VISUAL REVIEW | Vol. 18, No. 6, 2026 | ISSN 2695-9631
International Visual Culture Review / Revista Internacional de Cultura Visual
https://doi.org/10.62161/revvisual.v18.6449

STREET ART, DIGITALIZATION AND ARTIFICIAL INTELLIGENCE
New Practices and Challenges

NATALIA GUTIÉRREZ-COLOMER RUIZ [1]
npgutierrezcolomer@ucm.es
ANA LLORENTE VILLASEVIL [1]
ana.llorente@udit.es
[1] UDIT – Universidad de Diseño, Innovación y Tecnología, España

KEYWORDS
Street Art
Digitalization
Modern Art
Visual Culture
Urban Space
Social Media
Artificial Intelligence

ABSTRACT
This article examines the transformation of contemporary street art in relation to the Internet, social media, and artificial intelligence. Using a qualitative approach that combines theoretical review, case studies, and direct observation, the study analyzes how digitalization has reshaped artistic creation, dissemination, and reception. A typology of interventions is proposed according to their level of digital interaction, and emerging hybrid formats and AI-related practices are explored. The findings reveal an expanded form of street art situated between physical space and digital environments.

Recibido: 03/ 07 / 2026
Aceptado: 05/ 10 / 2026

1. Introduction

In the first two decades of the 21st century, street art has undergone an unprecedented process of expansion and transformation, driven by the widespread adoption of the Internet, the consolidation of social media, and, more recently, the incorporation of artificial intelligence–based tools. These technologies have not only altered the modes of production and dissemination of urban interventions, but also the ways in which they are experienced, interpreted, and preserved. In this context, street art is increasingly configured as a hybrid practice situated between the physical space of the city and digital environments.

This research focuses on the study of contemporary street art and its communication through digital platforms, addressing how the expansion of the Internet and social media has transformed both the production and perception of urban interventions. The study is exploratory and analytical in nature, combining documentary review with case studies of street artists in order to understand the changes generated by digitalization in a field traditionally linked to in-person experience.

The purpose of this research is to examine how the global circulation of images, digital interactivity, and the creation of hybrid formats have conditioned urban artistic practice, as well as to identify new forms of expression emerging at the intersection between the physical and the virtual.

The problem underlying this study lies in the limited understanding of how digital tools, while expanding the visibility and reach of street art, also generate distortions in the perception of its relevance and modify the relationship between artwork, space, and audience. This transformation raises questions regarding permanence, authenticity, and aesthetic experience in a context mediated by the development of the Internet and the popularization of social media, especially Instagram.

The main objective is to analyze the effects of the new digital communication paradigm on street art, categorizing interventions according to their degree of interaction with the Internet and evaluating how these transformations affect the local and global art scene, audience perception, and the emergence of new artistic formats.

The justification of this study lies in the need to understand an artistic phenomenon in full expansion and transformation, where digitalization not only enables preservation and dissemination but also fosters innovation in formats, narratives, and audience relationships. This analysis is relevant for art historians, critics, urban artists, and scholars interested in the convergence between art, social media, urban space, and artificial intelligence, providing a conceptual framework for future research.

The main contribution of this work lies in the articulation of a typology of urban interventions based on their degree of interaction with digital environments, as well as in the incorporation of artificial intelligence as an emerging variable in the analysis of contemporary street art.

2. Design and methodology

This research adopts a qualitative, exploratory, and descriptive approach aimed at analyzing the relationship between contemporary street art and communication on digital platforms. This methodological design is appropriate for addressing a complex and constantly evolving phenomenon involving aesthetic, communicative, technological, and social dimensions.

2.1. Approach and Type of Study

A qualitative study is developed, combining theoretical review, case analysis, and direct observation of urban interventions. This approach allows for an understanding of the meanings, processes, and dynamics shaping new street art practices within a context mediated by the Internet, social media, and artificial intelligence.

The research is based on three main techniques:

a) Documentary review, including scientific articles, books, doctoral theses, and specialized publications on street art, digital communication, and contemporary visual culture (2017–2025)
b) Analysis of digital sources, focusing on artists' websites, social media (especially Instagram), and videos of urban interventions.
c) Direct observation, including photographic documentation and contextual recording of works in situ.

2.2 Sample and Time Fram

The corpus consists of a purposive selection of representative cases of street artists and collectives with national and international projection, such as Boa Mistura, Bordalo II, Alice Pasquini, NSN997, Jonipunto, Animalitoland, Sabek, and Space Invader, among others. The selection is based on criteria of diversity in techniques, formats, degree of digital interaction, and recognition within the street art scene.

Likewise, social media posts associated with these artists and with specialized street art platforms were analyzed in order to identify patterns of dissemination, interaction, and presentation of the works during the period under study.

The temporal scope of the research extends from 2017 to 2025, encompassing both the bibliographic review and the analysis of field cases and digital publications. During the year 2025, particular attention was given to the study of interventions in relation to Artificial Intelligence.

2.3 Procedure

In an initial phase, a literature review was conducted to establish the theoretical framework and to delimit the key concepts. Subsequently, visual and textual material from digital sources was collected, along with the documentation of interventions observed in situ.

In a third phase, the cases were organized and classified according to their relationship with the digital realm, based on emergent categories derived from the analysis: interventions whose virtual version is irrelevant, interventions complemented by online information, works immersed in a multidimensional reality, and new hybrid formats. Finally, interventions determined by Artificial Intelligence were identified.

Regarding the analytical techniques, a qualitative content analysis was applied, aimed at identifying recurrences, similarities, and differences among the cases studied. This analysis made it possible to establish typologies of intervention and to derive interpretations concerning the impact of digital communication on the practice and perception of street art.

3. Literature Review

3.1. Development and Main Characteristics of Street Art

In recent decades, the term *urban art* has undergone a notable transformation. Until the 1990s, it was broadly used to refer to any artistic manifestation located in public urban space. This category included decorative elements such as fountains, sculptures, or other artworks, generally produced through institutional commissions.

Terminological difficulty emerges when an artistic practice initially linked to graffiti begins to develop, characterized by its execution without permission in the urban environment and which, over time, acquires distinctive features that justify its consideration as a phenomenon in its own right. The most accurate term is the English term street art although this do not work in other languages so, due to a variety of circumstances, the term street art is the most widely adopted in English, but the term urban art can be considered a synonym as it is the most used in other languages like Spanish.

It is often confused in the media with graffiti; however, it presents clear differences from traditional graffiti, which is based on the self-referentiality of signatures and the use of spray paint. Graffiti also operates within a closed code, whereas street art is conceived as an open code aimed at reaching a broader audience. Furthermore, they differ in the diversity of techniques employed—stencils, stickers, brushes, markers, among others—and in the frequent presence of an implicit message (Gutiérrez-Colomer, 2020).

In relation to traditional art, street art also presents notable differences. It is important to consider that these interventions are carried out within a context of illegality. This suggests that street art enjoys greater creative freedom, not subject to institutions, clients, or the art market. The fact that it is produced in the street also leads to another key characteristic of this phenomenon: its engagement with context. The environment becomes an inseparable part of the artistic manifestation, which is why the concept of context acquires particular relevance:

> The urban space is not only the setting of street art, but also its source of inspiration and its objective. Cities, with their structures, histories, and social dynamics, provide the essential context for the development of street art. (Bonales & Pradilla, 2025, p. 139)

The ephemeral nature of these interventions—where the artist, after completing the work, leaves it to its fate—is also a novelty compared to traditional art, which entails issues of preservation:

Due to its ephemeral nature and lack of legal protection, street art has found an ally as a means of preservation in photography (digital or analog), taken by artists, curators, enthusiasts, collectors, the community, or researchers. In addition, countless photographs have been taken to document it in books, magazines (printed and digital), and more recently in online databases, as the Internet is the perfect place for a broader audience to access, share, and disseminate it both locally and internationally. (Baeza, 2025, p. 6)

3.2 Dissemination of Street Art on the Internet and Social Media

During the early years of the present millennium, artists lacked the immediate access that would characterize the following decade, and the information available online did not reach the magnitude or diversity it has today. In that context, most creators did not yet disseminate their work via the Internet; however, throughout the first decade, they gradually incorporated themselves into this new cultural and technological dynamic. As researcher Castells points out, while Internet penetration in Spain was 14%, it reached 50% in the United States; therefore, artists were able to observe the interventions being carried out there (Castells, 2006).

As in other fields, new disseminators emerged in the art world who were not linked to the more institutionalized sphere of art. As a result of the emergence of these new agents, perspectives, types of content, and user profiles consuming artistic information multiplied, as stated in the article *Communication and Dissemination of Artistic Content through Social Media: Facebook and Twitter*:

> These new profiles of cultural intermediaries have created examples and accounts on social media with more or less specialized content related to art, becoming artistic disseminators who, in many cases, have improved users' cultural level and contributed to the democratization of art. (Izquierdo et al., 2017, p. 1178)

Traditionally, the dissemination of art had been in the hands of various agents with a central role in the art market and major cultural institutions, who acted as mediators of taste and largely determined the success or failure of creators. However, the dissemination work carried out by blogs and specialized websites around works outside conventional circuits enabled the emergence and consolidation of expressions linked to counterculture (Abarca, 2011). This space of "independent and massive communication" (as defined by Abarca) became ideal for artists more politically engaged and interested in communicating ideas opposed to institutions; indeed, many interventions fall within the realm of artivism. In this regard:

> For artivists, much of the tactical use of mass media lay in the possibility of establishing relationships among themselves thanks to the open, simple, and efficient communication they found online. Another fundamental aspect was the ability to transmit information bypassing channels of censorship, offering alternative information and expanding it. (Urroz & Baigorri, 2024, p. 3)

This phenomenon intensified exponentially with the widespread popularization of social media. The second decade of the 21st century was characterized by the penetration of the virtual environment into virtually all spheres of everyday life. In this large-scale transformation process, the emergence and consolidation of social media played a decisive role, and the field of street art was transformed accordingly. According to researcher Javier Abarca:

> In the evolution of street art, the most important factor is the Internet in general. In the last ten years, it has been social media, and in the ten years before that, it was the Internet, which was somewhat slower and less flexible, but photos were already being published. With social media, it has increased, but essentially it is the same: the enormous ease of sharing images. Another very

> important factor is digital photography. These two things are what have made street art; they are street art. (Gutiérrez-Colomer, 2020, p. 531)

The integration of virtual reality into everyday life has generated a wide range of unprecedented possibilities. In this context, social media offers artists the opportunity to disseminate their work without relying on the mediation of established figures in the art world, while also enabling their participation in a global and interconnected network.

> It is undeniable that today social media is a true springboard for disseminating knowledge of any kind—for example, artistic knowledge—but it is also designed for communication and interaction, which can be used to benefit cultural dissemination. (Izquierdo Expósito et al., 2017, p. 1177)

Another advantage provided by social media is the ease with which artists can understand public opinion. Street art differs from institutionalized art in that it is directed at a broader audience—all citizens—without requiring them to visit a museum, art fair, or gallery:

> Artists conceive street art as a dialogue in the shared space of the street. (…) The street thus becomes a democratic space where art is accessible to all, although it can also be imposing. This democratic aspect is fundamental to the identity of street art, allowing direct and unmediated interaction with the public. (Bonales & Pradilla, 2025, p. 147)

The Internet enables this direct interaction with a much broader audience regardless of location, and also allows viewers to share and comment on artistic interventions thanks to the widespread use of social media.

> One of the fundamental contributions of art to network society has been fostering the emergence of communities of and for artists engaged in social critique and political activism. In this early stage of chaotic circulation on the Internet, community-building became necessary as it allowed for greater visibility in an environment saturated with data and projects of all kinds. Moreover, beyond this pragmatic function, joining artist platforms was motivated by the search for a shared space for learning and collaboration in accessing services (Urroz & Baigorri, 2024, p. 4).

Many artists initially published images on Flickr or Tumblr, but these platforms were quickly replaced by Instagram, which was adopted by most street artists, as well as organizers of festivals, events, and projects related to street art.

Facebook was the first platform that enabled easy interaction with citizens and the first where the general population had a profile regardless of their education, profession, tastes, or interests (Izquierdo et al., 2017).

Twitter is a network used by artists for various purposes, although primarily for promoting their artistic activities—not only street art but also works produced for galleries, fairs, or institutions. Indeed, greater activity is observed among creators who work professionally in this field and are recognized figures both in unauthorized street art and in traditional artistic circuits.

In summary, social media has decisively contributed to expanding the dissemination of street art, enabling access to a broader audience and fostering the formation of global artist networks, in a dynamic that had already begun—albeit to a lesser extent—with fanzines. However, these platforms offer two additional advantages: immediacy, which allows users to access new works at the moment of publication, and direct interaction with audiences and other creators, facilitating encounters, event organization, and participation in festivals. Nevertheless, it should be noted that the degree of interest among street artists in gaining visibility online is heterogeneous, which may lead to a distorted representation of the artistic reality of the city.

4. Results

4.1 Global Artistic Scene

The large-scale use of the Internet and social media has completely transformed the street art scene, thus raising the question of the extent to which it has conditioned artistic interventions. One of the most

significant effects derived from the widespread circulation of artworks through the Internet, without geographical limitations, is the formation of a globally interconnected artistic scene.

This dynamic creates the impression that the local dimension is becoming diluted, insofar as the most influential artists exert their impact simultaneously in contexts as diverse as Africa, Australia, or Europe. In an interview, Guillermo de la Madrid (a street art documentarian in Madrid and creator of the Madrid Street Art Project), when asked how he would define street art in Madrid, responded: "It is difficult to differentiate it from street art in other cities; I think it is quite a global movement, increasingly so, for better or worse" (Gutiérrez-Colomer, 2020, p. 521). However, he also emphasized:

> Street art in cities, especially that more spontaneous part created without permission, is conditioned by several factors. The available spaces are determining factors, such as architecture, the colors of the city, and who is present. In other words, the street art of a city is also shaped by the artists who are present in that city. Events and certain themes can also influence those artists. (Gutiérrez-Colomer, 2020, p. 521)

The scarcity of studies in this regard does not allow for a clear appreciation of local characteristics in street art; however, it does appear that, thanks to networked communication, certain common features have emerged as a result of this global interconnection. This interconnection means that many artists are known in different parts of the world, enabling the emergence of collaborative projects in other countries. A good example of this is Boa Mistura, which has developed projects in numerous countries. In 2024 and 2025 alone, it carried out projects such as: SOMOS (Dominican Republic, 2024); RE-ACT (United States, 2024); UNYON (Philippines, 2024); LIBRES (Spain, 2025); TÚ Y YO (Panama, 2025); and AMOR (Portugal, 2025).

4.2. Distortion in the perception Street Art

Whereas artistic dissemination was previously filtered by the institutionalized art world, the current landscape is characterized by the removal of such filters, resulting in a distortion of reality in which it may appear that the greater the visibility an artist achieves on social media, the more relevant they are within the artistic field. Data on Instagram followers—Instagram being the most widely used social network for the publication and consultation of street art interventions—show the following figures for some of the most relevant artists on the international scene:

Table 1. Followers on Instagram

Artist	Country of origin	Followers in Instagram (aprox.)
Banksy	Reino Unido	13,7 millones
Shepard Fairey – Obey	Estados Unidos	1,3 millones
Os Gemeos	Brasil	1,2 millones
Space Invader	Francia	737.000
Okuda	España	441.000
Blu	Italia	36.700

Data collected from the official Instagram profiles of each artist (consulted on September 28, 2025).

If we analyze the data, it is true that Banksy is the most influential and well-known artist worldwide, which corresponds to his 13.7 million followers. Shepard Fairey–Obey and Os Gemeos have also played a significant role in the development of street art. However, the number of followers of such a relevant figure as Space Invader—only 737,000 followers—is relatively low for an artist who is a major reference in the use of mosaic techniques and who has even managed to have one of his works orbit the Earth aboard the International Space Station (ISS), making him the only street artist with a work in space.

Similarly, the number of followers of an artist such as Blu is also relatively low. He is a key figure in political critique through his large-scale murals and was able, through a call on social media, to mobilize his followers to gather in Berlin on the night of December 11–12, 2014, to paint over in black two of his murals located on Cuvrystraße, in the Kreuzberg district. This action was a protest against gentrification and real estate speculation that was transforming the neighborhood, where an alternative artistic scene had previously flourished. The disappearance of these murals became a symbol of the struggle against

gentrification and the loss of identity in cities. Although the works were physically erased, their message and the debate they generated remain present in the collective memory of street art and the recent history of Berlin. The importance of this artist in the recent evolution of street art is not reflected in his number of Instagram followers, which does not even reach 40,000 users.

4.3. Artistic Interventions According to Their Degree of Digital Interaction

The development of the Internet has exerted a decisive influence on the transformation of street art, even leading to the emergence of new forms of artistic expression. Artists acknowledge the ephemeral nature of their interventions in physical space; however, these can be preserved in the digital realm, where they also reach a considerably broader audience than those who experience them directly. This reality impacts artistic practice in different ways: while some authors assign little relevance to the virtual environment, others conceive proposals whose nature and meaning depend closely on their online circulation.

According to the degree of interaction with the Internet, several types of interventions can be identified: those whose virtual version is not relevant to the work and may even lose part of its value online; those that are complemented by online information to facilitate their understanding and/or discovery; those that require their virtual version; and those that exist exclusively in the digital realm.

4.3.1. Interventions whose virtual version is not relevant

Interventions characteristic of iconographic graffiti, in which an artist saturates the urban space with their logo or emblem, are not usually motivated by an interest in achieving media visibility. A clear example of this would be the stickers featuring the face of Giant that Shepard Fairey (Obey) disseminated in his early years along the American West Coast.

During the research process, the existence of independent street art proposals has also been observed which, although they use the Internet as a means of dissemination and archiving, do not conceive their virtual existence as an end in itself. In such cases, part of the essence of the work is diluted in its digital version, as these pieces have been conceived exclusively for direct encounter with the viewer in physical space. The contextual dimension is therefore paramount, since the value of the work lies in the dialogue it establishes with the urban environment. Although the virtual medium may contribute to its visibility and preservation, the authors do not consider it a central element of their practice. It is precisely the fortuitous nature of their discovery that grants these interventions a component of singularity and charm.

As with context, the material used can be essential to the work. If we consider the works of the Portuguese artist Bordalo II, created from scrap materials and thus transformed into metallic sculptures attached to walls, elements such as the reflection of light, the oxidation of materials, or the sharp reliefs cannot be fully perceived in their expressive dimension through virtual means. See, for example, the intervention *Half Hedgehog*, which the artist created in 2023 for a festival in Montreal (Canada).

Image 1.



www.bordaloii.com: Half Hedgehog por Bordalo II. Montreal (Canadá), 2023.

In contrast, large-scale murals are clearly distinguished from smaller independent interventions. These monumental works possess a dual expressive strength: on the one hand, they acquire great visual impact in photographic reproduction, which facilitates their rapid dissemination on digital platforms; on the other, they retain a significant aesthetic and sensory intensity in the in-person experience.

4.3.2. Interventions complemented by online information

The first consequence of interaction with the virtual world has been the creation of interventions designed to be experienced in person, but whose understanding and/or discovery can be facilitated by online information. Some works are difficult to locate and, although a chance encounter may be more powerful, the reality is that, in many cases, if we are not aware of their existence, they are likely to go unnoticed. This is the case with altered street signs carried out by numerous artists or micro-sculptures by artists such as Isaac Cordal or Slinkachu.

One of the interventions that best exemplifies this circumstance is found in some of the countdown works by the Madrid-based artist Jonipunto. Online awareness of their existence enables an active search for the paintings in the streets, turning the city into a kind of playground. Specifically, for the countdown dedicated to the graffiti artist Muelle, the Internet was used in three ways. On the one hand, it encouraged viewers to walk through the city, both from the artist's own profile and from other agents. On the other hand, it provided complementary information which, although not essential, offered an artistic reflection that intensified the evocative power of the intervention. The publication of the image on Instagram was accompanied by a text advocating the idea of conscious urban strolling and inviting passersby to search for the interventions and locate them on a map.

Finally, a last game was proposed: a "connect-the-dots" activity typical of puzzles. On a map of Madrid where the locations of the interventions were marked with numbers, viewers were invited to draw the line connecting these points. Naturally, the resulting image would be a spring ending in an arrowhead—that is, the signature of the well-known graffiti artist (Instagram, @jonipunto).

Image 2.



@jonipunto (Instagram): Publication in Instagram. Jonipunto. 18/05/2016.

There are also works in which the artist provides complementary information about their meaning on social media. When the Italian artist Alice Pasquini created the intervention *Viktor* in July 2025, she posted a video of its execution accompanied by the following text: "Just finished the mural inspired by Viktor, one of Pina Bausch's most powerful and visionary pieces. A tribute to its dramatic force, visceral emotion, and the poetry of moving bodies". She also published images of the intervention with explanatory texts providing further information a few days later in a subsequent post.

4.3.3. Interventions Developed within a Multidimensional Reality

New forms of artistic intervention have emerged as a result of the complex nature of contemporary urban reality, characterized by its multidimensional condition (physical space + virtual world). Some of these works maintain an inseparable connection with the Internet, either due to their hybrid format, their location in places that are difficult for the public to access, or because they require digital coordination as a fundamental part of their creation.

Within this framework, interventions based on anamorphosis—those that depend on a specific viewpoint for their correct perception—find in digital representation a particularly valuable resource, in some cases becoming indispensable. An illustrative example is the anamorphic intervention carried out by Boa Mistura on the domes of the Mercado de la Cebada, whose full comprehension requires observation from a certain height, and therefore can only be properly appreciated through photographic records. The trajectory of Boa Mistura is especially significant, as its works—primarily constructed through the use of typography and color, and often conceived on a large scale—adapt with notable effectiveness to the digital environment.

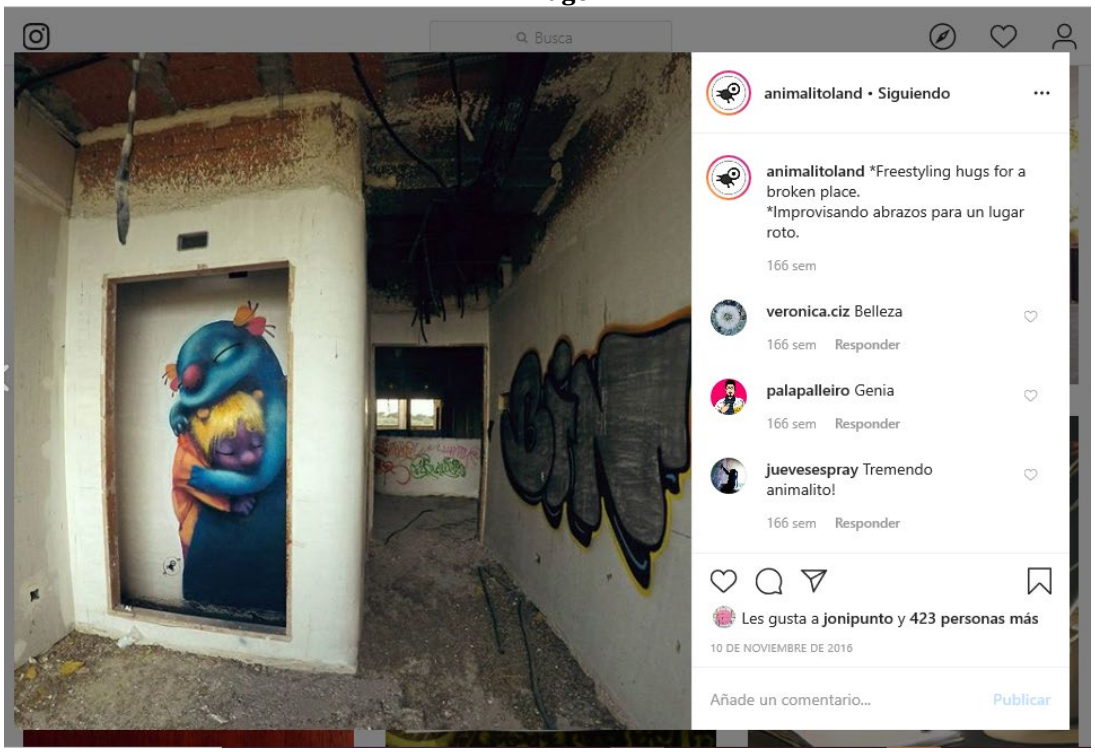
Image 3.



Boa Mistura. La Latina, Madrid. 2013. Source: allcitycanvas.com

Throughout the research, it has also been possible to identify the existence of interventions carried out in locations that are difficult to access, which have nonetheless achieved visibility through online publication, such as the striking intervention *Improvising Hugs for a Broken Place* by Animalitoland.

Image 4.



@animalitoland (Instagram): *Improvising hugs*. Animalitoland, 2020.

Most artists who create works in this type of abandoned location do not even provide information about the location of the work. In this way, artworks that were initially situated in spaces accessible only to a few privileged viewers came to become milestones in the evolution of street art, although the experience of appreciating them remained confined to the virtual realm.

4.3.4. New artistic formats

If the first consequence of the configuration of the city as a multidimensional space lies in the fact that artists' creative processes are conditioned from their very inception, the second is manifested in the emergence of new artistic formats that are developed precisely at the intersection between the physical and the digital realms.

> A good example of this is the emergence of GIF-iti, a hybrid of street art and the Internet led by the international artist INSA (@insa_gram). GIF-iti is created by photographing the stages of execution of large-scale murals deliberately painted in multiple layers, inspired by the process of stop-motion animation, in order to transform the resulting sequence into an animated GIF to be published online (MacDowall & de Souza, 2018, p. 6).

In other words, social media—especially Instagram—is not only a platform for communication, but its use has also led to the development of new artistic formats (MacDowall & de Souza, 2018). These newly created formats exist in a hybrid space between the process of creation in the streets and their publication online. This is the case of GIF-iti.

It was precisely with this format that the collective NSN997 won first prize at the Pinta Malasaña Festival 2019 (Madrid, Spain). Most of the audience accessed the final result only through a short video in which the different images created by the artists on the wall throughout the morning appear in rapid succession. The process consisted of painting an image, documenting it photographically, and subsequently covering it with the next one. This procedure gave the intervention a strongly performative character, such that only a very limited group of attendees was able to witness the full development of the action in person. Once the process was completed, the wall became practically unintelligible to those who viewed the work in its final state. In contrast, the virtual versión—resulting from the photographic sequence—was established as one of the most original proposals of that edition.

Image 5.



Brotherhood. NSN997. Malasaña, 2019. Source: @nsn997 (Instagram)

Image 6.



Brotherhood.. NSN997. Malasaña, 2019. Source: @nsn997 (Instagram)

In this case, GIF-iti was created by repainting the same shutter; however, some artists have taken the format further by combining, in video, images of different walls located in geographically dispersed places, thereby enabling the delocalization of the work. An example is Sabek, whose intervention Forgotten Places presents mini-videos that assemble photographs of works created by him featuring a running tiger as the protagonist in different abandoned spaces, generating a distinctive effect as the background changes with each image.

In summary, it is undeniable that digital platforms have contributed to the immaterial preservation of ephemeral artistic interventions. These practices, conceived for a specific context and with a strong local grounding, acquire global projection through their circulation in virtual environments, although in this process part of their original meaning may be diluted. The possibilities for dissemination and interaction offered by social media have encouraged many creators to transcend the limits of the physical artwork, integrating digital media as a complement, a meeting space, and even as a resource for the generation of new artistic genres. The arrival of AI further expands these possibilities.

4.4 Artificial Intelligence and Hybrid Street Art: Global Transformations, Emerging Practices and Critical Debates

This research has demonstrated that the integration of artificial intelligence (AI) in the field of contemporary art is generating a paradigm shift that affects both the processes of creation and the forms of circulation and reception of artworks. In the context of street art, these transformations acquire a specific dimension as they take place in public space, a territory historically associated with direct intervention, immediacy, and ephemerality. Various studies agree that AI should not be understood solely as a technical tool, but as an agent that reconfigures models of cultural production and expands the boundaries of authorship and creativity (Manovich, 2018; McCosker & Wilken, 2020).

The study of interventions through social media on an international scale has made it possible to observe a growing number of street artists who incorporate AI tools to generate sketches, experiment with compositions, or develop complex visual narratives that are later materialized on walls, installations, or digital environments. These practices position the artist in a hybrid role, acting as programmer, editor, and curator of algorithmic outputs. In this sense, creation is conceived as a collaborative process between human and machine, in which AI proposes formal variations that the creator selects, modifies, and contextualizes. This model of co-authorship has been analyzed as one of the main characteristics of art generated with contemporary algorithmic systems (Elgammal, 2019).

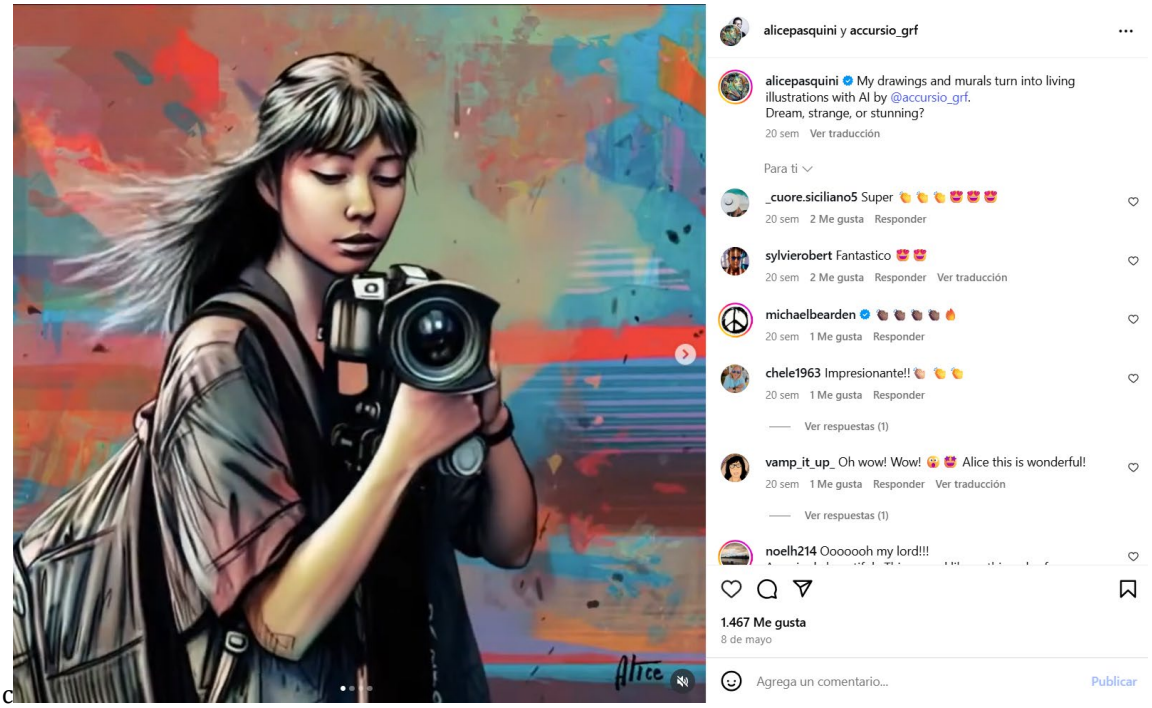
In the field of street art, the use of AI is not limited to the design phase but also affects the viewer's experience. International projects have been developed that combine murals with sensors, computer vision, and machine learning systems to generate reactive surfaces capable of responding to movement,

sound, or the presence of the public. These proposals transform the mural into a dynamic interface, expanding its communicative function and turning it into an interactive device that fosters immersive experiences. The convergence between street art, augmented reality, and AI points toward a scenario in which works exist simultaneously as physical objects and as processable digital entities (Paul, 2016).

This digital extension of the artwork finds a direct precedent in the hybrid formats previously described, such as NSN997's GIF-iti or Sabek's sequential videos, where movement exists only in the virtual environment. AI intensifies this logic by enabling the generation of animations from static images of murals, consolidating a type of intervention that is completed in the digital sphere and that reinforces the narrative dimension of street art.

Within this context, artists such as Alice Pasquini have begun to experiment with the animation of their own interventions through generative AI tools, disseminating digital versions of their murals on social media. This type of practice does not replace the physical work, but rather extends it into the virtual environment, incorporating movement and temporality into a traditionally static language. Cases such as this demonstrate how AI can function as an expressive resource that expands the narrative possibilities of street art while simultaneously reinforcing its global circulation.

Image 7.



Alice Pasguini. Source: @alicepasquini (Instagram)

In this sense, the interventions by Animalitoland in hard-to-access spaces mentioned in the previous section, whose experience is produced almost exclusively through their online documentation, anticipate a model of work compatible with AI-assisted processes. The incorporation of animations, generative filters, or virtual layers would expand the experience of these pieces, reinforcing their condition as works conceived primarily for the digital environment, even if they originate from a physical support.

Among interventions that respond to viewer behavior by combining sensors, algorithms, and active participation, Voxel Bridge is paradigmatic. It was an interactive public installation located beneath the Cambie Bridge in Vancouver as part of the Vancouver Biennale (2021–2023). The artist Jessica Angel created a large-scale digital-physical street artwork (approximately 8,000 ft^2) that combined a printed physical surface with digital elements activated through an augmented reality (AR) application. Through this free application, viewers could see interactive animations superimposed on the physical mural using their mobile devices, producing a hybrid experience between the tangible and the digital.

Image 8.



Jessica Angel. Voxel Bridge. Source: www.vancouverbiennale.com

It should be noted that one of the most relevant effects of the incorporation of AI is the democratization of access to visual creation. AI-based image and animation generation platforms allow users without advanced technical training to produce complex visuals, thereby reducing barriers to entry and fostering the emergence of new creative profiles. However, this accessibility also generates tensions. Chen et al. (2025) point out that the use of generative systems in artistic contexts raises challenges related to model transparency, the origin of training data, and the protection of the rights of creators whose works are included in such datasets.

Likewise, the use of AI may intensify the distortion in the perception of street art already described in section 4.2, by privileging those works that are more visually striking in their digital version over others whose strength lies in the in-person experience. In this way, the algorithmic logic of visibility may reinforce hierarchies based on the circulation of images rather than on the contextual impact of interventions.

Although, based on the analysis of the corpus, it is observed that the incorporation of artificial intelligence does not represent a radical break with the previous dynamics of street art, but rather an intensification of existing processes—such as the hybridization of formats, the centrality of digital documentation, and the expansion of the artwork within the virtual environment. Cases such as Alice Pasquini, NSN997, Sabek, Animalitoland, and Boa Mistura demonstrate that contemporary street art is increasingly configured as an expanded field, where the boundary between physical creation and digital production becomes progressively blurred.

However, lines of research remain open regarding tensions that are primarily articulated around three axes: authorship, originality, and ethics. First, authorship becomes diffuse when a work results from the interaction between an artist and an algorithmic system. Although the human creator directs the process, the active participation of AI challenges traditional models of individual attribution. Second, originality is problematized in a context in which algorithms generate images through the recombination of pre-existing styles, making it difficult to establish clear boundaries between inspiration, appropriation, and copying (Elgammal, 2019).

In summary, the incorporation of artificial intelligence into street art on an international scale is generating new aesthetics, formats, and models of collaboration that expand the expressive possibilities of the medium. At the same time, it raises significant challenges in terms of authorship, originality, and ethics that require interdisciplinary approaches. The study of these dynamics is essential for understanding the evolution of street art in the digital age and its role in the construction of a hybrid visual culture situated between the physical and the virtual.

5. Conclusions

This research has made it possible to confirm that contemporary street art is immersed in a process of profound transformation resulting from the expansion of the Internet, social media, and, more recently, the incorporation of artificial intelligence–based tools. These technologies have not only modified the modes of dissemination and preservation of urban interventions, but have also significantly conditioned creative processes, the relationship between artwork and viewer, and the configuration of the artistic scene on a global scale.

First, it is confirmed that digital communication has contributed to the consolidation of a globally interconnected street art scene, in which references circulate rapidly and exert simultaneous influence across diverse geographical contexts. However, this globalization does not imply the disappearance of the local, as interventions continue to be shaped by contextual factors such as architecture, neighborhood identity, and the presence of specific artistic communities.

Second, the study demonstrates that social media has generated a distortion in the perception of artistic relevance by favoring visibility dynamics based on quantitative metrics—such as the number of followers—that do not always correspond to the historical, conceptual, or critical importance of artists. This algorithmic logic introduces new hierarchies that influence the circulation of artworks and the construction of prestige within the field of street art.

Likewise, the analysis of the corpus has made it possible to establish a typology of interventions according to their degree of interaction with the digital environment, identifying works ranging from those whose virtual version is irrelevant to those that depend directly on their online circulation or exist exclusively in the digital realm. This classification demonstrates that street art can no longer be understood exclusively as a practice tied to physical space, but rather as a phenomenon that unfolds within a multidimensional reality in which the material and the virtual are intertwined.

With regard to artificial intelligence, the results suggest that its incorporation does not constitute a radical rupture with the previous dynamics of street art, but rather an intensification of already existing processes, such as the hybridization of formats, the centrality of digital documentation, and the expansion of the artwork beyond the wall. AI emerges as a tool that expands expressive possibilities, facilitates formal experimentation, and fosters the emergence of new visual narratives, while simultaneously introducing models of human–machine co-authorship that challenge traditional notions of authorship and originality.

Finally, the study highlights the need to critically address the ethical challenges associated with the use of generative systems, particularly regarding the origin of data, copyright issues, and the transparency of algorithmic processes. These issues, together with the impact of AI on the public perception of street art, constitute important lines of inquiry for future research.

In summary, contemporary street art is configured as an expanded and dynamic field situated at the intersection of urban space, digital media, and artificial intelligence, where the boundaries between physical creation and virtual production are increasingly blurred. Understanding these transformations is essential for interpreting the role of street art in contemporary visual culture and its function as a space for aesthetic experimentation, social communication, and critical reflection.

6. Acknowledgements

The authors wish to express their gratitude to the Office for the Transfer of Research Results (OTRI) of the University of Design, Innovation and Technology (UDIT) for the support and facilities provided during the research stay of Professor Natalia Gutiérrez-Colomer under the supervision of Professor Ana Llorente, within whose collaboration the present work is framed. This collaboration has been essential for the development and successful achievement of the objectives of this research.

References

Baeza Escobedo, B. (2025). *Análisis documental del arte urbano* (Tesis doctoral). Universidad Nacional Autónoma de México, Facultad de Filosofía y Letras, Programa de Maestría y Doctorado en Bibliotecología y Estudios de la Información.

Bonales Daimiel, G., & Pradilla Barrero, N. (2025). Arte urbano en el metaverso. Nuevos espacios creativos. *Street Art & Urban Creativity, 11*(1), 137–150. https://doi.org/10.62161/sauc.v11.5686

Castells, M. (2006). Internet y la sociedad red. *Contrastes: Revista Cultural, 43*, 111–113.

Chen, R., He, Q., Bao, H., Choi, J., & Tong, X. (2025). GestoBrush: Facilitating graffiti artists' digital creation experiences through embodied AR interactions. *arXiv*. https://arxiv.org/abs/2509.05619

Elgammal, A. (2019). AI is blurring the definition of artist. *Arts, 8*(1), 18. https://doi.org/10.3390/arts8010018

Gutiérrez-Colomer Ruiz, N. P. (2020). *Arte urbano y muralismo en Madrid: Evolución, comunicación y análisis del mensaje* (Tesis doctoral). Universidad Complutense de Madrid.

Izquierdo Expósito, V., Álvarez Rodríguez, P., & Nuño Barrau, A. (2017). Comunicación y divulgación de contenidos artísticos a través de las redes sociales: Facebook y Twitter. *Estudios sobre el Mensaje Periodístico, 23*(2), 1161–1178. https://doi.org/10.5209/ESMP.58038

Manovich, L. (2018). *AI aesthetics*. Strelka Press.

McCosker, A., & Wilken, R. (2020). *Automating vision: The social impact of the new camera consciousness*. Routledge.

Paul, C. (2016). *Digital art* (3rd ed.). Thames & Hudson.

Urroz Osés, A., & Baigorri Ballarín, L. (2024). Artivismo y primeros usos tácticos de la red: De la infoguerra a la guerrilla de la comunicación. En C. Fernández-Castrillo & D. Mantoan (Coords.), *Artivismo mediático*. *Artnodes*, (33). https://doi.org/10.7238/artnodes.v0i33.417632

Webgrafía

Abarca, J. (2011). *El papel de los medios en el desarrollo del arte urbano – Urbanario*. Recuperado el 23 de marzo de 2019, de https://urbanario.es/articulo/el-papel-de-los-medios-en-el-desarrollo-del-arte-urbano/

Animalitoland [@animalitoland]. (s.f.). *Perfil de Instagram*. Instagram. https://www.instagram.com/animalitoland/ (Consultado el 25 de octubre de 2024).

Banksy [@banksy]. (s.f.). *Perfil de Instagram*. Instagram. https://www.instagram.com/banksy (Consultado el 28 de septiembre de 2025).

Blu [@bluwalls]. (s.f.). *Perfil de Instagram*. Instagram. https://www.instagram.com/bluwalls/ (Consultado el 28 de septiembre de 2025).

Bordalo II. (s.f.). *Sitio web oficial*. https://www.bordaloii.com

Invader. (s.f.). *Home*. https://www.space-invaders.com/home/ (Consultado el 25 de septiembre de 2025).

NSN997 [@nsn997]. (s.f.). *Perfil de Instagram*. Instagram. https://www.instagram.com/nsn997/ (Consultado el 25 de octubre de 2024).

Okuda San Miguel [@okudart]. (s.f.). *Perfil de Instagram*. Instagram. https://www.instagram.com/okudart (Consultado el 28 de septiembre de 2025).

Os Gemeos [@osgemeos]. (s.f.). *Perfil de Instagram*. Instagram. https://www.instagram.com/osgemeos/ (Consultado el 28 de septiembre de 2025).

Shepard Fairey – Obey [@obeygiant]. (s.f.). *Perfil de Instagram*. Instagram. https://www.instagram.com/obeygiant/ (Consultado el 28 de septiembre de 2025).

Space Invader [@invaderwashere]. (s.f.). *Perfil de Instagram*. Instagram. https://www.instagram.com/invaderwashere (Consultado el 28 de septiembre de 2025).

Boa Mistura. (s.f.). *Proyectos*. https://boamistura.com/proyectos/ (Consultado el 25 de septiembre de 2025).