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Original Research Article

Gombrich's Schema Theory and the Perception of Salvador Dali's Paintings: A Focus on Visual Illusion and Trompe-l'œil Techniques

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Abstract

Problem statement: This study explores how viewers' perception of Salvador Dali's paintings are shaped through the lens of Ernst Gombrich's schema theory and its correction mechanisms, with particular attention to visual illusions and Trompe-l'œil techniques. These conceptual tools are drawn from Gombrich's seminal work Art and Illusion and are examined in relation to Dali's surrealist imagery.

Research objective: Dali's complex illusionistic skills and Trompe-l'œil techniques go beyond conventional perception by introducing unconventional elements that challenge familiar schemas. This research aims to answer these questions: How do selected Dali's Paintings disrupt schematic expectations through illusionistic skills and Trompe-l'œil techniques, thereby shaping viewer perception? To address this question, the study draws on Gombrich's emphasis on illusional and optical strategies as mechanisms for confronting mental schemas.

Research method: This research adopts a descriptive-analytical approach. Five selected paintings were examined to determine how schematic structures influence and reshape viewers' perception.

Conclusion: The study of Dali's paintings from the 1940s reveals that his most significant tools for challenging perceptual schemata are his illusionistic skills and trompe-l'œil techniques. By employing visual deception, double-faced images, reflections, transformations of objects, metamorphoses, mergers, and the creation of strange and innovative compositions—alongside enigmatic uses of shadows, unconventional angles, and anomalous depths—Dali destabilizes the viewer's mental schemata. He traps the audience at the threshold between reality and dream. Accordingly, Dali's endeavor goes beyond mere perceptual play. He uses these devices to stimulate the viewer's imagination, and produce semantic multiplicity. The viewer is compelled to actively participate in the process of perceiving and interpreting the artwork. In Dali's paintings, the use of illusionistic techniques and trompe-l'œil intensifies over time. As time progresses, these methods increasingly serve the purpose of meaning-making, moving beyond visual trickery toward deeper conceptual engagement.

Keywords: *Surrealist Painting, Salvador Dali, Ernst Gombrich, Visual Illusion, Trompe-l'œil Techniques, Viewers' Perception.*

Introduction

What René Descartes, the rationalist philosopher of the Baroque era, considered the origin of error in dismantling the house of knowledge was shaped by deceptive senses. These misleading senses lead us astray, undermining the very foundations of our cognitive structure like termites. Descartes sought to establish a basis for knowledge that would be less prone to error and deception. Thus, he cast doubt on anything that could be a source of error. This radical skepticism led him to the famous proposition: I think,

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therefore I am. To grasp such a proposition, he leaned toward presupposing rigid and pre-existing forms of reason—such as God, identity, self, and substance.

Art, however, seems to follow a path that diverges from rationalism and instead embraces the errors and illusions of the senses—especially visual deception and Trompe-l'œil techniques —as fertile ground for creativity and innovation. These techniques, which emerged in the early Renaissance and reached their peak during the Baroque period, were mastered by artists like Carlo Crivelli and Cornelis Norbertus Gijsbrechts. During the Baroque era, many visual illusions and Trompe-l'œil techniques were explored and refined. In the modern period, beginning with Impressionism, artists such as Salvador Dali employed these techniques in various forms.

Today, the stream of artistic creativity has turned optical deception into a tool for painting not only canvases but also city streets and the walls of large residential complexes. Against this backdrop, the present study seeks to answer the following question: How do these artworks shape viewer perception based on Gombrich's Schemas?

The significance of this research lies in its aim to explain how Dali's most brilliant illusionistic skills and Trompe-l'œil techniques in surrealism, disrupt established schemas. This analysis can serve as a foundation for future studies on artists who use such techniques to construct perceptual frameworks in their work.

Literature Review

A review of existing literature reveals that no study has precisely focused on the objectives of the present research. As previously stated, this study centers on the viewer's role in perceiving the artist's works through the lens of schemas, with particular attention to visual illusions and Trompe-l'œil techniques. Accordingly, the background is divided into two parts: a) Theoretical Framework: This section includes Gombrich's views on image perception, emphasizing schemas, viewer participation, types of visual illusions, Trompe-l'œil techniques, and, where applicable, ambiguity, and b) Artist and His Works: This part introduces Salvador Dali and analyzes selected works focusing on schema disruption.

Dotson (2020), in an article titled "Understanding the Persistence of Memory," published on Artsy, explores the representation of time, memory, and reality in Dali's The Persistence of Memory. The author shows how timeless, fluid forms challenge the viewer's perception. According to Dotson, visual illusion in Dali's work is not merely aesthetic but serves as a tool for reflection and interpretation. The article also discusses the role of the unconscious and dreams in shaping surrealist space. The key difference from the present study is its lack of focus on schemas and Gombrich's theory of illusion and deception.

Baxter (2016), in "The Persistence of Surrealism: Memory, Dreams, and the Dead," published in Memory in the 21st Century, examines psychological dimensions of Dali's work. He highlights how scientific concepts like relativity and neuroscience contribute to multilayered visual experiences. Baxter emphasizes Dali's use of the unconscious and memory to blur the boundaries between reality and dream. Again, the present study differs in its focus on schema theory and Gombrich's framework.

Ades (2004), in Dali, The Centenary Retrospective, offers psychoanalytic interpretations of his works alongside historical context. While comprehensive, the study leans toward Freudian analysis rather than schema theory or visual deception. Ades occasionally discusses visual illusion and trickery, but without emphasis on cognitive schemas. Notably, Ades distinguishes Dali's use of illusion from artists like M.C. Escher, suggesting it serves deeper conceptual aims beyond entertainment.

Dali (2000), in Dali's Optical Illusions, explore the paranoiac-critical method, Two-faced or Multifaceted images, anamorphoses, unusual perspectives, and visual distortions, including photography and 3D holography in Dali's later works. Although this book closely aligns with the current study in title and scope, it does not reference Gombrich's schema theory or viewer cognition explicitly.

Melies et al. (2021), In Pictorial multimodal analysis of selected paintings of Salvador Dali. Use Kress and van Leeuwen's theoretical framework of visual grammar for the analysis of the multimodal semiotic resources of selected paintings of Salvador Dali. Their study focuses on the social and political meanings of Dali's works through multimodality. The present research differs by employing Gombrich's theory and analyzing a different set of paintings.

A search through Persian-language sources shows that while researchers have explored artistic and psychological aspects of Dali's work from various angles, none have analyzed his paintings using Gombrich's Art and Illusion with a focus on viewer perception, schema formation, and visual illusions and trompe-l'œil techniques. The closest Persian-language study is by Taheri Qomi (2024), titled "A Comparative Hermeneutic Reading of Paintings and Animation (Case Study: Works by Salvador Dali and Ali Akbar Sadeghi)". Using hermeneutics, the author examines how artistic understanding relates to the artist's intent. Through a descriptive-analytical and comparative-historical method, the study concludes that factors such as lifestyle, artistic background, philosophical currents, and cognitive structures of both artist and viewer play a role in interpretation.

Research Method

This study is theoretical in nature and qualitative in method. It is developmental in scope. Data gathering was conducted through library research and documentary sources. The data analysis method was descriptive-analytical. The research began by outlining the theoretical foundations of schema formation and correction, emphasizing illusionistic skills, optical deception, and ambiguity in Gombrich's thought. It then elaborated on visual illusion with a focus on trompe-l'œil techniques. Salvador Dali was selected among modern artists due to his consistent use of unfamiliar schemas, ambiguity, visual illusions, and trompe-l'œil techniques in his works. His multifaceted, ambiguous, and illusion-based paintings, especially those from the 1940s, offer a distinct contrast to perceptual psychology studies. This purposeful selection aims to reveal how Dali employed ambiguity, illusionistic skills, and deception techniques to challenge perceptual schemas.

The statistical population includes approximately 250 paintings by Salvador Dali and two major works by Gombrich: Art and Illusion and The Story of Art. The sample consists of five paintings from Dali's 1940s period, selected with chronological order maintained. All analyses and interpretations are authored by the researcher, except for minor referenced sections. The study focuses exclusively on Art and Illusion.

Theoretical Foundations

The phrase "di sotto in su"[1] is an Italian term meaning "from below upward." In art, it is especially used to describe ceiling paintings from the Renaissance and Baroque periods. This technique involves creating perspective illusion that gives the viewer the impression of looking up into a three-dimensional space, even though the actual surface is two-dimensional.

Prominent examples of this technique can be seen in the works of artists such as Andrea Mantegna, in the Camera degli Sposi (Bridal Chamber), and Antonio da Correggio, in the Parma Cathedral. The technique was often employed to create the illusion of an open sky or architectural spaces above the viewer.

• Schemas and the role of the viewer in Gombrich's thought

Art, through illusion and visual deception or trompe-l'œil techniques, conveys messages that can only be fully received through the viewer's mental participation. The viewer actively constructs the meaning of an image by integrating what is seen on the canvas, what is known about the world, and what is stored in visual memory. Illusion does not reside in the image itself; it is formed in the viewer's mind. The illusion of reality is not achieved through imitation, but through eliciting an appropriate response from the viewer. Illusions in art are based on recognition presets (Gombrich, 2014, 380). Illusion relies on the

interplay of cues and the absence of contradictory evidence. The only way to resist distortion is to place cues in opposition, preserving a coherent image of reality against deceptive patterns on the surface (ibid., 407).

Gombrich explains how schemas are formed and adjusted in the mind through experience and observation. He describes the process of schema formation and correction in art, identifying two controlling agents: the viewer and the artist. The rhythm of perception mirrors the rhythm of representation. Schema formation and correction are based on prior experiences and expectations. When these expectations are disrupted, we abandon our assumptions (ibid., 397). First, we observe objects with our eyes, then examine them from different angles, and finally internalize their essential characteristics. These activities generate expectations and predictions that guide representation. Our perception of the world is egocentric; we scan the world for things directly related to us.

Artists can manipulate these schemas to create visual illusions. Some may fear random or unexpected elements that give the artwork independent life, while others, like Leonardo da Vinci and Alexander Cozens, embrace them to expand their artistic language (ibid., 357–358). The artist is indebted not only to schemas, memory, and artistic traditions but also to personal observation and experience (ibid., 348). Our understanding of an image is heavily influenced by its context. By placing an image in an unexpected setting, artists can alter its meaning and generate visual illusions or expectations. Despite our tendency to view images based on visual habits, there is a significant gap between perceiving images and seeing the observable world (ibid., 270).

Thus, we construct schemas not only from worldly experience but also from prior knowledge of visual art. Viewers are aware of artistic conventions such as spatial depth and object placement, which aid in schema formation and correction. Artists, too, create images by manipulating inherited schemas shaped by cultural conventions that represent reality (Gombrich, 2014, 378). Gombrich viewed art not as a perfect imitation of reality, but as a continuous process of schema revision. Through this method, artists help us expand our understanding of the world and revise our perceptual frameworks.

Gombrich emphasizes that the observer is not a passive recipient but actively interprets and completes the image with their mind. Art is a collaborative act between artist and viewer. The imagination of both parties is interlinked (ibid., 300). One must be aware of visual conventions and have learned them for them to be effective. Unlike Gestalt psychology, we do not unconsciously and automatically respond to artistic rules or visual codes (ibid., 397). The artist relies on the viewer's readiness to accept visual conventions and complete the illusion. Ambiguity in art is not a flaw but an invitation to interpretation. Gombrich considers this one of art's greatest appeals. The pleasure of art lies not in certainty, but in the play of possibilities. Through ambiguity, visual play occurs, allowing the viewer to shift between interpretations until the most fitting one emerges (ibid., 387).

Visual illusion and trompe-l'œil: viewer participation

Visual illusion refers to any method that creates the impression of three-dimensionality on a two-dimensional surface. The results of such illusions are often mistaken for reality. Among the most common techniques are perspective, foreshortening, depth creation, and trompe-l'œil. The term trompe-l'œil originates from French, combining the verb tromper (to deceive) and the noun œil (eye). It was coined during the Baroque period and first used officially at the Paris Salon in 1800. However, artworks employing this technique existed prior to that date, making the term applicable to earlier works as well (Attademo, 2020, 30). Various techniques were used to create trompe-l'œil paintings, especially during the Baroque era, including quadratura, anamorphosis, angular perspective (notably di sotto in su, or "from below upward"), and chiaroscuro effects (Tkachuk et al., 2021, 1274). Italian Baroque painters often employed these methods with great skill and variety. To grasp the illusionistic nature of such works

through form, the viewer experiences two successive moments: the moment of being deceived, and the moment of realizing the deception. Thus, trompe-l'œil reveals the participatory capacities of realism (Trubek, 2001, 37). Many scholars emphasize that works based solely on trompe-l'œil techniques do not constitute masterpieces. A painter may master these techniques to create compelling illusions and provoke curiosity, but masterpieces aim beyond technical prowess in perspective, color, and illusion. According to Graham, trompe-l'œil-based works never truly become masterpieces (Graham, 2023, 91). This research challenges the finality of Graham's claim.

Gombrich, throughout Art and Illusion, discusses various techniques artists use to create visual illusions, such as perspective, chiaroscuro, and trompe-l'œil. The first creates depth and distance on a flat surface; the second uses strong contrast between light and shadow to evoke volume and realism; the third deceives the viewer into believing a painted object is real. What we call "eye deception" is not merely the artist's skill but also a skill the viewer encounters midway. Gombrich believes illusionistic techniques have advanced significantly, but there remains debate about the distinction between artistic creation and technical trickery.With the rise of movements like Cubism, technical skills such as perspective and chiaroscuro have been devalued and deemed non-artistic. These techniques have suddenly acquired a pejorative connotation (Gombrich, 2014, 406). Nevertheless, illusionistic techniques and trompe-l'œil can still aid researchers in understanding the capacities of Surrealism. Gombrich uses some of these stages as analytical tools in his Story of Art. Therefore, examining schemas and their correction processes can serve as a starting point for deeper inquiry.

Contemporary critics suggest that meaning operates on multiple levels: formal meaning derived from the artwork's structure, subjective meaning rooted in the artist's inner world, cultural-historical meaning, interpretive or audience-centered meaning, and intertextual meaning (Hosseini & Darabi, 2015, 45–46). Viewer perception itself has multiple layers and serves as the gateway to meaning. The viewer engages with formal relations in the artwork and interacts with illusionistic techniques and trompe-l'œil. Through imagination and the artist's intent, perception is adjusted and refined. The viewer also seeks to correct schemas by attending to historical and cultural contexts, intertextual references, and even self-referential cues. Gombrich's method of analyzing artworks in Art and Illusion advances these layers of meaning as essential. Entering the realm of meaning without considering the schema process and its cognitive correction is impossible.

- **Salvador Dali: becoming a surrealist**

Salvador Dali, the renowned Spanish painter and artist, was born on May 11, 1904, in the city of Figueres, Spain. His life was full of ups and downs. He passed away at the age of 84 in 1989 due to heart failure. Dali was considered one of the prominent advocates of anti-rationalism in art (Pakbaz, 2004, 211). In 1929, he held several important exhibitions and officially joined the Surrealist group in the Montparnasse district of Paris. Dali developed a unique method for creating his paintings known as the paranoiac-critical method. He described it as "a spontaneous method of irrational knowledge based on the critical interpretation of delirious phenomena." He painted with a kind of spontaneous madness, creating images within his mind. The mysterious imagery he produced reflected the illogical eruption of the unconscious (Davis et al., 2009, 986). According to Dali himself, the only difference between him and a madman was that he was not mad. While we may accept this claim, it's clear that his behavior was provocative and stimulating, more aligned with his thought process than a mere tool for attention-seeking. According to Alexandrine, some of Dali's recurring motifs stemmed from his personal fears, such as fear of riding the subway, anxiety about the space behind him, terror of ticket booths, fear of telephones, and grasshoppers (Alexandrine, 1994, 6). Paranoia helped him enhance his vision and transcend

ordinary perception. This method enabled him to create hallucinatory scenes (Wilder, 2016, 354). Dali referred to his paintings as "hand-painted photographs for delirium."

Common symbols in Dali's works include: Ants: representing decay and destruction, Crutches: symbolizing connection to reality or support for standing upright, Teeth: associated with sexuality, Drawers: representing secrets and inner desires, Grasshoppers: symbolizing waste and fear (ibid., 353). In his birthplace of Figueres, there is a theater and museum named after him. The exterior is decorated with symbols from his paintings, such as eggs, and the interior features many of his works, including the portrait of Mae West. Dali defined beauty as "merely the conscious summation of our misguidances" (Alexandrine, 1994, 6). These misguidances stem from straying from the straight path of art, namely academicism, as well as logic and common sense. He also had theoretical interests. Among his works are The Aggressive Treatises of the Invisible Man (1930) and a series of rambling essays on fashion, architecture, objects and their symbolic uses, as well as the latent meanings in the painting The Angelus (Prayer) Jean-François Millet. Based on these, Dalí wrote a book titled The Tragic Myth of Millet's "Angelus" (1932), though he did not publish it until 1963. He also authored books such as The Old Husband of Modern Art and His Wife's Betrayal (1954), Diary of a Genius (1951), and Open Letter to Dalí (1967) (ibid., 6–10).

• Heavy dream: fish becoming human

Salvador Dali's Fish-Man (Fig. 1), through surrealist elements, invites the viewer into a perceptual challenge. This image is not merely a representation of a figure, but a complex structure of illusion, symbolism, and visual deception, in which Gombrich's theoretical components are traceable. By employing symbolic elements and intricate visual techniques, Dali confronts the viewer with a multi-layered, hallucinatory composition. The painting incorporates motifs such as a clock, shoes, an egg-shaped stone, a cypress tree, mysterious shadows, and deep architectural passages, not only referencing classical painting traditions but also aligning with perceptual theories like Gombrich's schema and correction. In this work, smaller fish form the head of a woman, resembling a sculptural bust. Pinkish fish muscles make up the rest of her body. On one hand, the woman is composed entirely of fish, and even her ponytail resembles an eel. Dali may be suggesting a metamorphosis from human to fish. On the other hand, she appears as a bust, though instead of traditional sculptural materials, her torso is made of pink fish. One shoe emerges from her chest, while another rests on the edge of a platform above. In many of Dali's works, shoes resemble outdated styles and may carry fetishistic significance.

The shadow cast by the platform in front of the woman is emphasized, blending with a faint,

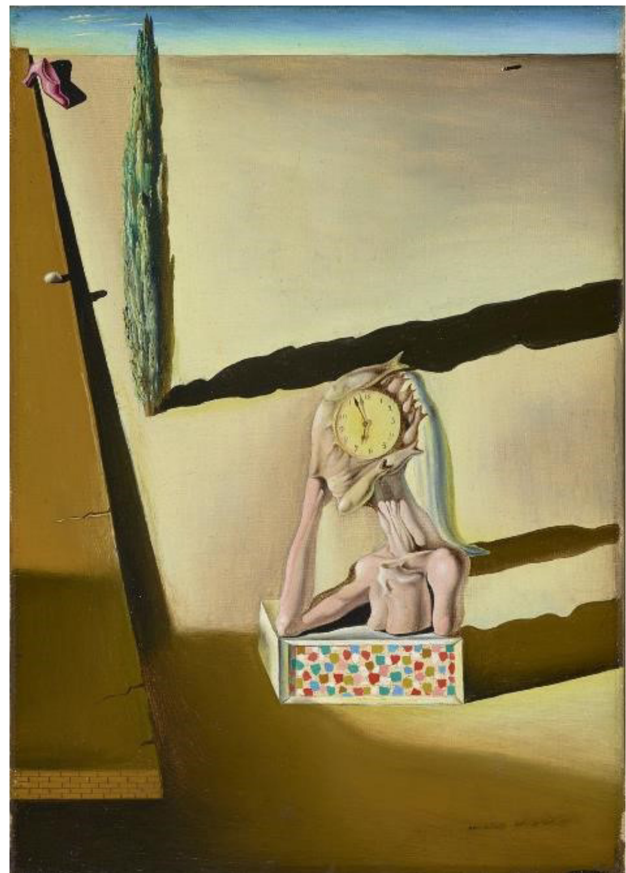

Fig. 1. Fish Man (L'homme poisson) Salvador Dali, 1930, oil on canvas Meadows Museum, Southern Methodist University (SMU), Dallas, Texas. Source: https://catalogues.salvador-dali.org/catalogues/en/heritageobject/599-23b6/

oversized, invisible figure near the viewer. This bodiless shadow extends toward the bust, possibly representing an architectural structure or an unseen entity. The Fish-Man is displayed as a bust atop a pedestal made of colorful mosaics—a recurring motif in Dali's earlier and later works, such as First Day of Spring (1929) and Surrealist Composition with Invisible Figures (1936). In addition to shoes and fish, the bust includes a clock. While the overall imagery suggests stillness and rigidity, the pink tones of the woman and fish evoke softness and fluidity. The clock, juxtaposed with the shadow behind the woman, symbolizes frozen time.

The shadow is used to deceive the viewer's eye. It may represent another facet of the woman's personality, melancholy, solitude, and repressed desires, contributing to the suspension of time. The contemplative posture of the fish-woman echoes the meditative female figure in Albrecht Dürer's Melencolia I (1514), a copper engraving. The shadow behind her suggests a sphinx-like tormentor from the dark depths of the past. The architectural platform recedes into depth, executed with precise perspective. Its shadow aligns with the midday sun's angle. Atop the platform lies an egg-shaped stone with an exaggeratedly elongated shadow. In the background, a solitary, upright cypress tree stands prominently, an element seen in works like The Sense of Speed (1931), The Birth of Liquid Fears (1932), and The Isle of the Dead (1934). According to Ades (2004, 166), the cypress may symbolize a phallic, masculine element in Dali's paintings.

Overall, the painting disrupts schemas and defies expectations through the use of perspective, exaggerated shadows, and dreamlike symbols, offering a fragment of Dali's hallucinatory narrative about himself and Gala. As Gombrich notes, the shadow is not merely a visual element but a tool for optical deception and interpretive provocation.

The painting's elements, clock, shoe, egg-shaped stone, cypress, deep passages, and mysterious shadows, echo the style of Giorgio de Chirico. These motifs also appear in Dali's Premature Ossification of a Railway Station (1930) and Remorse or the Sphinx Embedded in the Sand (1931). Dali explains that through a fully paranoiac process, one can arrive at a multifaceted image, where a single object, without any formal or descriptive alteration, simultaneously represents another complete image or entity.

In Fish-Man (Fig. 1), Dali employs various historical painting techniques, such as Giuseppe Arcimboldo[2] 's method of composing figures from inanimate objects and de Chirico's use of shadow to evoke mystery. According to Ades (2004, 140), these works ultimately resemble colored lithographs. Despite being paintings, they sometimes exhibit collage-like effects and are executed in unexpected media. Through different strategies, Dali challenges common sense, logic, and causality. In doing so, he undermines the viewer's expectations and schema-based perception. Through mental corrections, the viewer gradually develops a mechanism to confront the unconscious, suspended time, and the tormented past embedded in the woman's character.

- **Melting clocks: when time comes to a halt**

Using Gombrich's theoretical framework and analyzing the role of schema through visual illusion and trompe-l'œil techniques, one can examine several of Dali's key works—most notably The Persistence of Memory (Fig. 2), also known as the "melting clocks" (1931). In this painting, Dali employs familiar schemas—clocks, rocks, the sea, and trees—

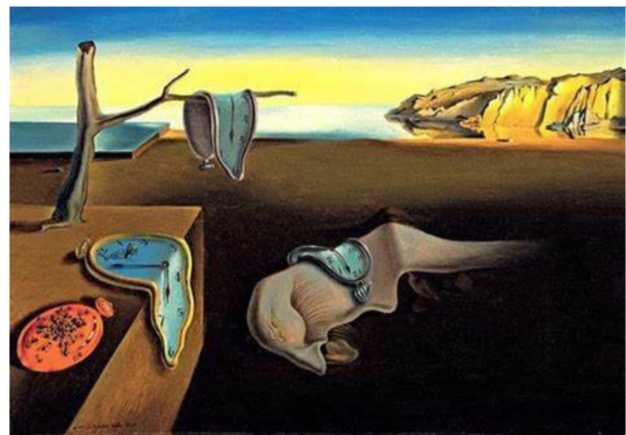

Fig. 2. The Persistence of Memory, 1931, museum of Modern Art, New York, oil on canvas. Source: Ades, 2004, 149.

but transforms them in unusual ways, placing them in an illogical landscape. The viewer's expectation of encountering a conventional clock is subverted by the melting forms, provoking surprise and cognitive dissonance. This interaction between mental schema and artistic disruption contributes to the viewer's perception of the work.

The melting clocks create a visual illusion by unexpectedly deforming a familiar object. This illusion evokes a sense of instability and fluidity. Time, in this painting, is suspended—preserved in memory through its very stillness. In this frozen moment, a black abyss opens, and a figure reduced to a dreamlike, sleeping eye seems to chronicle time beyond the clocks themselves. Each clock is stopped at a different time: one at seven, another at six, and the last at twelve. This stillness suggests that even real-world clocks are not synchronized, just as the time in Canada, Iran, and Morocco differs.

In the foreground, an inverted clock is overtaken by ants. In Dali's iconography, ants symbolize decay and corruption, referencing a childhood memory in which a dead bat was consumed by ants. A fly rests on the face of a nearby clock, perhaps signifying the swift passage of time. The face beneath one of the clocks belongs to the artist himself—Dali often includes self-referential elements in his work.

A barren olive tree supports a limp, sagging clock. These melting clocks were inspired by the texture of Camembert cheese. The leafless tree resembles the crutches that frequently appear in Dali's paintings. It's known that Dali nicknamed Gala "Olive" due to the olive tone of her skin (ibid., 154), suggesting that the barren tree may symbolize Gala herself.

As in many of Dali's works, the rugged cliffs of the Catalan coast near Port Lligat—where Dali and Gala lived—are visible. The sea and shoreline are immobilized in a state of lethargy; only the fluidity of the clocks introduces movement. The melting clocks, placed in a desert-like landscape, create a trompe-l'œil effect that enhances the painting's impact and memorability.

One clock draped over Dali's own face suggests that the orderly progression of clock hands no longer defines time. When all clocks cease to move and disintegrate, it is the timelessness of dreams that shapes our understanding of time. The title of the painting may also relate to Gala's prophetic remark: she said that seeing the painting once would make it unforgettable. According to Dali, the title was inspired by this statement (Dali, 1939, 317; Ades, 2004, 148).

With this painting, Dali moves along the edge of reality and dream. For him, reality exists only as defined by paranoia and dream. He refers to his method not only as paranoiac but also as critical, as it reveals the human entrapment in time. By dismantling the schema of time—symbolized by the clock—Dali transports us to another realm and invites reflection on a new concept of time. We are left to ponder: when all clocks stop and a black abyss opens endlessly, how is time truly perceived?

- **Swans on elephants: nature in a hallucinatory state**

Salvador Dali created Swans Reflecting Elephants in 1937 (Fig. 3). In this work, he plays with perceptual schemas through enigmatic imagery, inviting viewers to interpret different realities depending on their angle of vision and focus. On one level, one sees the shadows of swans and barren trees reflected in the lake; on another, the swans appear to be mounted on elephants. Dali draws upon familiar schemas—

Fig. 3. Swans Reflecting Elephants, 1937, oil on canvas. Source: https://www.dorotheum.com/en/auctions/current-auctions/kataloge/list-lots-detail/auktion/13572-old-master-paintings/lotID/142/lot/2

swans, trees, rocks, and water—but merges them through mirrored reflections, stepping beyond viewer expectations into a realm of ambiguity. The painting presents a double image, engaging the viewer's mind in the relationship between these two animals.

Swans are a recurring motif in Dali's work. In one personal photograph, he is pictured with a swan. In Leda Atomica (1949), Gala is depicted with a swan, its wings spread wide, the swan's head cradled in her hands. This swan resembles the same taxidermied swan seen in a photograph of Dali's home. Swans are monogamous creatures and choose solitude at the time of death.They become aggressive when approached, attacking with sharp wings. Yet here, beneath the lake, elephants intrude upon their domain. Upon seeing the swans and trees, the viewer expects a conventional natural landscape. However, the reflection of the swans forming the image of elephants disrupts this expectation, evoking surprise and wonder. Dali uses traditional nature schemas but reconfigures them through visual illusion. Looking deeper into the lake's surroundings, a man stands on the left, turned away from the scene, likely Edward James, Dali's wealthy English patron. His figure is camouflaged within the mountains. The clouds above also resemble strange, ambiguous forms.

Dali frequently referenced himself, his previous works, and figures from his life. These self-references open pathways to cultural meanings, historical contexts, and the genesis of the artwork. As Geiger (2013, 37) notes, "Painting is a historical act in which the artist responds to the works of other artists and broader social and cultural developments". Edward James collaborated with Dali on surrealist designs such as the rotary telephone and the Mae West Lips Sofa. According to Ades (2004, 284), James asked Dali to design his drawing room in a surrealist style. James is also connected to Dali's painting of the Mae West apartment (Fig. 4). Mae West, who inspired Dali, was considered the first symbol of glamour in America (Fig. 5). She was a talented, determined artist who influenced many. Dali admired her deeply.

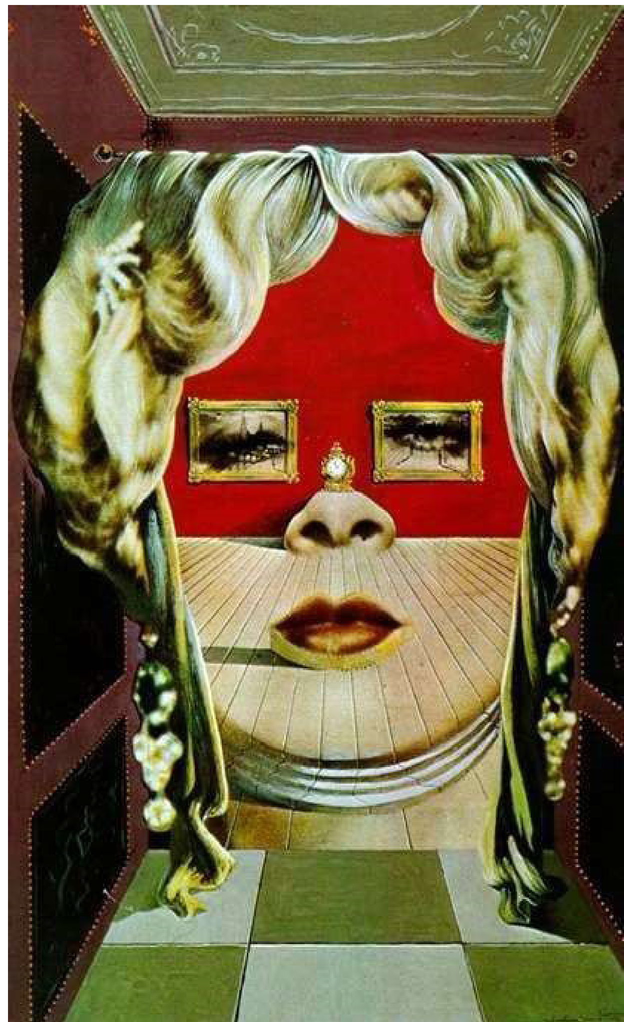

Fig. 4. The Face of Mae West Proposed as an Apartment, 1934–1935, gouache. Source: https://www.kingandmcgaw.com/prints/salvador-dali/face-of-mae-west-1935-83808#83808::frame:880610_glass:770007_media:0_mount:108644_mount-width:50

Fig. 5. A real photograph of Mae West. Source: https://www.wicaonline.org/blog/2019/9/30/article-the-immortality-of-mae-west

The Mae West Room is one of Dali's satirical works, created between 1934 and 1935. The face of the famous American actress is rendered as a surrealist interior. This apartment may have been Dali's proposed model for an artist's residence. The design was realized forty years later when Dali recreated the imaginary room in his Theatre-Museum in Figueres, with architect Oscar Tusquets. The exhibition opened in 1974. Of the five sofas commissioned by James and Dali, one was in a shocking pink hue, matching Elsa Schiaparelli[3] 's lipstick (Ades, 2004, 284).

In Swans Reflecting Elephants, Dali uses precise perspective and soft shading to create depth and recession into the lake. The boundary between swan and elephant is deliberately blurred, and the ambiguity intensifies as the elephant's legs appear on dry land beside another creature. This analysis reveals both the theme of metamorphosis and a departure from traditional landscape painting. The presence of Edward James also allows for reflection on Mae West's cultural impact, particularly in cinema and theater.

• Conical anamorphoses: a shadow that devours

In Gala and the Angelus of Millet Preceding the Imminent Arrival of the Conical Anamorphoses (Fig. 6), the viewer enters the scene through familiar perceptual schemas: a room, a door, a writer, a man behind the door, and Gala. Yet these schemas are immediately disrupted by anomalous elements, the frame above the door, the man behind it, the cypress tree inside the room, and the busts, each challenging the viewer's expectations. The frame above the door may be interpreted either as a window revealing an exterior landscape or, due to the yellow border on the left, as a painting frame reminiscent of Millet's peasant scenes (Fig. 7). The shadow cast on one side of the frame falls inward, while on the other it falls outward—blurring the distinction between inside and outside. This dual identity resists definitive interpretation and introduces ambiguity and visual deception. Dali revisited the Angelus of Millet motif across several years: The Adoration (1932), Archaeological Adoration of Millet (1933), Ancient Remembrance of the Angelus (1933), Midnight Ancestral Worship (1933–34), Spectres of the

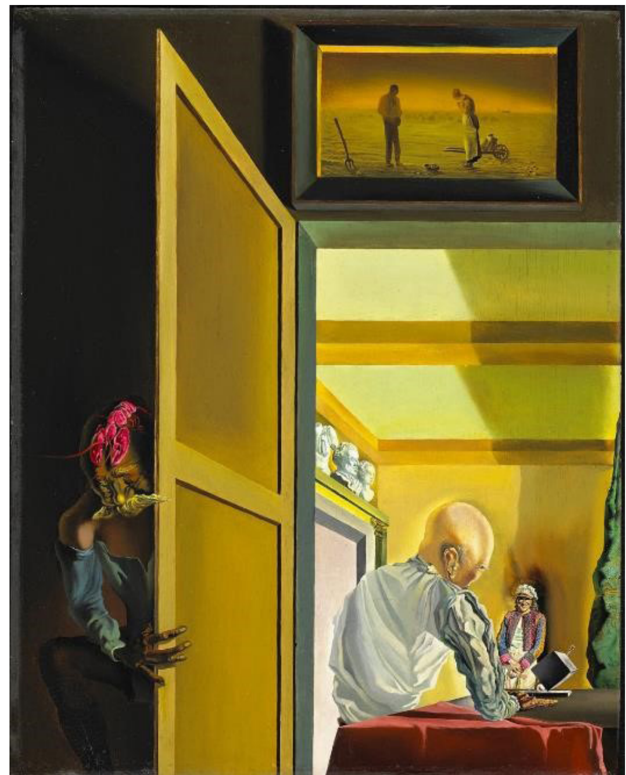

Fig. 6. Gala and the Angelus of Millet Preceding the Imminent Arrival of the Conical Anamorphoses, 1933, oil on wood, 24.2 × 19.2 cm. Source: https://catalogues.salvador-dali.org/catalogues/en/heritageobject/446-7d6c/

Fig. 7. The Angelus (Prayer) Jean-François Millet, 1857–1859, oil on canvas Musée d'Orsay, Paris. Source: https://lava102.blogspot.com/2019/09/jean-francois-millet.html

Angelus (1934), and Gala's Adoration (1935). In each, the Millet painting appears either directly or as a thematic fragment.

In the 1960s, Dali discovered that Millet's original painting concealed a child's coffin. He requested an X-ray analysis at the Louvre, which confirmed this hidden element (Charles, 2019, 93). Based on this revelation, Dali wrote The Tragic Myth of the Angelus of Millet around 1932, though it was not published until 1963. In it, he argued that the painting was imbued with imagery of castration and death, narrating a disturbing scenario: a husband twirling his hat between his fingers while waiting for his wife to finish her prayer. Dali likened the scene to the ominous mating ritual of praying mantises[4] , where the male is devoured by the aggressive female after copulation (Ades, 2004, 198).

Inside the room, a tall shadow of a cypress tree falls across the wall, though the tree itself is only partially visible. The cypress, appearing in works such as The Sense of Speed (1931), The Birth of Liquid Fears (1932), and The Isle of the Dead (1934), often symbolizes a phallic, masculine presence (ibid., 166). Gala wears a brocade coat, and the cypress stands to her right. Dali himself seems to be present, disrupting the viewer's expected schemas. The placement of the cypress relative to Gala contrasts with the mantis-like pair depicted above the door. The cypress's shadow falls across the darker shadow of Gala, suggesting that one of the conical anamorphoses may be unfolding within this very shadow.

Dali's manipulation of shadows lends the painting a mysterious and enigmatic quality. Outside the door, a figure resembling Maxim Gorky peers inward. His head resembles a crab, his mustache a shell, and his eyes and nose a panther, forming a still life reminiscent of Giuseppe Arcimboldo's composite portraits. Dali's famous crab motif is revived here. The figure's posture recalls the downward-facing man in Average Bureaucrat (1930). Another man, turned away from the viewer, resembles Lenin. A bust atop the cabinet resembles André Breton. These busts may be rendered through anamorphic technique, where an object, viewed from an unusual angle, alters the meaning of the entire composition. This is akin to the anamorphic skull in Holbein's The Ambassadors, which destabilizes the image of wealthy, successful diplomats.

Such anamorphoses challenge conventional schemas of interpersonal relationships. Lenin gazes at Gala. In a photograph behind Dali, we see portraits of his favored figures: a mustachioed Mona Lisa, Stalin, Hitler, and Gala. The imagined dialogue between Gala and Lenin unfolds under the watchful eyes of Breton, Gorky, and possibly Dali himself.

- **Apparition of face and fruit dish: a still life in motion**

In Apparition of Face and Fruit Dish on a Beach (1938) (Fig. 8), Dali constructs a composition of multi-identity forms. Exhibited at the Julien Levy Gallery in 1939, the painting's commercial success reportedly irritated André Breton. Breton remarked that some of Dali's works resembled "crossword puzzles" (Ades, 2004, 300; Breton, 2002, 147). However, Ades clarifies that Breton's critique was not a dismissal of Dali, but rather a concern about the rise of mass entertainment and popular culture. Ades suggests that Dali's paintings never descend into the contrived illusionism of contemporaries like M.C.

Fig. 8. Apparition of Face and Fruit Dish on a Beach, 1938, Salvador Dali. Source: https://www.thewadsworth.org/learn/education/virtual-studio/surreal-scenes/

Escher (Ades, 2004, 300), a claim this study seeks to affirm through a Gombrichian analysis of visual perception.
In this painting, grouped forms simultaneously suggest multiple identities. At the center, the face of a woman is composed of a small seated figure seen from behind. Her hair resembles a pear, evoking both a fruit dish and a human head. Her eyes are formed by a jug lying on the beach, and one eye doubles as the head of a sleeping child whose arms are extended, one on the head, the other on the ground. The child's legs are visible further back.
The pear-shaped fruit dish rests on a table alongside a fish, nail, rope, cloth, and a dead duck-rabbit hybrid. These elements form a still life, though lacking the density and clarity typical of Baroque compositions. Still, the still life alludes to abundance and worldly wealth, indirectly suggesting impermanence and death.
In the background, the mountains are composed of moving human figures. One appears tall and muscular, yet faceless. Dali subtly references Leonardo da Vinci's Battle of Anghiari, depicting a mounted skirmish beneath the snout of a dog. Among the trees, one can discern the face of the Mona Lisa, a recurring figure in Dali's work, often shown turned away from the viewer, as in Nutritional Insecurity–Furniture. This girl resembles the peasant child in Bruegel's Peasant Wedding, eating from her plate. She appears in the corner of the wall, in the chin, lips, and nose of the phantom face, and again on the opposite side.
This dreamlike landscape contains even more: "In the upper right corner, the bay with its waves and the mountain with a tunnel beneath it, also depicts a dog. Such a painting helps us understand why 20th-century painters no longer settle for representing only what they see" (Gombrich, 2003, 581). At the end of the dog's body, we see a woman's hair, her chin forming the basket of the same woman or girl, who is cooking over a fire in a cave-like space. At her feet lies a resting rabbit, its head clearly visible, while the other side suggests a duck's head. To see the full body, one must rotate the painting. The dog's other leg becomes the base of the central fruit dish.
Gombrich writes that Dali's method allows each form to represent multiple shapes, akin to a pun. Just as a pun leads us to multiple meanings, Dali's visual puns guide us toward layered interpretations (ibid., 395). The artist does not imitate the natural world but creates through color, line, and painterly technique. This is not merely a game of form and perception; each shape and hue carries multiple possible connotations. Though some areas remain ambiguous, the interplay between the painting's parts, its genre references, and the expectations it evokes (or disrupts) helps clarify its meaning. Moreover, intertextual connections with art history enrich its interpretive potential.
Dali preferred to trace his artistic lineage back to Leonardo da Vinci, whom he considered a true innovator in paranoiac painting. Da Vinci advised his students to seek inspiration by gazing at moisture stains and wall cracks in a particular mental state (Ades, 2004, 300; Dali, 1939). Dali followed this approach: a moisture stain could evoke a battle scene, as in Spain, where a tall female figure's face and torso are composed of small, struggling or conversing figures.
Dali's use of two-faced or multifaceted forms and emphasis on shadow engages the viewer's mental schemas, making it one of the most effective strategies for participatory perception.

Discussion

In an article titled The Decadence of Modern Art, published in an American weekly, Dali emphasized the need for modern painting and younger artists to return to classical principles of technique, skill, and mastery. He argued that the invention of high-speed photography rendered modern painting obsolete, prompting artists like Picasso and Matisse to develop abstract and decorative styles. According to Dali, abstraction was the only way to salvage modern painting. Yet, for painting to endure, younger artists must reclaim the unified brilliance of Raphael and Leonardo through classical mastery

(Dali, 1950, 16; Ades, 2004, 349). Dali's oeuvre consistently revives the concerns of history's great painters. The influence of Leonardo da Vinci, Raphael, Matthias Grünewald, Velázquez, and Tintoretto is evident throughout his work. This reverence for the masters began in his youth. Alexandrine (1994, 3) notes that at age 15, Dali and a friend published a journal called Stadium on wrapping paper, regularly writing about painters such as El Greco, Goya, and Velázquez.

Evaluating Dali's work across decades confirms that his art serves as a testament to the revival of historical painting techniques, from the High Renaissance to modernity. His commitment to Renaissance grandeur is visible in works like Madonna of Port Lligat (1949–1950), Crucifixion (1953–54), and Ascension (1958)[5] .

Compared to predecessors like M.C. Escher and successors like Glenn Brown, who focus primarily on perceptual play, Dali appears more invested in meaning than mere optical trickery. While this comparison warrants a separate study, it is clear that Dali sometimes uses illusion and trompe-l'œil opportunistically to distance himself from academicism, ornamentation, and the risks of abstraction.

Conclusion

This study has focused on the viewer's role in the perception of Dali's artworks. In this perceptual process, schemata are fundamental. Established schemata are constructed based on representations of the world and are sometimes shaped through artistic conventions and training. In modern art movements, familiar and representational schemata are often disrupted. Particularly in Cubism, for example, the relationship between figure and ground is no longer maintained as in representational art, and the schema formed on that basis can be imagined as fractured. In this article, Dali's surrealism was examined through the lens of schema theory. The study reveals that Dali not only constructs the image but also designs the viewer's perceptual process. Without the viewer's act of perception, which Gombrich emphasizes, entry into the realm of meaning is not possible.

According to this research, Dali's most significant tools for challenging schemata and perception are his illusionistic skills and trompe-l'œil techniques. By employing visual deception, two-faced images, reflections, metamorphoses, mergers, and the creation of strange, innovative Integrations, alongside enigmatic uses of shadows, unconventional angles, and depth, Dali destabilizes the viewer's mental schemata. He traps the viewer at the threshold between reality and dream. Thus, Dali's endeavor goes beyond mere perceptual play. He uses these techniques to stimulate the viewer's imagination, and produce semantic multiplicity. The viewer is compelled to actively participate in the process of perceiving and interpreting the artwork. This study ultimately paved the way for a comparative analysis of Dali's illusionistic and trompe-l'œil techniques with the visual deceptions found in the works of M. C. Escher and the contemporary artist Glenn Brown. Although a deeper investigation of this comparison remains beyond the scope of the present research, it may serve as a valuable suggestion for future studies.

Endnotes

1. The phrase "di sotto in su" is an Italian term meaning "from below upward." In art, it is especially used to describe ceiling paintings from the Renaissance and Baroque periods. This technique involves creating perspective illusion that gives the viewer the impression of looking up into a three-dimensional space, even though the actual surface is two-dimensional.
Prominent examples of this technique can be seen in the works of artists such as Andrea Mantegna, in the Camera degli Sposi (Bridal Chamber), and Antonio da Correggio, in the Parma Cathedral. The technique was often employed to create the illusion of an open sky or architectural spaces above the viewer.
2. A Mannerist still-life painter who would compose a female bust as an allegory of a season—such as summer—by assembling it from a variety of fruits.
3. She was an Italian fashion designer who had a significant impact on the world of fashion during the 1920s and 1930s. She collaborated with artists such as Salvador Dalí. Schiaparelli was the first to use the color Shocking Pink in her designs.
4. Praying mantises, also known simply as mantises, are predatory and carnivorous insects. Due to the distinctive posture of their front legs, they are called "Praying Mantis" in English—a name that reflects their prayer-like stance. In Persian, they are similarly referred to as "Niyāyeshgar" (the one who prays).
5. Although Salvador Dalí created numerous faces that appear to be visual illusions and perceptual games, one can still seek degrees of meaning within those works. Even if we set aside such aspects of meaning, the sheer number of these pieces warrants a separate study.

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