

Digital Surrealism: Video Game Space

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The concept of virtual reality (VR), perceived as a copy of physical reality, restricts both the creators and users of the space, leaving no room for potential surreal experiences. The main motivation for conducting the research on virtual surreal space is to open up creative/productive spatial possibilities for discussion from a thought perspective that goes beyond this definition.

Although there are various approaches to digital space in the literature, these studies mostly rely on computational methods. In contrast, this study aims to explore space from the perspective of "digital surrealism" which is ignored in spatial studies, through the computer-based gaming experience. Scholars writing about architecture and surrealism have argued that, unlike other forms of fine art, architecture was never an integral part of surrealism. Against this perspective of the digital game experience, the study aims to question whether it is possible to interpret the space with a surreal perspective and to investigate whether the space can approach surrealist thought with the digital game experience fed by computational methods that support the concepts of 'autonomy' and 'ubiquity'.

The main goal of the study is to explore the relations between surrealism and architecture and the spatial potential of these relations through the experiences of the players. The surrealist spatial potential of digital space experience is explored in Superliminal (2019), a puzzle game that transforms the experience into allegories of dreams, free-thinking and multiple opportunities. Data analysis performed on the STEAM platform and the First Manifesto of Surrealism (1924), in which surrealism came into existence as a movement, were analyzed with Python software. The experimental group's thoughts and comments expressed on the STEAM platform were analyzed.

Preliminary results of the study are presented with the "regression tree" method. Using the Python programming language, analyses are prosuded to discuss game spaces from a lens of surrealism perspective.

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Dijital Sürrealizm: Video Oyun Mekanı

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Fiziksel gerçekliğin bir kopyası gibi algılanan sanal gerçeklik (VR) kavramı, mekânın hem yaratıcılarını hem de kullanıcılarını kısıtlayarak potansiyel gerçeküstü deneyimlere yer bırakmamaktadır. Araştırmanın sanal gerçeküstü mekân üzerine yapılmasının temel motivasyonu, bu tanımın ötesine geçen bir düşünce perspektifinden, yaratıcı/üretken mekânsal olasılıkları tartışmaya açmaktır.

Literatürde dijital mekâna yönelik çeşitli yaklaşımlar mevcut olsa da bu çalışmalar çoğunlukla hesaplama yöntemlerine bağlı kalmaktadır. Buna karşılık, bu çalışma, bilgisayar tabanlı oyun deneyimi yoluyla, mekânsal çalışmalarda göz ardı edilen "dijital gerçeküstücülük" perspektifinden mekânı keşfetmeyi amaçlamaktadır. Mimarlık ve gerçeküstücülük hakkında yazan araştırmacılar, diğer güzel sanat türlerinden farklı olarak mimarinin hiçbir zaman gerçeküstücülüğün ayrılmaz bir parçası olmadığını öne sürdüler. Çalışma, dijital oyun deneyiminin bu bakış açısına karşı, mekânı gerçeküstü perspektifle yorumlamanın mümkün olup olmayacağını sorgulamayı ve mekanın, 'özerklik' ve 'her yerde bulunurluk' kavramlarını destekleyen hesaplamalı yöntemlerden beslenen dijital oyun deneyimiyle sürrealist düşünceye yaklaşım yaklaşamayacağını araştırmayı hedefler.

Sürrealizm ile mimarlık arasındaki ilişkileri ve bu ilişkilerin mekansal potansiyellerini, oyuncuların deneyimleri aracılığıyla keşfetmek çalışmanın ana hedefidir. Deneyimi rüyalar, özgür düşünme ve çoklu fırsatlar alegorilerine dönüştüren bulmaca oyunu (puzzle game) Superliminal'de (2019) dijital uzam deneyiminin sürrealist mekansallık potansiyeli araştırılmaktadır. STEAM platformu üzerinden yapılan veri analizleri ve sürrealizmin bir akım olarak vücut bulduğu birinci sürrealizm manifestosu (1924) Phyton yazılımı ile analiz edilmiştir. Bilinçli olarak deney grubunun tamamen kendi düşüncelerini, STEAM platformunda ifade ettikleri yorumlar analiz edilmiştir.

Çalışmanın ön sonuçları "regression tree" metodu ile görselleştirilmiştir. Python programlama dili kullanılarak oyun mekanlarının sürrealizm perspektifinden tartışılmasına yönelik analizler sunulmuştur.

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1.INTRODUCTION: EXPLORING THE POTENTIAL OF SURREALISM IN VIDEO GAME SPACE

Surrealism, as defined by Breton (1924) in his "Manifesto of Surrealism," emphasizes the importance of understanding one's surroundings through the lens of the inner self rather than relying on external perceptions. This artistic movement aims to bring to life the imagery of the subconscious and dreams, challenging traditional notions of nature. Surrealism investigates how individuals relate to the external world through subconscious filters and suggests that neglected associations and the boundless power of dreams possess a higher reality.

In contrast to traditional modernist approaches, surrealism prioritizes exploration over discovery. It rejects the idea of constructing a rational thinking based on logical data or creating new structures that reflect external reality. Moreover, it invites individuals to turn inward, to explore hidden and suppressed inner perspectives. By revealing these hidden perspectives, surrealism seeks to transcend the creation of merely aesthetically pleasing spaces and delve into the deeper role of human exploration. It suggests that space should be seen as something to be discovered rather than pre-existing (Hopkins, 2004).

Furthermore, Breton has articulated his surrealistic perspective on space, highlighting that Surrealism maintains a certain distance from architecture in contrast to its closer engagement with other fine arts (Altınyıldız Artun, 2020). In consideration of these factors, this research seeks to investigate the possibility of bridging Surrealism and architecture through the immersive experience of digital space. Through interactions within the digital gaming space, it draws nearer to cultivating a surrealistic encounter. This study delves into the potential inherent within digital game spaces, offering a more expansive array of interaction opportunities when contrasted with other virtual environments such as cinema and social media platforms. In the interplay between the game space and the player, both undergo transformation, fostering exploration, which in turn possesses the potential for dreamlike spatiality. At this point, consider exploration as an inherently creative act, with game spaces serving as ideal arenas for such creative exploration.

Within the realm of games, James P. Carse (1986), a researcher, discerns between finite and infinite games. Finite games are played with the aim of achieving victory through strategic maneuvers to attain a predetermined outcome. Their objective lies in establishing a binary result upon game completion, often at the expense of neglecting the player's spatial experience. On the other hand, an infinite game can only be sustained through dialogue within a physical and/or digital space that defines a finite ground. Instead of focusing on a definitive triumph, infinite games, played to perpetuate the game itself, prioritize exploration. While a finite game concludes with a winner, an infinite game offers different outcomes, potentially leading to creative endeavors.

The research subject of this research is limited to the games for explorers in the definition of Bartle player types (Bartle, 1996). This study's inspiration for a new sense of creativity from the less-known field of game design. In addition to being similar to game design, visual arts, music and other fields with many current results, it is thought to establish a deep and active communication with the community it addresses. It feeds the user's perception/creativity as well as leaving gaps to be filled to the player.

In light of all these thoughts and research, this study aims to explore the development of a productive relationship between game spaces and players and to investigate how it can contribute to spatial experience as a non-linear way of thinking. It aims to examine the transformative dynamics between virtual game spaces, which give rise to hybrid spatiality, and surrealism. By exploring their applicability and adaptability to spatial experience, this research seeks to uncover the potential emerging from the intersection of surrealism and virtual game spaces. Crucially, this study positions surrealism not merely as a stylistic influence but as a strategic mindset. Mentioned mindset will be examined in detail in the surrealism section of the research.

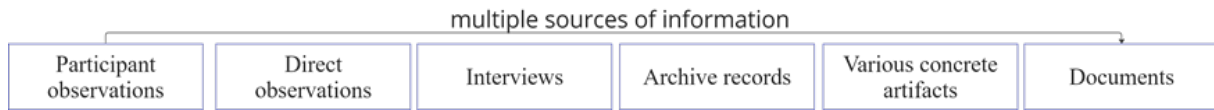
By focusing on gameplay and player experience, this study embraces a theoretical explanation that surpasses data and code methods, emphasizing the importance of experimentation and exploring gameplay dynamics in understanding the possibilities of surrealist thought. In the upcoming chapters, will delve into the revival of

surrealism within architectural spaces, employing a theoretical lens rooted in surrealist principles. This exploration will be conducted through the medium of video games tailored to the preferences and tendencies of the explorer player type. The aim is to investigate and clarify the current state of game space research in terms of surrealist space and to suggest further research avenues.

2. METHODOLOGY

This study is conducted using the case study research method. Various procedures can be used when conducting the case study, but Yin's (2009) studies will be used as a reference in this study. As suggested by Yin (2009), six types of information sources were used to collect data (Figure 1).

Figure 1: Research Sources (created by author).



The methodology of the study consists of two stages: investigation of surrealism, architecture, and videogame space using literature documents and extracting the critical parameters of surrealism mindset and exploring the example game environments according to player comments on STEAM for the perspective of surrealist spatiality, then implementing the parameters into the conceptual regression tree using Python software.

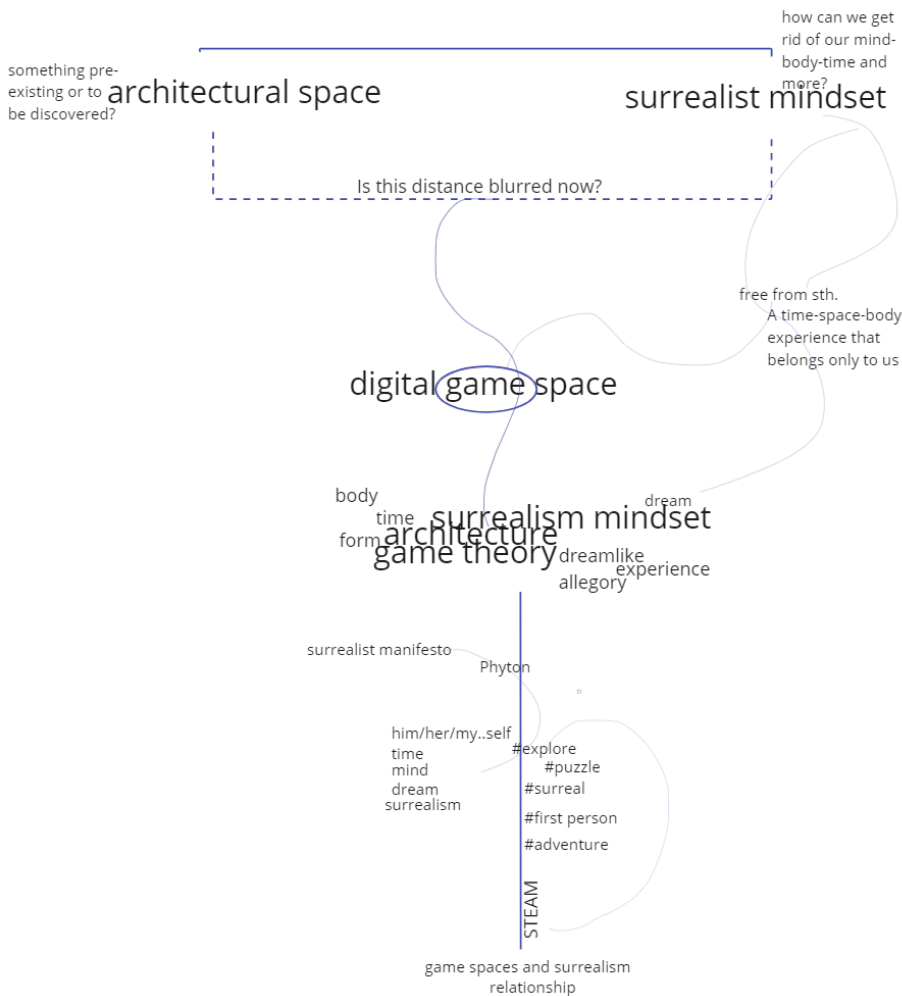
Overall, this methodology focuses on understanding the relationship between surrealism and selected game space, identifying the important parameters involved, evaluating their manifestation within a specific context (video game space), and finally integrating them into a conceptual regression tree. As the primary objective, the study explores the relationship between architecture and surrealism through the lens of the digital space experience.

To discuss the fundamental elements of surrealism and understand surrealism in its simplest form, André Breton's First Surrealist Manifesto was used. This manifesto, the first written work highlighting the mindset of surrealism as a movement, was analyzed using the content

analysis script with Python, and the most frequently used words were determined.

The most suitable games were selected to address the research questions, and a cross-case analysis was conducted within the framework of the relationships between the situations. The research is conducted on the STEAM platform where players can freely express their experiences rather than by asking specific questions to an experimental group. Comments related to the game "Superliminal" on the Steam platform were gathered, and these comments were categorized using the same method, with the frequencies of words determined. The incorporation of automatic analysis methods derived from the advantages of digital space aligns research methodologies with surrealist thinking.

Figure 2: Research Structure (created by author).



3. SURREALISM

Surrealism, an artistic and cultural movement led by André Breton in the early 20th century, wielded significant influence, particularly in art and literature. Its origins can be traced to a convergence of various influences, notably the Dada movement (1917) and principles from psychoanalysis. The definitive initiation of surrealism as a movement transpired with André Breton's "Manifesto of Surrealism" in 1924. Positioned as a responsive departure from established norms in art and literature, surrealism emphasized the prominence of subconscious mechanisms and dream states. Techniques like automatic writing and automatism in painting were employed with the explicit aim of exploring and expressing the surrealist's subconscious. The movement, rejecting rational thought and societal conventions, gave rise to a distinctive and critical vocabulary within the realm of artistic expression.

3.1 Surrealism and Architecture

The texts that makeup Architectural Design's Surrealism and Architecture file dated 1978, which is the first source to comprehensively investigate these relationships, constitute an important basis for this part of the research.

According to Dalibor Vesely (1978), architecture has never been like other branches of art; Painting has not been an integral part of surrealist thought like sculpture and objects. According to Kenneth Frampton, another writer who supports this idea, 'it can be argued that there is no such thing as surreal in architecture' (Altinyıldız Artun, 2014). Surrealists, on the one hand, tried to erode the modernist rigid rules of architecture. On the other hand, they try to produce alternatives to this. Against temporality and desires that modern architecture ignores, they want to explain architecture as a place where desires and time accumulate. They argue that time and experience enrich the space by layering and overlapping, creating the soul of the space. By making architecture the object of poetic experience, they imagine the existence of poetic space that rationalism destroyed. According to them, this is a formless, a timeless architecture that changes according to the flow of desires. The best-known example of this understanding of space important source for the research- is Nadja.

Nadja can be considered one of the basic texts of the surrealist space experience.

In mentioned text describes the experience of Paris, the main character is not only the experienced city but also the subject who experiences the city. The question "Who am I?" mentioned by Breton in Nadja's first page, regarding the identity, nature of the subconscious, or the relations between mind and body, was fundamental in Surrealism (Breton, 1928).

The main character of the book, as an explorer of urban space, also explores himself. A person discovers oneself through space and discovers space based on their own identity. Spatial experience exists not only with external but also internal elements. Here the experience of the one is at the same time active, hallucinatory, and shocking. It is a spontaneous creation at every step (Ojalvo, 2011). In Benjamin's words (as for Baudelaire before him), the flaneur's dreams evoked by perceptions are set free in this kind of experience (Benjamin, 1995). The city turns into a surreal place, it is turned upside down in the mind and constantly reconstructed through imaginary connections. Reality and dreams are inextricably merged. The book's character and the city are intertwined and become one. This existence with the city, Nadja, and overlapping times makes Paris a collage of magic. In surrealism, space, time and the subject who experiences it are becoming one. Space is formed through these experiences and through the accumulation of time.

In this case, the form limits the existence of other possibilities by enclosing these possibilities within a framework. Batallie explains this situation with the concept of formless "L'INFORME" (Batallie, 1929). Batallie affiliated with the surrealist movement, is a philosopher who challenges societal norms and established hierarchies, actively seeking their dismantlement.

The figure drawn by the painter André Masson, depicting a headless person with the pelvis covered by a skull, represents Georges Bataille's concept of the "formless" (**Figure 3**). The concept, introduced by Bataille, rejects all encoded, systematized, and hierarchical definitions of matter or objects. According to this perspective, the condition for an

individual's liberation metaphorically involves rebellion against even their own body.

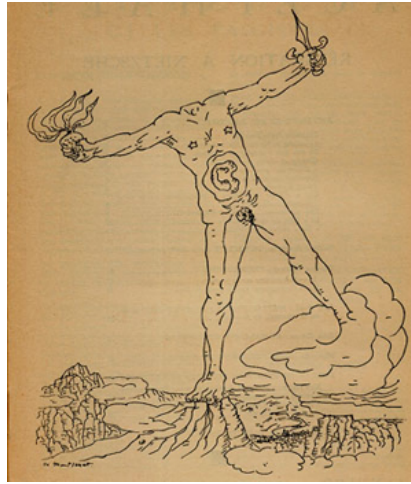


Figure 3: André Masson's cover for the first issue of *Acéphale*, 1936

Despite the rigid stance of space, the emphasis is on the surrealist potential of experience. Based on these thoughts, a "game", in which a person resists one's own body, time, and place, and builds one's identity only with an inner impulse (winning, discovering, spending time, creating), is a way to get rid of these boundaries - prisons.

3.2 Digital Surrealism

The concept of digital surrealism is utilized in this study by placing space at the center of focus. As mentioned in previous sections, architecture has often steered clear of a surrealist approach. The central problem of this study is to investigate how architecture and surrealism converge or diverge through the experience of digital space.

Various "automatic analysis" methods that emerge as advantages of digital space also align research methodologies with surrealist thinking. The methods used by surrealists to reveal the unconscious and break free from the limits of consciousness have become more pronounced in the digital world. This situation paves the way for the use of surrealist creative methods in digital platforms. However, in the literature, the concept of Digital surrealism has been limited to cinema studies and there are still very few studies.

For instance, Ferguson proposes the concept of digital surrealism as a method of digital manipulation, using scientific image analysis software

such as “ImageJ” to manipulate film frames. The aim is to examine film texts beyond the ordinary through the images resulting from these manipulations. Referring to Roland Barthes's idea of structural activity, which involves taking apart an object and then reassembling it to create something new, Ferguson emphasizes that the digital surrealism method targets a similar creative process. Drawing on a quote from Roland Barthes about "the structuralist activity," Ferguson highlights that structural analysis takes apart the truth and then reassembles it to create something new. Ferguson's use of digital surrealism as a method involves manipulating film frames with scientific image analysis software to examine film texts in extraordinary ways, echoing Roland Barthes's concept of structural activity (Ferguson, 2017).

Andrei Kartashov considered this concept from the perspective of surrealist film theory and used this concept in his work on cinema works that have surrealist qualities and consciously use digital technology in their production (Kartashov, 2018).

3.3 Surrealism and Game

It is said that Surrealists produced creative ideas with the games they played, such as exquisite corpses, automatic drawing, etc. The relationship between games and surrealism is important because surrealists encouraged creativity and free thought via games (Figure 4).



Figure 4: (on the left) André Mason, Automatic Drawing, 1924, (on the right) Hannah Hoch, Da Dandy, 1919, Photomontage

David Graeber expresses the relationship of games with freedom by arguing that playing is the purest form of freedom. He says freedom is our ability to make up just because we can. When we feel free, we are

more likely to play or invent. Game is not only what gives birth to freedom, but also what arises from freedom. Through playing, the limits of the mind are exceeded (Graeber, 2018).

According to Huizinga, playing games is a tendency that comes from the instinct of 'being different'. Even though the game is inherently bound by rules, it is free and subject to pleasure. The fact that it can be postponed at any moment makes the game free from time, and one is free in the field of play, both in terms of the decision to be in it and in terms of establishing the space. The game always creates other possibilities, and even though it depends on the rules, it gives birth to itself by turning into another game with a new rule at any moment. According to Huizinga, excessive systematization and increased discipline of the game overshadow the playful content (Huizinga, 2015). In that case, game designers cannot directly design the game, they create an indirect experience for the player by designing the rules that give rise to experience. The game includes the objective choices a player makes and the conditions reached in the game, as well as the player's subjective reactions and expectations. At the limits of imagination, space is built and unbuilt over and over again in the mind throughout the playing process. For this reason, digital games do share a viewpoint in terms of spatiality with other visual forms, photography, painting, etc. - but they differ from them with their interactive nature. The distinct difference between video games and other forms of visual media is the main reason for choosing a case video game environment for this study. Videogames exploit all of the four key affordances of digital media: They are procedural, participatory, encyclopedic, and spatial (Murray, 2011) (**Figure 5**).

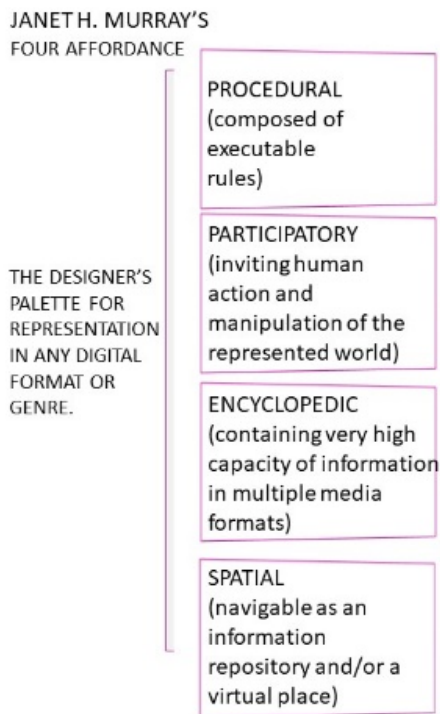


Figure 5: Janet Murray's four affordance of digital media (created by author).

Digital game environments allow players to experience space in unique ways via their limited bodies and subconscious. In this study, the experience of the space by integrating the limited human body and perception with an unlimited subconscious, and digital game spaces that directly affect the user by looking at the space from a surrealist viewpoint through these experiences and reveal the subconscious by keeping the moment alive, are discussed. Within the scope of the study, spatial narrative is examined through digital game spaces, and the emergence of space through the experience created by the synthesis of architecture, game, and surrealism is explained with examples. In this section, game spaces with non-Euclidean spatiality features were selected as cases in order to support and examine the hypothesis mentioned/explained in the previous sections.

4. VIDEO GAME AS SPATIAL SURREALIST EXPERIENCE

In research on video games, space to date, game space has been seen as architectural metaphors (Günzel, 2013) representational and textual spaces of the imagination (Schwartz, 2006) a form of storytelling or interactive spaces (Jenkins, 2004).

Henry Jenkins, who associates the concept of narrative with games in his article written in 2004, talks about the potential of researching games not only as stories but also as spaces that mature/create themselves with narrative possibilities. While playing a game, the players construct their own narrative with the contribution of the potential narrative of the game. The concept of narrative in the game is a situation that is affected not only by storytelling but also by other mechanics of the game -environment, object that constructs game space, time, player's perspective, and more. When talking about narrative or other game mechanics that come into play from the player's experience, all can be classified under the concept of interactivity. The game offers the players a potential for an experience, it does not design the experience. It creates an interactive environment to explore and build their own experience. In this respect, game designers can be defined as narrative architects rather than storytellers (Jenkins, 2004).

Jenkins defines the term "narrative" as something pre-structured or programmed, something that takes shape through play, nor does it mean unstructured or chaotic. This means that playing the game allows the player to create their own stories. The story itself is structured through the actions of the player. Experience is a product of the continuous and cumulative interaction of an organic self with the world. In this interaction, the interactor (player in this context) is in a constant state of transformation. In this case, the game space provides a ground where mutual change is continuous. More than just a spatial element created by the game, the self is also reconstructed in the game world. The players experience the game space in another dimension, with a different identity, and with new skills, through players' avatars.

Dewey defines experience as consisting of stories, each of which has its own plot, a beginning and a progression towards closure, of a non-repetitive nature. For example, since a staircase is mechanical, it progresses in individual steps rather than a solid progression, and an inclined plane is distinguished from other things by its apparent steepening. An experience has a pattern. They do not consist merely of following and exposure to each other, but of these occurring in relation to each other. Action and its result must be united in perception. The scope and content of relationships are the measure of the content of an experience. (The depth and breadth of a child's experience is low

due to the lack of background and the lack of understanding of the relationships between exposure and doing.) Through the object, the artist/designer and the active observer-experiencer- encounter each other, their material and mental environments, and their culture at large (Dewey, 2021) (Figure 6).

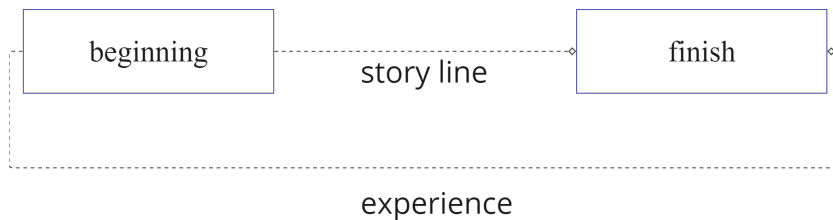


Figure 6: John Dewey's experience definition (by author)

5. VIDEO GAMES AS A FIELD OF STUDY

Video games have distinct characteristics that differentiate them based on their gameplay styles. Platform games, RTS (Real-Time Strategy) games, TBS (Turn-Based Strategy) games, adventure games, simulations, FPS (First-Person Shooter) games, TPS (Third-Person Shooter) games, and RPGs (Role-Playing Games) each have unique game mechanics, gameplay styles, and objectives (Tanyeli, 2011). And the puzzle games included in this research. The main focus of puzzle games is the player's ability to manipulate various objects to solve challenges and progress. This feature provides players with an active role in the development of the story and the opportunity to solve various puzzles.

In the scope of this study, puzzle games were chosen for their potential to enhance players' different thinking. In puzzle games, each puzzle or object change represents a crucial element that assists the player in advancing the story or interacting with game space.

This situation provides players with an interactive experience, allowing them to actively participate in the development of the story. According to Bartle's player types, it is believed that conducting research through games that specifically appeal to Explorer-type players would be productive in this study's scope (Figure 7).

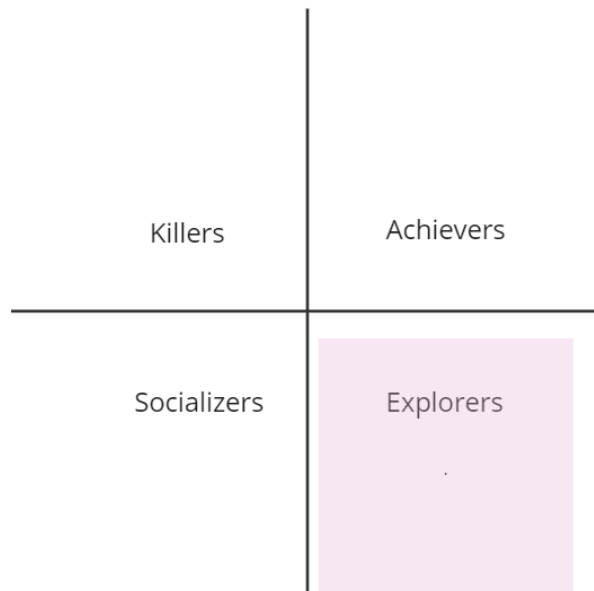


Figure 7: Type of players (Bartle, 1996).

Explorer types enjoy exploring all aspects of a game, including its mechanics, various story elements, and want to know everything about what they can do in it. Bartle explains that they are interested in how the game works and look for interesting and abnormal characteristics such as bugs (Bartle, 1996). Explorers are less concerned about competition and more interested in spending time experiencing the story that the game has to offer.

Games that focus on single-player experiences and include tags such as "Puzzle," "Surreal," "Exploration," "First-Person," and "Adventure" were considered in order to exclude the impact of other players on the game. Tags such as "Horror", "Psychological Horror" and "Survival Horror" were excluded due to the games being perceived as surreal due to their visual effects only. The "Realistic" tag was not included in the elimination criteria as it was outside the scope of the research. Games with at least 1000 reviews were listed as shown in **Table 1**.

Table 1: Created from 04.01.2024 STEAM data (created by author).

Game	Most popular user-defined tags	Release date	Review
The Stanley Parable	#Comedy, #Narration, #Indie, #Walking Simulator, #First-Person	2013	38,673
Superliminal	#Puzzle, #First-Person, #Surreal, #Narration, #Physics	2019	21,178
The Witness	#Puzzle, #Exploration, #First-Person, #Open World, #Singleplayer	2016	13,163
Antichamber	#Puzzle, #First-Person, #Indie, #Surreal, #Exploration	2013	12,348
Manifold garden	#Puzzle, #Surreal, #Abstract, #First-Person, #Exploration	2020	5,061
Viewfinder	#Puzzle-Platformer, #First-Person, #Puzzle, #Singleplayer, #3D-Platformer	2023	4,423
Moncage	#Puzzle, #Casual, #Indie, #Singleplayer, #Drama	2021	4,386
Quern UndyingThoughts	#Adventure, #Puzzle, #Mystery, #Atmospheric, #Exploration	2016	2,972
Call of the Sea	#Adventure, #Puzzle, #Story Rich, #First-Person, #Female Protagonist	2020	2,880
Obduction	#Adventure, #Puzzle, #Exploration, #Indie, #First-Person	2016	2,784
The Unfinished Swan	#Adventure, #Puzzle, #Indie, #Exploration, #Puzzle Platformer	2020	1,283
realMyst: Masterpiece Edition	#Adventure, #Puzzle, #Point & Click, #Exploration, #Mystery	2014	1,245
Hyperbolica	#Surreal, #Exploration, #First-Person, #Adventure, #Puzzle	2022	1,125
Riven: The Sequel to MYST	#Adventure, #Puzzle, #Point & Click, #Exploration, #Classic	2010	1,080

5.1. Spatial Surrealist Experience in Superliminal Game

The game space of Superliminal with non-Euclidean spatiality feature was selected as a case in order to examine the hypothesis mentioned in the previous sections. According to the research conducted by Arsenault and Larochelle (2014), the spatiality of digital games adheres to illusionistic projections of Euclidean space. Games like Superliminal or Antichamber, which feature non-Euclidean spatial characteristics, can significantly impact players' perception of object permanence and evoke feelings reminiscent of childhood (Backe,2020).

Superliminal strategically engages players in a cognitive challenge, prompting them to explore their cognitive abilities and devise inventive solutions. By manipulating perception through alterations in point of view, achieved via perspective changes and optical illusions, the game transcends conventional spatial representations found in digital games. Through interventions on spatial elements, such as resizing objects, eliminating barriers, and generating navigable platforms, players gain

direct influence over the game space, transforming it into an allegorical entity.

Granting players the authority to manipulate the game space fosters a surreal atmosphere, akin to a dream that defies the constraints of physics and perception. This departure from traditional spatial logic encourages players to explore unconventional cognitive pathways. The non-linear narrative structure of the game empowers players to formulate subjective interpretations. The surreal potential embedded in the game space compels players to transcend conventional cognitive mapping, fostering an experiential journey into spatial surrealist possibilities facilitated by perspective shifts and optical illusions. Consequently, the game makes possible an exploration into the subconscious depths within a dream-like ambiance.

5.2. Exploring Subconscious Dimensions of Space Perception: A Conceptual regression tree

Surrealism aimed to transcend the confines of visual imagery and its conventional purpose. It envisioned itself as a thought factory, a lifestyle that embraced playfulness and creativity. Surrealism was not merely an art movement; rather, it embodied a way of life that allowed for unbridled experimentation within the realm of the inner self, free from external constraints (Klingsöhr-Leroy, 2004).

André Breton's First Surrealist Manifesto (1924) has been chosen to evaluate how the surrealist experience is manifested or exists in terms of creativity, playfulness in the video game space.

The manifesto is considered significant for research as a written text that gives substance to surrealism as a movement. The most frequently occurring words in the manifesto have been analyzed using Python software (**Appendix 1**). Stop words have been eliminated and most used words have been categorized (**Figure 8**).

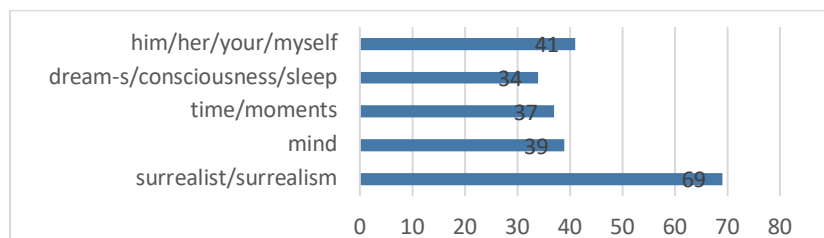


Figure 8: Most used concepts in First Surrealist Manifesto (English version) (created by author).

Concepts such as individuality-mind-time-dream- within surrealism are deemed important for questioning the surrealist experience in the game space. In this context, when these concepts are determined as categories, it is important which of these elements are experienced in the game space and in what way. Inherent to the main logic of surrealism, Steam (n.d.) has been selected as the research field, where users share their comments without any specific purpose, instead of conducting interviews with specific users chosen as the research area.

The goal is to reach as much data and commentary as possible without making distinctions such as hierarchy or gender/country/age range among the comments. The intersection between what the players can and cannot do in the game, determines the possibility space of the game universe. Players' preferences and how they perceive the game provide important clues for understanding and improving game design. In this context, methods such as interviews with players can play a critical role in the game analysis process.

Digital games, being interactive spaces, make user feedback a crucial evaluation data for research. It is believed that the Steam platform, which possesses the broadest pool of information, is suitable for accessing such data. Specifically, for the "Superliminal" game on Steam, comments made in English between November 1, 2020, and December 28, 2023, were considered. Among a total of 25,021 comments, those deemed helpful by at least 2 individuals (via the most helpful category filter) were filtered, resulting in 13,244 comments for analysis (Stream, n.d.).

Stop words (such as prepositions) have been eliminated. Following this analysis, the filtered comments were analyzed using Python software, and the frequencies of the concepts mentioned in the comments were determined (**Table 2**).

The frequencies of the concepts in the table provide a starting point for understanding which aspects of the play are prominent and how they influence the surrealist space perception. According to the results of the analysis, it is seen that the players frequently use expressions such as bending, and melting regarding mind, and words such as bending and illusion regarding time (**Table 2**). When the analysis is taken into

consideration, it can be seen how they experience these concepts. In the context of the research on the surrealist space experience, the ways of experiencing it can be seen in these categories.

Table 2: Relationship between surrealist manifesto and Superliminal Game comments on STEAM platform (created by author).

Concepts	Frequency	Concepts	Frequency
Dream		Surrealist/surrealism	
play/played/player/s	435	puzzle/s	674
story/storytelling	170	play/played/player/s	435
dream/s/ing/sleep	112	mind/brain/mental	202
gameplay	86	experience/s/experiment	196
unique	70	fun/entertaining//enjoyed/enjoy/able	136
narrative/narration	65	dream/s/ing/sleep	112
creative/creativity/create	51	interesting	96
simulator	33	trippy/weird/odd/fantastic	87
imagine	16	outofthebox/exceptional	53
exploring	16	change/changing/ed	50
built	13	design/s	46
hidden	12	unexpected/surprised	40
complex	12	illusion/s	38
journey	9	environments/place	38
provoking	8	variety/various/multiple	27
non-euclidean	7	atmosphere	24
inspiring	7	secret/s	24
visually	7	explore/ation	24
phenomenal	6	art	22
hallways	6	surreal	22
intuitive	6	humor	22
profound	6	visuals	19
subliminal	6	confused/ing	17
manipulation	6	imagine	16
vision	6	possible	16
metaphor	5	rules	13
inventive	5	pretentious	12
charming	5	complex	12
physics	5	impossible	12
emotional	5	inspired/inspirational	12
Him/her/your/my self		designed	11
experience/s/experiment	196	puzzler	11

Concepts	Frequency	Concepts	Frequency
perspective/s	179	replayability	11
feel/s/ing	161	acting	11
firstperson	103	aesthetic	9
creative/creativity/create	51	crazy	9
times	35	endless	9
optical	21	novel	9
depending	20	potential	8
focus/es	19	non-euclidean	7
dialogue/interact/interactive	23	inspiring	7
personally	13	particular	7
aspect	11	visually	7
characters	5	phenomenal	6
inventive	5	inception	6
Mind		intuitive	6
perspective/s	179	bizarre	6
feel/s/ing	161	subliminal	6
solve/solving/solution/s	206	philosophical/philosophy	10
challenge/s	55	puzzling	5
perception	54	doubt	5
change/changing/ed	50	stunning	5
expected/expectations/expectin g	49	choice	5
challenging	40	metaphor	5
illusion/s	38	inventive	5
times	35	creepy	5
secret/s	24	charming	5
explore/ation	24	physics	5
thinking	23	messes	5
satisfying	22	intriguing	5
impressive/ed	21	emotional	5
therapy	20	Time	
headache/sickness	20	bending	38
hurts/pain	18	illusion/s	38
confused/ing	17	playthrough	21
blind	16	certain	18
blowing/melting	16	speedrun	18
relaxing	15	constantly	18
built	13	repetitive	15
problems	13	progress	14
hidden	12	impossible	12
complex	12	endless	9
inspired/inspirational	12	constant	7
puzzler	11	limits	7
high	11	free	7
acting	11	sequence	7
depth	10	progression	6
crazy	9	limited	6
forced	8	immediately	5
provoking	8	loop	5
shrink	7		
attention	7		
treatment	7		
blast	6		
puzzling	5		
doubt	5		
stunning	5		
creepy	5		

6. CONCLUSION

As can be seen, there are points where the concepts, which are divided into categories and seen as the basic concepts of surrealism as a result of the research, overlap with the comments made about the game experience (**Table 2**). It can be used as a preliminary study for future studies that can be taken into consideration in the process of designing digital game experiences. The concepts of time, mind, individuality, dream and their related concepts can be taken into consideration in the design of digital game space experience.

During the research process, an effort was made to examine the relationship of surrealism, which emerged in the 20th century and has now ended, with space. The works of Surrealists, how they adopted this understanding, how they integrated it into their lives, their creative works, their relationship with mechanization and Surrealist manifestos were among the main sources of this study. Walter Benjamin's definition, "history is not looking for traces of the past today, but discovering traces of the present in the ruins of the past", is the source of inspiration for efforts to see the present in the ruins of surrealism during the research process. It can be said that the inclusive and creative perspective in these ruins is not far from the experience of space due to the position that mechanization has reached in the 21st century.

In this case, since the categorized concepts interweave with each other and shape an experience that cannot be thought of independently, it would be more appropriate to present a table where intersections occur rather than listing them vertically in a table (**Figure 10**). As spatial experience consists of multiple variables, it will contain various points of intersection.

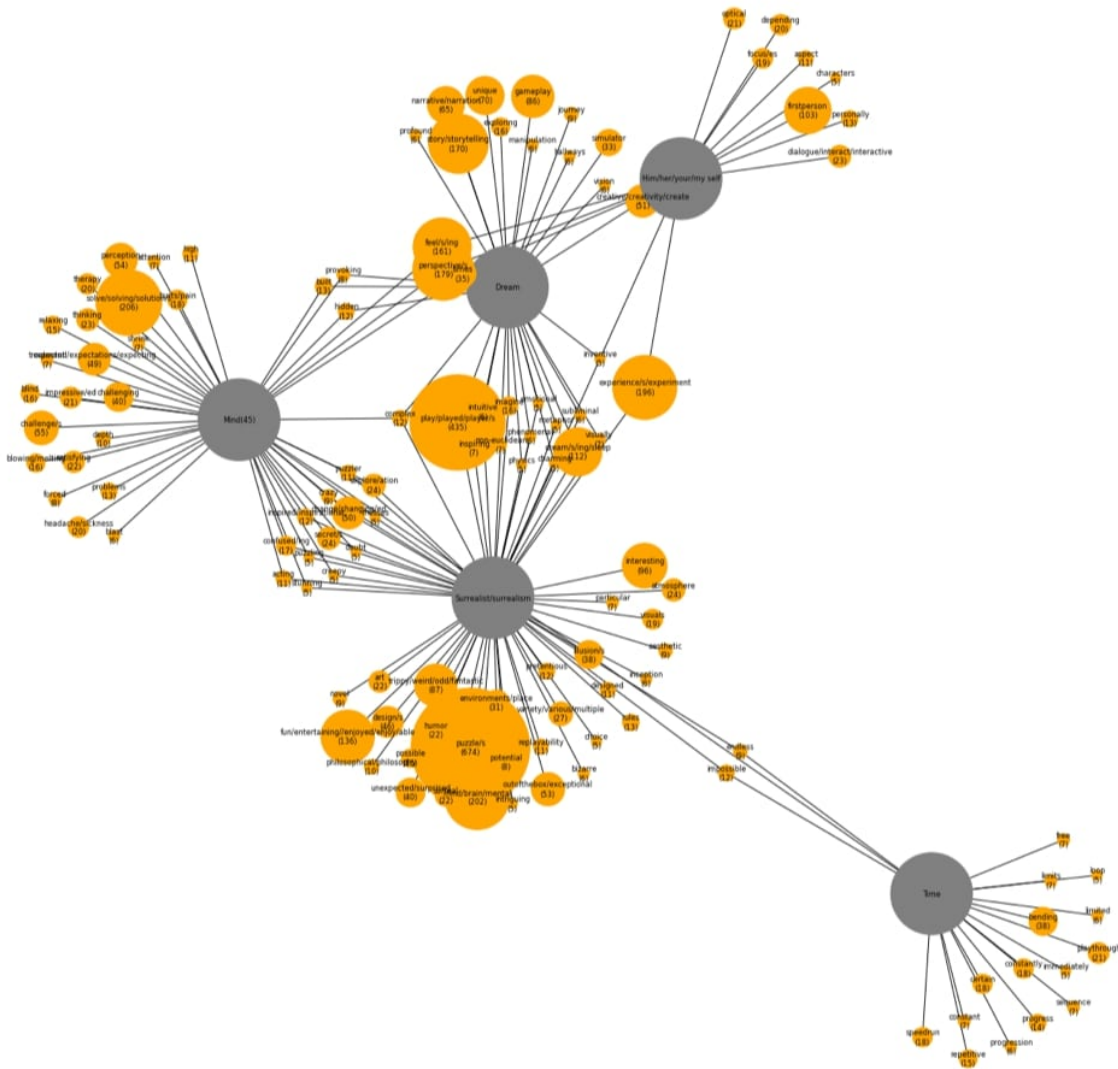
Understanding surrealism's non-linear way of thinking, experiencing, and producing, not as a series of absurd images but as the mindset of surrealism, liberates our minds in designing and experiencing space. The perspective that liberates the designer's mind also liberates the experience of the experiencing subject.

Thus, space, rather than being the prison of our body, like a frame that contains us, can lead us to completely different experiences by freeing us from time and space. The way digital game spaces liberate our minds from time, framed spaces, and even our bodies have been investigated within the scope of this study.

Future studies can expand the results of these studies and focus more on how surrealists use techniques such as dreaming, stream of subconscious and automatism, how these techniques can be reinterpreted in digital space design, and how the surrealist mindset can be integrated into digital space design.

Surrealism's dream of separating the subject from the body, time, and everything that comes as a boundary between every element of one's experiences and offering there an experience in the limitlessness of the dream can be realized in the game spaces in the digital world. It is anticipated that the parameters emerging as a result of these studies will be preliminary research, in that they will always lead to the imagination of other possibilities in space design.

Figure 10: Conceptual regression tree (created by author).



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Conflict of Interest Statement

The authors of the study declare that there is no financial or other substantive conflict of interest that could influence the results or interpretations of this work.

Author Contribution

The authors declare that they have contributed equally to the manuscript.

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