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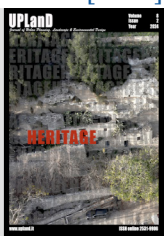
Journal of Urban Planning, Landscape & Environmental Design



Research & experimentation
Ricerca e sperimentazione

GENERATE COMMUNITIES: THE VOICE OF THE INHABITANTS OF THE FUORIGROTTA NEIGHBOURHOOD IN NAPLES

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HIGHLIGHTS

- Environmental psychology, in its constant search for the relationship between human and the environment, resizes the distance between designers and users by intervening in the methods of conceptualising and implementing the design process.
- Models for assessing environmental pleasantness represent a useful tool to support designers as they can provide factors and variables that influence the users' perception.
- Participatory design fosters the development of a sense of belonging among residents, motivating them to protect and maintain shared spaces.
- A gradual development intervention strategy begins with listening to the needs and concerns of the local community. The distribution of questionnaires and data analysis help establish the guiding principles for the regeneration of the neighbourhood's public spaces.

ABSTRACT

To counter the dangerous trend of neglect and abandonment of places, synonymous with territorial decay and fragmentation, landscape policies must aim to enhance the active role of local communities in the management and decision-making processes concerning those territories, with particular attention to younger generations. The analysis of perception, and consequently the image of urban spaces as an aggregate of all stimuli, is a fundamental step in understanding the relationship between the built environment and the people who inhabit or use it. This allows for a deeper exploration of community needs, moving beyond a purely analytical assessment to consider temporal, spatial, and behavioural dimensions. A perceptual analysis enabled a comprehensive understanding of the issues affecting the Fuorigrotta neighbourhood in Naples, identifying potentially transformable spaces and formulating intervention strategies and guidelines to be applied in an initial phase of spatial transformation. The described approach, capable of generating public spaces of aggregation and sociality where communities can feel fully involved and completely represented, fosters respect for places and promotes their ongoing care and maintenance.

ARTICLE HISTORY

Received: April 29, 2024
Reviewed: December 15, 2024
Accepted: December 20, 2024
On line: December 26, 2024

KEYWORDS

Human-environment relationship
Perceptual survey
Third places
Participation
Temporal phases

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1. The circular human-environment relationship and the perceptual dimension of urban space

In a human-oriented approach, urban transformation processes cannot be discussed without considering social needs, community participation, and the collective use of spaces. The city should not be regarded as a standalone object but rather through the ways in which its inhabitants — individuals with diverse characters and social background — experience and interact with it, continuously shaping its structure. The environment and architecture inevitably influence our identity, thoughts, and emotions. Similarly, humans are the beings most capable of modifying the environment to suit their purposes through territorial changes and architectural choices. Perceptions, experiences, emotions, and sensations felt while inhabiting the same place are never identical for everyone. The differences in adaptation within the same context among individuals and social groups are so evident that they justify numerous studies conducted by the psychological-social science branch known as *environmental psychology*. One of the main goals of this sector is to reduce the excessive distance created between designers and users (Baroni, 2008), primarily by changing the methods of conception and implementation of the design process. To achieve this, specific tools and analytical methods are employed, serving as valuable support for designers.

Perception is the way people interpret and understand urban spaces through their senses, experiences, and personal perspectives. It extends beyond the mere visual observation of physical elements to include emotional, cognitive, and sensory comprehension of urban environments. The perception of an environment involves simultaneously different sensory channels, as well as signals concerning position, balance, temperature, comfort, and discomfort. The first aesthetic evaluation of an urban space is certainly based on a visual impression: with a simple glance we can see elements of degradation, which generate a feeling of insecurity and discomfort, or evaluate an attractive and pleasant place. We are struck by perceptual gradients, spatial modulation, and the irregularity of facades, deriving a sense of pleasure from walking and exploring the urban space. We decode architectural signs, recognise margins and nodes, and assess small furniture elements within the urban scene, such as those featured in Gordon Cullen's urban landscape drawings, which restore a human scale to the space (Clemente, 2017). Environmental information is always dynamic, characterised by a continuous flow of data, changing distances, shifting perspectives, focus of attention, and various motivations and emotions (Baroni, 2008). According to Gibson's *Ecological Theory* of perception, experience plays no role in the perceptual process, as most perceptual responses are innate. However, German psychologist Neisser introduced the concept of schema into environmental psychology, viewing it as a mental construct that mediates perception. In this framework, external environmental information is filtered and selected through pre-existing mental schemas, which evolve because of new experiences, enrich over time, and dynamically influence how external spaces are perceived. Therefore, the perception can vary depending on social components such as age, gender, and culture of the subject, as well as specific situational factors linked to an individual's psychological and physiological state.

Reading a space and decoding its physical or purely virtual boundaries involves constructing a cognitive map where these elements are transcribed. The mental representation of space is essential for orientation, distance assessment, route planning, and the perception of safety, as it simplifies otherwise unreadable complexity that could cause both physical and psychological disorientation. In short, it helps interpret the complexity of environmental information, enabling specific spatial behaviours of the individual and his environmental usage. Mental maps consist mainly of paths, margins, landmarks, and nodes — the same elements codified by Lynch in 1960. These maps result from a mutual process between the observer and the observed, representing a simplified version of the surrounding environment. They are subject to constant distortions and omissions, as the human mind tends to regularise and simplify spatial organisation. We tend to overestimate familiar areas, assign a central position to known environments like our homes, and use well-known parts of the territory as anchors for less familiar ones. The quality of an urban space is based on the clarity of the environmental images that individuals have of different places (Lynch, 1960).

2. Contributions of environmental psychology to design: measurement models for assessing environmental pleasantness

The psychological approach to design plays a crucial role in understanding how users will respond to a project once it is completed. Through various processes, elaborations and expedients, sensations can be translated into sequences of information, mapped out, and integrated with quantitative data traditionally used in planning. This enriches the understanding of a given area, enabling a more comprehensive and detailed assessment of the analysed environment. Environmental psychology has a long-standing tradition of interpretative models exploring how specific places influence people's perceptions, emotions, intentions, and behaviours. The *Environmental Preference Scheme* developed by Steven Kaplan and Rachel Kaplan (1989) serves as a valuable tool for designers in predicting a location's perceived pleasantness. For the subject — an individual with his or her personal characteristics, past experiences, and current goals — to evaluate an environment positively, the four conditions of coherence, readability, complexity, and mystery must be met to an optimal degree (Berlyne, 1971). Coherence refers to the degree of agreement and repetition, in perceptual or functional terms, that distinguishes the various aspects of the environment. Legibility indicates how easily a landscape's functions can be understood and categorised, facilitating orientation. On the other hand, the complexity of an environment is defined by the number and variability of the elements that compose it. It is related to the lower predictability and richer perceptual stimuli of the place; it must satisfy the individual's need for exploration, without compromising legibility of the place itself. Finally, mystery indicates the amount of hidden information that a scene may contain, offering the promise of further discoveries upon exploration.

A model more similar to the considerations on knowledge of environments, Purcell's *Discrepancy Model* (Baroni, 2008), incorporates individuals' past experiences in the evaluation of environments, stored as environmental schemas. These mental frameworks, developed over time, allow to activate appropriate behaviour models, to maximize the use of cognitive resources and to inform individuals about the qualities of an environment and possible actions. According to Purcell, the perception of a new stimulus activates an existing environmental scheme, and the evaluation of pleasantness depends on how much the environment deviates from the individual's prototypical image. There is an optimal level of discrepancy sufficient to stimulate the subject's attention and interest, without compromising the activated schema or blocking the process of knowledge. Similarly, Whitfield's *Environmental Preference Model* establishes a linear relationship between the evaluation of prototypicality and the preference for a stimulus. According to Whitfield, in fact, the closer a stimulus is to a familiar prototype, the more likely it is to be perceived positively. Another central area of interest for environmental psychology is the investigation of the affective qualities of places and their evaluations. In the literature on the subject, the contribution of the Canadian group led by J. Russell is recognized, which examined the evaluations of different environments in the city of Vancouver, organizing the affective states evoked and described by adjectives, in a *Circular Model* (*"Circumflex"*) (Russell & Pratt, 1980). The model suggests that affective states arise from two neurophysiological systems: one associated with displeasure and the other with the activation of alertness and arousal. Each emotion is considered a linear combination of these two dimensions. In the Italian version (Perugini et al., 2002), which closely mirrors the original English version, the psychometric instrument consists of two main orthogonal axes (relaxing/stressful and exciting/depressing) and two other intermediate axes. Forty-eight qualifying adjectives related to environmental attributes are distributed evenly across the eight dimensions, with six synonyms assigned to each, facilitating the description of the affective response elicited by a particular environment. A significant physical and objective variable influencing the affective evaluation of a place is whether it constitutes a natural or built environment. Extensive research confirms that natural environments, characterized by the presence of vegetation and, where possible, water are universally preferred over urban or constructed ones (Baroni, 2008). Even within urban areas, tree-lined streets surrounded by vegetation receive higher affective evaluations from subjects. The presence of vegetation not only mitigates the adverse effects caused by anthropic transformations but also fosters a pleasant sense of well-being, positively affecting

mood, psychological health, mental fatigue, and temperament, with a secondary repercussion, not insignificant, on the greater propensity for social relationships and physical exercise.

The quality of urban space, defined as the set of factors and characteristics that enhance the perceptual satisfaction of a given place (Franceschini, 2003), cannot be assessed in an objective and unequivocal manner (Dessi & Astolfi, 2020), but has a subjective component, as it is generated from the inhabitants' perception of the city. The indices have historically led to a solely quantitative focus on urban development (Mascarucci, 2005), while standards have resulted in service provisions in cities that are insufficient in both quality and quantity (Colombo, 2002). A comprehensive study of residential satisfaction must include both subjective perceptions and objective parameters, to improve the quality of life in the evaluated residential area (Bonaiuto et al., 2012). It is widely recognized that improving the liveability of the built environment largely depends on the strategic role of public space, a connective system traversing the entire urban fabric, which facilitates and supports flows and activities of people, services, and information. The quality of public space is obtained through work on various small-scale variables (Bonaiuto et al., 2006), issues strongly connected with the visual perception of the urban environment, minute, and widespread interventions, which reshape the use of those places without damaging their identity. This approach shifts attention from isolated urban episodes to the relationships between them and embraces the multidisciplinary nature of urban planning methodologies.

3. Participatory planning for the promotion of place attachment and shared sense of identity

Place attachment plays a significant role in the development of individual identity and security, manifesting in various forms (Gallino, 2007), each distinct and independent from the others. These include the strongest form, an emotional-family bond tied to symbolic places of identity development; an aesthetic attachment to landscapes that evoke a profound sense of beauty and admiration; a socio-emotional connection linked to the social context a place conveys; and a functional relationship with places offering specific uses. The psychological classification of territories, introduced by Altman and Vinsel in 1977, distinguishes them, based on the duration of occupation and psychological centrality, into primary, secondary, and public territories (Costa, 2016). The public territories, which warrant particular attention, are areas where individuals hold no personal ownership or possession; they belong to the community, granting everyone equal usage rights. Due to the absence of a psychological bond of belonging and possession, individuals behave very differently in a public territory. Here there is a lack of sense of direct responsibility, an aspect that leads people to neglect places, not defend them and, if not regulated, over-exploit them. Initiating processes that generate a strong sense of belonging and responsibility towards public spaces is essential for ensuring their appropriate use, respect, and maintenance. Feeling connected to a space, creating a solid personal bond similar to that felt toward one's home, includes the possibility of personalising it. Hence, involving citizens — those who will ultimately inhabit and use the space — during various stages of design, execution, and management of an intervention becomes essential for the long-term success of a public space project. Such participation should focus on ideas, proposals, and collective initiatives concerning decisions about neighbourhood transformations, governance, and maintenance, in order to increase the sense of belonging and motivate the inhabitants to protect and preserve spaces imbued with personal significance. Citizens excluded from defining goals, programmes, project development, and implementation often become indifferent to the management of their urban environment, unable to influence transformation processes effectively.

Today, however, we must hope for the birth of a new awareness of common spaces, public-use facilities, residential complexes, and historical, environmental, and cultural heritage — a new consciousness that no longer distinguishes between personal and collective assets and encouraging the reclamation of shared resources by all individuals. Robert Sommer defines Social Design as a method of working not for people but together with them, a way to engaging them in the organization of their living spaces and a system to educate people to use urban environments wisely to achieve a balance between social, physical, and

natural settings. Two key stages of the design process highlight the importance of the user's perspective: the programming phase, which involves initial analysis aimed at identifying project objectives, constraints, and guiding criteria, and the post-occupancy evaluation, the final phase, which examines the efficiency of built environments from the standpoint of the users who inhabit and utilise them. To understand users, psychological-social research employs a variety of methods, each with its specific advantages and limitations. Subjective or 'naive' evaluation methods involve collecting perceptual and evaluative data from observers or users concerning environmental quality and other contextual features. These methods include non-intrusive observation of subjects' behaviour in the environment, the use of self-reports tools such as questionnaires, interviews, and rating scales to obtain information about the environmental perception, methods based on archival research, and analysis of environmental traces or cues indirectly provided by users (Bonaiuto et al., 2012).

4. Exploring the Fuorigrotta neighbourhood: engagement and active listening

Fuorigrotta is a district in the western area of Naples, the most populous of the city, which, together with Bagnoli, forms the X Municipality of Naples. The analysis conducted on the neighbourhood addresses various aspects, including accessibility, transport connections, urban fabric morphology, and the type of local services available. Equal attention was given to open spaces, their incidence and typology, and the area's heritage constraints. Through an investigation of recent local news and a review of activities promoted by social associations and community groups, several critical issues were identified. However, these challenges also hold significant potential for urban and social regeneration. One prominent aspect is the central and strategic location of the district, featuring numerous railway stations that enable convenient access to key city landmarks, especially when using public transport. Fuorigrotta is the centre of Neapolitan sporting events and trade fairs, the main venue for concerts and conferences and numerous university and scientific institutes (Figure 1). This role has a profound impact on

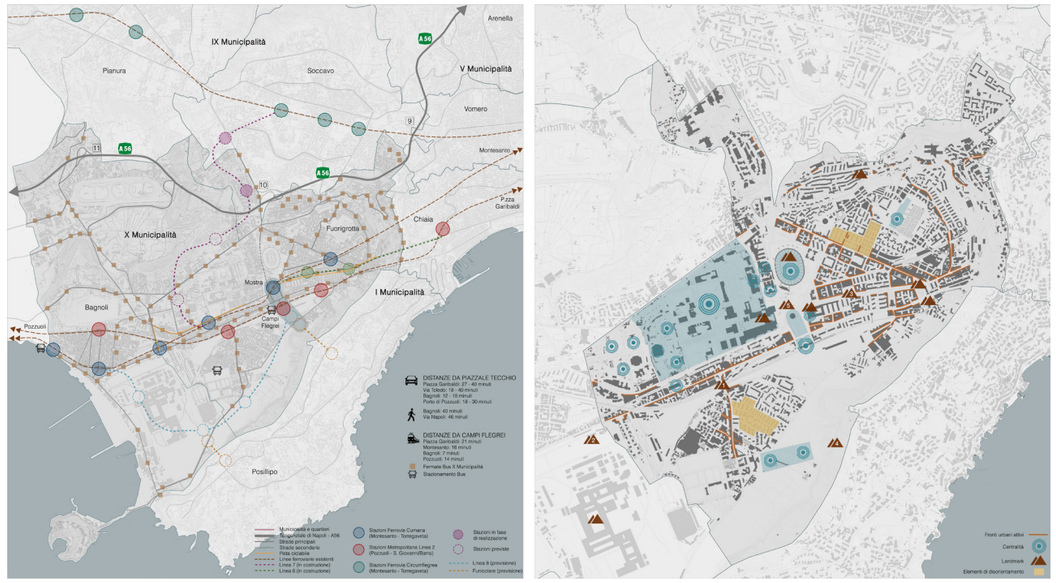


Figure 1: The Fuorigrotta district: viability, connections, and centrality. *Source: author's elaboration.*

residents, who often feel torn between criticising the chaos and traffic congestion, which frequently occurs during the events hosted, and appreciating the vibrant atmosphere of a neighbourhood frequently in celebration. From the comparison of the data with the ideal benchmarks of green per capita and from the classification of public spaces in the neighbourhood, another important issue emerges concerning the lack of meeting places and of green ones (Figure 2). After analysing the main criticalities of the neighbourhood, it is necessary to recognize the latent potential of urban voids, work on interstitial spaces, on everything that is left over from the built. Despite considerable challenges related to long-term management and maintenance costs, public space remains more adaptable and responsive than buildings to citizens' evolving needs. It can react to societal changes and periods of crisis through new uses driven by *bottom-up* initiatives. Among these spaces, *Piazzale Tecchio* and the old local market area stand out as particularly problematic yet highly promising. These neglected areas could be transformed into new social hubs through collaboration among key stakeholders and active engagement with the neighbourhood's residents.

The perceptual survey of the places was conducted through the administration of questionnaires designed for different purposes and respondent types, following an in-depth demographic analysis of the Fuorigrotta neighbourhood. It was considered appropriate to create three categories of modules tailored to the district's predominant age groups, aiming to collect and organise diverse data. The first questionnaire, *"Neighbourhood spaces"*, targeted young residents aged between fifteen and sixteen, a generation actively engaging with urban spaces during their leisure time. This survey explored their favourite and most frequented places, the dominant characteristics of these spaces, the reasons behind their choices, the least desirable places to visit, preferred times of day, and the specific features of these locations. Additionally, space is given to their ideas and respondents were encouraged to share proposals for redeveloping existing degraded areas. The second questionnaire, *"Journey through memory and prospects"*, was designed for residents over forty years of age. Its objective was to evoke memories of a typical day in the neighbourhood's past and identify former communal spaces. This approach helped trace the district's transformations, highlighting both positive and negative changes over time. The final questionnaire, *"Perceived quality"*, was distributed to a broader range of residents to involve a wider audience in the perceptual analysis. This survey aimed to investigate and stimulate reflections on the quality of life in the neighbourhood while gathering suggestions for its improvement. Upon reviewing and processing the collected responses, the perceptions of the local community were represented through a series of thematic maps. These visual representations depicted the most significant places in the neighbourhood, contrasting the perspectives of residents with those living in adjacent districts to analyse potential differences (Figure 3). The map of social gathering spaces highlights preferences for green areas or lively spots, such as areas near shops, bars, and fast-food outlets, particularly among young residents. The map of locations perceived as unsafe reveals the primary reasons behind these perceptions: widespread petty crime, frequent reports of assaults and robberies, the isolation of certain areas, and excessive speeding on some of the neighbourhood's streets. The perceptual analysis continues with the investigation into residents' favourite and least-liked places (Figure 4). This assessment focused on the emotional qualities attributed to these spaces and the corresponding evaluations, to deepen the choices made and understand what are the qualities of the environments that determine a preference and a positive or negative evaluation, especially among young people. Therefore, respondents were asked to assign an adjective, selected from a predefined list, that best described their chosen location, as well as the term least reflective of the place's character. This evaluative method draws upon J. Russell's *Circumplex Model*, previously explored, offering a valuable tool for support designers in the development of design alternatives aimed at re-evaluating and overturning the negative connotation of some places by its residents. The findings indicate that teenagers prefer spaces described as pleasant, stimulating, exciting, and bustling attributes located in the upper semicircle of the *Circumplex Model*. Conversely, oppressive, monotonous, and dull environments are considered undesirable and are avoided. While today's youth are attracted to dynamic, entertaining, and lively places, many adults view Fuorigrotta as overly chaotic, particularly during large events. They often recall the neighbourhood as quieter in the past, expressing nostalgia for cleaner streets, better-maintained green areas, and safer public spaces. Regarding the district's least-favoured areas, many of the places listed are the same ones that were perceived as most dangerous by residents. This correlation suggests that safety and its inhabitants' perception is the fundamental quality of an urban space, which determines its attractiveness, vitality, and overall pleasantness. All adjectives associated with the worst places in the neighbourhood are located in the lower semi-circumference

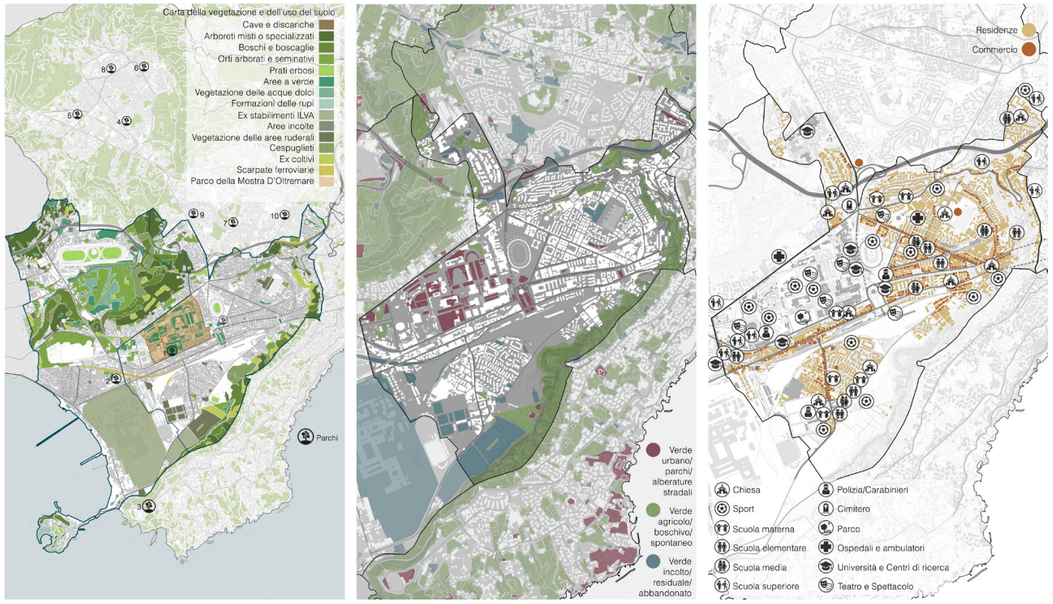


Figure 2: Analysis of green areas and neighbourhood services. *Source: author's elaboration.*

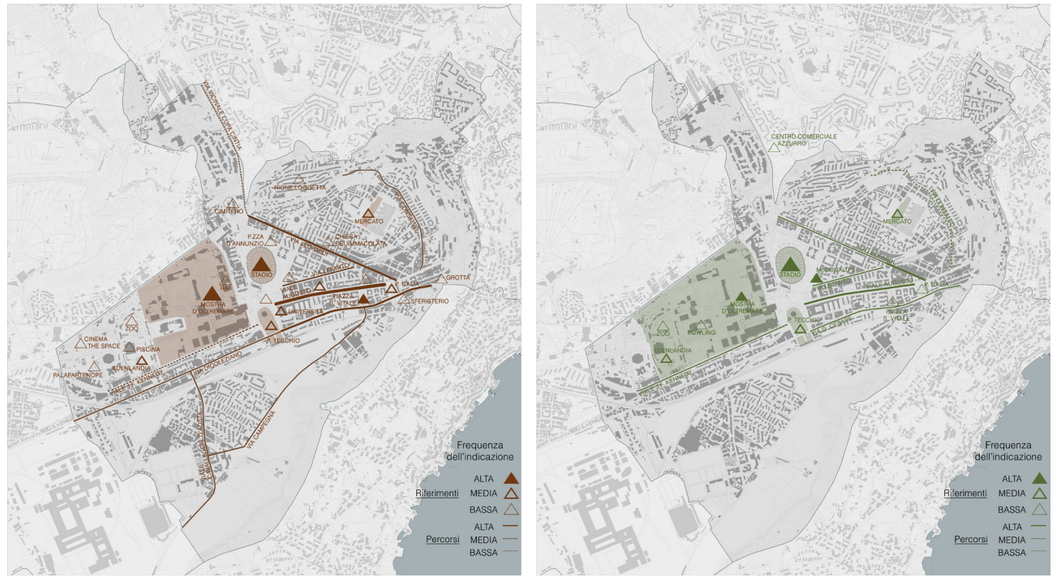
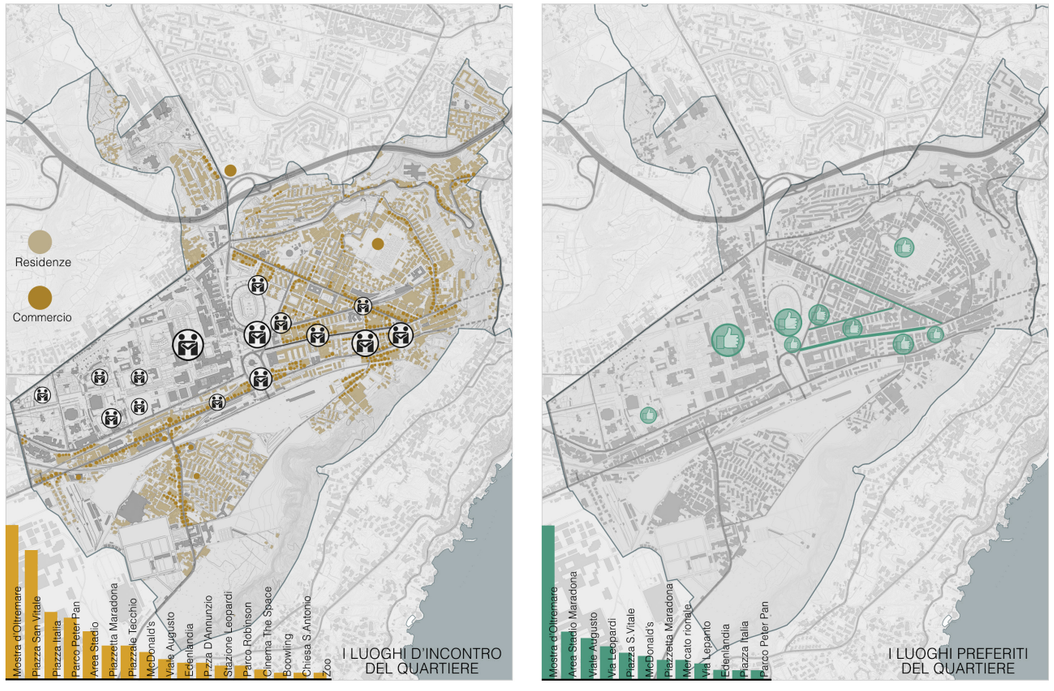


Figure 3: The images of neighbourhood. *Source: author's elaboration.*



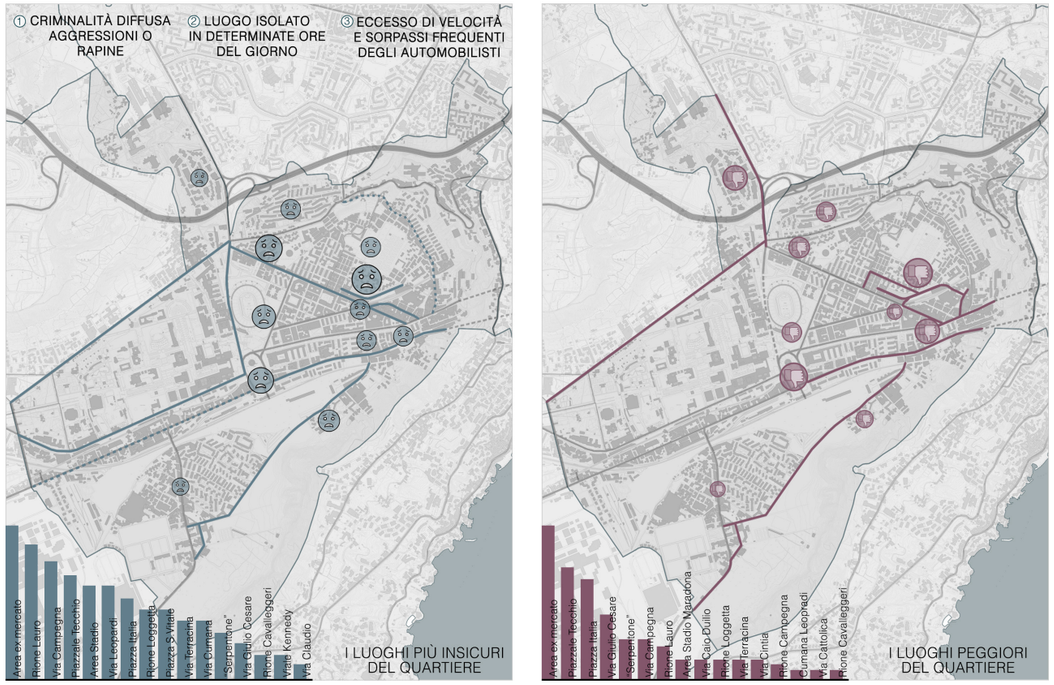


Figure 4: The psychological survey of the neighbourhood's places and the corresponding maps. *Source: author's elaboration.*

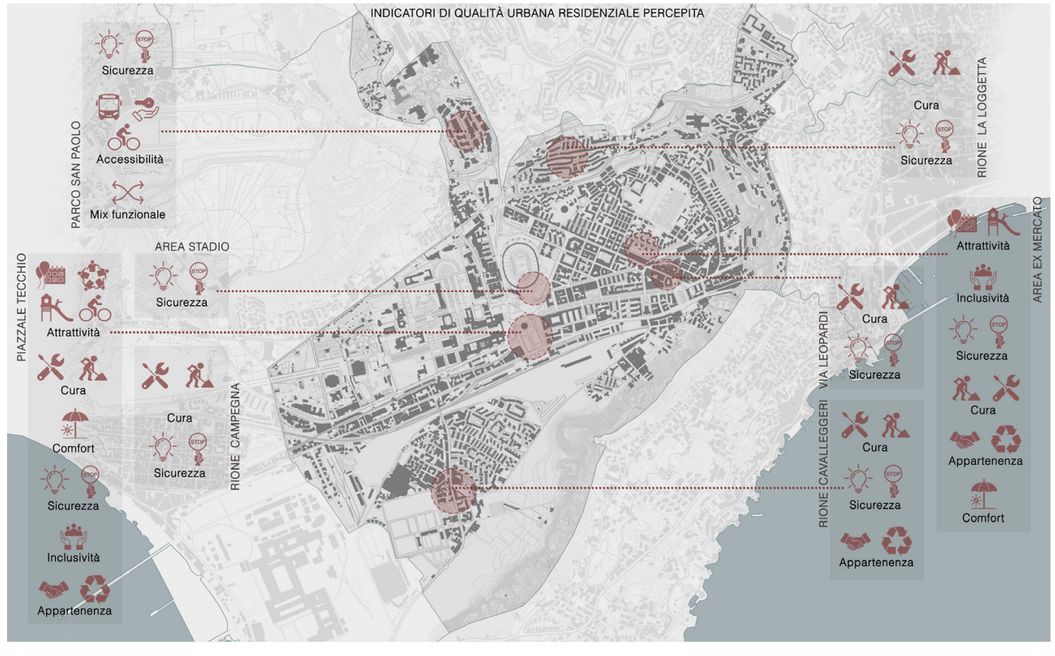


Figure 5: Map of local community needs. *Source: author's elaboration.*

of the schema, between the primary dimensions of depressing-stressful and the intermediate attribute unpleasant, resulting from the combination of these negative qualities.

The main problem of the neighbourhood that emerged during the discussion with the residents, documented alongside other issues in the needs map (Figure 5), concerns the lack of social and meeting spaces designed for all age groups, from the youngest to the oldest. Another significant issue is the inadequate maintenance of existing public spaces and green areas. Equally critical is addressing the low perception of safety experienced when traversing certain areas of the neighbourhood, particularly during evening and night-time hours.

5. Regeneration strategies for promoting social interaction and urban safety

The sociologist Zygmunt Bauman emphasizes the great capacity of public space to stimulate sociality and to be the privileged place for social life (Mela, 2014). In contemporary cities, public space manifests in highly diverse and complex forms that defy traditional classification. The classic types of squares, parks or streets are no longer sufficient to describe the intricate network of interconnected spaces that flow seamlessly into one another. Mobility, temporality, and flexibility — hallmarks of modern society — are mirrored in public spaces that increasingly struggle to meet the real and immediate needs of communities. Thus, adopting more inclusive and participatory approaches becomes essential to create public spaces that genuinely respond to modern communities' aspirations and necessities. Currently, compared to the traditional square, open-air markets, museum and library courtyards, spaces set up for temporary events, café terraces, and flash mob locations have greater potential for fostering social interaction. "*Third places*" such as cafés, restaurants, street food venues, gyms, and wellness centres, are transformed into new meeting places (Oldenburg, 1999). Social interaction now appears to inhabit traditional neighbourhood spaces only marginally and the consumption often dictates the rules of togetherness (Deriu, 2015). The presence of social spaces is crucial for citizens' well-being and quality of life. These places provide opportunities for

meeting people, sharing experiences, participating in cultural and recreational activities, and fostering a cohesive community. One potential strategy to enhance social interaction is to leverage the possibility that art — in its tangible and intangible dimension — has to bring people together, to encourage the rethinking of spaces as a place of informal and voluntary meeting, to generate aggregation and relationship. Whyte asserts that the key element capable of making a public space attractive is the concept of "*triangulation*", which refers to the presence of external stimuli — such as objects, sculptures, or street performers — which encourage people to interact and socialize with each other. Art changes and evolves towards a participatory and emotional use, moving beyond galleries into public squares, gardens, abandoned factories, urban public environments, to intervene in the debate on the city, collaborating closely with designers and urban planners. Art thus becomes not just an object but the result of a process involving multiple stakeholders addressing city issues. This includes street events, public art installations, urban walks, guided neighbourhood tours, photography workshops, and micro-interventions by residents. While not the sole strategy for fostering change and reclaiming urban spaces, art serves as a valuable tool supporting a broader, multi-faceted action plan.

Another issue that emerged during the psychological survey relates to the poor perception of urban safety in certain areas of the neighbourhood and at specific times of the day. When people perceive a threat, they tend to alter their daily routines and how they use urban space. In the literature, several key principles emerge as positive strategies for preventing crime and disorder. These include the concept of territoriality, which relates to the sense of belonging to a place; natural surveillance, the so-called "*eyes on the city*" (Jacobs, 1969), a mechanism of spontaneous control by the inhabitants over their neighbourhood obtained through the appropriate configuration of streets and buildings, and the presence of different types of users —pedestrians, cyclists and motorists — on the same level; access control, which should be appropriate and clearly visible; the careful selection of vegetation, ensuring good level of permeability and not interrupting the sightlines; the continuous use of spaces, also known as territorial vitality, guaranteed through a functional and socio-economic mix; the maintenance and constant care of places and street furniture. The "*Broken windows theory*" elaborated by Wilson and Kelling, suggests that urban decay transmits a signal of disinterest, that increases the citizens' sense of insecurity and, at the same time, can be interpreted positively by potential vandals, who may feel legitimised to engage in further illicit or criminal acts.

5.1 Events, interventions, and time phases for the case study

For the regeneration of the spaces of the Fuorigrotta district, a project strategy has been proposed based on light, flexible interventions that are quick, immediately applicable, cost-effective, and sustainable. Additionally, the effectiveness of implementing a gradual development process for interventions has been recognised. This process, born from listening to the needs and problems of the local community, is divided into three phases that unfold over time and that can be expanded according to the circumstances and intermediate or partial results. The activation of the space begins with the organization of temporary events involving the potential actors for future changes. These events, such as parties, demonstrations, neighbourhood walks, and flea markets, organised by associations, committees, or by the citizens themselves, aim to strengthen the sense of community and social cohesion, stimulating new relationships and authentic dialogues. In this way, the groundwork is laid for subsequent physical interventions, fostering greater trust and participation from residents in the later modifications of the spaces. Subsequently, small interventions can be implemented, including temporary actions that are easily achievable and affordable, aimed at improving spaces that require revitalisation. To address one of the primary needs of the inhabitants — to strengthen the sense of security — it is deemed appropriate to first ensure adequate lighting of spaces, achieved not only with the simple and usual public streetlamps, but also through light installations, urban furniture, or children's equipment and play areas that create lighting effects, or even the use of photoluminescent concrete as a material for paving certain areas or for the new sections of the planned bicycle lanes. Another intervention aimed at ensuring an improved perception of safety and the complete restoration of the right to access spaces involves enhancing visibility within the area under consideration through the care of the greenery and the constant pruning of the trees. This allows the user's line of sight to remain unobstructed in all directions, making the space as a whole perceivable. The planned interventions to introduce new and diversified functions include, for example, the provision of multifunctional furniture that can serve as seating for relaxation, support for lying down to read a good book, or a table for playing cards with a friend, among many other uses. These elements, which may be more or less modular, can be arranged and customised to create the most appropriate composition to meet the temporary needs of one or more individuals. The possibility of changing, embellishing, moving the pieces of urban furniture — such as placing a seat opposite another for easier conversation, positioning it near a tree for shade, leaning it against a wall for back support, or setting it aside during events — enables personalisation of the space, fostering a strong sense of belonging and strengthening the bond between residents and their environment. In addition, inserting small gazebos, kiosks, multifunctional newsstands, and playgrounds for children can contribute to the introduction of new functions in existing public spaces, making places more lively, attractive, and inclusive, while diversifying the range of users frequenting them. The proposed extension of the existing cycling path aims to enhance its usability and functionality by bridging its current gaps and extending it to connect key points of the neighbourhood and areas identified as having limited accessibility during the analysis phase. The creation of a well-structured cycling network encourages the use of bicycles as a sustainable mode of transport, reducing motor vehicle usage and contributing to the reduction of air pollution and traffic congestion. A simple, flexible, and low-cost expedient designed to resize the

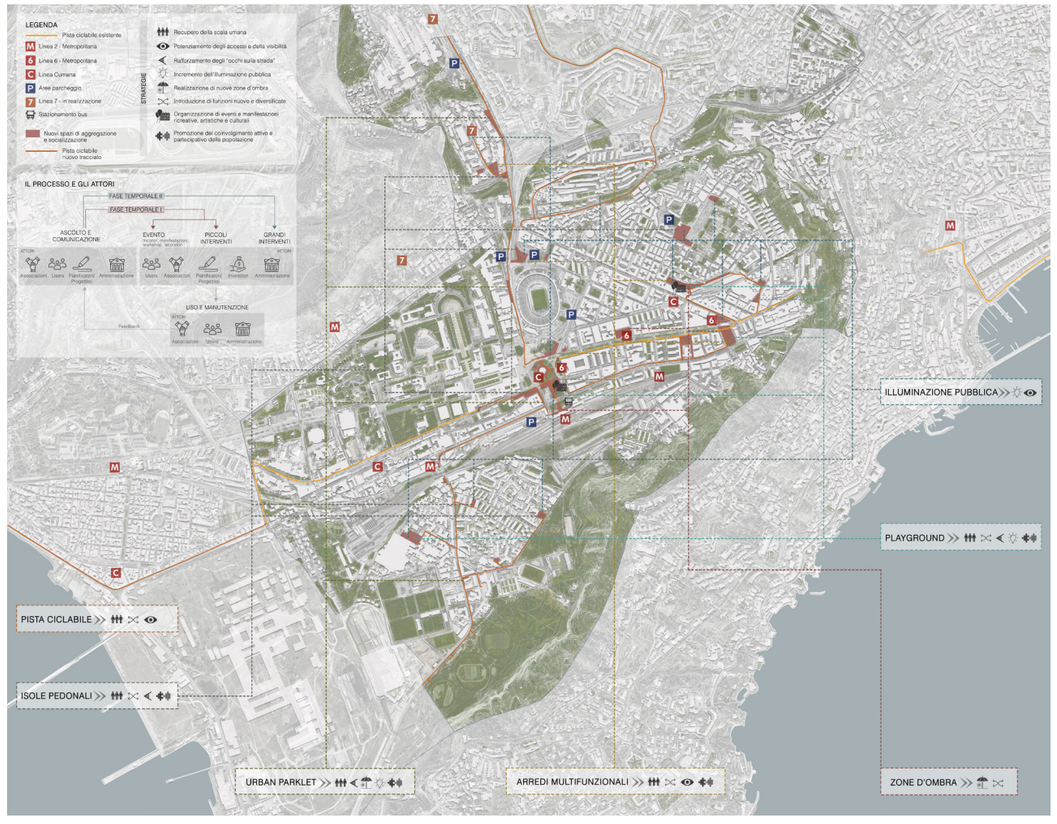


Figure 6: Intervention strategies for the neighbourhood. *Source: author's elaboration.*

roadway to create more human-scaled spaces, facilitating pedestrian crossings, and enhancing the attractiveness and vibrancy of pavements involves the implementation of *urban parklets.* These are areas equivalent to one or two parking spaces reclaimed from the roadway to expand the size of the sidewalk, making it a recreational and social space designed for pedestrians and rest — a practical approach to achieving urban regeneration at a low cost (Clemente, 2017). To further this goal, temporary pedestrian islands or small open squares could replace underutilised parking areas or vacant spaces, designated solely for pedestrian and cycling use. The use of materials such as gravel, coloured paint, wood, movable planters, and flexible seating allows for the creation of functional and aesthetically pleasing public spaces with relatively low investment. The proposed small-scale interventions have been designed and adapted to meet the different needs of citizens and are primarily located in two key areas of the neighbourhood: *Piazzale Tecchio* and the *Cerlone Oasis*, along with small areas in the Cavalleggeri d'Aosta district, the San Paolo Park, the new local market, the area behind the stadium, and along *Viale Augusto* (Figure 6). Once these small-scale interventions are implemented and feedback is gathered, further investments can be made collaboratively with the community and local authorities in larger-scale projects requiring more time, resources, and integrated space management. These initiatives should commence when community awareness and commitment to space maintenance become tangible. The regeneration process involves a continuous collection of ideas and feedback from the population, alongside phases of maintenance and revitalisation of public spaces, acknowledging that such areas are dynamic elements shaped by the community's everyday practices.

5.2 The perceptual analysis of places in support of a flexible and inclusive approach to urban regeneration

Activities, social relations, events and uses of public spaces contribute to defining the identity and vitality of the city. The movement and interactions of people become part of the urban choreography, shaping the surrounding environment in ways that often elude the control of designers. Sometimes the uses of space cannot be fully predicted during the design phase and can evolve over time. Therefore, street design should be approached flexibly, allowing room for different interpretations, unforeseen events, potential misunderstandings, and even unconventional uses. This approach involves refraining from designing spaces for a single specific purpose and instead creating environments that people can appropriate and repurpose in various ways, enabling greater freedom of expression and social participation. This perspective leans towards a more ephemeral dimension, aiming not at permanent and radical changes but at adapting temporarily to existing realities. Temporariness provides an opportunity to experiment with actions and obtain immediate feedback, useful for testing solutions reversibly before committing resources and time to definitive interventions. Tactics and strategies are adopted instead of final solutions. The initial imperfection of the project is seen as an opportunity to identify new stimuli and gauge collective interest. The interventions focus on fostering a sense of identity in anonymous or degraded environments, promoting the appropriation of space and collaboration among individuals to reduce existing mental and physical barriers. Often, the most significant outcome is the creation of a cohesive community.

Tactical urban planning interventions facilitate the exploration of various ways of utilising urban spaces and the implementation of strategies to improve the quality of life in neighbourhoods. This is achieved through the adoption of temporary, lightweight, rapid, and cost-effective solutions, including the use of "civic" financing tools such as crowdfunding. These interventions, by their very nature, yield immediate effects on citizens' well-being, enabling them to become promoters of innovative initiatives and active participants in the transformation of the city. Moreover, they have the potential to initiate lasting transformations — changes that not only impact the urban environment and social fabric but also introduce an innovative approach that contrasts with the more traditional and static methods of urban planning.

Considering temporary uses for currently degraded or inaccessible areas could represent an initial attempt to re-establish a dialogue and to return those spaces to the community. Indeed, this type of experimentation is becoming an increasingly institutionalised practice, not only across Europe but also in Italy. With Resolution No. 30 of 26 July 2022, the Municipality of Naples formalised, through a specific agreement, the temporary use of public spaces and publicly owned properties, pursuant to Article 23-quater of Presidential Decree 380/2001 and subsequent amendments. "*Regeneration is understood as a continuous, multi-scalar, multi-dimensional, and intersectoral process that enables the innovation of space and society by creating new social infrastructures and values, imagining an increasingly polycentric and multi-cultural city. By temporary uses, we mean the possibility of employing unused or underused spaces, even irrespective of their designated urban planning use. Temporary use can be implemented 'in the meantime' while a process is completed, between decommissioning and the introduction of a permanent use, or as a catalyst to initiate a regeneration process and harness the legacy it leaves behind*." (Municipality of Naples, 2022).

Another tool employed by the Municipality of Naples to promote participatory processes and experiment with temporary uses is the "Call to Action". A notable example is the "*Parco dei Quartieri Spagnoli - Community Hub*" which concluded on 19 February 2023. Groups, agencies, organisations, committees, individual citizens, and all those who value the park and recognise its redevelopment as an opportunity for the inhabitants of the historic centre's neighbourhoods and the entire city, were invited to participate. Each was encouraged to contribute their ideas, energy, and proposals, becoming protagonists in the participatory design process for transforming areas within the Complex of "*Santissima Trinità delle Monache*". Through community activation efforts, the park has progressively opened itself to the city, becoming a space that can be traversed, inhabited, and explored. The shared goal of the approach proposed in this work is to create a project community capable of suggesting uses and activities for space regeneration, as well as developing a management model and guidelines for the collective use of spaces.

The analysis of the perception and representation of urban spaces, understood as a synthesis of all stimuli, constitutes a crucial step in fully understanding the relationship between the built environment and the people who inhabit and frequent it. The application of this investigation enables an empirical assessment of urban space in its overall significance for the individual. Conducted through questionnaires and thematic maps, it proves to be a valuable tool for supporting decisions in urban regeneration processes. This approach is more inclusive and adaptive, fostering collaboration between communities, planners, and policymakers. Beyond increasing the amount of information available for planning, it facilitates the involvement of a broader and more diverse range of stakeholders in decision-making processes. In this way, citizens have the opportunity to contribute to the development of shared knowledge, which serves to implement interventions more closely aligned with the needs and expectations of the community.

However, this type of approach must account for the limitations arising from the variability of individuals' emotional evaluations. It is therefore essential that the process of collecting and geolocating data obtained from questionnaires is updated and customised by the evaluator/user according to the context, objectives, and sample to be surveyed. At the same time, the implementation of flexible or temporary solutions ensures that the use associated with a given space can easily adapt to the new purposes and needs of residents, as well as address the issues and priorities of the area that can evolve over time.

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