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# The Role of Greenery in Street Art and Its Contribution to Urban Aesthetic Enhancement

El rol de la vegetación en el arte callejero y su contribución a la mejora de la estética urbana

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	Abstract
<i>Keywords:</i> greenery; public art; street art; mural E-ISSN: 1886-9751	The symbolic function of greenery in public art reflects its deep-rooted cultural and ecological significance, serving as a reminder of humanity's interconnectedness with the natural world. Artists often draw inspiration from the organic forms of trees and plants, creating artificial structures that echo the beauty and resilience of their natural counterparts. This symbiosis between art and nature not only enriches the urban environment but also fosters a sense of harmony and reverence for the ecosystem. Moreover, greenery assumes a decorative role in public art, both as an integral part of existing urban spaces, such as green roofs and vertical gardens, and as embellishments on walls and facades, imbuing them with distinctive character and vitality. Additionally, the incorporation of living elements into art installations blurs the boundaries between artifice and nature, creating dynamic compositions that evoke emotional responses and engage the senses of urban dwellers. The article provides a comprehensive analysis of the diverse roles' greenery plays within the realm of public art, drawing insights from a range of case studies spanning different geographical locations. It elucidates three overarching trends observed in the utilization of greenery as a foundational element in public art: its symbolic function, decorative significance, and its integration into living or symbiotic art forms. Greenery transcends its conventional role as mere inspiration for artists; instead, it emerges as an indispensable component of urban landscapes, contributing to their aesthetic appeal and functional utility.
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	Resumen
Palabras clave: Vegetación; arte público; arte callejero; mural	La función simbólica de la vegetación en el arte público refleja su profundo significado cultural y ecológico, sirviendo como un recordatorio de la interconexión de la humanidad con el mundo natural. Los artistas suelen inspirarse en las formas orgánicas de los árboles y las plantas, creando estructuras artificiales que evocan la belleza y la resiliencia de sus contrapartes naturales. Esta simbiosis entre el arte y la naturaleza no solo enriquece el entorno urbano, sino que también fomenta un sentido de armonía y respeto por el ecosistema. Además, la vegetación asume un papel decorativo en el arte público, tanto como parte integral de los espacios urbanos existentes, como los techos verdes y jardines verticales, como en forma de adornos en muros y fachadas, dotándolos de un carácter distintivo y vitalidad. Asimismo, la incorporación de elementos vivos en las instalaciones artísticas difumina los límites entre lo artificial y lo natural, creando composiciones dinámicas que evocan respuestas emocionales y estimulan los sentidos de los habitantes urbanos. El artículo ofrece un análisis exhaustivo de los diversos roles que desempeña la vegetación en el ámbito del arte público, basándose en una variedad de estudios de caso en diferentes ubicaciones geográficas. Los resultados muestran tres tendencias generales observadas en la utilización de la vegetación como elemento fundamental en el arte público: La vegetación trasciende su papel convencional como mera inspiración para los artistas; en cambio, emerge como un componente indispensable del paisaje urbano, contribuyendo tanto a su atractivo estético como a su utilidad funcional.

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### 1. Introduction

In contemporary urban landscapes, street art—particularly murals—has emerged as a pivotal element in the configuration of public spaces and the reinforcement of place identity. Once regarded as mere ornamental enhancements to the built environment, murals have evolved into dynamic instruments that shape urban aesthetics and influence socio-cultural interactions. Their origins can be traced back to prehistoric cave paintings, with the term mural derived from the Latin murus, signifying "wall" (Jasmi et al., 2021). In the modern era, street art has developed into a globally recognized subculture, encompassing a diverse array of techniques and stylistic approaches (Maevskaya, 2021). Unlike graffiti, which is often associated with unsanctioned urban interventions, murals are increasingly acknowledged as integral components of contemporary cityscapes (Maevskaya, 2021, Radwan, 2014). Consequently, the growing significance of mural art has prompted scholarly discourse on conservation strategies aimed at safeguarding these cultural artifacts for future generations (Chatzidakis, 2016, Shank & Norris, 2008, Drescher, 2004).

Beyond their aesthetic function, murals play a critical role in fostering communal identity, reinforcing cultural heritage, and enhancing the quality of the urban fabric [3]. Ranging from traditional hand-painted compositions to monumental large-scale works, they have become instrumental in shaping the experiential and perceptual dimensions of urban spaces. In recent years, increasing attention has been devoted to murals as catalysts for architectural transformation and as mechanisms for strengthening local social cohesion. Community engagement constitutes a fundamental aspect of mural art, facilitating participatory initiatives that align with local narratives and reflect socio-cultural diversity. Such endeavors, exemplified by collaborative mural projects, encourage civic involvement and reinforce the collective stewardship of urban spaces while promoting environmental awareness (Bakar et al., 2013).

As urban art practices continue to evolve, the 21st century has witnessed the integration of new technologies and methodologies of artistic expression. Due to their scale, chromatic intensity, and thematic complexity, murals exert a profound influence on urban perception and the wellbeing of city dwellers. Through their visual semiotics, they encapsulate the spirit of place, convey historical and cultural narratives, and articulate social values.

A concomitant trend in contemporary public art is the increasing incorporation of greenery as both an aesthetic and ecological component. While traditional murals have predominantly emphasized social and cultural themes, a growing number of artworks integrate vegetation as a primary compositional element. The fusion of natural and artificial elements within mural design facilitates the creation of dynamic, multidimensional installations that not only contribute to urban beautification but also align with principles of sustainable development. This emerging paradigm positions greenery as an expressive medium, leading to the proliferation of mural gardens—living artworks that simultaneously enhance urban biodiversity and promote ecological consciousness.

The intersection of street art and environmental sustainability presents novel opportunities for artists and urban communities alike. Murals integrating botanical motifs and living vegetation transcend mere decorative functions, serving as vehicles for environmental advocacy and sustainable urbanism. In recent years, a discernible shift has occurred, wherein greenery is assuming an increasingly prominent role in urban murals and street art compositions.

This study critically examines this phenomenon, delineating the multifaceted roles of greenery within the domain of street art while presenting global case studies that exemplify its diverse applications. Through a comprehensive analysis of the aesthetic, ecological, and socio-cultural implications of green street art, this research aims to elucidate its potential as a transformative agent in urban environments and as a strategic tool for fostering sustainable social and environmental development.

#### 2. Methodology

The article adopts a methodology based on case study analysis and a literature review, enabling a detailed examination of the impact of greenery as an element of street art on the aesthetics and functionality of urban spaces. The research process was divided into three main stages, which facilitated a systematic analysis and the formulation of conclusions on the topic.

In the first stage, a comprehensive literature review was conducted to identify existing studies on street art and the role of greenery in urban spaces. Literature on sustainable urban development and the ecological aspects of urban design provided the theoretical context necessary for understanding and classifying the phenomena under study. Based on this analysis, selection criteria for the case studies were developed, focusing on uniqueness, innovativeness, and impact on urban spaces. The second stage involved selecting 30 diverse examples of greenery in street art from various locations worldwide that met the established criteria. A detailed description of each example was prepared, highlighting its specific characteristics, location, and significance within its urban context. From the initial selection, further refinement narrowed the focus to 11 representative examples that illustrate the trends under discussion. Each selected case was meticulously analyzed in terms of form, composition, methods of integrating greenery, and its impact on the aesthetics and function of public spaces.

The third stage consisted of a comparative analysis of the selected cases, allowing for the identification of shared themes and patterns in the use of greenery in street art. This phase also involved cross-referencing the analyzed cases with theoretical literature, enabling a comprehensive synthesis and the formulation of conclusions regarding the role of greenery in shaping the character and dynamics of urban public spaces. The comparative analysis highlighted how various forms of greenery integration influence the perception of urban spaces, as well as community engagement and satisfaction.

The adopted methodology not only facilitates a thorough investigation of the role of greenery in street art but also supports the analysis of its long-term impact on the aesthetics and functionality of urban spaces.

#### 3. Greenery- functions

Contemporary cities face numerous environmental challenges that significantly impact public well-being and quality of life. Urban sprawl has led to increased pollution, excessive resource and energy consumption (Saaty & De Paola, 2017), and a decline in green spaces, contributing to biodiversity loss (Haaland & van Den Bosch, 2015). Additionally, densely built environments exacerbate the urban heat island effect, posing serious health risks for residents (Stone et al., 2010, Lemonsu et al., 2015). These challenges are further intensified by the long-lasting nature of urban structures, meaning that their negative consequences may persist for future generations (Næss, 2014, Zhou et al., 2017). To mitigate these effects, urban planning must prioritize public health by integrating green spaces into dense urban environments. Ensuring accessible and high-quality greenery is a fundamental aspect of sustainable urban development (Sotoca & Gyurkovich, 2018).

Green spaces play a vital role in shaping urban environments, contributing to both environmental sustainability and social well-being (Sifuentes-Muñoz et al., 2024). Their placement and accessibility significantly influence residents' quality of life. Vegetation helps moderate the climate, reduces soil impermeability, and improves stormwater management. Additionally, plants enhance air quality by producing oxygen, absorbing pollutants such as CO<sub>2</sub> and heavy metals, and trapping particulate matter (Pugh et al., 2012, Chudy, 2014). Green areas also serve as structural elements within urban compositions, shaping public spaces and influencing their aesthetic and functional organization (Figure 1) (Virtudes, 2016).

Urban greenery can be categorized into traditional forms, such as city parks, public squares, and street plantings (Mullaney et al., 2015, Wood & Esaian, 2020), as well as integrated solutions like green roofs, vertical gardens, and greenery incorporated into small architectural elements. An emerging trend in urban design involves the fusion of greenery with artistic expression. When street art interacts with natural elements, it creates a dynamic and evolving visual landscape. Murals and sidewalk paintings that coexist with vegetation acquire new dimensions, blending art with the organic environment. Renowned street artist Banksy has explored this concept, using nature as an integral component of his work (Baker, 2008, Liang, 2017, Radwan, 2014).

Architects increasingly incorporate greenery into contemporary urban design, utilizing both traditional and innovative approaches. Green roofs not only enhance a city's visual appeal but also support environmental sustainability (Carrasco Aldunate et al., 2024). They aid in water retention, reduce the urban heat island effect (Dunett & Kingsbury, 2004, Köhler, 2010, Köhler & Kaiser, 2019) and provide habitats for urban biodiversity (Baumann, 2006, Brenneisen, 2006, İnan, 2019, Kowalczyk, 2011, McDonough, 2005). Similarly, green walls, or vertical gardens, integrate plants into building facades, offering benefits beyond aesthetics. These installations improve thermal insulation, absorb carbon dioxide, and contribute to better air quality (Chudy, 2014, Pugh et al., 2012).

The intersection of greenery and street art is gaining prominence, with murals and other artworks appearing on green walls. This synergy between natural and artistic elements redefines urban space, transforming it into a medium for creative expression. Additionally, trees play a symbolic and aesthetic role in street art, often incorporated into sculptures and installations. Their presence enriches the urban landscape and fosters a deeper connection between communities and their natural surroundings. Integrating greenery into public art not only enhances urban aesthetics but also strengthens community engagement with the environment. This growing trend highlights the potential of nature-based artistic interventions to create more sustainable, vibrant, and liveable cities.



Source: Prepared by the autor.

#### 3.1. Greenery as an Element of Architecture and Art: A Case Study

Contemporary urban art increasingly incorporates greenery as a creative element, especially in the context of murals and vertical walls. Murals that combine painting with vegetation provide a remarkable testament to the symbiosis between nature and culture, and their utilization can take various forms. Artistic compositions may include both natural plants and their artistic representations. Vegetation can be used as an integral element in the artwork, creating a three-dimensional effect and depth, or as a decorative accent, adding color and life to urban spaces. Street art with green elements not only enriches the urban landscape but also has educational and inspiring potential. By depicting the diversity of vegetation and promoting green spaces, such artworks can increase ecological awareness among urban communities and encourage environmental stewardship (Andrews, 2013). By introducing natural elements into the urban landscape, artistic works of art can inspire observers to contemplate the relationship between humans and nature and reflect on the importance of sustainable development for the future of our cities.

Climatic, cultural, and urban diversity across different regions of the world gives rise to varied forms of incorporating natural elements into art, including street art. In regions rich in biodiversity, nature often plays more complex roles, such as shaping local identity, supporting environmental education, and strengthening social bonds. Conversely, in cities with limited greenery and lower biological diversity, nature is often used in a more symbolic manner or as a stark contrast to the predominantly concrete urban environment. This duality underscores the adaptability of nature as a medium in art, tailored to reflect and address the specific challenges and characteristics of each urban setting.

Murals, as a form of street art, adorn the empty walls of urban buildings to an increasing extent, serving not only as a form of artistic expression but also as a significant urbanistic element. However, there is a growing consideration for incorporating greenery as an additional decorative element on these walls, which can bring numerous aesthetic and ecological benefits. Empty walls of urban buildings, especially those located in neglected or unattractive parts of cities, often constitute an unaesthetic element of the urban landscape. It is precisely here that murals can play a significant role, transforming these gray and monotonous walls into colorful works of art that attract the attention of passersby and give character to the surroundings. However, to further enrich the aesthetics of these urban spaces, there is also an increasing

consideration for the use of greenery in conjunction with murals. Vegetation can be placed on empty wall fragments, in the form of pots, containers, or modular panels, creating an interesting combination of street art with a natural element.

L'Oasis D'Aboukir is an impressive green wall, 25 meters high, designed by the renowned botanist and researcher, Patrick Blanc. The wall consists of a rich variety of plants, encompassing as many as 237 different species. Its arrangement resembles undulating shapes, giving it a unique charm. Installed in spring, it replaced the previous raw concrete surface that dominated the corner of Aboukir Street and Petits Carreaux Street in Paris, as can be seen in Figure 2.



Figure 2. Transformation of Qaza Aboukir

Note: Images depict (a) the initial condition and (b) the results after transformation. Source: Adapted from Andrews (2013).

Contemporary artists are also more frequently drawing inspiration from the existing greenery surrounding urban environments when creating their artworks. Many artistic works integrate elements of nature as an integral part of the artistic composition. An example of this approach can be seen in a mural created by Polish artist Natalia Rak in the city of Białystok (Figure 3). In this particular artistic piece, a young girl dressed in traditional Polish attire is depicted sculpturally watering a tree growing in close proximity to the building. By placing the figure in the context of the surrounding greenery, the artist not only creates a picturesque image but also references the symbiotic relationship between humans and nature, emphasizing the importance of harmony with the natural environment in urban spaces (Street Art News, 2013).



Figure 3. Mural in Białystok

Source: Street Art News (2013).

Such connections between urbanism and nature can also be observed on a smaller scale. Fábio Gomes Trindade, a street artist from Goiânia, Brazil, utilizes a subtle blend of urban elements with nature to create portraits of women and girls. Colorful,

blooming trees and green leaves growing on the walls of streets serve as their natural hair. To achieve this effect, Trindade creates an illusion of tree branches on the walls, on which he paints only the faces and sections of hair of the figures, allowing natural elements of the surroundings to enrich and emphasize the unique character and significance of his artistic works (Figure 4).

Figure 4. Street murals created by Fábio Gomes Trindade



Source: Farah (2021).

In contemporary times, greenery is increasingly utilized not only in traditional forms such as vertical gardens or green roofs but also as an artistic element in wall decoration. Examples of such applications can be found in various locations around the world, as can be seen Figure 5. One such example is the Fig plant, which naturally grew on the side wall of an industrial hangar in Stafford, after which the building's background was adapted to it. Another example is the Suite Plants installation, which was recently executed in Charlotte in the Arrowood South office building. These innovative uses of greenery not only add aesthetic value but also represent unique forms of artistic expression that integrate nature with urban architecture. Such an approach opens new perspectives for the design of urban spaces, combining functionality with art and ecology.

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Figure 5. Vegetation Integrated into the Building Façade

Note: a) Suite Plants installation in Charlotte at the Arrowood South office building, b) Fig tree on Stafford building Source: (a) Adapted from Fahey (2021) and (b) from *The Fig Tree's Keeper* (2022).

# 4. Use of Trees in Public Art – case study

Public spaces serve as venues for gatherings, cultural celebrations, and social expression, making them increasingly popular arenas for artistic interventions. Among the diverse artistic elements incorporated into these spaces, trees play a particularly significant role. Beyond their ecological and functional contributions to the urban landscape, trees hold artistic and symbolic value, influencing both the visual character and emotional perception of public spaces (Worłowska & Marko-Worłowska, 2010).

This article explores the multifaceted use of trees as an artistic element in public environments, considering both their natural form and their transformation through artistic interventions. Throughout history, trees have served as a source of inspiration for artists and cultural creators (Worłowska & Marko-Worłowska, 2010). In many traditions, they are revered as symbols of life, strength, growth, and renewal (Wojtkiewicz, 2022).

Their presence in public spaces not only enhances aesthetic diversity but also fosters an emotional connection between individuals and their surroundings.

Integrating trees into urban art offers practical and environmental benefits. Trees contribute to improving air quality, reducing noise pollution, regulating microclimates, and creating spaces that promote relaxation and well-being among city residents (Haaland & van Den Bosch, 2015, Lemonsu et al., 2015, Saaty & De Paola, 2017, Stone et al., 2010). As artistic elements, they reinforce the relationship between nature and the built environment, highlighting the significance of ecological awareness and sustainable urban development (Worłowska & Marko-Worłowska, 2010). By creatively merging natural and artistic forms, it is possible to design unique, engaging public spaces that reflect the identity and character of specific locations.

The tree motif frequently appears in both painting and sculpture, allowing artists to express a range of symbolic meanings (Figure 6). It can evoke themes of harmony, balance, and connection with nature, while also representing cycles of life, death, and rebirth (Wojtkiewicz, 2022). One notable example is "Old Tree" by Pamela Rosenkranz, located on the High Line in New York City. This twenty-five-foot-tall sculpture stands in stark contrast to the surrounding architecture, transforming the space into a site for social engagement. Constructed from synthetic materials in shades of pink and red, the artwork embodies archetypal representations of the tree of life, symbolizing the connection between the earth and the cosmos. Its intricate form, reminiscent of organic structures such as branching vessels or neural pathways, prompts viewers to reflect on the interconnectedness of human and plant life.

By incorporating trees into artistic compositions, public art fosters deeper engagement with the environment while enriching the sensory experience of urban spaces. This fusion of art and nature serves not only an aesthetic function but also strengthens social bonds and promotes ecological consciousness.



Figure 6. Artificial Art Inspired by Nature

Note: (a) Old tree in Manhattan and (b) The wish fulfilling tree Source: (a) Adapted from Rosenkranz (2023) and (b) from Vibhor Sogani Has Created "Kalpavriksha – The Wish Fulfilling Tree" (2018)

Contemporary cities increasingly incorporate artificial trees as urban elements. These modern installations, made of various materials such as metal, glass, or synthetic polymers, aim to beautify the urban space aesthetically while serving practical functions (Figure 7). An example is the ARTEKS Arquitectura studio, which designed a sculptural shadow element in a seaside park in La Pineda, Spain. It mimics the shape of real pine trees nearby. Due to the sea salt suspended in the air, which would hinder the growth of pines in the park, they developed a shadow structure made of fiberglass, which is resistant to salt and, at the same time, harmonizes with the shape and diversity of the real pine forms (*"Pinar de Perruquet" Park / Arteks Arquitectura*, 2008).

Figure 7. Artificial Art Inspired by Nature



Note: (a) Shadow structure in La Pineda, Spain, b) Idea tree in San Jose, CA, USA. Source: (a) Adapted from *"Pinar de Perruquet" Park / Arteks Arquitectura* (2008) and (b) from *Idea tree Soo-in Yang/Lifethings* (n.d).

Creating sculptures from living trees is an extraordinary form of artistic expression that harmoniously combines elements of nature with human creativity. Through careful shaping and pruning, an artist can give the tree various forms and shapes, thus creating unique works of art. The work titled "Illawarra Placed Landscape" was commissioned by the Wollongong City Council and has become a permanent feature of the urban landscape (Figure 8a). Four living cabbage palms and about 200 tons of rocks were used to create the installation, which aims to bring elements of the local landscape into the urban space. In addition to the main element - a uprooted cabbage palm suspended on a high column above the street - the project includes a playground with irregular sandstone boulders with "conveyor belts" seemingly holding the rocks in place, a swing, and benches made from horizontal trunks of two of the palms (Wong, 2018). An interesting solution is also the combination of an artificial structure with a living tree form. A sculpture resembling a gigantic tree, 21 meters high, designed by the Heatherwick Studio, is designed to support 350 living trees on its steel branches, earning it the name "The Tree of Trees" (Figure 8b). The project aimed to draw attention to a tree planting campaign marking the 70th anniversary of the British Queen's reign (Ravenscroft, 2022).

#### Figure 8. Natural Vegetation in Art



Note: (a) Illawarra Placed Landscape, (b) Tree of Trees, London Source: (a) Adapted from Wong (2018) and (b) from Ravenscroft (2022)

Artists can also utilize existing trees to give them extraordinary expression (Figure 9). Konstantin Dimopoulos, an artist from New Zealand, gained considerable renown for his successful environmental art installation "The Blue Trees." His work is known through numerous recreations worldwide, including installations in Pirrama Park in Sydney in 2016 and the Vancouver Biennale. The artist applied a biologically safe, intense blue pigment to the trunks of trees, creating a striking effect. This color evokes various emotions in the observer, serving as an incredibly effective means of countering the grayness, stagnation, and monotony of accepting the environment - it is a significant stimulating tool (*In Profile: Konstantin's Blue Trees*, 2017).

Another example is a public art project in downtown Mississauga that was enriched with a colorful accent aimed at introducing vibrancy and colors to the urban space during winter months and improving the mood of residents (Figure 9). A design firm

from Toronto, Polymétis, created a temporary installation that includes 45 oak trees lining Hurontario Street, whose trunks were wrapped in brightly colored fabrics in vivid shades of orange, red, and pink, reminiscent of a sunset. The Sun-SET project not only signals a new stage in the city's development in the face of new projects but also addresses environmental protection and gratitude for Mississauga's natural resources (Selzer, 2015).





Note: (a) Blue trees in Vancouver, (b) Public art Tree quilts in Mississauga, Canada. Source: (a) Adapted from *In Profile: Konstantin's Blue Trees (2017) and* (b) from Selzer (2015).

#### 5. Conclusions

Based on selected case studies from various locations around the world, the article presents diverse forms of utilizing greenery in street art and their impact on the surrounding urban space, as shown in Table 1.

Lp.	Name of Project/ Location	Greenery function			
1	Oaza Aboukir, Paris, France	Greenery on the VG building wall - greenery as decorative element.			
2	Wall Mural, Białystok, Poland	Greenery as a complement to art / standalone unit			
3	Street works by Fábio Gomes Trindade, Goiânia, Brazil,	Greenery as a complement to art / standalone unit			
4	Plant mural, Stafford, Anglia	Greenery as a complement to art / standalone unit			
5	Suite Plants Installation, Arrowood South office building, Charlotte, USA	Greenery as a decorative element of a wall			
6	Old Tree, Manhattan's High Line, New York, USA	Greenery inspiration – artificial construction.			
7	Heatherwick's Tree of Trees at Buckingham Palace, England	hybrid construction (nature combined with artificiality)			
8	"Tree Quilts", Mississauga, Canada	Greenery in its natural form as an element of art – decorating or shaping vegetation			
9	"Pinar de Perruquet" Park / Arteks Arquitectura Park Vila-seca, Spain	Greenery inspiration – artificial construction			
10	Kalpavriksha – the wish fulfilling tree, Gujarat, India	Greenery inspiration – artificial construction			
11	Idea Tree, San Jose McEnery Convention Center, San Jose, CA, USA	Greenery inspiration – artificial construction			
12	Blue Trees - project	Greenery in its natural form as an element of art – decorating or shaping vegetation			
13	'Illawarra Placed Landscape', Wollongong, Australia	Greenery in its natural form as an element of art – decorating or shaping vegetation			
14	Mural by Dawid Celek on the building of the Bielska Fabryka Szczotek i Pędzli "Befaszczot", Bielsko-Biała, Poland	Greenery as inspiration – greenery image on the building wall			
	(continue)				

Table 1. Case studies of greenery in public art

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Lp.	Name of Project/ Location	Greenery function
15	Longwood Gardens Kennett Square, Pennsylvania, USA	Greenery as a decorative element of a wall
16	Universidad del Claustro de Sor Juana Mexico City, Mexico	Greenery as a decorative element of a wall
17	Devocion Brooklyn, New York, USA	Greenery as a decorative element of a wall
18	Semiahmoo Public Library Surrey, Canada	Greenery as a decorative element of a wall
19	Il Fiordaliso Milan, Italy	Greenery as a decorative element of a wall
20	Street Art By El Decertor – In Imbabura, Ecuador	Greenery as a complement to art / standalone unit
21	Street Art By Nuxuno Xän – In Fort De France, Martinique	Greenery as a complement to art / standalone unit
22	Street Art In Nicaragua	Greenery as a complement to art / standalone unit
23	Flower mural by OGMillie and Floratorium in New York, USA	Greenery as a complement to art / standalone unit
24	Street Art By Robson Melancia in Dois Córregos, Brazil	Greenery as a complement to art / standalone unit
25	Street Art By SFHIR in Málaga, Spain	Greenery as a complement to art / standalone unit
26	Street Art By Fauxreel in Toronto, Canada	Greenery as a complement to art / standalone unit
27	Pabellón Macao (RAE), Impromptu Projects;	Greenery inspiration – artificial construction
28	Street art By Wild Drawing in Athens, Greece	Greenery as a complement to art / standalone unit
29	The Cloud Forest Plaza   Wuhan, China   Terrain Studio	hybrid construction (nature combined with artificiality)
30	Nature Public Art Installation at a police & fire training facility in Chandler, Arizona	Greenery inspiration – artificial construction

Source: Own elaboration.

Research on the integration of greenery in street art highlights its functional dependence on local environmental and socio-economic conditions. Case studies indicate that the role of greenery in urban art varies significantly depending on geographical location, urban density, and cultural attitudes toward nature. Four primary functions can be distinguished: symbolic, decorative, symbiotic, and ecosystemic, each contributing to both the aesthetic and functional qualities of public spaces (Figure 10).

#### Figure 10. Greenery functions in public art



#### Source: Own elaboration

A comparative analysis of case studies reveals that in regions abundant in greenery, nature in street art serves as an integral and interactive component, reinforcing local identity, fostering ecological awareness, and strengthening social bonds. Conversely, in highly urbanized environments with limited biodiversity, greenery assumes a compensatory role, advocating for increased vegetation and improved environmental quality in response to public demand for revitalized urban spaces. These differences underscore the necessity of contextualizing greenery's role within broader socio-cultural and ecological frameworks.

# 5.1. Symbolic Significance of Greenery

Greenery in street art frequently carries symbolic meaning, with artists incorporating natural motifs such as trees, leaves, and flowers to evoke notions of harmony, renewal, and resilience. This function varies across cultural contexts—while in some societies, vegetation symbolizes ecological consciousness and sustainability, in others, it may represent historical continuity or spiritual connections to nature. The symbolic role of greenery, therefore, is not universal but shaped by regional environmental narratives and artistic traditions.

# 5.2. Decorative Function of Greenery

As an aesthetic enhancement, greenery is commonly integrated into urban murals and installations through green roofs, vertical gardens, and ornamental plant compositions. However, its decorative role differs based on urban development patterns. In cities with high ecological awareness, greenery-infused street art complements existing environmental policies, reinforcing green infrastructure initiatives. In contrast, in concrete-dominated environments, these installations serve as visual interventions, mitigating the psychological effects of urban monotony and contributing to placemaking strategies.

### 5.3. Symbiotic Role of Nature

A symbiotic approach to urban art involves the direct incorporation of living vegetation into artistic compositions, transforming street art into dynamic, evolving installations. Case studies reveal that in cities where green policies are already established, such projects align with broader sustainability efforts, fostering active engagement between communities and public art. In areas lacking green initiatives, symbiotic street art often acts as an experimental intervention, demonstrating the potential of nature-based solutions in revitalizing neglected spaces.

# 5.4. Ecosystemic Value of Greenery

Beyond aesthetic and social dimensions, the ecosystemic benefits of greenery in public art are substantial. Plants incorporated into urban artworks contribute to air purification, temperature regulation, noise reduction, and biodiversity preservation. However, these effects are more pronounced in cities with warm climates and high pollution levels, where vegetation-integrated murals function as passive environmental regulators. In regions with temperate or colder climates, the environmental impact is less immediate, shifting the focus toward greenery's psychological benefits, such as stress reduction and improved well-being.

Regardless of the geographical context, greenery as an element of street art acts as a catalyst for change, promoting positive ecological attitudes and inspiring actions toward sustainable development. Its presence in public spaces fosters reflection on the importance of environmental protection and raises ecological awareness among residents. Moreover, street art based on nature enhances the sense of aesthetics and community, positively influencing the psychological and physical well-being of urban space users. These findings confirm that greenery in street art is not only a carrier of aesthetics but also a tool for social communication, ecological education, and improving urban living conditions.

The comparative analysis of case studies highlights that the effectiveness of greenery in urban art is contingent upon the broader geographical, socio-economic, and cultural contexts in which it is implemented. In wealthier urban centers, where sustainable development is a priority, green murals and installations often receive institutional support, becoming part of city-wide ecological strategies. In contrast, in areas with economic constraints, such projects typically emerge from grassroots initiatives, serving as bottom-up interventions aimed at reclaiming public space and advocating for environmental justice.

Regardless of the context, greenery in street art functions as a catalyst for urban transformation, promoting ecological awareness, fostering community engagement, and enhancing the overall quality of life. Its presence in public spaces not only stimulates discourse on sustainability but also demonstrates how artistic interventions can contribute to environmental and social resilience.

The findings suggest that greenery-infused public art is not merely an aesthetic enhancement but a multifunctional urban strategy with implications for ecological, social, and cultural sustainability. As cities continue to grapple with the challenges of climate change, air pollution, and deteriorating public spaces, integrating greenery into urban art emerges as an innovative approach to addressing these pressing issues. Future research should further explore the long-term impacts of such projects, particularly in relation to policy integration, urban resilience, and public participation in sustainable development initiatives.

#### 6. Authorship

Conflicts of interest: The author declares that there is no conflict of interest.

#### 7. References

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