

Article

Urban Regeneration Strategies for the Open Urban Spaces's Project. Experimentation and Innovation in Rome for A New Urban Welfare

Carmela Mariano¹, Ignacio Grávalos Lacambra² and ³ Patrizia Di Monte

¹ Associate professor in Urban Planning, Department of Planning, Design, Architecture Technology, Sapienza University of Rome, carmela.mariano@uniroma1.it

² Associate professor in Architectural design, Escuela de Arquitectura, Universidad San Jorge, igravalos@usj.es

³ Architect, Studio grávalosdimonte arquitectos, Zaragoza, patrizia@gravalosdimonte.com

*Correspondence: carmela.mariano@uniroma1.it

Abstract: The paper proposes, through an experimental method, a conceptualisation of theoretical-methodological and practical guidelines for the project on the system of collective open spaces, residual areas, abandoned areas that characterise the contemporary city, both in the urban contexts of the historical city, and in the more marginal areas of the modern suburbs. This methodology was experimented on an historical neighbourhood in Rome (San Lorenzo district) starting from the results of some researches conducted in collaboration between Sapienza University of Rome and the Escuela de Arquitectura, Universidad San Jorge and some design experiments conducted by Grávalosdimonte design studio. This methodology and experimentation combines the theme of the inter-scalarity of the project (territorial, urban and local scale) with the themes of the flexibility and proximity of functions with respect to local instances and contingencies caused by the pandemic situation and by the sustainability perspectives, with particular reference to the need for urban health, the dialectic between public and private space in the perspective of the notion of common good, the bottom-up project for the construction of proximity spaces and plurality in the decision-making process.

Keywords: public space; sharing and inclusiveness; quality; urban regeneration; temporary uses

1. Introduction

The contemporary city is considered a place of density and physical, functional, social and symbolic complexity [1], and in the early 2000s it became a place where environmental and social crisis intertwined; conditions exacerbated in recent years by the difficulties generated by the pandemic emergency [2]. Indeed, the pandemic has led to a condition of social vulnerability and has highlighted the condition of marginality of places far from the centre, to which must be added the inequalities related to income, education, work, proximity and quality of services [3].

This new scenario has generated an increased awareness of the scarcity of environmental resources, combined with growing demands for safety, health and education, technological progress and changing rules of social interaction [4]. These factors have caused undoubted effects on urban transformation processes, anchored to the assumption of growth, cancelling, or at least considerably reducing their driving role [5].

In a few decades we have witnessed a mutation of the hierarchies and urban balances that had been built over time, and, alongside the potential for development, lines of division and tension have emerged that have contributed to the emergence of increasingly

explosive inequalities [6, 7]: social segments excluded from the labor market and the enjoyment of goods, privatization of public space, inequalities in the system of collective mobility, the new poverty of non-integrated immigrant realities, the issue of social housing and its segregation, security and many others [8, 9].

In this new urban dimension, public space has once again become the site of an increasingly transversal and difficult-to-govern conflict [10], which has produced a disaffection of the individual towards urban spaces [11, 12] «to take refuge in the extraterritoriality of electronic networks (...) And so public space is increasingly emptying itself of public issues. It is incapable of fulfilling its past role as a place of encounter and debate, of private suffering and public issues» [13].

The current socio-economic dynamics and the consequences induced by the pandemic emergency have generated a reflection on the need to recover the dimension of proximity [14] and to share resources, spaces, infrastructures, and experiences. This reflection is also confirmed by the guidelines of the European Commission for the new urban agenda that identifies the perspective of the *human-centred city* [15], in which the role of communities and institutions «as city makers, co-creators of their evolving urban development and actors of innovation» [16] is central.

2. Literature Review

The hierarchy of needs elaborated by Maslow (1968) [17] is a psychological theory that identifies five categories that determine an individual's behaviour. These are physiological, security, belonging, love needs, esteem, self-fulfilment need.

The different dimensions of public space – in its morphological, perceptual, visual, relational, functional and temporal meanings [18, 19] - are closely related to this hierarchy of needs and convey the complexity of this urban infrastructure and the need for 'community building' [2], which is only possible by creating an environment suitable for the production of stimuli, social relations and multiplicity of events, i.e. a system of proximity [20, 21] sufficiently diversified and balanced between the functional and relational dimensions of public spaces.

The debate on the need for a balance between these two dimensions dates back to the 1960s, starting with the theories of Jane Jacobs (1961) [22] who identified the performance of functions as the indicator of urban quality of public space, and then with the theories of Lofland (1998) [23] who speaks of Public Space as the physical and morphological dimension of public space and of Public Realm as the relational dimension and social interaction between inhabitants, and by Montgomery (1998) [24] who identifies the success factor of public space in the correct combination of activities performed, meaning and quality of the physical environment. In more recent years, Jan Gehl argues that the quality of the public space arises from the everyday practices and behaviours that take place in the street, with 'the presence of people, the production of events, activities, stimuli, solicitations' [25, 26].

In subsequent years, quality indicators for public spaces have been redefined according to changing socio-economic dynamics. According to Carmona [18, 19], key factors are related to accessibility, perceptual and visual comfort and usability in social terms of spaces. Richard Sennet (2019) [27] also states that urban quality depends on the interaction, more or less dialogic or conflictual, between the component of the built environment (the *Ville*) and that of the lived environment (the *Cité*), i.e. between the functional proximity embodied by the *Villé* and the relational proximity realised in the *Cité*.

In this context, the search for a renewed relationship between *urbs* and *civitas* calls for the contribution of the town planning discipline to adapt the design of public spaces to new social practices and new needs, prefiguring a complex design capacity in which space and society, physical dimension and listening to demands, overall visions and selective actions, plan and programme, large and small scale, long and short timescales, strategies, rules and projects constantly interact [28]. All this with the aim of restoring 'depth' and 'density' [29] not only to the physical and morphological dimension of public

space, but above all to the relational dimension and the set of social interactions between inhabitants, a dimension that is not visible and representable but fragmented and changeable [23].

The comparison with the transformation dynamics of the contemporary city in recent decades, which are more changeable, and therefore more uncertain, in which it is difficult to foresee and anticipate [30, 31], highlights the need to identify a new approach to the design of public spaces, more strategic and better able to adapt to unforeseen situations and events. An approach that stimulates the adaptive capacity of cities, through innovative experimentation and a series of actions adapted to the speed of urban transformations [32, 33], capable of innovating planning and design tools and procedures, as also called for by the guidelines of goal 11.7 of the Sustainable Development Agenda: "By 2030, provide universal access to safe, inclusive and accessible, green and public spaces, in particular for women and children, older persons and persons with disabilities".

Hence, the design intervention on the system of collective open spaces, of residual areas, of disused areas, both in the urban contexts of the historical city and in the most marginal areas of the modern periphery, is increasingly confronted with the need for an integrated approach to urban complexity [34], which is able to make a sustainable turn, in a polysemous sense, in urban regeneration strategies and the construction of the 'public city', with particular reference to the relations between urban well-being and the quality of spaces, between temporary uses, identity and sense of belonging to places, between new technologies, accessibility and use of spaces, between participatory processes, the effectiveness of local/urban public policies and social cohesion.

The design intervention on the system of public spaces should provide temporary, non-specialised, multifunctional, hybrid and reversible functions [35], favouring a transitional and incremental approach of regeneration [36], as a design device, capable of accompanying the consolidation of lasting uses over time and of identity and sense of belonging by the community [37, 38].

A perspective of action in which the designer assumes the role of placemaker [39], engaging in concrete processes of construction of new economies, new possibilities for living and new forms of sociability, and which also permeates the action of the New European Bauhaus Programme [40], relaunching the challenge of combining cultural and social innovation in the design of public spaces with the principles of sustainability and spatial justice [41, 42, 43], promoting the involvement of stakeholders and the satisfaction of community needs [44, 45].

3. Materials and Methods

3.1. Materials

In this context, the contribution proposes a methodology of intervention on the system of public spaces in a district of the historic city of Rome, deduced, through an inductive method, from a conceptualisation of theoretical-methodological and operational references for the design of public spaces in the contexts of the contemporary city, starting from the research activities conducted by the PDTA Department of Sapienza University of Rome in collaboration with the Escuela de Arquitectura, Universidad San Jorge¹, as well as from the analysis of some design experiments conducted by the Gràvalosdimonte design studio in Zaragoza.

1 The research and experimentation activity took place in Rome in 2021 in the presence of Prof. Ignacio Gravalos Lacambra, Associate Professor in Architectural design, Escuela de Architettura, Universidad San Jorge, Zaragoza, as Visiting Professor at the Department of Planning, Design, Architecture Technology (scientific responsible Prof. Carmela Mariano). The research activity also saw the participation of arch. Patrizia Di Monte from the design studio Gravalos-Di Monte in Zaragoza. During the activities, the students of the CdL magistrale Architettura-Rigenerazione Urbana, Faculty of Architecture were also involved.

In particular, the experimental programme *Estonoesunsolar* in Zaragoza and the *Supermanzana* project in Barcelona were analysed, which combine the theme of the inter-scalarity of intervention (territorial, urban and local scale) with the themes of the flexibility of functions with respect to local instances and contingencies, with particular reference to the topicality of the need for urban health, the dialectic between public and private space in the perspective of the notion of common good, bottom-up design for the construction of neighbourhood spaces and plurality in decision-making [46, 47, 48].

In addition, the research and experimentation activity also made use of the intervention guidelines contained in the Temporary Use Toolkit developed by arch. Di Monte as part of the *Horizon 2020 gE.CO Living Lab* project [49], which identified tactical intervention methodologies from the perspective of proximity [50] emphasising the criteria of safety, inclusion, connectivity, accessibility and sustainability.

The document establishes a 6-step methodological tool for the design of empty spaces in contemporary city contexts and their reactivation in a new life cycle. The methodology includes the steps of:

- offer, which corresponds to a mapping of empty spaces in relation to properties, state of maintenance, present uses and functions;
- demand, which corresponds to a reconnaissance and evaluation of local demand and bottom-up initiatives in relation to the transformability of spaces with the elaboration of design concepts;
- assignment and funds that correspond to the stages of involvement of stakeholders (public/private and local associations) in the drafting of the business plan for the identification of economic and social benefits;
- implementation, which corresponds to the project authorisation phase and the identification of local action groups for project implementation;
- assesment, which corresponds to the monitoring, management, and reporting phase of the project results.

The Experimental Programme '*Estonoesunsolar*', promoted by the Sociedad Municipal Zaragoza Vivienda, is an experimental programme for the temporary use of abandoned lots in the city of Zaragoza, which between 2009 and 2010 saw the realisation of 32 interventions involving the reconversion of 60,000 square metres of disused spaces into new public spaces [48], through multiple uses and functions that represent a concrete response to a neighbourhood demand.

'*Estonoesunsolar*' was an innovative response to the large number of 'meanwhile spaces' [51] that have shaped the urban landscapes of the crisis. It focused on the social dimension of public space as a place of exchange and interaction, as an expressive context for multiple conflicts and, thus, urban learning [22]. It was precisely this condition that succeeded in converting the conception of physical space into place, understood in its anthropological sense, shortening the sometimes insurmountable distances between the concepts of *urbs* and *civitas* [52] or, in 'Lefebvrian' words, between the urban fabric and «the *modus vivendi*» [53] of urban society.

Each of the proposals investigated the meanings of the urban context, seeking to enhance elements of the collective memory of the place, to some extent constructing a space in which the affective bonds that constitute the "murmur of societies" [54] could be strengthened. In the context of an eroded public space, the intention was to create elements that would constitute small affective anchorages with the territory, spaces of emotional significance as opposed to what Daniel Hiernaux calls "the slippery city" [55], through which one passes without leaving a trace.



Figure 1. Zaragoza waterfront regeneration intervention - estonoesunsolar.



Figure 2. Zaragoza Estonoesunsolar Programme.

The pilot experience of the first 'functional superblock' is part of a workshop organized by the International University of Catalonia in 2016, in which students from all the universities of architecture in Barcelona participated. The aim of the course was to test in the Poble Nou district of Barcelona the new public spaces as a result of the implementation of Barcelona's new Urban Mobility Plan (2013-2018).

The 'superblock' is a model consisting of the grouping of 9 blocks of the urban fabric in a system surrounded peripherally by major road and public transport networks. Within it, it has a character related to soft mobility with a marked predominance of pedestrian traffic. The four inner crossings of the superblock, previously intended for vehicular traffic, were to be converted into pedestrian spaces, creating a kind of micro-city within the city in which pedestrians were to have absolute priority.

The pilot experience, developed in experimental terms in the workshop, offered keys to understanding very simple and at the same time effective urban strategies, which were subsequently taken up and promoted by the Barcelona City Council in the post-pandemic emergency situation, promoting them within the post-covid mobility plan as provisional solutions, although aimed at being incorporated within a more radical urban transformation strategic process.

Transforming traffic spaces into pedestrian, cycling and public transport spaces improves air quality, promotes physical activity and curbs climate change. The new Soft Mobility Plan envisages a 270% increase in pedestrian travel, so now pedestrians can use between 45% and 70% of public spaces.

Initially, the intervention addressed the issue of the legibility of space. The substantial change in mobility has entailed the rearrangement of roles in the new pedestrian-vehicle dialectic, and for this it was necessary to assign new reading codes to the collective imagination [56]. For this reason, one of the proposed objectives was to endow the space with a new identity that would make the new limits of the pedestrian zone legible, and that would also convey the new environmental values of scarce and restricted circulation. To implement this, it was decided to homogenize the space, transforming the 'panot' into an icon, to create a pedestrian area through the outsized use of a recognizable icon in everyday life.



Figure 3. New public space of the 'supermanzana' in Poblenou.

3.2. Methods

In both case studies described, interventions were made within the already built city through urban acupuncture [57, 58] which, far from becoming self-referential interventions, allowed a very direct relationship to be established between tactical action and urban planning.

In the first case, experimenting with the infinite possibilities allowed by temporary uses, while at the same time emphasizing the need to regulate these good practices within

a legal framework that would enable them as permitted interventions. In the case of the 'supermanzana' what was a pilot project, subsequently became a replicable model in other contexts of the urban structure.

The reference to meanwhile spaces stimulates and legitimizes the adoption of temporary solutions, which in these cases represented the prelude to regulated, larger-scale urban transformation strategies. Both cases define the desire to rebalance and reprogram the existing city through experimental approaches that seek to adapt the city to contemporary contingencies.

The research and experimentation activities on the case study were articulated according to three distinct phases that take up and update some of the methodological references of the Temporary Use Toolkit:

1. Offer

The first phase consisted of:

- Analysis and mapping of the system of public open spaces (squares, streets and green areas) and of the private spaces for public use in the district returned within a document that was constructed, starting from a series of physical inspections, from the verification of territorial cartographies and orthophotos and of the thematic elaborations of the cognitive framework of the planning tools that concern the area under study;
- Mapping of the offer of neighbourhood services and activities, catalogued by functional areas, present in the case study district obtained through a census using Qgis software and opendata territorial information systems.

2. Evaluation and Demand

The second phase aims to return an evaluation, according to criteria linked to the proximity requirement of the open space system, of the results of the analysis phase conducted in phase 1. This phase consisted of:

- Evaluation of the level of accessibility of each space, the function present and the system of connections (visual and physical) within the open space system;
- Evaluation and synthesis of local demand involving the main associations operating in the area in the identification of flexible uses and functions of open spaces with a view to their networking and enhancement.

3. Proposals

The third phase aims to identify some project scenarios consisting of:

- hypotheses for reuse and identification of flexible functions for the open space system;
- Identification of stakeholders, consultation and sharing of stakeholders and drafting of phases and timetable of interventions;
- project examples.

4. Case study. San Lorenzo, from 'island' to 'inclusive' district

The San Lorenzo district arose between 1884 and 1888 and underwent several transformations and extensions during the 20th century, due to processes of building replacement of the original typologies and the reconstruction of bombed buildings in 1943.

At the beginning of the 19th century, the area occupied by the San Lorenzo district was completely undeveloped, with only the presence of the main ordering elements, such as the Basilica of San Lorenzo, the Cemetery and the historical routes of the Tiburtina and Collatina [59]. Later came the construction of the railway and Termini station, the building in the areas between the Walls and the Via Tiburtina, which abandoned its ancient route with the opening of a gap in the Walls and the opening of the Tiburtino square (IGM, 1872-1874, 1906, 1924). Particularly in the early years of the 20th century, with the construction of modestly sized factories such as the *Paszko-wsky* (later to become *Wurer beer*) in 1902 and the *Cerere* mill and pasta factory in 1905, the district started to become a compact working-class core. This was the period of a social and cultural development parallel to the spread of a political ideology that is still prevalent in the district today and that manifests itself through a pronounced class consciousness and solidarity, reinforced by the

San Lorenzo inhabitants' sense of belonging to the neighbourhood community. During the Second World War, San Lorenzo was the first district of the city to be bombed and was the hardest hit. Even today, it is still possible to find buildings in the neighbourhood damaged by the 1943 bombing that have not yet been rebuilt. The end of the 20th century was the period of reconstruction, with the replacement, extension, and completion of existing buildings. [60] (Headquarters of the Faculty of Psychology in Via degli Apuli and of Neuropsychiatry in Via dei Reti). Starting from the end of the 1960s, the neighbourhood began to undergo a gradual process of 'depersonalisation'; these were the years in which several public works of great importance for the neighbourhood were carried out, such as the building of Child Neuropsychiatry in via dei Reti and via dei Piceni and the Tangenziale Est. The neighbourhood began to be populated by out-of-town university students and little remains of the original population [61].

The urban layout of this part of the city owes its current definition to the original layout built or referable on the one hand to some structuring and ordering historical signs (Via Tiburtina, Aurelian Walls), but above all to some large 'enclosures' of post-unification formation, which grew up immediately outside the city walls to provide the city with superior facilities and services: The Polyclinic, the University City, the Verano cemetery and the military and railway areas of Termini Station and the Freight Station surround on all sides the residential tissues of the district, which constitutes a sort of "island" connected to the rest of the city by a high-density urban-level road system and by tunnels under the bundle of tracks (San Lorenzo Urban Regeneration Programme, 2019). This kind of 'urban isolation' has reinforced the sense of territorial and community belonging of the inhabitants of San Lorenzo. The character of the San Lorenzo district from its earliest historical stages has been accustomed to change, and it is evident how the urban layout from its inception has influenced the social economic and morphological character of the district. From the very beginning, the urban structure had an orthogonal matrix with the Labicane walls, the freight yard, the Verano cemetery and the Via Tiburtina as its limits; the configuration of the district and its position outside the city walls contributed to isolate it from the urban fabric, making it a true village within the city [62, 63].

Urban isolation is accompanied by social isolation: the pronounced social characterisation of its inhabitants is induced primarily by the district's economic and professional conformation; the fact that the railway freight yard, the water reservoirs of the main aqueducts, the garbage depot, the tram depot and the workshops for the construction of tram vehicles, the central railway station, the Verano cemetery and the construction sites all around the expanding city are located here, meant that mainly labourers, bricklayers, railway workers, tram drivers, garbage collectors and artisans were housed in the district, and among these especially those linked to cemetery activities, such as carpenters, welders, stonemasons, tinsmiths, bricklayers, railway workers, construction workers, artisans and marble workers.

The presence of the headquarters of La Sapienza University, Europe's largest university, has, over the years, progressively altered the social structure of the neighbourhood, as a result of an increasing number of out-of-town university students adding to the resident population. This settlement pressure has led over time to a clear mutation of the district's socio-economic characteristics, with a progressive decline of traditional craft activities to the benefit of the proliferation of tertiary-commercial and public service activities, which has led to the phenomenon of gentrification, an increase in traffic volumes, rising rental costs and a crisis for local crafts.

Moreover, this process of mutation and the urban dynamics that have affected the neighbourhood have highlighted the lack of services and amenities in the neighbourhood and neglected the neighbourhood's emerging characteristic, namely the wealth of historical and monumental evidence and pre-existences.

For these reasons, the San Lorenzo district, which falls within the connotations of the Historic City in the General Urban Plan of the Municipality of Rome, [64] has been the subject of the redevelopment plan of the San Lorenzo district launched by the Municipal

Administration in 2006 as an integral part of a broader and more articulated Urban Project called "San Lorenzo - Circonvallazione Interna - Vallo Ferroviario", as it is closely connected to the definition of the mobility layout (New Inner Ring Road) and the railway areas [65]. The PRG also identifies a number of perimeters destined for type B "Enhancement Areas" (PRG Sistemi e Regole, 2008), which "concern places that over time have not achieved or have lost the identity characteristics proper to the Historic City and are characterised by the presence of buildings and artefacts that are no longer used and can be reconverted to new uses or that present evident phenomena of physical and functional degradation" (art. 43 paragraph 1 Implementation Technical Regulations).

Within this framework of a general strategy for the regeneration of the neighbourhood, as yet unfinished, there has been a lack of attention to the local system of collective open spaces, which constitute an identifying feature of the neighbourhood. In this sense, numerous initiatives have been launched and are planned for consultation and participation in planning with citizens.

The experimental research activity considered the complexity of the neighbourhood's social structure and local demand through the direct involvement of neighbourhood associations and citizens' committees rooted in the area. Several interviews were conducted with the associations' contact persons, and guided surveys were carried out to provide a picture of the resources, potential and criticalities of open spaces and, more generally, of local demand in relation to their transformability.

5. Results and discussion

The diagram depicted in Fig. 4 represents one of the results of phase 1. It offers and returns a mapping of the district's public and semi-public spaces (set in relation to each other and graphically highlighted as voids) that made it possible to group the inner courts into four areas, delimited by the main road axes, each of which presents different morphological and functional characteristics.

The courts of group 1 are located between Via Tiburtina (18), Via dei Luceri, Via dei Ramni (17) and Via di Porta Tiburtina and enjoy the proximity of important public spaces in close connection with each other: Piazzale Tiburtino (6), Piazza di Porta San Lorenzo (7), Piazza dei Siculi (8), Parco dei Caduti 19 luglio 1943 (9) and Villa Mercedes (10), it follows that the re-functionalisation of these semi-public spaces will have to be configured as a connective tissue of the social aggregation functions proper to the public spaces and the private spaces of the buildings.

The courtyards in group 2 are between Via dello Scalo San Lorenzo, Via dei Campani and Via di Porta Labicana (13) and enjoy the proximity of Largo Talamo (3) and Piazza dei Campani (5).

In this case, the proximity of the Labicane Walls to Piazza dei Campani and the Largo Talamo tomb give this complex of courts a strong identity connotation from the point of view of historical memory.

The courtyards of group 3 are located on Via dei Marrucini/Via dei Sardi (14) and enjoy the proximity of the 'Benedetto XV' Sports Centre and the 'San Lorenzo basketball court', functions that connote the area as having a strong sporting vocation, suggesting the inclusion of sports-related functions for the re-functionalisation of the semi-public spaces present here.

The courtyards in group 4 between Via dei Reti, Via dei Volsci and Via dei Sabelli (16) enjoy the proximity of Piazzale del Verano (12) and Sapienza, a circumstance that prefigures these spaces as a meeting place for residents and students.

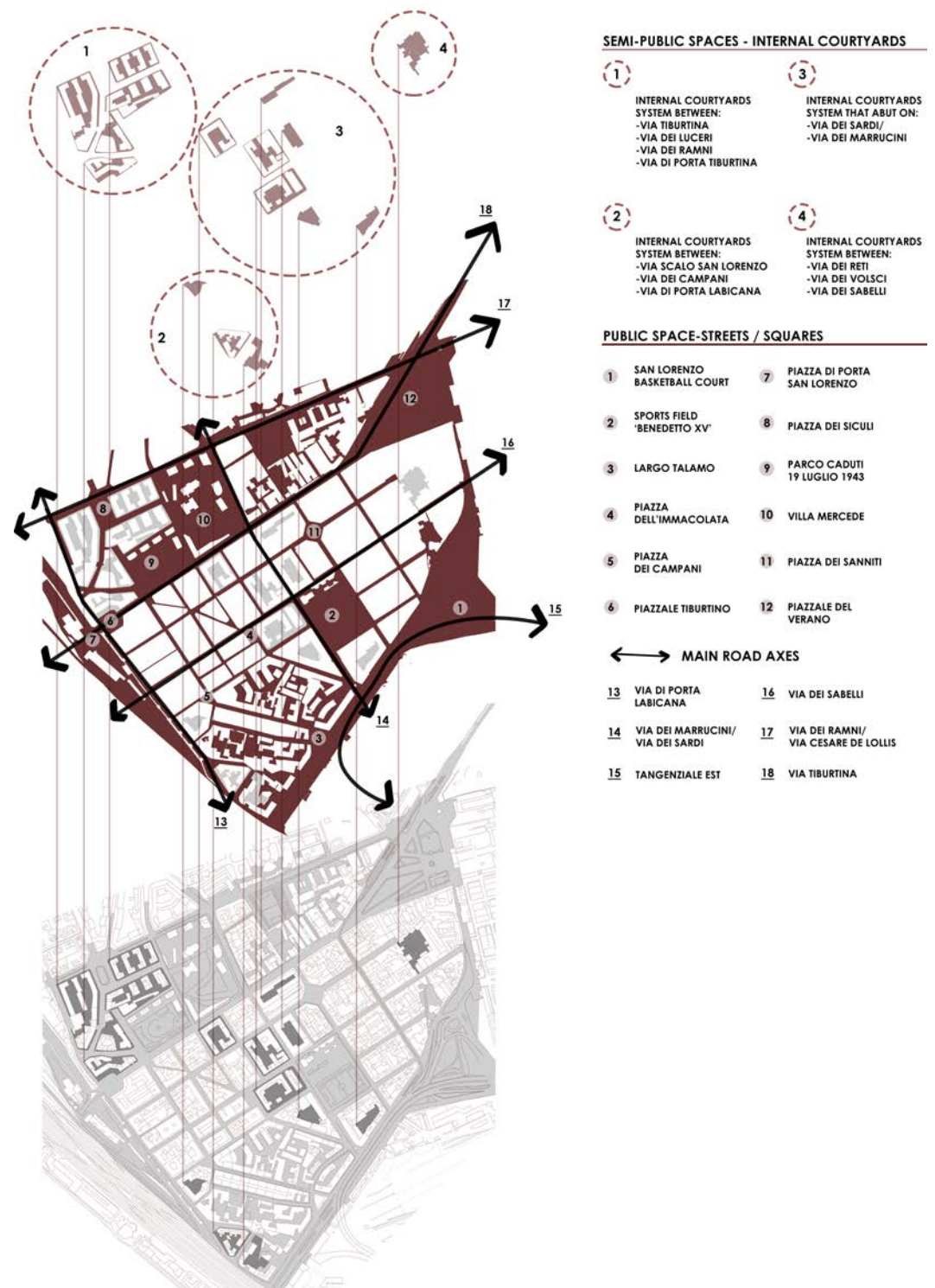


Figure 4. Mapping public and semi-public spaces in the San Lorenzo district

The mapping of the offer of neighbourhood services and activities (Fig. 5), relative to phase 1. Offer, returns the consistency of the territorial endowments of the San Lorenzo district with respect to five prevailing areas of functions and activities:

- Culture;
- Free time;
- Work;
- Commercial activities;
- Transport.

This analysis was carried out using Q-GIS software from the Opendata of the GIS Cartographic Portal of the Metropolitan City of Rome, the Territorial Information System of Rome Capital and the Romamobilita.it dataset of the Municipality of Rome Capital [66, 67, 68].

Specifically, about 'Culture', the diagram shows that the prevailing activities are those related to education and history, with a discrete presence of libraries.

As far as 'Free time' is concerned, on the other hand, the district is endowed with numerous activities related to catering, including bars and restaurants, but poor in cinemas, theatres and public parks.

As far as the 'Work' area is concerned, the diagram shows that the area is not characterized as an office pole, due to the scarce presence of offices.

With respect to 'Commercial activities', on the other hand, it is evident that the predominant business activities are those related to the sale of food and a modest presence of retail activities.

As far as 'Transport' is concerned, the San Lorenzo district is very accessible thanks to the massive presence of public transport, by rail and by road, and, in general, has a good primary and secondary road network; likewise, it is noted that the cycle track routes are poorly laid out and disconnected, thus not guaranteeing optimal cycle accessibility.

In general, it is possible to state that, given the proximity of Sapienza University, the San Lorenzo district has over the years modified the configuration of its territorial endowments to make them adhere to the needs and requirements of the students who live there, neglecting, in some cases, other categories of citizens and thus favouring the aforementioned processes of gentrification.

The diagram in Fig. 6 gives some of the results of phase 2. Evaluation and demand, and proposes a reading of the public and semi-public spaces in the neighborhood, numbered on the plan from 1 to 23, according to four prevailing aspects envisaged by the project: planned displacements, visual connections, temporary functions, accessibility.

First of all, the proposal identifies the planned modes of travel from one space to another, therefore, on the diagram are indicated, with dedicated symbols, the stretches that the project envisages can be travelled on foot, by bicycle, by car, or by public transport.

At the same time, the visual connections of these routes are highlighted, indicating the presence of green corridors or paving.

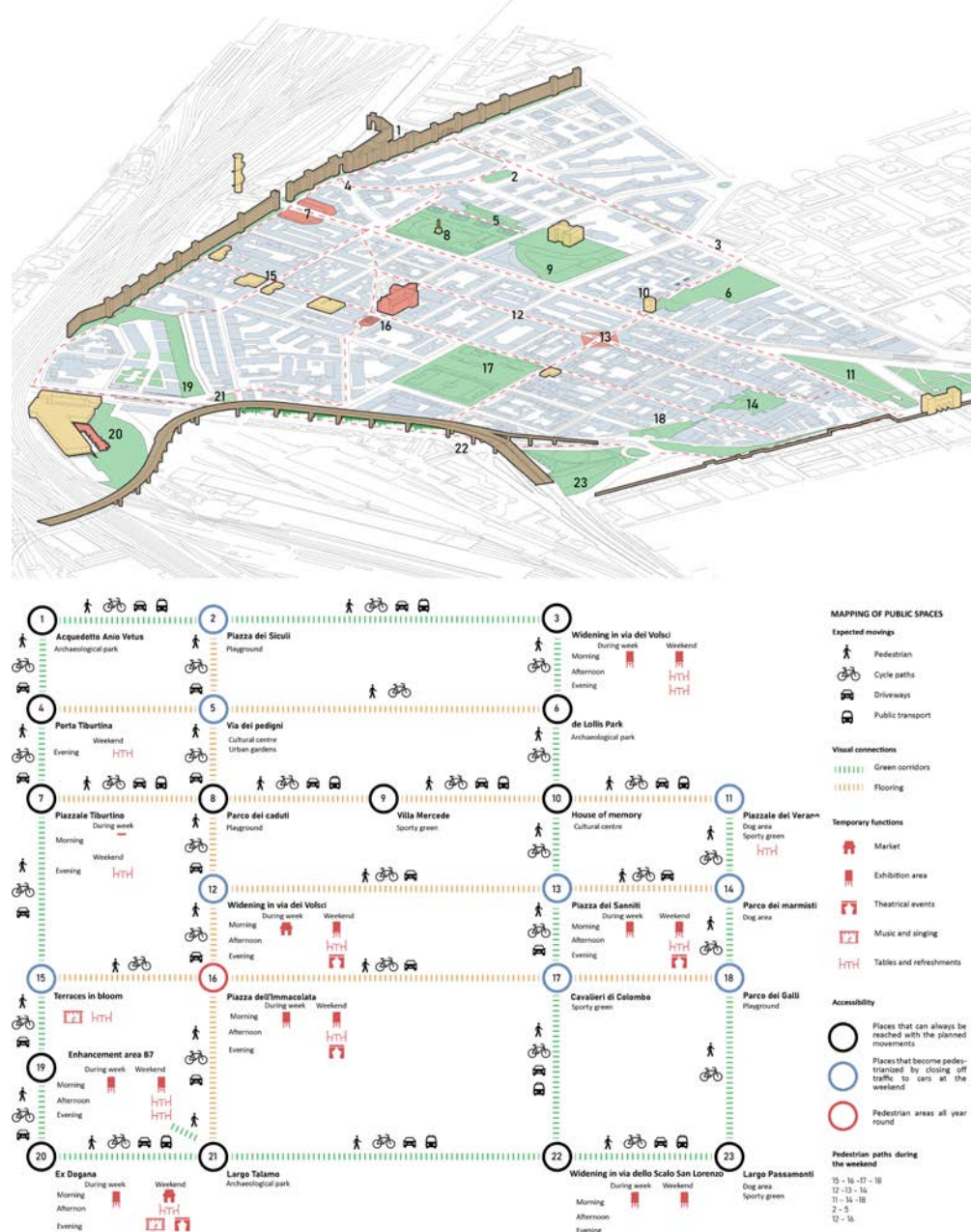


Figure 6. Levels of accessibility, functions and connections of open spaces in the San Lorenzo district

Furthermore, within the mesh generated by the diagram, the complex of the neighborhood's courtyards is symbolically restored, defining, for this, a series of temporary functions that vary according to the time of day (morning, afternoon, evening) and during

the week (midweek, weekend), these functions are: market, exhibition area, theatre events, music and singing, tables and refreshments.

In line with the changeability of the envisaged functions, the project proposal also envisages a modulation in terms of accessibility, indicated on the diagram with black circles (indicating places that can always be reached with the movements envisaged by the project and shown in the diagram in the previously described modes of movement), blue (indicating places for which the project envisages closure to vehicular traffic at weekends), red (places for which the project envisages only pedestrian use all year round).

The proposal returns a holistic vision of urban regeneration that emphasizes the importance of a systemic approach in both the analysis and design phases.

As a result of phase 3. Proposals, an example of one of the urban regeneration proposals for the neighbourhood is shown in Fig. 7.

Each planned project action is structured in a seven-step timetable:

Site inspection;

Dialogue between citizens and associations;

Drafting of guidelines and intervention;

Presentation of the Intervention Guidelines to the Public Administration;

Dialogue between public administration and private actors;

Regeneration of degraded spaces;

Realisation of temporary projects.

Specifically, the one described concern the flexible design of some urban voids, for which the name 'Terraces in Bloom' was chosen.

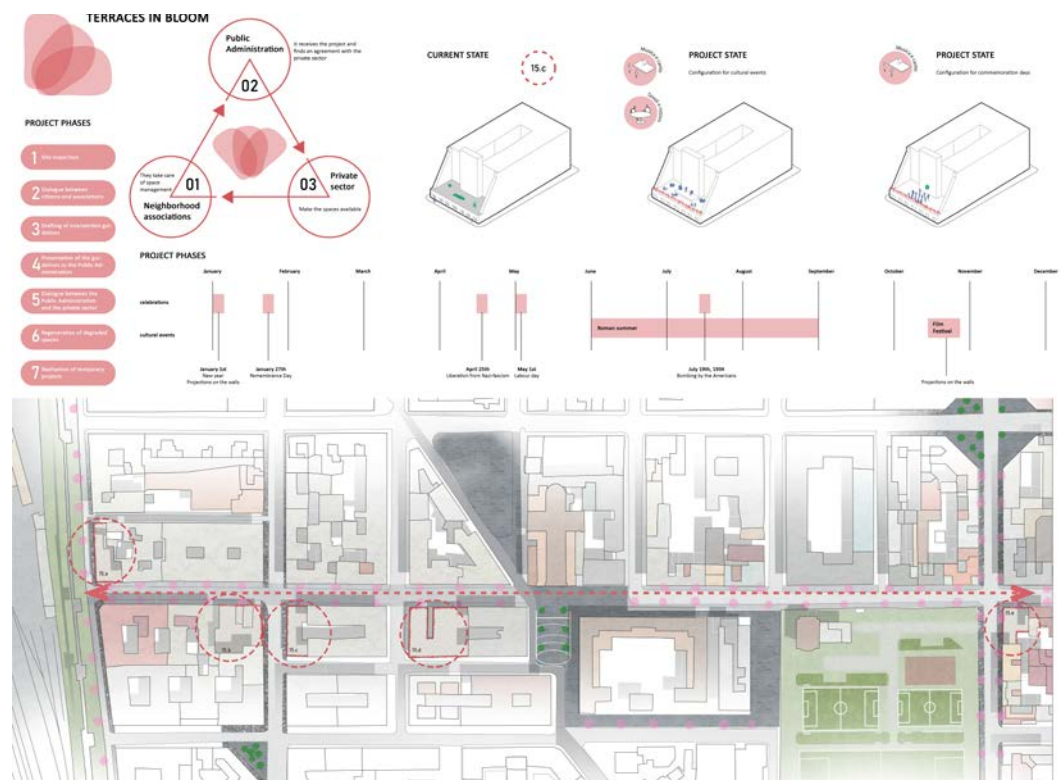


Figure 7. Schematic example of project hypothesis for open spaces in the San Lorenzo district

The project is planned for the regeneration of five buildings on Via dei Sabelli, indicated on the plan with red circles (15a, 15b, 15c, 15d, 15e). The axonometries render the project envisaged for lot 15c, relating the state of the sites to two different moments of the project, the first refers to the setting up of the area for cultural events (which envisages the implementation of two of the temporary functions made explicit in the general diagram: "music and singing", "tables and refreshments"), the second for commemoration days

(which envisages the implementation of one of the temporary functions made explicit in the general diagram, namely "music and singing").

In addition, a 'calendar of events' is also indicated, from January to December, defining the functionality of the space throughout the year, from which it can be deduced that the area will predominantly host cultural events and, therefore, there will be a set-up specifically dedicated to these activities. However, on some specific days the area will be dedicated to celebrations or commemorations and, in these cases, there will be a set-up specifically dedicated to these activities.

6. Conclusions

The experimentation carried out on the case study represented the place where the grid of theoretical-methodological and operational references identified as a result of the phase of examination of the main bibliographic references, current research and emblematic best practices converged, verified and actualized, and constituted, in its entirety, the methodological reference of this research activity.

The results of these activities highlight the presence of some recurring themes that constitute possible theoretical-methodological and operational references, replicable and exportable in other territorial contexts, in relation to the specificity of the places, around which the possible success and quality of the interventions revolve:

- the theme of the inter-scalarity of the project and the possibility of declining and experimenting such operations at the territorial, local and micro scale through a structured planning of interventions and a gradualness of project actions;
- the relationship and integration with the physical context of the existing urban structure, with particular attention to aspects of connectivity, usability and user-friendliness, livability and safety of spaces, and aspects of ecological-environmental sustainability and landscape components;
- the flexibility of uses and functions, which also implies a modularity and replicability of certain solutions that allow, at the same time, the recognizability of a unified project;
- innovation in the identification of area acquisition mechanisms, as in the case of the *Estonoesunsolar Programme's* land occupation plan, which provides for a temporary transfer of areas by private individuals and a simultaneous appropriation by local communities;
- the involvement of the local community in coworking and co-production activities on open and neighborhood spaces for the realization of tangible and usable common goods with spin-offs in terms of social inclusion and socio-economic development;
- the possible involvement of multidisciplinary expertise for aspects related to new technologies, environmental sustainability issues, social and economic impacts of interventions, spatial design, etc;
- the return to a central role of the public entity as promoter of interventions also with the involvement of local communities in the governance of public space, management, and participation procedures.

Author Contributions: Conceptualization, C.M.; methodology, C.M., I. G. L., P.D.M; software, C.M.; validation, C.M., I. G. L., P.D.M.; format analysis, C.M., I. G. L., P.D.M; investigation, C.M., I. G. L., P.D.M; resources, C.M.; data curation, C.M.; writing-original draft preparation, C.M I. G. L., P.D.M; writing-review and editing, C.M.; supervision, C.M.; project administration, C.M.; funding acquisition, C.M.

Funding: "This research received no external funding"

Acknowledgments:

The paper is the results of a shared reflection by the authors. However, paragraphs 1-2-4-5 are to be attributed to Carmela Mariano; paragraph 3.1 is to be attributed to Ignacio Grávalos Lacambra and Patrizia Di Monte; paragraphs 3.2 and 6 are to be attributed to all three authors.

Conflicts of Interest: The authors declare no conflict of interest.

References

1. Secchi, B. *Prima lezione di urbanistica*; Laterza, Roma-Bari, 2000.
2. Manzini, E. *Abitare la prossimità. Ideas for the 15-minute city*, Egea editore, 2021.
3. Conti, P., Green, S. *Turning the page. Six museums challenge global crises*, Baldini+Castoldi Ed., 2022.
4. Secchi, B. *La città dei ricchi e la città dei poveri*; Laterza, Roma-Bari, 2013.
5. Meadows D. et al. *The new limits of development. The health of the planet in the third millennium*. Mondadori, Milan, 2006.
6. Touraine, A. *Globalisation and the End of the Social*; Il Saggiatore, 2015.
7. Saraceno C. *Welfare. Tra vecchie e nuove disuguaglianze*; Il Mulino, Bologna, 2021.
8. UN World Social Report. *Inequality in a rapidly changing World*. Department of Economic and Social Affairs, ST/ESA/372 United Nations publication. Sales No.E.20.IV.1, 2020.
9. Borja, J., Castells, M. *The Global City. Development and contradictions of metropolises in the third millennium*: De Agostini editore, 2002.
10. Mela, A. *La città con-divisa. Lo spazio pubblico a Torino*, FrancoAngeli ed. 2014.
11. Arendt, H. *The Human Condition*, University of Chicago Press, 1958.
12. Habermas, J. *The philosophical discourse of modernity*. Laterza ed., 1997.
13. Bauman, Z. *Liquid life*; Laterza publisher, 2006.
14. Battaglini, E., Palazzo A.L. Urban regeneration as socio-territorial infrastructure. *ECONOMY AND REGIONAL SOCIETY*, XXXIX (3), 2021, Doi: 10.3280/ES2021-003001.
15. Galdini, R. Urban regeneration. Ideas, practices and policies for a shared city. Experiences of socio-spatial innovation: tactics and strategies for urban regeneration. *Urban and Rural Sociology* no. 128, 2022: 7-13 doi: 10.3280/SUR2022-128001.
16. McLaren, D., Agyeman, J. *Sharing cities: A case for truly smart and sustainable cities*. Cambridge: MIT Press, 2015.
17. Maslow, A. H. *Toward a Psychology of Being*. New York: D. Van Nostrand Company, 1968.
18. Carmona, M. *Public Places-Urban Spaces: The Dimension of Urban Design*. Oxford, UK: *Architectural Press* 2003, 1st edition.
19. Carmona, M. *Public Places-Urban Spaces: The Dimension of Urban Design*; Routledge Taylor and Francis Group, 2021.
20. Boschma R. Proximité et innovation. *Economie Rurale* 2004, 280(1), 8-24. DOI: <https://doi.org/10.3406/ecoru.2004.5469>, www.persee.fr/doc/ecoru_0013-0559_2004_num_280_1_5469
21. Moreno C. *Droit de cité, de la ville-monde à la ville du quart d'heure*; Éditions de l'Observatoire, 2020.
22. Jacobs, J. *Muerte y vida de las grandes ciudades*. Madrid: Capitán Swing. 2011 (original ed. 19961).
23. Lofland, L. H. *The Public Realm: Exploring the City's Quintessential Social Territory*. Transaction Pub., 1998.
24. Montgomery, J. Making a City: Urbanity, Vitality and Urban Design. *Journal of Urban Design*, 1998, 3, 93-116. <http://dx.doi.org/10.1080/13574809808724418>
25. Gehl J. *Cities for people*. Washington, Island Press, 2010.
26. Gehl J. *Life Between Buildings: Using Public Space*. Arkitektens Forlag, 1996.
27. Sennett, R. *Construir y habitar. Ética para la ciudad*; Barcelona: Anagrama, 2019.
28. Gasparini, C. A selective urbanism for resilient cities, in *Urbanism Dossier* no. 4 *The governance of the city in the contemporary world. The city as an engine of development*, 2013.
29. Mariano, C. *Progettare e gestire lo spazio pubblico*, Rome: Aracne, 2012.
30. Prigogine I. *The End of Certainties: Time, Chaos and the Laws of Nature*; Boringhieri, Turin, 1997.
31. Ascher, F. The challenges of European cities at the beginning of the 21st century. In Marcelloni M. (cured by), *Questioni della città contemporanea*, FrancoAngeli. 2005.
32. Charbonneau J. P. *Faire beaucoup avec peu, vite et bien, Tous urbains* 2013, no. 1/13.
33. Charbonneau, J.P. *Aménagement d'anticipation*, 2007. Available online: jpcharbonneau-urbaniste.com (accessed on 5 March 2022).
34. Iacomoni A., Mariano C. *The regeneration of Public Space in INACASA neighbourhoods*. *Territory*, no. 89, 2019.

35. Cacciari, M. *La città*; Pazzini editore, 2009.
36. Gabellini, P. Understanding the character of the crisis, acting gradually and selectively, accepting partiality, in Fregolent, L., Savino, M. (cured by) *Città e politiche in tempo di crisi*, FrancoAngeli, Milan, 2013.
37. Bonfantini B., (2018). Four words for a thematic horizon. *Territory*, 85: 189-192. doi: 10.3280/TR2018-085028.
38. Galuzzi, P., Vitillo, P. Resilient frames and building blocks for urban welfare in the contemporary city. *Urbanistica Dossier* no. 22, 2022, pp.134-140.
39. Grenade, E. *Placemaker. The inventors of the places we will inhabit*. Einaudi publisher, 2021.
40. *New European Bauhaus*, 2021. Available online: https://new-european-bauhaus.europa.eu/index_en (accessed on 25 october 2022).
41. Amin, A. The Good city. In *Urban Studies*, 5/6. 2009, 1009-1023.
42. Soja, E. *Seeking spatial justice*; University of Minnesota Press, Minneapolis, London, 2010.
43. Harvey, D. *Capitalism versus the right to the city*, Ombre corte, Verona, 2012.
44. Moulaert, F. & Sekia, F. Territorial Innovation Models: A Critical Survey. *Regional Studies*, 2003, 37:3, 289-302, DOI: 10.1080/0034340032000065442
45. Phills, J.A., Deiglmeier, K. and Miller, D.T. Rediscovering Social Innovation. *Stanford Social Innovation Review*, 2008, 6, 34.
46. Di Monte, P., Grávalos, I., 10 ideas sobre el programa estoneoesunsolar. In *en Manito, Félix* (ed). *Ciudades Creativas. Economía creativa, desarrollo urbano y políticas públicas*. Barcelona: Kreanta, 2011.
47. Grávalos, I., Di Monte, P. Estoneoesunsolar: el reuso como clave para una regeneración urbana sostenible. In *Actas 4º Congreso Europeo sobre eficiencia energética y sostenibilidad en arquitectura y urbanismo*: 2013, 113-122.
48. Grávalos, I., Di Monte, P. La reprogramación de la ciudad. *Ciudad y Territorio* nº179, 2014, 127-138.
49. Di Monte, P. *Temporary Use Toolkit*. Horizon 2020 gE.CO Living Lab project, 2021. Available online: <https://generative-com-mons.eu/the-temporary-use-toolkit%e2%80%8b/> (accessed on 13 June 2022).
50. UN-Habitat. *Public Space Site-Specific Assessment: Guidelines to Achieve Quality Public Spaces at Neighbourhood Level*, Nairobi 2020.
51. Bishop, P., Williams, L. (2012), *The Temporary City*. London, New York: Routledge.
52. Cacciari, M. *La ciudad*; Barcelona, 2010.
53. Lefebvre, H. *Il diritto alla città*, Marsilio, Venice, 1970.
54. De Certeau, M. *La invención de lo cotidiano*. México: Universidad Iberoamericana, 2007.
55. Hiernaux, D. Geografía de los tiempos y de los espacios efímeros y fugaces. In *Las otras geografías*, J. Nogué y J. Romero (ed). Valencia: Tirant-lo-Blanc, 2006.
56. Delgado, M. *El animal público*. Barcelona: Anagrama, 2006.
57. Lerner, J. *Urban acupuncture*. Barcelona: IAAC, 2005.
58. Casanova, H.; Hernández, J. *Public Space Acupuncture*. New York: Actar, 2014.
59. Metropolitan City of Rome, *Carta del Censo 1839*. Available online: <https://geoportale.cittametropolitanaroma.it/cartografia-storica/20/40/roma-nel-1839> (accessed on 3 March 2021).
60. Città metropolitana di Roma Capitale, *Aero-photogrammetric map of the Municipality of Rome Nistri 1960*. Available online: <https://geoportale.cittametropolitanaroma.it/cartografia-storica/19/47/carta-aerofotogrammetrica-0> (accessed on 3 March 2021).
61. Piccioni, L. *San Lorenzo, un quartiere romano durante il fascismo*; Edizioni di storia e letteratura, Roma, 1984.
62. De Simone, C. *Venti angeli sopra Roma*. Ugo Mursia Ed., Rome, 1993.
63. Pazzaglini, M. *Il quartiere San Lorenzo a Roma*; Gestedit editrice, Rome, 1994.
64. Municipality of Rome Capital, *General Regulatory Plan 2008*. Available online <http://www.urbanistica.comune.roma.it/prg-2008-vigente.html> (accessed on 5 March 2022).
65. Municipality of Rome. *Urban Project "San Lorenzo"*, PRG Rome 2008. Available online: <http://www.urbanistica.comune.roma.it/partec-pu-san-lorenzo.html> (accessed on 10 February 2021).

66. Geographical Information System of Roma Capitale. Available online: <https://www.comune.roma.it/web/it/sistema-informativo-territoriale-nic.page> (accessed on 10 February 2021).
67. Municipality of Rome Capital, *Dataset Romamobilita.it*. Available online: <https://romamobilita.it/it/tecnologie/dataset-geografici> (accessed on 20 February 2021).
68. GIS Cartographic Portal of the *Metropolitan City of Rome Capital*. Available online: <https://www.cittametropolitanaroma.it/homepage/servizi-on-line/portale-cartografico-gis/> (accessed on 18 February 2021).