How Can Street Art Have Economic Value?

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Abstract: The following paper analyzes the phenomenon of Street Art with particular attention to the increasing correlation between practices of Street Art and socio-economic dynamics. From the perspective of recognizing a possible formulation of the economic value of Street Art, the paper aims to describe the impacts which Street Art is having in some urban contexts, where the regeneration processes have found in this new form of “re-signification” an innovative modality of intervention. Some impacts have economic nature (direct, indirect or inducted), others are only social and cultural. Starting from an overview concerning the impacts of Street Art on the property market in several urban contexts, a first evaluation of what is happening in some neighborhoods of the metropolitan city of Naples is presented.

Keywords: street art; property market; urban regeneration; economic value

1. Introduction

Many different definitions can be attributed to “Street Art”, a term which “cannot be defined conclusively since what it encompasses is constantly being negotiated” [1]. Ulrich Blanche gave a working definition: “Street Art consists of self-authorized pictures, characters, and forms created in or applied to surfaces in the urban space that intentionally seek communication with a large circle of people. Street Art is done in a per formative and often site-specific, ephemeral, and participatory way” [2].

Public spaces, sidewalks, exterior building walls, highway or railway overpasses, and metro stations, are the most common places where this form of creative expression is developed. Concerning the built environment, Street Art can contribute to the “physical sustainability” or the “sustainability of the built environment”, one of the essential dimensions of the Urban Sustainability paradigm—together with economic, social, ecological, and political sustainability. In fact, as highlighted by Allen [3], physical sustainability concerns “the capacity of an intervention to enhance the liveability of buildings and urban infrastructures for ‘all’ city dwellers without damaging or disrupting the urban region environment. It also includes a concern for the efficiency of the built environment to support the local economy”. The capacity of Street Art to contribute to the enhancement of urban places is demonstrated by several international experiences, with different spillover effects depending on the context where it has been developed.

With specific reference to the context of Naples, in the Campania region (Italy), in accordance with Camorrino: “… certain distinctive works—which refer specifically to Street Art productions—are strong indicators of incipient changes ongoing in the city: the dynamics of re-signification that such practices and cultural products have established to cause episodes of urban regeneration” [4]. Widely recognized, urban regeneration is a key factor for the urban sustainability and, from this perspective, what it is currently happening in some contexts of Naples allows us to sustain this assumption (Ponticelli, Scampia, S.Giovanni a Teduccio, etc.). There, as in other Italian peripheral areas (Tourin, Rome, Milan, etc.) the regeneration processes, have frequently found efficacious ‘activators’ in spontaneous phenomena.
as Street Art practices rather than being governed by the public administration. Several cases have demonstrated in an empirical way how this form of urban art can activate artistic requalification and social regeneration and play a meaningful role in the ‘creative placemaking’ [5].

But is there a real association between Street Art and changes in the economic conditions of urban neighborhoods? And how much does it actually affect urban regeneration? Several international experiences demonstrate an increasing correlation between practices of Street Art and changes in socio-economic and urban dynamics.

In the U.S.A., where the Street Art emerged in 1960s in New York City, one of the most successful examples is Philadelphia, nowadays recognizable as the City of Murals thanks to the Philadelphia’s Art Program, the U.S.A.’s largest public art program ever made. Since 1984, over 3,000 murals and works of public art have been created in Philadelphia. The Art Program employs approximately 250 artists and teaching artists every year, contributing about $2.7 million to Philadelphia’s creative economy. More than 12,000 visitors discover the neighborhoods of Philadelphia with their unique Street Artworks [6].

A first general attempt to assess the economic impacts of Philadelphia’s Mural Art Program was made in 2003. Among several impacts on Philadelphia Community, Stern and Seifert [7] also examined the relationship between the presence of murals and changes in property values, verifying a general positive effect on real estate sale prices.

Other remarkable Street Art cities in U.S.A. are San Francisco, Los Angeles, and San Diego, the most relevant cultural hubs in California; Atlanta e Miami, also in U.S.A. Further examples include Toronto in Canada; the South American painting powerhouse cities of Sao Paulo and Buenos Aires [8].

In Europe, the development of Street Art is part of an old tradition of expression in public spaces [9]. It has a stronghold in London with the ‘Bansky effect’, in Berlin, considered the ‘art capital’ of Germany, in Lyon (France) where there is a very diversified tourist offering based on Street Art, or in Poland where murals in many cities have become touristic attractions [10].

In Italy, the phenomenon of Street Art mostly emerged on the outskirts of metropolitan cities, where meaningful impacts of a social nature and, sometimes, also economic have been found. Currently, more than 180 Italian municipalities are active in the enhancement of Street Art, with almost 300 art projects and 30 festivals across all the national territories [11].

From the perspective of recognizing a possible formulation of the economic value of Street Art, the paper aims to describe the impacts which Street Art is having in some urban contexts, where regeneration processes have found in this form of re-signification an innovative modality of intervention [12]. In Section 2, on the basis of all available sources (scientific and media), an overview of the impacts of Street Art on the property market in several urban contexts is developed. In Section 3, a first evaluation of what is happening in some neighborhoods of Naples is presented.

2. Street Art and Impacts on the Property Market: an Overview

2.1. Street Art and the Property Market

The capacity of Street Art to revalue and regenerate degraded areas and buildings, as well as its influence on real estate market values, are issues that are only now beginning to be studied in some geographical areas. As well evidenced by Kauko [13,14], because real estate is an integral dimension of urban sustainability, it is necessary to better integrate social, cultural, and economic dimensions into the real estate sustainability agenda. In Italy, the correlation between Street Art and real estate is difficult to verify, because many Street Art interventions involve public housing complexes.

More meaningful impacts relate to the social sustainability to which Street Art contributes as part of ‘cultural branding and consumption issues’ [13]. From the perspective of urban regeneration and social sustainability, according to Colantonio and Dixon [15], the inclusion of newer and ‘softer’ themes occur, such as happiness, social mixing, sense of place, participation, needs, and social capital,
etc. Such themes are closely related to Street Art practices. Moreover, there are a few scientific studies in the literature that specifically deal with them.

Markusen and Gadwa [16] reviewed, in general terms, the state of knowledge about arts and culture as an urban or regional development tool, exploring norms, reviewing evidence for causal relationships, and analyzing stakeholders, bureaucratic fragmentation, and citizen participation in cultural planning.

Again, Vicario and Martinez Monje [17] examined the relation between urban regeneration policies designed to restructure urban cores and the gentrification of deprived inner-city neighborhoods via the example of Bilbao.

Cameron and Coaffee [18] focused on the role of art and the artist in the main established theories of gentrification, looking respectively at culture and capital as key drivers. In particular, cultural analyses of gentrification have identified the individual artist as an important agent in the initiation of gentrification processes in old working-class neighborhoods. The paper examines the arts-led regeneration strategy adopted in Gateshead (north-east England), it also critiques whether the linking of art, regeneration, and gentrification as public policy can be extended and generalized to others urban contexts, playing play a role in the transformation of unpopular and stigmatized urban neighborhoods and the renewal of urban housing markets.

An interesting study by Grodach et Al. [19] examined the conflict between recent creative placemaking policies intended to promote positive neighborhood development through the arts and the fact that the arts have long been considered as relevant to contributing to gentrification and the displacement of lower-income residents. They statistically tested how two different groups of arts activities (fine arts and commercial art industries) are associated with conditions indicative of revitalization and gentrification in 100 large U.S. metropolitan areas. The results showed that art activities are associated with different types and levels of neighborhood change. Commercial art industries show the strongest association with gentrification in rapidly changing areas, while the fine arts are associated with stable, slow-growth neighborhoods.

In the Warhol Economy [20], Currid argued that creative industries like fashion, art, and music drive the economy of New York as much as, if not more than, finance, real estate, and law. The implications of Currid’s argument are far-reaching, and not just for New York. Urban policymakers often underestimate the importance of the cultural economy, or they fail to recognize the social, cultural, and economic mix that some economists call the Warhol Economy.

However, all the above studies focus more on broader issues of gentrification or cultural economy. Specific reference to the relationship between Street Art and real estate values is a topic that only in the last few years has become the object of specific studies.

In the U.K., a recent study conducted by scholars of Warwick University [21], has demonstrated, as in London, the districts which presented the highest percentage of urban and Street Art have registered an increase in the real estate prices. Starting from the pictures posted on Flickr about the Street Art interventions in the different urban districts examined [22], the variations in the real estate market prices in the period 2003 to 2014 were compared and verified. It is obvious, in accordance with the authors of the study, there are different potential reasons for the real estate price increases, among which Street Art as certainly an indicator of district quality improvement and real estate demand increase, as well as an attractor for resources and economic activities.

In 2017, a specific U.K. property report highlighted the stakeholders would be willing to pay more for the property if the building is ‘tagged’ with the artworks of Bansky (the most famous British street artist, Figure 1): on average more than 5% and up to 30% of the property price [23].

In New York, the pioneer city of Street Art in its several evolutions, the once popular neighborhoods of Chelsea, Lower East Side, and Harlem show a high percentage of murals nowadays and are subject to an intense gentrification phenomenon. In these neighborhoods, as well as in others, the requests for new murals are numerous, because the building owners understand these interventions can attract new tenants with a higher income capacity. An emblematic example of this phenomenon
occurs in Chelsea, where a building which exhibits two murals of Brazilian artist Eduardo Kobra painted in 2012, recorded an increase in market value of $880,000 to $2,075,000. Media reports indicate that in New York City neighborhoods enhanced by ‘street writers’ the property prices increased by 10 to 15%, depending on the reputation of the artist involved [24].

![Image of a mural](image.png)

**Figure 1.** London, “Yellow Lines Flower Painter” (Banksy artist).

Obviously, in the above urban contexts, the dynamics and consistency of the property market are very different from Italy, where the correlation between Street Art and property market is not, as yet, a phenomenon under observation.

Among the few references, an article in 2012 in the business daily “Il Sole 24Ore” [25] highlighted how in few years the Street Art phenomenon in the city of Turin (specifically in the San Salvario district) as contributed to an increase in property values of 25 to 30%. While in the metropolitan city of Milan, despite the majority of projects of Street Art being sustained by the public administration, several private operators are choosing to invest in these valorization works.

Analyzing the data of the O.M.I. (Observatory of Real Estate Market Values of the Italian Agency of Revenue), from 2014 (a year before the realization of some Street Art interventions) to 2017, it is possible to register an increase in the residential property values in some neighborhoods of Milan (Lambrate and Bovisa) [26].

In addition, in the metropolitan city of Rome Street Art is widespread, and since 2015 a map with a tour including 13 of the 15 districts of the Italian capital has been available. In particular, the peripheral neighborhoods of Rome have found a new touristic vocation with this form of art (Figure 2). One of the most meaningful examples is the Tor Marancia neighborhood, where the cultural association 999 Contemporary promoted the Big City Life project with the realization of 21 murals (each of 14 square meter) on façades of the City Hall. The overall cost of this project was about 168,000,00 euro, financed for the 56% by 999 Contemporary association, 26% by Roma Museo Foundation and 18% by Roma Capitale Public Authority [27].

However, this last Street Art experience in a very popular neighborhood does not make an observable meaningful contribution by Street Art to neighborhood regeneration from the point of view of the real estate market.
2.2. How Can the Impacts of Street Art on Real Estate Prices be Measured?

In the economic field, the term externality refers to the effect that occurs outside an economic activity (costs or benefits imposed on others not directly involved or benefiting from the activity).

Generally, for real estate markets, the monetary valuation methods of environmental externalities are based on the econometric analysis of property market prices, starting from the principle that the price of the property market is affected, among other things, by the quality of the environment.

From this perspective, Street Art can be understood as a positive externality for its capacity to re-evaluate degraded areas and buildings and, therefore, is able to affect the property market.

For these reasons, real estate properties can be understood as receptors of environmental externalities, which, in the same way as positional rents, are incorporated into the market prices. This makes it possible to estimate the value of environmental externalities as equal to the measure of the change in housing prices resulting from environmental change. The estimation can be carried out using statistical pluriparametric models (e.g., multiple regression or semiparametric models), which are able to define the market price as a function of the variables corresponding to the property’s characteristics, including those relating to the environmental qualification of the territory [28,29].

Real estate price analysis leads to the evaluation of environmental externalities through an articulated operational scheme.

Once the area under study has been defined, one which is affected by environmental change, different homogeneous categories of properties can be identified (houses, agricultural land, building soils, industrial, and commercial buildings, etc.). For each category \((j = 1, 2, ..., n)\) an adequately representative sample is defined \((c_j)\); the phases are:

- a determination of the price change \((\Delta PK_{ji} = 1, 2, ..., c'_j)\) that produces environmental modification on the properties of the sample;
- the aggregation of the price change \((\Delta P_j)\) in each property category;
- the determination of the monetary value of environmental externalities \((W_i)\).
The implementation of the first phase involves the search of $G_j$ function such that [28]:

$$\Delta PK_{ji} = G_j(\Delta x_v)$$

(1)

In this function, $\Delta x_v$ represents the variation in the quantity (or the degree of manifestation) of the variables ($x_v$, $v = 1, 2, ..., r$) that express the (extrinsic) characteristics of the property regarding the environmental qualification within the territory under study (Street Art, presence of spaces designed for public parks and gardens, people-friendliness, aesthetic and visual conditions of the landscape, etc.). The $\Delta x_v$ variance, evidently, is derived by comparing the state of the area in the previous situation with the state of the area in the situation after the environmental change. The variables are given by the environmental characteristics that are influenced, positively and/or negatively by the interventions on the territory. The calculation of the $AP_j$ price change (second phase), in turn, may be based on the average value ($\mu_j$) of changes in the price of real estate, $p_j$. This value must be determined by an estimate, by range, conducted on the arithmetic mean ($m_j = \sum \Delta PK_{ji}/c_j$) of changes in the price of real estate, $c_j$ sample. This may be achieved through the following relation [26]:

$$\mu_j = m_j \pm Zs/(c'_j)^{1/2},$$

(2)

where $Z$ represents the stochastic variable resulting from the variable $V_j$ ($v_j = \Delta PK_{ji}$) through the following report: $z = (v_j - \mu_j)/s$; $s$ is the standard deviation of changes in the price of real estate sample, $c_j$. In this way, the calculation of $\Delta P_j$ may conservatively be made on the basis of the minimum value $\mu_j$ resulting from the estimate by range:

$$\Delta P_j = \mu_{j\min} \cdot p_j.$$

(3)

Lastly, in the final phase, the monetary value of environmental externalities can be determined as the sum of $\Delta P_j$ changes extended to the various populations of properties located in the study area: $W_e = \sum \Delta P_j$.

The practical applicability of the outlined operational framework is obviously subject to the ability to determine the changes in real estate prices, produced by environmental change. Formally, the calculation could be done using the $G_j$ function that relates the price of real estate with the environmental variables ($F_j$). The application of econometric models in search of $F_j$ function is, however, conditioned by the data collection mode, implying the construction of an estimate-statistical sample, the determination of market prices and the environmental characteristics of the buildings, both in the situation with and in the situation without intervention [28,29].

3. Street Art and Socio-Economic Dynamics in the Metropolitan City of Naples

The attention of several Italian municipalities in recognizing the value of street art becomes evident where this form of art has been inserted into institutional programs, often also with resource investments. More than governed by the public administration, frequently in Naples the processes of regeneration have found efficacious activators in spontaneous phenomena, among which is Street Art. Recognizing the street art phenomenon as a powerful vector to launch great messages of modernity, the Municipality of Naples is equipped with a pact for the street art as the common good to regulate the use of urban spaces destined for these artworks (Figure 3). The pact of authorization is based on the regeneration principle of urban contexts (above all other peripherals), recognizing Street Art as an innovative art and as a social aggregation moment of high cultural depth [30].

Particularly interesting results have occurred in the Ponticelli district (on the eastern outskirt of the metropolitan city of Naples). This district is characterized by a very high level of unemployment and early school-leaving. In the 2015 in the Merola Park, a public housing complex built in the 1990s, where some buildings were characterized severely by both physical and social degradation (deteriorated concrete, repetitive modules, widespread anonymity, absence of common services and
facilities, etc.) have gained an identity through the social powerful charge of street art [31] thanks to the initiatives of the Arteteca Association and Inward Project (International Network on Writing Art Research and Development).

Figure 3. Main Street Art interventions in the metropolitan city of Naples (modified by Google Maps).

The first mural painted in the park was realized in 2015 (title: Ael, tutt’equal song’e creature) by the Neapolitan artist Jorit Agoch, which was inspired by a fire in a Gipsy camp that happened some years ago in the area (Figure 4). The second mural A’ pazziella n’man è criature was realized (in 2015) by Zed1 and is about toys and childhood; it was born from the consideration of the “strummolo”, a classic old game unknown to the young generation (Figure 5). The third mural Chi è vuluto bene, nun so scorda was realized by Sicilian street artists (Rosk and Loste) and is a tribute to the football game; the title is a quote from the famous football player Maradona and it means “who is well-cared for will never forget it” (Figure 6). The fourth mural Lo trattenemento de peccerilli was realized by Mattia Campo dell’Orto, which develops the theme of storytelling and the importance of reading a story together (Figure 7). The most recent murals are: ‘A mamm’ è tutt’ e mamm’ by La Fille Bertha, Je sto vicino a te by Daniele Hope Nitti and “’O sciore cchiù felic by Fabio Petani [32].

All the murals realized by artists were inspired by the suggestions and participation of Ponticelli residents and tell the histories of the Merola Park and children living there. The colored facades endow the park with a strong, distinctive signature. The art assumes a measure, a weight in the urban context, contributing both to the physical and social sustainability.

It is not possible to verify the correlation between art murals and increasing of residential market values in the real estate market of Ponticelli district, mainly because the properties are in an economic and popular precinct and on public buildings. However, more meaningful impacts regarding the social and physical sustainability to which Street Art is contributing (sense of place, identity, social capital, common goods, etc.) can be determined.

Figure 4. Ael, tutt’equal song’e creature.
First of all, media attention on the Merola Park has contributed to making it more attractive, so a varied offering of Street Art tours was launched together with several television and film productions. The International Airport of Naples listed Merola Park among the touristic attraction of the city. Local administration became more sensitive to the needs of the neighborhood approving, in 2015, the functional recovery of the football field. At the same time, urban creative workshops were activated in the park, together with a project entitled Androni Colorati (or Coloured Entrances) involving youngsters in the requalification of the common spaces of the residential buildings inside the park.

Further interventions of street art have been carried out in San Giovanni a Teduccio, another neighborhood on the outskirts of Naples, where Jorit Agoch has realized Dios Umano dedicated to the famous football player Maradona (Figure 8) thanks to the patronage of the municipality of Naples. Even in the historical center of Naples there are Street Artworks, some of which have also led to micro activities of merchandising. As example, in the Forcella district, in 2015 the artist Jorit realized the iconic mural of San Gennaro Operaio (Figure 9), an official print production of the work was implemented.
under the supervision of the author, together with other gadgets which are appreciated by tourists. Several new touristic services opened up here (such as restaurants and bars).

![Figure 8. “Dios umano”](image)

![Figure 9. San Gennaro Operaio.](image)

These cases, as with many others in Naples, demonstrate empirically, how the Street Art phenomenon is able to activate artistic requalification and social regeneration process, contributing to the urban sustainability of places traditionally characterized by degradation.

4. Conclusions

Urbanization processes have generated metropolitan areas with heterogeneous urban systems (real estate values, demography, environmental, and socio-economical factors, building types, etc.) [33]. It is increasingly recognized that Street Art can represent an added value and is able to contribute to the aesthetic and ethical enrichment of the urban places thanks to its extraordinary communicative power. Worldwide, it is possible to find a correspondence between Street Art practices and cities’ new concerns: insertion of cultural programming into a strategy for attracting tourism, institutional communication of social action in disadvantaged neighborhoods, and the redynamizing of local economies [34].

However, more accurate and appropriate methodological approaches are necessary to verifying these assumptions. From an evaluative point of view, the question of how to capture, measure and qualify the added value of Street Art in its multiple dimensions (economic but also social and cultural) is an open and current issue [34,35].

While deterministic approaches based on statistic inference are theoretically very reliable, the lack of information and real estate data is often a considerable and difficult limitation to overcome.

From this perspective, a very particular approach by the IXIA Institute with the aim to promote and implement the art public policies [36] was developed. It consists of a system able to estimate the impacts of artistic practices in the public sphere involving several stakeholders as artists, inhabitants,
public institutions, third sector associations, etc. The value categories used in the impact matrix are: artistic value (visual and aesthetic fruition; drawing quality, etc.); social value (community development, social inclusion; acquisition of skills and competences, etc.); environmental value (enhancement of the physical environment; care of the common spaces, etc.), and economic value (territorial marketing; economic investments, employment, property market, etc.). As in every evaluating process, the interpretation of the results taking into account the specificity of the urban context is particularly crucial.

Certainly, the IXIA approach, together with the Assessment of Community Impact of the Philadelphia Department of Recreation Mural Art Program [8], represent a cue for reflection and a useful starting point to develop, in a systematic and rigorous way, the analysis of the several impacts of the Street Artworks under realization in the metropolitan city of Naples.

In this context, as in other Italian cities, more often the Street Art phenomenon has become part of institutional programs aimed at promoting urban sustainability, and it is certainly an issue to examine in greater depth in further scientific researches activities.

Finally, according to Haedicke [37], Street Art interventions invade a public space, shake it up and disappear, but the memory of the disruption haunts the place for audiences who experience it. The imagination of street artists re-frames, re-interprets, confuses and often tries to subvert or challenge notions of the real. This imagination and the everyday world created by a Street Art intervention works is like a collage juxtaposing incongruous images, ideas or logic to construct new interpretations, and it uses the city as its medium and passers-by as its found objects.

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