findings on Corporation Emblem Designs in the Cyberpunk 2077

Cyberpunk 2077 is an action role-playing game developed by CD Projekt RED, designed in a cyberpunk style. Set in the open-world environment of Night City, the game centers around themes of power struggles and bodily transformation. Players assume the role of V, an ambitious mercenary in pursuit of a unique implant believed to be the key to immortality. (Sun and Zhou, 2021, p. 640). In the open-world setting of Night City, the player-controlled avatar has access to a wide range of products and services within the game, including upgradeable weapons, hacking capabilities, body-enhancing implants, corporate security systems, cyber software, vehicles, motorcycles, and clothing. (Sepetçi ve Küngerü, 2022, p. 953). All these services provided by corporations all around the world in the game.

**Table 11.** Semiotic analysis of the emblem of "Nokota Manufacturing" in the Cyberpunk 2077.


	Sign	Signifier	Signified
	Color	Black	Strength, prestige, power, seriousness
	Typography	Sans serif, uppercase	Modern, trustful, solid
	Symbol	Horse, Nokota	Speed, strength, Nokota horse, untamed, freedom, America, polygonal

Table 11 presents the semiotic analysis of the emblem belonging to Nokota Manufacturing, a weapons company featured in Cyberpunk 2077. The emblem depicts a stylized running horse figure. Considering the company's field of activity, this imagery aligns with meanings such as power, durability, and resilience. The horse's forward-focused gaze while running also evokes the act of aiming at a target. The name "Nokota" refers to a wild horse breed native to the U.S., thereby allowing the company to allude to its American origins through its emblem.

**Table 12.** Semiotic analysis of the emblem of "Kaukaz" in the Cyberpunk 2077.


	Sign	Signifier	Signified
	Color	Black	Strength, prestige, power, solid
	Color	White	Snow, cold, strong, light,
	Typography	Sans serif, uppercase	Modern, trustful, solid, powerful
	Symbol	Bear	Strength, power, durability, Russia, Soviet, speed, wilderness

Table 12 presents the analysis of the emblem of Kaukaz, a Russia-based automobile company featured in Cyberpunk 2077. The emblem depicts two stylized bears facing each other and roaring. A black-and-white contrast is employed between the figures and the background. As the bear is a symbolic animal of Russia, the emblem alludes to the company's national roots while also referencing the strength and durability of the vehicles it produces within the game.

**Table 13.** Semiotic analysis of the emblem of "Arasaka" in the Cyberpunk 2077.


	Sign	Signifier	Signified
	Color	Red	Power, energy, action, passion
	Typography	Sans serif, lowercase	Modern, digital, futuristic
	Symbol	Stylised Three Hollyhock	Flower, Japanese culture, clan, mafia, samurai, shogun

Table 13 presents the semiotic analysis of the emblem and logo of Arasaka, a Japan-based megacorporation featured in Cyberpunk 2077. The three hollyhock flowers depicted are traditional cultural symbols of Japan, while the red color references the Japanese flag. These elements also allude to the company's areas of operation—banking, security, and manufacturing. Furthermore, the emblem evokes the crest of the Tokugawa clan, reinforcing its connection to Japanese heritage.

**Table 14.** Semiotic analysis of the emblem of "Herrera" in the Cyberpunk 2077.


	Sign	Signifier	Signified
	Color	Silver	Wealth, sophistication, beauty, value, luxury
	Color	Black	Strength, prestige, power
	Typography	Sans serif, uppercase	Modern, luxury, powerful
	Symbol	Cheetah	Speed, fast, exotic, hunter

Table 14 presents the analysis of the emblem of Herrera, a Spain-based luxury automobile company featured in Cyberpunk 2077. The cheetah depicted in the emblem evokes the Jaguar emblem of a well-known car manufacturer. The silver color symbolizes luxury, sophistication, and wealth, while the cheetah itself represents speed, power, exoticism, and predation. The company's name, Herrera, also resembles the common Spanish surname Herreira ("smithry") (Cyberpunk Wiki, 2021).

**Table 15.** Semiotic analysis of the emblem of "Techtronika" in the Cyberpunk 2077.


	Sign	Signifier	Signified
	Color	Black	Strength, prestige, power
	Typography	Sans serif, cyrillic, uppercase	Modern, Slavic
	Symbol	Griffin	Mythologic, Christianity, beast, powerfull, scary
	Symbol	Rifle	War, defence, death, battle
	Symbol	Gear	Work, power, continuity, factory
	Symbol	Aim	War, shoot, kill, defence, perfection, success

Table 15 presents the semiotic analysis of the emblem of Techtronika, a Serbia-based weapons manufacturer featured in Cyberpunk 2077. The dominant motif consists of two back-to-back griffins. As symbols associated with Christian culture, the griffins allude to the company's Serbian origins. The rifles and aim symbols depicted in the emblem reference the company's field of activity, while the gearwheel signifies factory-based production and the continuity of manufacturing.

## Discussion

In three findings sections, five emblems from ETS2: Greece DLC, five emblems from Cyberpunk 2077 and five emblems from GTA: San Andreas were examined through semiotic analysis method. The five companies featured in the ETS2 Greece DLC operate in olive farming, cotton agriculture, food production, logistics, and hospitality—industries deeply rooted in Greece's economy. Marquina et al. highlight that, as of 2017, Greece cultivated olives on 1.13 million hectares, ranking third in Europe (2018, p. 2). Regarding cotton agriculture, Vouras notes that post-World War II agricultural development prioritized cotton, making it the country's third-largest export at the time (1963, p. 11). Koutinos et al. emphasize cotton's vital role in Greek agriculture, constituting 9% of total agricultural production (2023). Halstead traces farming in Thessaly to around 7000 BCE and across other Greek regions between 5000–1000 BCE, marking agriculture as a longstanding economic activity (1996, p. 298). Tourism, Greece's most profitable sector, thrives due to its Mediterranean climate, scenic beaches, and cultural heritage, making it a global tourism hub. Chrysovalantou states that tourism is crucial to the country's economic stability (2025, p. 7). The Greece DLC reflects these key industries, integrating them into the game's narrative through emblematic representations. These findings indicate that emblem designs in the Greece DLC are crafted to reinforce the game's narrative while embedding cultural codes that authentically represent Greece within the virtual environment.

In GTA: San Andreas, radio stations play a key role in shaping the narrative. Each station focuses on a specific genre, mostly drawn from 20th-century American music, with many rooted in African American culture (Kızılkaya, 2010, p. 144). These genres—such as hip-hop, R&B, soul, disco, rock, and country—reflect major elements of American culture and are integrated into the game's world through radio broadcasts and their emblem designs respectively. Radio Los Santos, for instance, features hip-hop and rap, genres that emerged in the late 1970s as forms of cultural resistance among marginalized Black communities (Angi, 2013, p. 68). Bounce FM reflects the disco scene, which gained popularity in the 1970s and led to the rise of house and techno (Özdemir, 2014, p. 33). Rock-focused Radio X traces its roots to African American musical traditions brought by enslaved people (Çalış, 2006, p. 169). CSR 103.9 centers on soul music, popularized by Ray Charles and seen as an expression of Black identity (Starr & Waterman, 2007, p.40-67). K-Rose, known for country music, appeals to rural communities and reflects traditional rural American values with its direct and candid character (Dyck, 2020, p. 4).

In Cyberpunk 2077, corporations operate in fields such as weaponry, banking, automotive, and security. Their emblems often reference both their industries and cultural origins. The Serbian arms company's griffin, for instance, traditionally symbolizes protection, while in Christian symbolism it is associated with Christ, embodying all positive virtues (Öner, 2024). Similarly, the bear of the Russian company Kaukaz reflects a central motif in Russian culture, once considered too sacred to name directly and regarded as the “king of the forest,” a force driving away evil and ensuring prosperity (Karakale, 2018, p. 37). Other examples include the Spanish connotations of “Herrera,” the American Nokota horse representing a U.S. arms manufacturer, and the hollyhock in Japanese firm Arasaka's emblem. Collectively, these symbols demonstrate how corporate insignia in Cyberpunk 2077 integrate cultural motifs to shape the game's setting and narrative through emblems.

As seen in the semiotic analysis, the emblems of five radio stations in GTA: San Andreas contribute to the game's narrative by symbolically representing aspects of American music culture through visual design. Also the examined emblems of companies in ETS2: Greece DLC and Cyberpunk 2077 includes narrative elements such as colors, forms, typographic elements and symbols too. Emblem designs contribute the narrative structures of all three games, showing the symbolic examples of meaning graphic carriers in game space. In addition, the emblem designs featured in the games exhibit a simplified and stylized visual language. Through this minimalist and stylized approach, emblems and logos contribute more directly to the narrative via the game environment. This may enables players to more easily perceive the symbols and meanings conveyed by the emblems. Considering that reducing complexity and achieving an impactful appearance through simplicity allows users to recognize logos more quickly (Demirkale Kukuoglu, 2024, p. 170), the use of minimal and stylized emblems becomes more comprehensible in terms of its contribution to shaping the narrative through spatial design in digital games.



## CONCLUSION

This study examines the contributions of emblem designs to the spatial dimension of narrative construction in digital games, focusing on GTA: San Andreas, Cyberpunk 2077 and ETS2: Greece DLC. In digital games, space serve as the settings where the narrative unfolds and gameplay activities occur. The spatial design of games is constructed through the integration of various elements such as buildings, natural features, urban furniture, vehicles, and graphic design components. These elements not only serve functional purposes but also make the game's narrative visually perceivable. Players engage with the narrative through the game space and the details embedded within it, making every component of the environment significant for storytelling. Graphic design elements play a crucial role in enabling the narrative to be perceived within the game space. As in the real world, elements of visual identity—such as street signs, directional and informational graphics, posters, and emblems—are present in digital game environments. In this context, these graphic design products shape the game space and transform into meaningful narrative details. With their strong symbolic expressiveness, emblem designs significantly enhance the visibility of the narrative within the game's spatial setting.

This study examines how emblem designs, as graphic design elements integrated into spatial environments, contribute semantically to the narrative and storytelling in digital games. Emblems from three games released in different times—GTA: San Andreas (2004), Cyberpunk 2077 (2020) and ETS2: Greece DLC (2024) were analyzed using a semiotic approach. Five emblem examples were selected from each game, representing both a temporal and stylistic contrast, as the games differ not only in release date but also in genre (action-adventure, simulation and role-playing). This methodological choice enabled comparative analysis between games and emblems, and is considered a one strength side of the study. The semiotic analyses revealed that emblem designs in all games carry multiple meanings related to the game narratives, both in terms of form and content. The emblems of in-game radio stations in GTA: San Andreas reference various music genres and associated cultural elements that were popular in the United States during the 20th century. Since the game is set in late 20th-century America and reflects many cultural features of the period, the emblems often draw upon the musical culture of the time. Details such as disco balls, guns, roses, urban silhouettes, and the use of bold, serified, Gothic-inspired typography all serve to visually evoke the aesthetics and symbolism of those musical subcultures. Similarly, the company emblems in ETS2: Greece DLC serve as meaningful narrative elements that integrate into the game space. Set in Greece, the DLC features fictional companies whose emblems incorporate symbols tied to Greek culture, such as wings of Icarus, olives, cotton, the portrait of Artemis, and oxen. Also the colors of these emblems in Greece DLC represents country's historic and geographic values through blue, green and white colors mainly. These emblems communicate meanings related to both ancient Greek mythology and the country's geographic and agricultural richness, shaping the narrative through spatial cues. In Cyberpunk 2077, selected company's emblems carries different meanings such as cultural identities and production sectors. Symbols such as bear, griffin, hollyhock and horse symbolises the cultures and identities of the companies. Also the gear, rifle, cheetah and aim symbols refers to productional sectors of the companies like car manufacture and gun manufacture.

From a graphic design perspective, the emblems analyzed in all three games share a common visual language characterized by stylized, simplified forms and minimalist typographic solutions. This design approach allows emblems to convey meaning in a more direct and accessible manner. The observation that all sets of emblems—despite being from three games produced in 20 year scale—share similar design strategies suggests that graphic design elements in digital games tend to favor clarity and straightforward communication. Thus, emblem designs from three temporally and generically different games nonetheless display notable formal and functional parallels.

This study has demonstrated how narrative elements within digital game worlds are constructed through spatial design, and how emblems contribute to shaping that narrative within these spatial frameworks. The use of both semiotic analysis and a theoretical framework in the interpretation of examples is considered another strength of the research. Future research could expand upon this work by analyzing emblems from a wider range of game genres, which would contribute to a deeper understanding of the role of graphic design and emblems in narrative and spatial construction. Additionally, conducting such

studies with the involvement of multiple researchers and experts, and across various games, could enhance the reliability and validity of the findings. Also, player's opinions and experiences about experiencing graphic design elements in the game world could be a potential research topic for the both graphic design and game design fields.

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