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The Aesthetics of Imperfection: A Theoretical Evaluation of the Meaning Layers of Glitch Aesthetics in Communication Design and Cinema

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Abstract: Glitch aesthetics based on digital errors and visual noise, has become a notable phenomenon in contemporary art, design, and visual culture, challenging the notion of digital perfection. This multi-layered qualitative study examines classic glitch works from early digital art experiments and contemporary glitch applications emerging in new technologies such as artificial intelligence (AI), augmented reality (AR), virtual reality (VR), and the metaverse. The research aims to analyze how glitch aesthetics generates meaning in the field of communication design by comparing historical examples with various modern digital contexts. To achieve this goal, the study employs content analysis, case studies of significant glitch artworks (including "JPEGged Mona Lisa," Kanye West's "Welcome to Heartbreak" music video, and Rosa Menkman's digital works), and conceptual evaluation methods to thoroughly investigate the aesthetic and communicative layers of glitch visuals. The findings show that glitch remains relevant in the digital age both as a critical art practice and an aesthetic strategy, continuing to produce multi-layered meanings in the fields of digital culture, communication design, and cinema. Overall, the study emphasizes the enduring importance of glitch as an intentional creative strategy and clearly demonstrates its impacts on communication design, digital art practices and cinema.

Keywords: glitch art; communication design; digital aesthetics; augmented reality; cinema; metaverse

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Introduction

The art and design practices of the digital age have moved beyond viewing technical glitches and unexpected system failures as merely tolerated flaws, instead introducing a new approach that transforms these elements into an aesthetic advantage. This approach, known as glitch art, evaluates errors, glitches, and image distortions that occur in digital or analogue environments as a conscious art production strategy (Günevi Uslu, 2025, p.766; Taşkesen, 2022). The term 'glitch' refers to a defect, malfunction, or momentary failure in a system's operation (Aydın, 2019, p.884; Taşkesen, 2022). This term was first used in the 1960s to describe technical problems encountered by NASA astronauts during their missions; over time, this concept has become one of the fundamental references of an innovative aesthetic movement in the visual arts (Taşkesen, 2022).

Initially, digital glitches encountered in visual media were regarded as systematic errors or technical deficiencies. However, with new media artists utilising these glitches as an aesthetic tool, the perception of imperfection has transformed. These artists succeeded in transforming digital errors into an aesthetic element, creating a different kind of pleasure and focus of attention in the viewer's visual perception. Thus, the idea that perfection does not always produce aesthetic value, but that imperfection can also have an aesthetic quality, has gained acceptance in the field of art (Kanat, 2018). This transformation paved the way for the development of glitch aesthetics, enabling technical errors to transcend being mere malfunctions and become a deliberate production

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strategy and a form of artistic expression. With its approach of placing digital errors and glitches at the centre of art production, glitch aesthetics exhibits a unique attitude that diverges from traditional art norms. This approach not only repositions seemingly random digital distortions as visual assets; it also constitutes a critical intervention into the structure of digital culture, which is based on regularity, perfection, and controllability (Günevi Uslu, 2025, p.767). The significance of glitch aesthetics lies not only in its ability to create unusual visual effects, but also in the critical layers of meaning these effects embody. The aestheticisation of flaws, errors and corruption offers an opportunity to re-evaluate the nature of the concepts of beauty and perfection, enabling the viewer to develop a questioning perspective within the context of digital culture (Kanat, 2018). Although digital noise, corruption, and data breaks may initially appear disturbing, these elements reveal the fragility of trust in technology and the desire for perfection in contemporary digital culture.

The primary aim of this study is to reveal how this phenomenon, defined as glitch aesthetics in digital art, contributes to meaning production within the context of communication design. In this regard, the discussion will focus on the circumstances under which glitch aesthetics creates new layers of meaning, the functions it performs in visual communication, and the nature of its interaction with the audience. The importance of this study stems from its contribution to understanding the philosophical, cultural, and artistic foundations behind the increasingly popular glitch approach. Indeed, glitch has become one of the defining elements of contemporary design culture, appearing across a wide range of fields, from marketing and brand communication to fashion and graphic design, cinema and music videos (Griner, 2017). Therefore, examining glitch aesthetics from the perspective of communication and fine arts is important for understanding the visual language of new media culture and the changing aesthetic paradigms.

The Theoretical Foundations of Glitch Aesthetics in Digital Art

Glitch art has established Glitch Art challenges traditional approaches that measure the value of art solely by perfection, inviting the viewer to redefine their aesthetic experience through error, distortion and imperfection. This aesthetic approach, which encompasses a broad creative practice ranging from the materials used in the production process to technical interventions, creates a unique field of expression that differs from established art norms with its distinctive visual language (Kanat, 2018, p.28). Therefore, glitch art transforms the concepts of malfunction and distortion into an aesthetic principle within the context of new media, offering an alternative visuality to the ideology of perfection in the digital age (Demircan, 2023).

To comprehend the intellectual background of glitch aesthetics, one must consider the historical and artistic transformation of the concept. The glitch approach is, in a sense, a continuation in digital form of the 'counter-art' attitude that emerged in 20th-century avant-garde art. Just as Dadaism or Abstract Expressionism rejected the classical criteria of beauty, glitch art confronts the myth of the flawless functioning of the digital world and seeks to disrupt its invisible norms (Demircan, 2023). In this context, 'glitch aesthetics' represents a new strategy of expression that emerges through the deliberate use of malfunctions encountered in digital systems (Lee, 2025).

Glitch artists subvert the dominant design principles of visual culture through methods such as manipulating code structures, reprocessing data by corrupting it (databending), or manipulating image compression errors. Thus, images that are technically considered flawed produce an aesthetically unexpected and striking effect; this mode of production reconfigures the boundaries of art and perceptual expectations (Taşkesen, 2022). Glitch's questioning attitude disrupts the safe space of visual order, distancing the viewer from their comfort zone; it fragments the integrity of the original image and reconstructs it with new layers of meaning (Kanat, 2018).

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Positioned against the widespread belief that technology functions flawlessly, glitch aesthetics reverses aesthetic value scales by making the broken, incomplete, or fragmented visible (Günevi Uslu, 2025, p.768). Therefore, glitch is not merely a formal distortion; it is an aesthetic moment of rupture that points to a critical questioning of the ideology of perfection that dominates digital culture. This approach is also noteworthy in that it demonstrates that art is not merely a formal production; it also has the capacity to produce a social and political discourse (quoted from Yılmaz, 2020, in Günevi Uslu, 2025, p.768).

Dutch new media artist Rosa Menkman, who has conducted significant research on glitch aesthetics, defines glitch as 'an experience of destruction where meaning dissolves.' According to Menkman, rather than being reduced to a technical malfunction, glitch represents a rupture that becomes visible when the normal flow is interrupted, and this rupture causes the viewer to rethink their assumptions about technology (Taşkesen, 2022; Aydın, 2019, p.884). Menkman's 2010 Glitch Studies Manifesto reveals the conceptual basis of glitch, which violates traditional aesthetic boundaries, arguing that this aesthetic reveals the potential meanings hidden behind the seemingly ordinary (Taşkesen, 2022).

Iman Moradi, who explains the productive diversity of glitch, divides the concept into two main categories: the spontaneously occurring 'pure glitch' and 'glitch-alike' works created for aesthetic purposes (Aydın, 2019, pp. 885–886; Taşkesen, 2022; Jackson, 2011). Moradi's distinction reveals that glitch can be both an art strategy fuelled by random malfunctions and one produced performatively through conscious intervention (Moradi, 2004, p.10).

The proliferation of glitch aesthetics has progressed in parallel with the transformation of digital culture. With the increased use of the internet, social media, and digital design tools, data loss and image distortion have become part of everyday experience; representations of glitch have

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permeated popular culture. This aesthetic has gained visibility in many areas, from cinema to television series, music videos to advertising campaigns (Somer, 2013, pp. 5–6). For example, the deliberate use of glitch effects in HBO's Westworld series has deepened the thematic layers of the narrative by distorting the characters' perception of reality (Taşkesen, 2022). Similarly, Kanye West's 2009 music video Welcome to Heartbreak brought the glitch aesthetic into mainstream culture, reaching millions of viewers and contributing to the popularisation of this approach (Taşkesen, 2022).

All these examples demonstrate that glitch aesthetics is not merely a visual glitch, but a powerful means of expression that transforms the intellectual and cultural dynamics of the digital age. By revealing the aesthetic and semantic potential inherent in the errors that can occur in any system, glitch develops a critical counterpoint to the discourse of digital perfection. In this way, glitch aesthetics has become an important component of contemporary communication design, harbouring multiple layers of meaning beneath the surface distortion.

The Intersection of Glitch Aesthetics with Emerging Technologies

Glitch aesthetics can be defined as an expression form that deliberately transforms digital errors and glitches into artistic material. This aesthetic approach has begun to permeate the mainstream to a significant degree in recent years, both in the fine arts and in the worlds of communication design and visual media (Lee, 2025). With the continuous development of digital media, how glitch aesthetics intersects with emerging technologies such as artificial intelligence (AI), augmented reality (AR), virtual reality (VR), and the metaverse, how it is reproduced in these technologies, and how it is used by new generations of artists has become an important topic of

discussion.

Artificial Intelligence and Glitch Aesthetics

In the field of artificial intelligence, generative algorithms' efforts to create flawless images can lead to unexpected digital artifacts. Errors or unwanted artifacts seen in images created by artificial intelligence may appear to be "flaws" at first glance, but current approaches interpret them as a unique signature of the AI model's creative process (Cappelletti, 2024). In other words, the visual "errors" produced by artificial intelligence may actually be an aesthetic expression emerging at the intersection of human intent and machine operation, rather than a technical malfunction. This situation demonstrates that glitch aesthetics is being reinterpreted in the context of artificial intelligence.

Indeed, glitch-like distortions in AI images can often be interpreted as clues revealing the limitations of the training data or the internal logic of the model (Cappelletti, 2024). For example, a deep learning model unexpectedly fragmenting and scattering certain parts of an image may reveal gaps or biases in that model's knowledge of the world. Such errors create surprise and alienation in the viewer, opening the door to new interpretations; according to some theorists, this accidental aesthetics even has a creative potential reminiscent of the random creation practices found in movements such as Dadaism and Surrealism (Cappelletti, 2024). Therefore, in the context

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of artificial intelligence, glitch points to a current debate about the artistic value of the uncontrollable.

The convergence of glitch aesthetics with artificial intelligence brings innovations that are as conceptual as they are technological. Some artists consciously trigger and direct these errors in generative systems. For example, studies classifying and analyzing distortions in the visual outputs of artificial neural networks have made it possible to understand the causes of these errors and instrumentalize them in the creative process. One study proposes categorizing different types of glitches in AI images to analyze their causes and aesthetic effects, suggesting that artists can then deliberately incorporate specific types of glitch effects into their work (Cappelletti, 2024). Thus, in AI art, glitches can transform from unintended errors into new means of expression consciously incorporated into the artist's language. Indeed, this approach expands the creative repertoire of AI art by transforming the unexpected results of human-machine interaction into aesthetic value.

A recent example in this field is the exhibition *Data • Glitch • Utopia* (2023) by new media artist Jake Elwes. Elwes has turned the "fantastic failures" produced by artificial intelligence systems into an aesthetic focus in order to reveal the "black box" of artificial intelligence to the viewer (Elwes, 2023). The exhibition features AI and machine learning-based works that reveal the underlying glitches in algorithmic processes, approaching the relationship between technology

and humans from a critical and playful perspective (Elwes, 2023). This example offers a conceptual model of how artificial intelligence and glitch aesthetics can be blended: the transparency of algorithmic flaws emerges both as an aesthetic strategy and as a critique of the technological black box.

Glitch Aesthetics in AR, VR, and Metaverse Environments

Augmented reality (AR) and virtual reality (VR) are other important platforms where glitch aesthetics are reproduced and experienced. In these environments, glitch appears not only in two-dimensional images but also directly within the space and interactive experience. As we often see in AR applications, tracking errors, delays, or visual shifts that occur in experiences where digital layers are superimposed on the physical world are often perceived as unwanted technical problems, but a new generation of designers can consciously adopt them as a style. Indeed, designer Lark Spartin, known for her Instagram face filters, uses a deliberate "broken image" aesthetic in the filters she developed, inspired by the limited technical performance of the Spark AR platform, thus adding a critical-satirical dimension to social media visuals (Bozzi, 2024). Spartin's glitch-effect filters allow users to transform their digital identities in unusual ways; for example, making the face unrecognizable with a deliberate visual glitch effect or applying pixelated masks in real-time cameras. Such works open up the concepts of identity, representation, and glitch in online

augmented worlds known as the metaverse.

Glitch aesthetics have also become a striking tool in VR environments. Although VR's fundamental promise is to provide the user with a flawless sense of "presence", it is precisely this feeling that can be deliberately disrupted through glitch. For example, deliberately added visual/audio glitches or unexpected interaction problems in virtual reality experiences can disrupt the user's immersion and draw their attention to the artificiality of the system. An academic study on this approach has shown that intentional "glitch" limitations placed in VR scenarios qualitatively change the user's experience: Participants viewed moments of instant disconnection or error as part of the experience and attributed creative meanings to them (Ryan Bengtsson & Couvering, 2022). Thus, in VR, glitches can evolve from being design flaws into layers that carry meaning. This productive failure approach in immersive media creates a critical awareness of the technology's imperfection while simultaneously leaving a surreal and unsettling aesthetic impact on the user, thereby increasing the emotional intensity of the experience (Lee, 2025).

Concrete examples from the art world can also be given for the use of glitch aesthetics in AR/VR environments. Digital artist Daniel Kramer (known by the pseudonym Visceral Glitch) has attracted attention with his works that combine traditional glitch art with augmented reality. Kramer integrates distorted digital images with AR technology, enabling viewers to experience

interactive and layered works via their smartphones or tablets (Artivive, ty). In this way, a static glitch image is brought to life in three-dimensional space with the help of an AR application, gaining depth and movement. Such work demonstrates how the aesthetics of glitch can combine with a sense of surprise, defined as *the "*wow *factor,"* to transform into a playful and experiential art form that draws the viewer into the work (Artivive, n.d.). Similarly, festivals and online exhibitions dedicated to glitch art, such as /'fu:bar/, are also held on VR platforms, offering participants virtual spaces filled with digital glitches. For example, the Zagreb-based international glitch art event /'fu:bar/ has brought together the work of hundreds of artists around the theme of digital " " glitches by establishing an online virtual exhibition space alongside the physical exhibition (Cappelletti, 2022). Thus, glitch aesthetics is becoming a collective form of expression and a vehicle for sharing experiences in the field of VR and the metaverse.

From a technological perspective, creating a glitch effect in AR/VR environments requires specialized technical expertise. Deliberately corrupting 3D models or texture maps involves experimenting with shader programming or game engines (Lee, 2025). In this sense, glitch also brings new skill areas to the forefront in the discipline of communication design: A designer should know that instead of offering a flawless augmented reality experience, they can trigger certain emotions in the viewer by adding intentional glitches. Moreover, glitch aesthetics have entered the

language of digital communication; from advertising videos to music videos, from interface design to typography, "broken" visuals are frequently used as a symbol of the fast-flowing data age. This usage is sometimes preferred as part of the cyberpunk aesthetic to evoke the digital chaos of the future, and sometimes to create a nostalgic retro atmosphere. Glitch aesthetics are being reproduced in new media technologies both as a critical tool and as a popular style.

New Generation Artists: Glitch Language and Technological Innovations

A key factor shaping the future of glitch aesthetics is the creative appropriation of this language by a new generation of artists and designers. Today's young media artists are adding new dimensions to glitch aesthetics by using artificial intelligence and XR (extended reality) technologies. While using glitch as an aesthetic choice, these artists also use this choice to make conceptual critiques of digital culture. Glitch has gained importance, particularly in approaches that examine issues of identity, body, and representation in the digital age, in terms of making the non-normative visible and using system errors as a political message of. Indeed, the concept of "Glitch Feminism" proposed by theorist Legacy Russell provides a theoretical framework for this aesthetic, arguing that the glitch aesthetic created by digital technologies provides individuals with new forms of subjectivity and representation (Cappelletti, 2022). This manifesto argues that digital errors and glitches, particularly in relation to gender and identity issues, demonstrate the possibility of existing outside existing binary structures. With this perspective, a new generation of artists is

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embracing glitch not only as a visual effect but also as a language of resistance and transformation.

Current glitch-based projects at the intersection of AI, AR, and VR demonstrate how this language is applied in practice. Below are examples of some glitch-focused projects and artists developed using artificial intelligence or immersive technologies:

Jake Elwes – "Data • Glitch • Utopia" (2023): Elwes created works that question the opacity of AI technology by placing the unexpected errors and deviations produced by artificial intelligence algorithms at the center of his creative process. In these works, exhibited in London, AI's "fantastic glitches" are presented to the viewer as an aesthetic experience (Elwes, 2023). Elwes' approach bridges technology criticism and art by combining glitch aesthetics with the ethical and philosophical questions of AI research.

Daniel Kramer (VisceralGlitch): Based in New York, young artist Kramer blends traditional glitch art with augmented reality, transforming static digital images into interactive AR experiences. For example, in his work shared on Instagram, he digitally "shreds" and reconstructs a photograph, then uses an AR app to add movement and depth to the image, creating surreal scenes that draw the viewer in (Artivive, n.d.). Kramer's work is a successful example of how glitch aesthetics can be used in communication design for a new generation of interactive visual storytelling.

Lark Spartin – Glitch Face Filters: Spartin is known for the extraordinary filters he has developed on Instagram's AR face filter platform. The filters he designs deliberately distort and transform the user's face to create "digital masks." Spartin, who particularly turns the limitations of Spark AR software to his advantage, presents a Cindy Sherman-esque satire and identity game with effects that mimic technical glitches (Bozzi, 2024). These filters open a critical dialogue about how individuals present themselves on social media, while also demonstrating how glitch aesthetics have become a common language in popular culture.

These examples demonstrate how glitch aesthetics has taken on new expressions in different technological contexts. In the realm of fine arts, glitch is now more than just an aesthetic stance that glorifies the margin of error in the digital age; it is a conceptual research tool that explores the unpredictable nature of technology. In the context of communication design, glitch serves as a tool that adds stylistic richness to digital visual communication and evokes strong

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emotional responses in users. For example, a deliberately added glitch effect on a high-resolution advertising image can attract the viewer's attention and disturb them, thereby increasing the memorability of the message; at the same time, it can create a subtext by referring to the discontinuous and flawed nature of modern life.

Although glitch aesthetics represent the "broken," they play an extremely productive and innovative role in today's digital culture. No matter how advanced technology becomes, it is striking that the phenomenon of glitch reappears in some form in every new media format (Cappelletti, 2022). This reminds us of the impossibility of perfection in the digital age and that technological control is an illusion (Cappelletti, 2022). The intersection of glitch aesthetics with AI, AR, VR, and the metaverse has provided artists and designers with a broad playground, both technically and conceptually. New-generation artists are pushing the boundaries of these technologies to bring together error and innovation, while also transforming digital glitches into social and aesthetic dialogues. This shows that glitch aesthetics will continue to be one of the most exciting and thought-provoking approaches in the field of digital art and communication design.

Glitch Aesthetics in Cinema: Formal and Semantic Functions

The rapid development of digital technologies and the new opportunities this development has brought to production processes have led to a transformation in cinematic language, as in almost every field of art. These digital interventions, which enable us to go beyond traditional

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narrative structures, are reshaping not only visual aesthetics but also cinematic modes of thinking. In this context, glitch aesthetics emerges in cinema not merely as a technical glitch or image error, but as a conscious narrative choice. Limiting glitch to technical deformations such as pixel breaks, image freezes, colour distortions, sound vibrations, synchronisation shifts, or interruptions in data flow narrows the scope of this aesthetic approach. On the contrary, glitch is a multidimensional strategy that transforms the dramatic structure of the narrative in the cinematic universe, increases emotional intensity, and creates new layers of meaning by fragmenting themes such as memory, time, identity, and perception. From this perspective, glitch is more than a visual-auditory distortion; it is a thematic aesthetic intervention that shakes the viewer's perception and invites them to experience different realities. Therefore, glitch should be regarded not merely as a conspicuous distortion, but as a central component of contemporary cinema aesthetics that opens up a critical space for questioning cinema's technological infrastructure, visual continuity, and representational understanding.

When examining the cinematic use of glitch aesthetics, it is noteworthy that this approach is particularly evident in experimental cinema, independent productions, and the science fiction and dystopian genres. In these genres, glitch functions not merely as a technical intervention, but as a form of expression that disrupts traditional narrative patterns, interrupts the linear perception

of time, and subverts visual and auditory expectations. In experimental and independent cinema practices, glitch aesthetics offer an innovative perspective that removes the viewer from the position of a passive recipient and directly involves them in perceptual processes, thus making them an active subject in the production of meaning. In this respect, glitch constitutes an aesthetic intervention that redefines the narrative logic of cinema at both the formal and conceptual levels.

Glitch aesthetics is not merely a random deviation of the digital age, but rather an important tool that nourishes the aesthetic and narrative logic of postmodern cinema. Qualities specific to postmodernism, such as fragmented structure, multiple perspectives, the breaking of chronological continuity, and the rejection of established narrative norms, find a concrete cinematic counterpart in glitch aesthetics. This approach positions image distortions, synchronisation shifts, or digital glitches not merely as technical issues but as discursive interventions that question the processes of constructing perceptions of reality. Science fiction and dystopian films, in particular, transform glitch from a technological malfunction into a metaphor that reveals the fragmented subject structure, artificial reality relationships, and simulation-based ontology of the postmodern world. Thus, glitch aesthetics not only interrupts the narrative; it exposes the instability of the modern subject, blurs the boundaries between reality and representation, and transforms into a postmodern form of expression that translates the epistemological disruptions of the digital age into cinematic language.

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In this context, when we evaluate glitch aesthetics in cinema in terms of its formal and narrative dimensions, it is possible to express it as a structure and a new aesthetic form that disrupts the visual and auditory flow of the film by deliberately using disturbances at the level of sound and image as a conscious intervention, thereby challenging the viewer's habitual perception patterns. Narratively, rather than disrupting the integrity of the narrative by fragmenting thematic elements such as time, memory, identity, and reality, it deepens them and becomes a multi-layered narrative strategy that actively involves the viewer in the story's meaning-making process. Indeed, when studies on glitch aesthetics are examined, it is emphasised that glitch is not merely a visual effect; it is a multifaceted narrative strategy that questions the limits of technology and our relationship with memory, fragments time, and contributes to the reconstruction of memory, in short, it is a form of expression that is both technical and aesthetic (Günevi Uslu, 2025; Manovich, 2011).

In light of this information, a brief look at the chronological development of the cinematic use of glitch aesthetics reveals that this approach has been used as a conscious narrative choice in many productions across different periods and genres. Memento (Christopher Nolan, 2000) offers an early example of the conceptual impact of glitch aesthetics, disrupting the linear flow of memory by fragmenting the perception of time. The Matrix series (Lana & Lilly Wachowski,

1999–2003) renders the manipulability of the perception of reality visible by coding moments when the simulation crashes through glitch. Inland Empire (David Lynch, 2006) represents mental breakdowns through digital dissolutions, transforming glitch into a reflection of the character's inner turmoil. The Enclave (Richard Mosse, 2013) goes beyond the classic documentary, transforming the violence in war and humanitarian crisis zones into an audio-visual experience; creating a traumatic sense of disconnection in the viewer through aesthetic interventions that disrupt time, space, and perception, while also using colour and image distortions as a deliberate strategy to transform glitch into a political expression. Blade Runner 2049 (Denis Villeneuve, 2017) links holographic glitches to artificial memory and identity production, enabling glitch to point to an ontological problem specific to the post-human era. Aftersun (Charlotte Wells, 2022) renders the fragility of personal memories visible through digital glitches, transforming the glitch into an emotional memory interface. In Turkish cinema, G.O.R.A (Ömer Faruk Sorak, 2004) turns glitch aesthetics into a humorous tool, transporting technological glitches into a narrative playground. When all these productions are evaluated together, it can be said that although the glitch aesthetic produces different meanings depending on the genre and context, it does not remain merely a superficial distortion; it functions as a conscious aesthetic approach that transforms the structure of cinematic narrative, its perceptual continuity, and its thematic depth.

Method

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The study employs a qualitative multiple case study analysis to examine glitch aesthetics across different periods and technologies. The research examines both classic examples of digital glitch art and glitch applications in new technologies such as artificial intelligence and augmented/virtual reality. The sample was determined in the following two main categories to reflect the broad spectrum of glitch aesthetics:

1-Examples of Classic Digital Glitch Art: Early works deliberately produced with digital distortion/malfunction were selected. For example, Luciano Testi Paul's famous work 'JPEGed Mona Lisa' (2002) is a piece in which a digital icon (the Mona Lisa) is deliberately distorted through excessive JPEG compression. Similarly, director Nabil Elderkin's music video 'Welcome to Heartbreak' (2009) for Kanye West is a popular example of glitch aesthetics, featuring pixelation and image glitches through the creative use of video compression errors (using the datamoshing technique). The distortion effects presented in Rosa Menkman's performances and visuals (e.g., 'The Collapse of PAL', 2010) have also been considered an important example of classic glitch art. These works represent early examples of digital errors and flaws being used for aesthetic purposes.

2-New Technological Glitch Applications: To examine contemporary reflections of glitch aesthetics, glitch-based artistic applications in artificial intelligence (AI), augmented reality (AR), virtual reality (VR), and metaverse platforms were investigated. The sample included unexpected artefacts appearing in AI-generated visual works (e.g., strange/bizarre images produced by deep learning models or DeepDream outputs), deliberate glitch effects in AR face filters used on social media platforms such as Instagram (e.g., filters that fragment the face or impart a signal distortion aesthetic) (Bozzi, 2024) and deliberate technical glitches in VR-based art experiences (e.g. unexpected image breaks in virtual environments or distorted avatar/appearance effects created in 'metaverse' worlds). In these contemporary examples, glitch is defined as applications that draw on the technical infrastructure of new media (e.g. AI algorithms' 'hallucinations' or errors, the limitations of AR software) or use them as a critical tool.

Content analysis and comparative case study methods were applied to all selected examples. In classical works, the types of visual-auditory content degradation, the techniques used (e.g. datamoshing, codec errors, analogue interference) and their aesthetic/expressive dimension

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were analysed qualitatively. In the new technological examples, considering the technical characteristics of the relevant platforms, how the glitch effect was produced (e.g., whether it was an AI model training error or artist intervention) and how it affected the viewer experience was examined. Aesthetic motifs and themes were coded for all examples, and the transformation of glitch aesthetics in new media was evaluated comparatively with its traditional layers of meaning. During this process, theoretical frameworks of glitch art in the literature (e.g., Menkman's Glitch Manifesto and concepts from other glitch theorists) were used as a guide to interpret the role of each example in the context of error aesthetics. Thus, the method aimed to conduct a comprehensive analysis between the past and the present by addressing different turning points in glitch art together.

The study has certain limitations. Firstly, although glitch aesthetics manifests itself in both visual and auditory fields (e.g. glitch music), it focuses solely on the visual communication dimension. In other words, auditory glitch art is excluded from the scope. Furthermore, although the concept of glitch aesthetics shows continuity from the 1990s to the present day, the study mainly examines examples from the 21st-century digital age. The sample size is limited to three, and although this selection provides comprehensive representation, it undoubtedly cannot fully reflect the diversity of glitch art. Finally, comments on the examined works are made to the extent of the available sources; therefore, sections concerning the artists' intentions or audience reactions

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are limited to the information found in the literature. While these limitations do not affect the in-depth analytical nature of the study, they require the reader to be cautious about the generalisability of the findings.

Examples and Analyses of Glitch Art

Example 1: "JPEGged Mona Lisa" – A Glitch Reinterpretation of a Classic Work

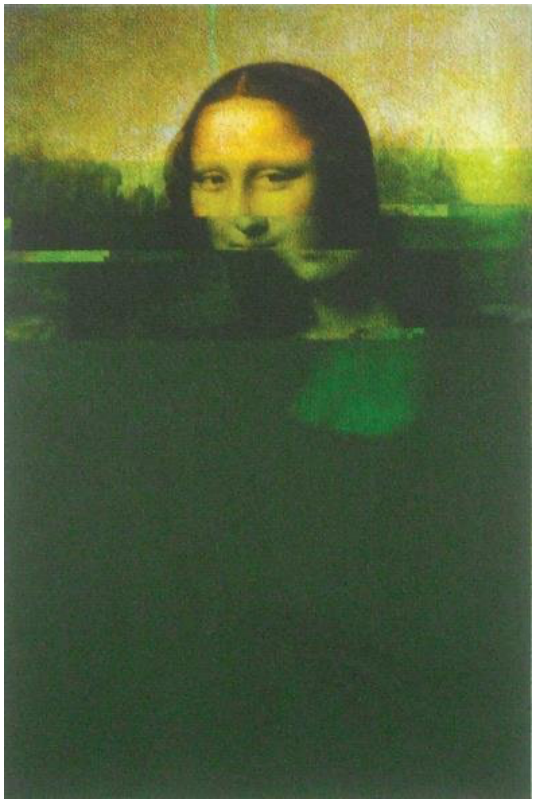

Figure 1: Luciano Testi Paul, JPEGged Mona Lisa. (Source: URL 1)

Italian artist Luciano Testi Paul's 2003 work titled 'JPEGged Mona Lisa' (Image 1) is a striking example that reveals the layers of meaning in glitch aesthetics (Kanat, 2018). In this work, the artist has distorted Leonardo da Vinci's famous Mona Lisa painting through digital

interventions, transforming the work into a different appearance. The image resulting from deliberate distortions made on a digital copy of the original painting appears familiar at first glance but contains significant differences in the details. Paul pixelated the image into horizontal layers and dramatically altered the colour palette. The serene expression on Mona Lisa's face and the landscape in the background have been replaced by colours and blocks fragmented by digital noise, while only a small area containing the figure's eyes remains unchanged (Kanat, 2018). This allows the viewer to recognise the work as the Mona Lisa by her eyes, but encounter a completely new aesthetic in every other element.

The JPEGged Mona Lisa is a fine example of the multi-layered meaning production of glitch aesthetics: on the one hand, it makes a critical reference to art history by fragmenting a work that symbolises peace and beauty, such as the Mona Lisa, through digital corruption; on the other hand, this act of fragmentation produces a completely original and independent work. The new image that emerges has dispelled the sense of tranquillity that the original painting evoked in the viewer; instead, it has introduced a narrative belonging to the fragmented reality of the digital age, perhaps a little unsettling but certainly captivating. Thus, the glitch has destroyed the old meaning by disrupting and recreating a classic work, building its own layer of meaning in its place. The 'JPEGged Mona Lisa' is a frequently cited work both in the art world and in academic literature,

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and can be considered a cornerstone in terms of embodying the idea of ‘the beauty of error’ in glitch art.

Example 2: Kanye West – "Welcome to Heartbreak" Music Video (2009)

One example of glitch aesthetics reaching a wide audience in communication design comes from the world of popular music. Renowned hip-hop artist Kanye West brought this trend to the mainstream stage by featuring intense glitch visuals in the music video for his 2009 song ‘Welcome to Heartbreak’ (Taşkesen, 2022). The visual language of the video is shaped by deliberate digital distortions: images of West and guest artist Kid Cudi are frequently pixelated, colours suddenly fade or turn into bright digital artefacts, and transitions between scenes feature interruptions reminiscent of data stream errors (Figure 2). This aesthetic choice aligns with the song's emotional content. ‘Welcome to Heartbreak’ is a piece that describes the artist's inner sorrow, even amidst fame and prosperity; the glitch effects in the video visually represent this emotional turmoil and the disruption of the inner world. Each ‘glitch’ in the images is like an external manifestation of the heartbreak and mental turmoil expressed by the artist. From a communication design perspective, this video demonstrates the glitch aesthetic's capacity to powerfully capture the viewer's attention and engage them. Unlike conventional, smooth music videos, the images here are constantly disrupted and rebuilt, creating an element of curiosity that

keeps the viewer glued to the screen. Indeed, Kanye West's bold visual choice caused quite a stir at the time and introduced countless fans to the glitch aesthetic (Taşkesen, 2022).

Figure 2: Kanye West – "Welcome to Heartbreak" Music Video (2009). (Source: URL 2)

This clip has also been seen as a source of inspiration within the industry, with many music videos and commercials in subsequent years beginning to use similar glitch effects. For example, it is known that Coca-Cola's advertising campaign for the launch of its mini can product featured rapid glitch effects reminiscent of the glitch technique (Lee, 2025). West's 'Welcome to Heartbreak' clip is a successful example of how a brand or artist image can be presented innovatively through glitch. Due to its widespread resonance in popular culture, it is considered an ideal example for discussing the role of glitch aesthetics in mass communication in a communication context.

Example 3: Rosa Menkman – Theory and Practice in Glitch Art

One of the leading figures in the field of glitch aesthetics, both for her theoretical contributions and her artistic practice, is Rosa Menkman. Menkman is a Dutch artist and academic and the author of one of the most frequently cited theoretical texts on glitch art. Her 2010 publication, Glitch Studies Manifesto, offers a comprehensive overview of the place of digital error in art and communication. In the manifesto, Menkman defines glitch as 'an experience of destruction where meaning is absent, diverging from ordinary form and discourse' (Taşkesen, 2022). This statement emphasises that glitch aesthetics breaks traditional structures of meaning, opening up a new field of experience for the viewer. According to Menkman, the claim of perfection in technological systems can be shaken by the aestheticisation of inherent errors; error is an aesthetic intervention in technological perfection (Taşkesen, 2022).

In addition to his theoretical work, Menkman has also created artistic projects that give practical expression to glitch aesthetics. One of his best-known works is entitled 'A Vernacular of File Formats' (Figure 3). In this project, Menkman saved and corrupted a single image (a portrait photograph) multiple times in different digital file formats, visualising each format's unique 'glitch language'.

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Figure 3: A Vernacular of File Formats. (Source: URL 3)

The resulting series of images reveals the hidden language of the digital environment by presenting side-by-side the glitch artefacts produced by formats such as JPEG, GIF, and BMP. This work demonstrates how glitch aesthetics sheds light on the infrastructure of digital media as a layer of meaning: each file format leaves a distinct mark when corrupted, and these marks render the invisible building blocks of the digital world visible. Menkman's other projects similarly aim to push the boundaries of technology and offer the viewer an unexpected experience. For example, in his performance entitled 'Ghost Stream-o', he transformed corrupted data streams into real-time visuals, making the audience part of an interactive glitch experience. Menkman's works have been exhibited in a wide range of venues, from galleries to digital festivals, and have inspired new media artists.

From a communication design perspective, Rosa Menkman's contribution lies in revealing the conceptual depth of glitch aesthetics. Thanks to her work, glitch has moved beyond being merely a random visual effect to be recognised as a conscious design language and critical tool.

Artists such as Menkman use glitch to explore the fragility of digital communication, the socio-cultural effects of data structures, and the limits of our aesthetic perception. For this reason, Menkman's works and writings are frequently referenced in academic circles and form the basis for discussions on glitch in the fine arts and communication disciplines. Drawing from his example, it can be said that glitch aesthetics is a form of expression rich in layers of meaning, both in theory and practice, and understanding the subtleties of this form of expression will contribute to a better understanding of the digital communication tools of our age.

Conclusion and Evaluation

Research findings indicate that while the traditional layers of meaning in glitch aesthetics persist in new technological media, they undergo significant transformations. Analysis of *classic examples of glitch art* confirms that the use of error and distortion as an artistic expression tool produces multi-layered meanings. For example, digitally distorting the Mona Lisa or deliberately disrupting the data flow of images in a music video demonstrates an attitude that subverts the ideals of perfection in digital media. In these works, glitch creates an aesthetic deformation on the surface while questioning the reliability and continuity of the digital image in its deep structure. Indeed, as Demircan (2023) emphasizes, glitch practices overturn discourses about the perfection of digital technology, revealing the aesthetic components of error and thus challenging technological and ideological structures. This is clearly seen in the classic examples examined: In the works of Rosa Menkman, the "aesthetics of glitch" creates an experience that makes the infrastructure of the media visible and reminds us of the importance of human intervention (Demircan, 2023). Kanye West's music video, which reached a wide audience and featured glitch aesthetics, demonstrates how glitch art has infiltrated mainstream popular culture, revealing that this aesthetic has become

a *popular culture artifact*. Therefore, the results of traditional glitch aesthetics have been evaluated not only as an abstract digital error beautification but also as works that contain a critical discourse against norms.

An examination of contemporary glitch applications has revealed that this critical and aesthetic core of traditional glitch aesthetics manifests itself in different forms in new media. In examples of AI-based glitch art, unexpected errors and visual inconsistencies produced by AI algorithms have been embraced as a new source of "glitches." For example, strange faces or distorted patterns that appear in machine learning-generated images actually reveal the fallibility of algorithmic systems. Artists use these AI-generated glitch effects to expose the underlying biases and black-box processes of artificial intelligence. This demonstrates that glitch aesthetics continues to serve as a tool for technological criticism: just as classic glitch art drew attention to the imperfections of digital systems, AI-glitch works expose the fallibility of digital systems and artificial intelligence. For example, works such as Trevor Paglen's *ImageNet Roulette* project have placed glitch logic in a contemporary critical context by exposing biases in AI training data. The findings show that the glitch aesthetic produced by AI continues the ethics and aesthetics of traditional glitch art, which "creates meaning through error," but also contains criticism of algorithmic decision-making processes.

Glitch aesthetics in augmented and virtual reality environments appear in a more immersive context. In the analyzed examples, it was observed that glitches intentionally created as in AR and VR content were used both as an aesthetic style and as a narrative device. Particularly in AR face filters or lenses, some artists turn the technical limitations of the platforms into an artistic advantage. AR artists such as Lark Spartin have deliberately used *glitch* effects in their filters, inspired by the performance limits of tools like Spark AR; for example, they have aestheticized

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errors such as "stuttering" caused by low frame rates or facial fragmentation that the camera cannot capture properly for the purpose of satire and criticism (Bozzi, 2024). In this way, glitch aesthetics in the AR environment can be used to discuss issues of *identity* and *visibility* – as filters create glitches that distort users' faces or transform them into other forms, emphasizing the fluidity of digital identity. On the VR side, the results show that glitch can be a strategic tool, particularly in storytelling and experience design. The emergence of an unexpected visual/audio glitch in a virtual reality experience can create a conscious discomfort in the user, signaling a rupture in the fictional world. Indeed, glitch effects can be used as a *narrative disruption* technique in VR environments, deliberately disrupting the sense of reality. The examples included in the study show that VR artists sometimes "disrupt" the scene, confronting the viewer with the artificiality of digital fiction.

Similarly, in persistent online worlds that we might call *the metaverse*, glitch aesthetics often appear as visual glitches arising from system errors (e.g., graphics that fail to load, faulty physics simulations) or deliberately added glitch visuals. Findings suggest that the use of glitches in metaverse environments has emerged as an art form that reveals the underlying code layer or control of the platform. In this sense, glitch offers a kind of "counter-intervention" strategy in the new media order: it provides the opportunity to make a critical statement about the techno-social structure by using glitch aesthetics in contrast to the promise of a flawless, seamless virtual world.

It has been determined that both traditional and contemporary glitch artworks share significant commonalities in terms of aesthetic and critical value. Glitch aesthetics, beyond being merely a technical effect, subverts the value attributed to the notion of imperfection, thereby introducing a new understanding of beauty to visual culture. In traditional glitch art, elements such as broken pixels, colour shifts, and analogue interference have aesthetically re-evaluated image errors that were considered ‘ugly’ or ‘wrong’. This aesthetic innovation continues in contemporary

glitch applications: for example, the strange images produced by AI systems are surprising aesthetics that arouse curiosity in the viewer; glitch effects in AR/VR enrich the viewer's sensory experience and break the ordinary image flow, providing striking, innovative visual experiences. New generation artists such as Daniel Kramer state that they achieve what they call the 'wow factor,' a surprising effect, by blending the classic glitch style with AR technology (Artvive, n.d.). This demonstrates that glitch aesthetics also has creative value in new media art, offering the viewer a different perceptual experience.

On the other hand, the critical value of glitch aesthetics continues in new technologies by diversifying its forms of expression. While traditional glitch art sought to undermine the digital technology's claim to perfection and expose its underlying control mechanisms, contemporary uses of glitch in fields such as AI, AR, and VR adapt this critical stance to different dimensions. In the domain of artificial intelligence, glitch creates awareness of the unreliability of automation and simultaneously sheds light on how social biases can be reproduced through algorithms (for instance, when a facial recognition system fails or produces peculiar outcomes, it opens a discussion about the data-driven biases behind it). In AR/VR and metaverse contexts, glitch has become a tool for developing a critical discourse on digital identity, perceptions of reality, and corporately controlled virtual platforms. Particularly at a time when companies like Meta (Facebook) promote "seamless" metaverse experiences, artists' deliberate use of glitch effects in filters or virtual environments functions as a rebellion against the identity constructions and reality narratives imposed by these platforms. As glitch artists have historically emphasized, "every technology is invented with its own malfunction," and these malfunctions offer a creative mode of resistance. The research findings indicate that glitch still plays a role in media critique and technological skepticism within immersive media environments, making the margin of error in

digital systems visible and inviting viewers to occupy a more conscious and questioning position.

Today, glitch aesthetics is no longer confined to selected examples of digital art; rather, it manifests across the entire media ecosystem, appearing in various forms ranging from communication design to interface aesthetics, from advertising discourse to cinematic narration. At times, this aesthetic emerges as clusters of corrupted pixels within a graphic interface, as intentional image disruptions in a music video, or as a dramatic device that transforms the relationship between reality and emotion in cinematic storytelling, thereby repositioning perception itself. In this sense, glitch is not merely the aestheticization of a technical flaw but a semiotic strategy that enables new meaning-making practices within media texts.

The analysis of classical digital art examples reveals that glitch is not an accidental malfunction, but a deliberate artistic strategy that questions existing norms and the myth of digital perfection. In the age of artificial intelligence and immersive media, glitch aesthetics continues its inherent pursuit of "truth through error" by means of new technological instruments. Moreover, glitch not only opens a space for aesthetic renewal within complex systems such as AI and the metaverse, but also holds up a mirror to the intrinsic problems embedded in these structures. In this respect, glitch art sustains the poetic and political potential of error by establishing a bridge between disciplines and technologies within digital culture. The findings demonstrate that while glitch aesthetics has evolved and expanded over time, it has preserved its radical artistic and critical core. Consequently, glitch positions itself not merely as a unique aesthetic mode of expression, but as a discourse of resistance against the invisible assumptions of the digital order in a world increasingly woven with data and algorithms.

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REFERENCES

Artivive. (n.d.). *Daniel Kramer: Transforming digital art through glitch and augmented reality*. ARTVIVE. https://www.artivive.com/blog/daniel-kramer-transforming-digital-art-through-glitch-and-augmented-reality#

Aydın, Y. (2019). Dolaysızlık ve Glitch Arasındaki İlişkiye Bir Bakış. *Erciyes İletişim Dergisi*, 6(2), 881-898. https://doi.org/10.17680/erciyesiletisim.503293

Betancourt, M. (2022). Glitch Art and the cinematic articulation of the 'shot': the convergence of datamoshing with the long take. *Journal of Visual Art Practice*, *21*(1), 47–71. https://doi.org/10.1080/14702029.2021.2020592

Bozzi, N. (2024). Meta's artistic turn: AR face filters, platform art, and the actually existing metaverse. *Information, Communication & Society*, *28*(5), 832–851. https://doi.org/10.1080/1369118X.2024.2427116

Cappelletti, G. M. (2022, October 28). *Glitch is dead, long live glitch!* RED-EYE. https://red-eye.world/c/glitch-is-dead-long-live-glitch#

Cappelletti, G. M. (2024, June 19). *The poetics of error: Aesthetics of glitch and disruption in AI-generated visuals*. RED-EYE. https://red-eye.world/c/the-poetics-of-error-aesthetics-of-glitch-and-disruption-in-ai-generated-visuals#

Cubitt, S. (2017). Glitch. *Cultural Politics*, *13*(1), 19–33. https://doi.org/10.1215/17432197-3755156

Demircan, Ö. (2023). 21. Yüzyılda Karşı Sanat Anlayışı Olarak Glitch. *Yedi* (30), 43-56. https://doi.org/10.17484/yedi.1219249

Elwes, J. (2023, June 2). *Jake Elwes looks to demystify the black box of artificial intelligence*. Gazelli Art House. https://gazelliarthouse.com/exhibitions/170-data-glitch-utopia-jake-elwes/

Griner, D. (2017, January 5). *From marketing to fashion, "The Glitch" has become one of today's defining design trends: How digital errors became an aesthetic*. Adweek. https://www.adweek.com/performance-marketing/from-marketing-to-fashion-the-glitch-has-become-one-of-todays-defining-design-trends/

Günevi Uslu, E. (2025). Aftersun filminde glitch estetiğiyle parçalanmış bellek ve zamanın temsili. *Selçuk İletişim,* 18(2),764-789. https://doi.org/10.18094/josc.1677321

Kanat, S. (2018). Glitch sanatı. *İnönü Üniversitesi Kültür Ve Sanat Dergisi*, *4*(2), 28-35. https://doi.org/10.22252/ijca.529181

Lee, S. (2025, June 15). *Glitch art in advertising: A visual revolution*. NumberAnalytics. https://www.numberanalytics.com/blog/glitch-art-in-advertising-illustration#

Manovich, L. (2001). The language of new media. MIT Press.

Moradi, I. (2004). *Glitch aesthetics* (Yüksek lisans tezi, University of Huddersfield). University of Huddersfield, Huddersfield, United Kingdom.

Ryan Bengtsson, L., & Van Couvering, E. (2022). Stretching immersion in virtual reality: How glitches reveal aspects of presence, interactivity and plausibility. *Convergence: The International Journal of Research into New Media Technologies*, *29*(2), 432-448. https://doi.org/10.1177/13548565221129530

Somer, H. S. (2013). Sayısal medya sanatı olarak glitch sanatı ve etkileri. http://www.sayisalmimar.com/kurslar/bs503/makaleler/bs503_201314_sarp.pdf

Taşkesen, K. (2022, July 31). *From digital noise to a popular trend: Glitch*. Adgager. https://blog.adgager.com/dijital-kulturden-populer-bir-akima-glitch/

Filmography

Lynch, D. (Director). (2006). Inland Empire [Film]. Absurda Cinema.

Mosse, R. (Director). (2013). The Enclave [Film]. Irish Pavilion / Venice Biennale Commission.

Nolan, C. (Director). (2000). Memento [Film]. Newmarket Capital Group.

Sorak, Ö. F. (Director). (2004). *G.O.R.A.* [Film]. BKM Film.

Villeneuve, D. (Director). (2017). Blade Runner 2049 [Film]. Warner Bros. Pictures.

Wachowski, L., & Wachowski, L. (Directors). (1999). The Matrix [Film]. Warner Bros.

Wells, C. (Director). (2022). Aftersun [Film]. A24.

List of Figures

URL 1. Image 1. Luciano Testi Paul, JPEGged Mona Lisa, https://www.researchgate.net/figure/JPEGed-Mona-Lisa-de-Luciano-Testi-Paul-2002-Arquivo-digital-em-extensao-JPEG-MORADI_fig1_321062322 , [Access Date: 09/10/2025].

URL 2. Image 2. Kanye West – "Welcome to Heartbreak" Music Video (2009), https://vimeo.com/4578366 , [Accessed: 08/27/2025].

URL 3. Image 3. A Vernacular of File Formats, http://lossyculture.altervista.org/a-vernacular-of-file-formats /, [Accessed: 08/14/2025].