

THE REGENERATION THE EASTERN AREA OF NAPLES BETWEEN CIVIC UNIVERSITY, MICRO-INTERVENTIONS AND IMPLEMENTATION PLANNING

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Abstract

San Giovanni district, a former industrial area in Naples, started a decline in the 1970s due to the cease of the industrial activity. Since then, a number of plans aimed to draw the adequate guidelines for eradicate its social, ecological and urban problems. Besides the ambitious implementation of a new civic university campus, many other urban interventions are still requested to overcome the weakest points of its very fragmented urban tissue. A very recent research by design experience pointed out strategies and proposals for a more comprehensive urban regeneration.

Keywords

Urban regeneration, periphery, brownfields, urban strategies, micro-interventions

Introduction

The urban kick-off in the regeneration process in San Giovanni neighbourhood recently started with the implementation of the new Campus of the Federico II University in the ex-Cirio area¹. In accordance with the idea of “Civic University” (Goddard, 2009), the University contribute to the public good by opening a dialogue with those responsible for local development policies. The university complex of San Giovanni was inaugurated in the academic year 2016/17 and hosts a number of Engineering faculties and research centers. The area has potentially become a hub for advanced technological services and many companies have chosen the area (Cisco, Apple Academy, CESMA, Eni, Terna, etc.). Designed to accommodate around 4,000 students, its first steps were conditioned to the pandemic times and the regeneration of the urban fabric around the university has not really started yet.

Centuries before, ancient areas of delight, were developed along the famous “golden mile” both for the gardens full of oranges, lemons and mandarins and for the historical

¹ Innovation District in PRIN SOUND - Smart Open Urban-rural Innovation Data, <https://www.cluds.unirc.it/project/sound-project-smart-open/>

and landscape richness and the presence of splendid eighteenth-century Vesuvian villas. The nineteenth-century transformations compromised the landscape since the construction of the Naples-Portici railway line (1839) then the subsequent industrialization of the coast, which took place between 1874-1940 with the progressive saturation of spaces.

Today the San Giovanni district, as a former industrial area of the city of Naples, has been in a serious state of neglect since 1970 when the main factories in the area were closed. The subsequent extraordinary post-earthquake residential building plan led to the construction of 1600 apartments between Barra and San Giovanni, of which 524 in the very recognizable and “off-scale” area of Taverna del Ferro which contributed in addition to occupying the few gaps left in the neighbourhood.

Yet, in the post-earthquake period in the Rione Villa, the ancient historical nucleus of the district, very interesting urban experiments had been carried out which reinterpreted traditional building typologies in a modern language. Today there are even fences around the church, widespread abandonment and little social life even for wrong urban planning choices. Other features that characterize this area are: the denied sea, reclamation of the beaches, empty common spaces.

Currently, from a planning point of view, the area is partly subject to the Municipal Urban Planning Plan (PUA), which later became PIAU - Innovative Program in the Urban Area (2009) essential objectives in: 1/ recovery of the relationship with the sea, through a new network of coastal paths and connecting the district with the coast, the latter replacing the level crossings which are expected to be closed; 2/ systemisation of existing and new public spaces and equipment; 3/ urban reconfiguration of some nodal areas, in particular that affected by the land-sea interchange, for urban scale functions; 4/detailed addresses for private interventions in residential and productive building fabrics.

The plan involves an organic set of interventions on a continuous system of areas, located along the coast and the railway axis, from Vigliena to Pietrarsa. The lower limit consists of the border of the “Porto Fiorito” intervention and the coastline, while the upper one coincides with Corso San Giovanni; in only two points - Largo Tartarone, in correspondence with the new university building, and along the artificial riverbed, at Taverna del Ferro. Despite the planning strategy and also due to the recent pandemic, the neighbourhood does not yet show regeneration evidence but rather abandonment and the characteristic urban chaos.

In February 2022, a group of students and professors from Barcelona School of Architecture (ETSAB) in collaboration with Department of Architecture (DIARC) Federico II-Napoli held an international workshop in Naples in the framework of the Urban Regeneration and Sustainable Rehabilitation [RURS] Studio at ETSAB. The course aims to discuss about the potential and opportunities to develop different projects in a fragment of the San Giovanni area, as a synthesis of urban planning, architecture and technology, defining a path in which to analyse and identify the places, formulate ideas, plan micro-interventions that will give an answer to the first ideas and that will serve to deepen the reflection on the place and its possibilities and methods of transformation.

Historical and geographical reconstruction of San Giovanni a Teduccio

The eastern area of Naples corresponds to the name that the current general variant of the Naples PRG of 2004 gave to the districts of Barra, San Giovanni a Teduccio and Ponticelli, which since 2005 have become the VI city municipality: a territory of 19,279 km² that welcomes a population of 138,596 inhabitants.

An untidy and anonymous urban area (Coppola, Moccia 2013), especially in the part of the San Giovanni a Teduccio district, closer to the historic city which is characterized as an intricate network of streets, oil pipelines, driveways and motorways that badly cross the territory, break the contiguity and permanence of the agricultural landscape with a network delimited by roads, sheep tracks, canals and embankments. But also of the skeletons of abandoned factories, abandoned and dilapidated warehouses, precarious homes, barren lands, beaches and cliffs full of waste, polluted and smelly sea configure a disturbing, apocalyptic scenario, worthy of a catastrophic science fiction film (Amore 2018).

The same railway line, which has the distinction of being the first European route, parallel to and very close to the coastline, has broken direct contact with the sea. The industrial legacy that has marked the territory with large areas occupied by industry is also heavy and now mostly empty and in severe degradation. In sum, it can undoubtedly be said that the eastern coastal area of Naples - between Vigliena and Portici and the sea and the railway line - is the most degraded urban area of the Neapolitan capital.

If it is utopian to think of implementing the design principles with the nature of the Environmental Protection Agency, based on the practices of green infrastructures most suitable for improving the water-ecological balance of the territory (Moccia, Coppola, 2013), certainly the analysis procedure which provides for the reconstruction of the natural site, prior to urbanization (which has the geomorphology and the hydrographic system as fixed points) and the discontinuities introduced by anthropic changes constitute an even more relevant analytical basis in a territorial context strongly compromised by anthropization.

Only in this way will the micro-interventions that emerge will be able to give an answer on possible transformations.

The reconstruction of the landscape identity therefore passes through the reconstruction of the colonization interventions in order to identify the permanencies. A non-original method since the transposition of urban studies to the landscape has already been carried out by the "territorialist" current (Poli, 2011).

This geographical area, being a natural impluvium due to its morphological conformation for the waters that flow from the Vesuvian area, was historically known as a marshy area. Also the legendary Sebeto river, a river immortalized by poets such as Virgilio and Sannazaro and which in fact today is no longer visible, for most of its course, in the eastern area. The river, the mills, the vegetable gardens and the waters that flowed down from Vesuvius represented the first signs on the territory.

San Giovanni a Teduccio, was intended to accommodate one of the two nascent industrial centres of the then capital of the Bourbon kingdom (1874-1940) with the

progressive saturation of free spaces. In particular, we remember the Cirio tomato conservatories, which employed 5,000 workers and also represented the beginning of work in the factory for Neapolitan women. Industrial destination that remained until 1970 when there was then the abrupt closure of the industries and the progressive abandonment of the area.

Since 1972 we can say that the “periphery question” has begun. The mayor Valenzi (1975-1983) produces an acceleration on the side of Urban Redevelopment but in 1980 the earthquake accelerates the suburban issue. A real urban emergency is determined and with Law 219/81 “Law for the reconstruction of earthquake areas” the PSER - Extraordinary Residential Building Plan has been launched. 1600 lodgings will be built between Barra and San Giovanni, 524 lodgings only in Taverna del Ferro, together with the 15 ha of the Troisi Park and the tree-lined avenue on the Pollena river.

While in the Rione Villa, typological solutions are experimented with courtyard attributable to the extra-urban farmhouses and which also use the Neapolitan open staircase and the galleries, in Taverna del Ferro, on a project by the architect Pietro Barucci, the “alley” has been re-proposed but in an outside staircase that made the building intervention that took the name of Bronx unsafe. The fragmentation between the different places in the neighbourhood is a characteristic of San Giovanni, where the barriers are everywhere, from the *linea ferrata* that hinders access to the sea, to the private parks that try to preserve themselves from the outside, from the waterfront facilities, to the public facilities that close to stem insecurity and vandalism (Lepore Berruti 2009).

Surely the post-earthquake design has the strong limit of having relied solely on road infrastructures. New oversized roads designed in a logic indifferent to the morphology and characteristics of the territories crossed (agricultural routes, centuriatio, hydrographic network) creating new geography and above all a lot of disorientation.

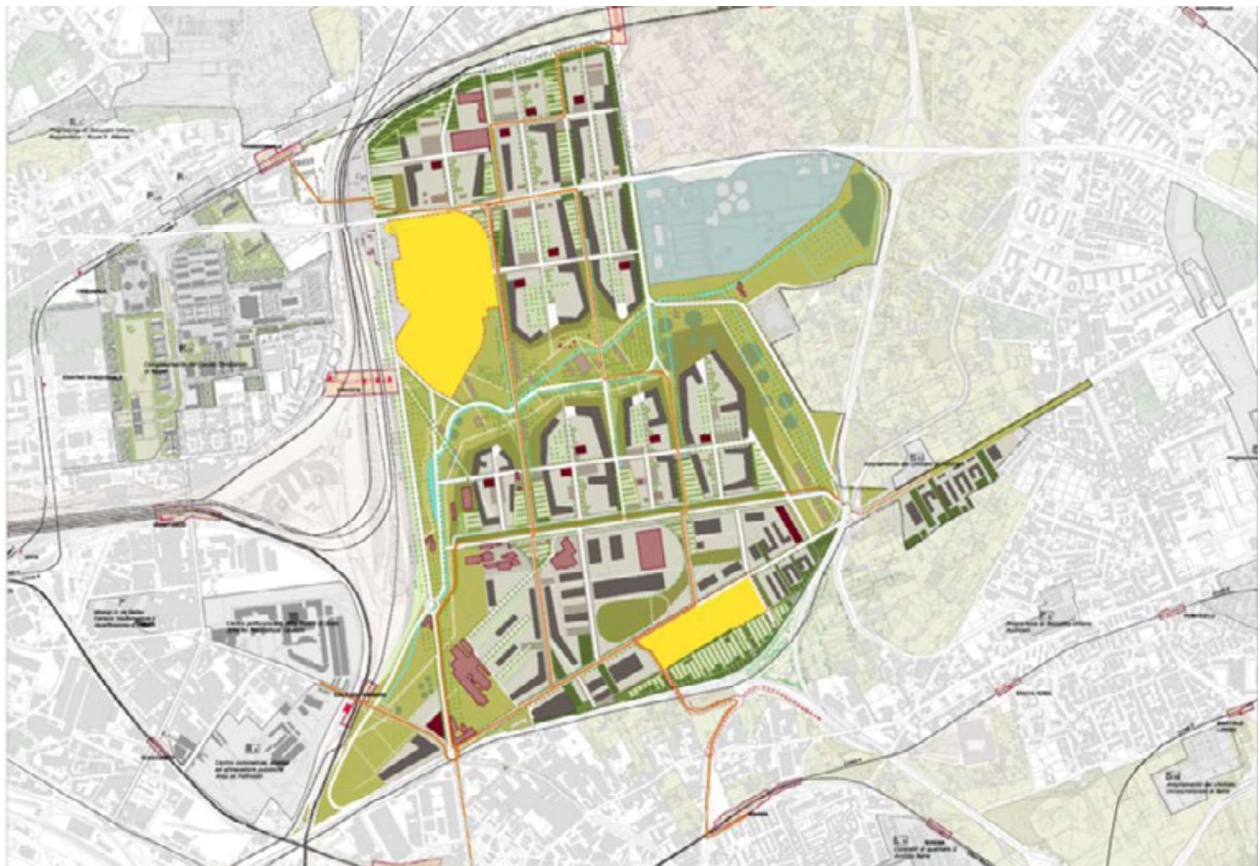
The expansionist push comes to a halt with the industrial decommissioning but above all with the exhaustion of the expansionary thrust of public housing.

In addition to this scenario, December 21, 1985 - a terrible fire that causes the explosion of twenty-five tanks at the Agip refinery in Vigliena: five dead, 165 were injured, 2594 people were left homeless, black skies and flames for a week, a city divided in two with traffic blocked up to the highway. In total, 100 billion lire in damages. Above all, the explosion of the tanks underlines the incompatibility of the presence of residences with industries at risk.

The Preliminary Plan of De Lucia (1991) and the Variation to the PRG (2004) tries to block what has been called the “sack of Naples”, by that the dramatic housing question be resolved in metropolitan and non-municipal context.

The implementation plan for the eastern area of Naples

Currently, from a planning point of view, the area is partly subjected to the Municipal Urban Planning Plan (PUA), which later became PIAU - Innovative Program in Urban Area (2009) which has as its main objective the reconstruction of the coastline, for about 3 km from Mergellina to Molosiglio but also does it with two lunges on two areas



1: Masterplan del Preliminare del PUA dell'Ambito 13 (ex Raffinerie). Studio Gasparri

inside the district: the new university building in the abandoned Cirio area and the public residential settlement of Taverna del Ferro.

If the new Campus of the Federico II University in the ex-Cirio area, inaugurated in 2016, is configured as an experience of Knowledge Transfer and University “Engagement” (Angrisani, 2019) as it is becoming a Hub for advanced technological services (Cisco, Apple Academy, CESMA, Eni, Terna, etc...) even if the regeneration of the area is struggling to take off also due to the recent pandemic; the complex of Taverna del Ferro, called “Bronx” by the inhabitants of the neighbourhood and made known by the four huge murals created by the famous artist Jorit, on the other hand, was nominated for the National Recovery and Resilience Plan (PNRR) with a technical feasibility project- economic has a total amount of 52 million euros. The project, divided into several phases, envisages sacrificing the uninhabitable sports area to build three twelve-storey skyscrapers that will house the inhabitants of 144 apartments in a Bronx “stick” to be demolished together with a co-design network to which they adhere groups of inhabitants, non-profit associations and local institutions (the network of schools, ASL, social services).

The decommissioning of the industries is an opportunity to establish new large parks, one of which becomes an opportunity for the recovery of a significant piece of the city. This is the case of the PUA of Area 13 - Former Refineries, regulated by art. 143 of the Naples PRG, an ambitious urban project that constitutes the most important investment for the future of the city (Gasparri, 2017).

The redevelopment process proposes, as a preliminary condition, the relocation of all oil plants: not only the residual deposits, but also the docking of oil tankers in the port, in the absence of which the oil pipelines will continue to represent a cumbersome and dangerous presence, incompatible with the new quality of settlements.

The pivot of the reconfiguration will be the large park of about 170 hectares, which will connect the agricultural plain to the sea following the course of the new watercourse that recalls the Sebeto and by the long avenue that, starting from the new square that duplicates Piazza Garibaldi in correspondence with the arrival track of the high speed, reaches Ponticelli.

The new settlement for the production of goods and services is formed around the park and the avenue, which will host the whole range of production activities, from crafts to industry (excluding the incompatible one), from trade to services.

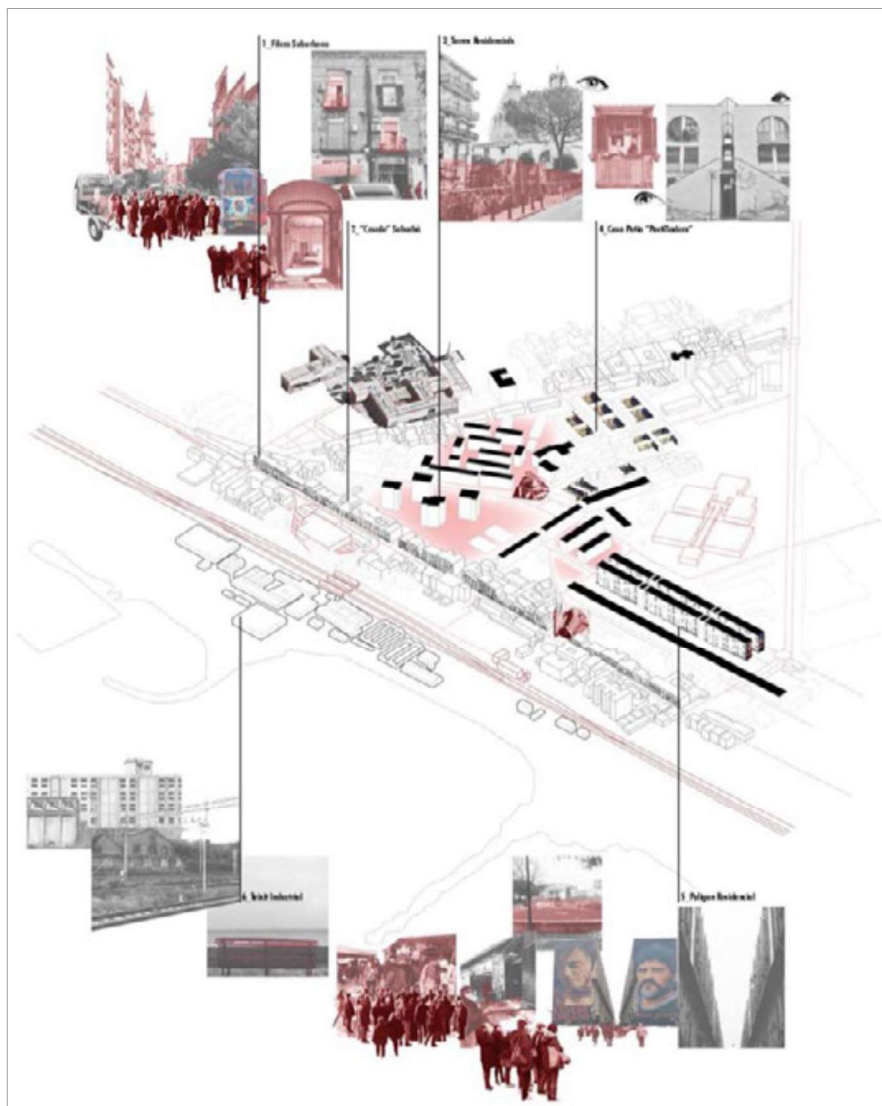
The preliminary plan was approved with resolution Gc 26/2009. In 2017, an investigation was opened on company Q8 relating to the disposal of oily residues from the refining business and at the moment the plan is blocked.

Zooming in: strategies and design projects for the San Giovanni neighborhood

The aforementioned plans define the main guidelines for strengthening the green, grey and blue infrastructure for the transformation of the eastern part of the metropolitan area of Naples. Within this general framework, a closer look at the existing particularities of the area of San Giovanni neighbourhood has driven the research by design approach on how to get a stronger social cohesion through an urban regeneration design process.

Previous very interesting academic studies addressed similar questions at the Università degli Studi di Napoli Federico II. It is of note the research led by Valeria Pezza (2005) showing the relation between San Giovanni, the Vesuvian territory, and its infrastructure. This work provides insights into the geographical connotations of this site, its historical background, and a detailed report on the relationship between the first settlements and the main infrastructure. From a wider perspective, it's also quite valuable the research of Lilia Pagano (2001) that describes the configuration of the periphery of Naples, depicting the main features of the mass-housing compounds that transformed the historic city into a metropolis during the second half of the XX century.

Two classic references are also inspiring to compose a general understanding of the urban fragmentation of the site: on the one hand, the renowned view of "the territory as a palimpsest" (Corboz, 1983); on the other, "Territories without a model" (De Solà-Morales, 1997), as an illustration of the works on the periphery of the Laboratori d'Urbanisme de Barcelona during the 1990s. Both reflections are especially useful to understand the logics of the construction of the area taken in the studio, well defined by an infrastructural triangle made up of three very different axes: in the south, the railroad parallel to the seafront; in the west, the historical path of Corso Nicolangelo Protopisani and in the west, the wide and anonymous Viale Due Giugno.



2: Interpretation of the neighborhood as a puzzle of different buildings and compounds. Fabià, A., Rizo, M., Salas, J.

Very diverse strategies and projects were discussed in a 4-month studio with 5th-year students in the Barcelona School of Architecture² in the Spring 2022. The studio started with an extensive analysis of the urban kaleidoscope of the isolated urban compounds (Fig. 2) that have settled in the area over time, looking through the lenses of the ecology, collective uses, urban fabric, heritage, housing types, activities, mobility, among others. Accepting that the principles of homogeneity and continuity that often guide the intervention in the traditional cities cannot guide identical interventions in the peripheral areas, it's worth figuring out new interventions to link the autistic pieces to strengthening, not only their physical but also social relationships. These inspire a series of urban guidelines:

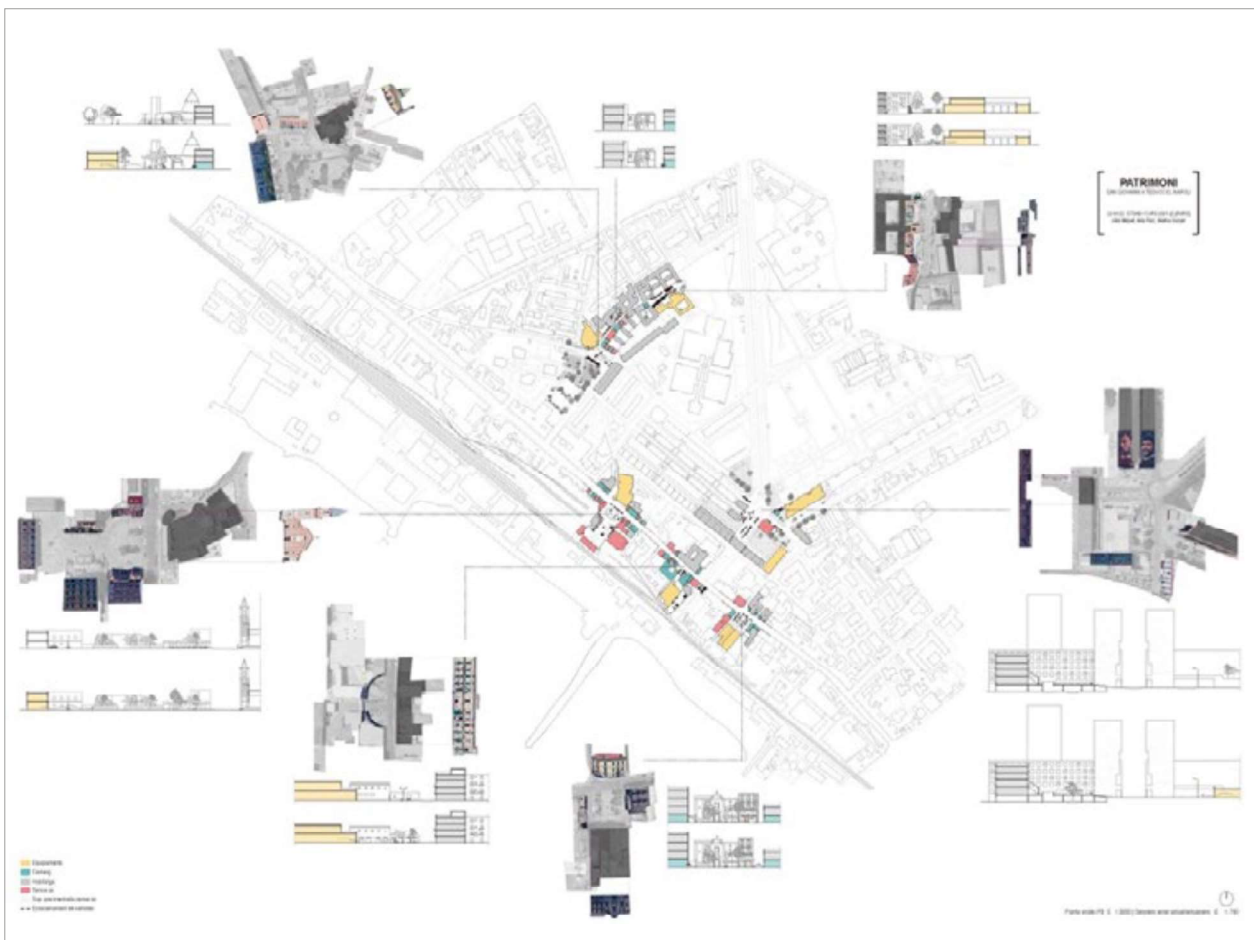
² The Thematic Studio “Urban Regeneration and Sustainable Rehabilitation” was led by Professors Carles Crosas (Urbanism Department), Oriol Cusidó (Architecture Department) and Còssima Cornadó (Technology Department) at Universitat Politècnica de Catalunya in which participated 33 students. The results summarized in this section are the output of the collective work developed among professors and students from February to June 2022 at Barcelona School of Architecture. Some of the dynamics and course materials can be seen at the social network platform https://www.instagram.com/rurs_tt.etsab/

1. Creating local centralities. This is a quite traditional and widespread approach in urban regeneration, which has been tested with success in many cases. During the 1980s and 1990s, Barcelona excelled in the practice of requalifying the existing urban fabric, not only in the very central places, but also in the peripheral neighbourhoods.

Thus, the transformation of the residual open spaces between buildings into meaningful collective places has been the motto of some proposals that aim to create and reinforce some micro-centralities at the local scale.

Figure 3 shows an example of the concatenation of small centralities, including: 1/some of the existing singular intersections along the historical Corso San Giovanni; 2/a re-configuration of the so-called “Piazza” Antonino Caponnetto, encompassing its singular “astronave” (spacecraft) and extending its central value northwards to the old Via Nuova Villa; 3/ pointing out a new central point in the final stretch of Viale Due Giugno, at the front end of Taverna del Ferro.

The design proposals for the regeneration of these spots combine interventions on the ground surface but also look at the opportunities of the ground floor of the buildings: sometimes infilling new programs, others creating new accesses, and others opening blind walls to enhance permeability.



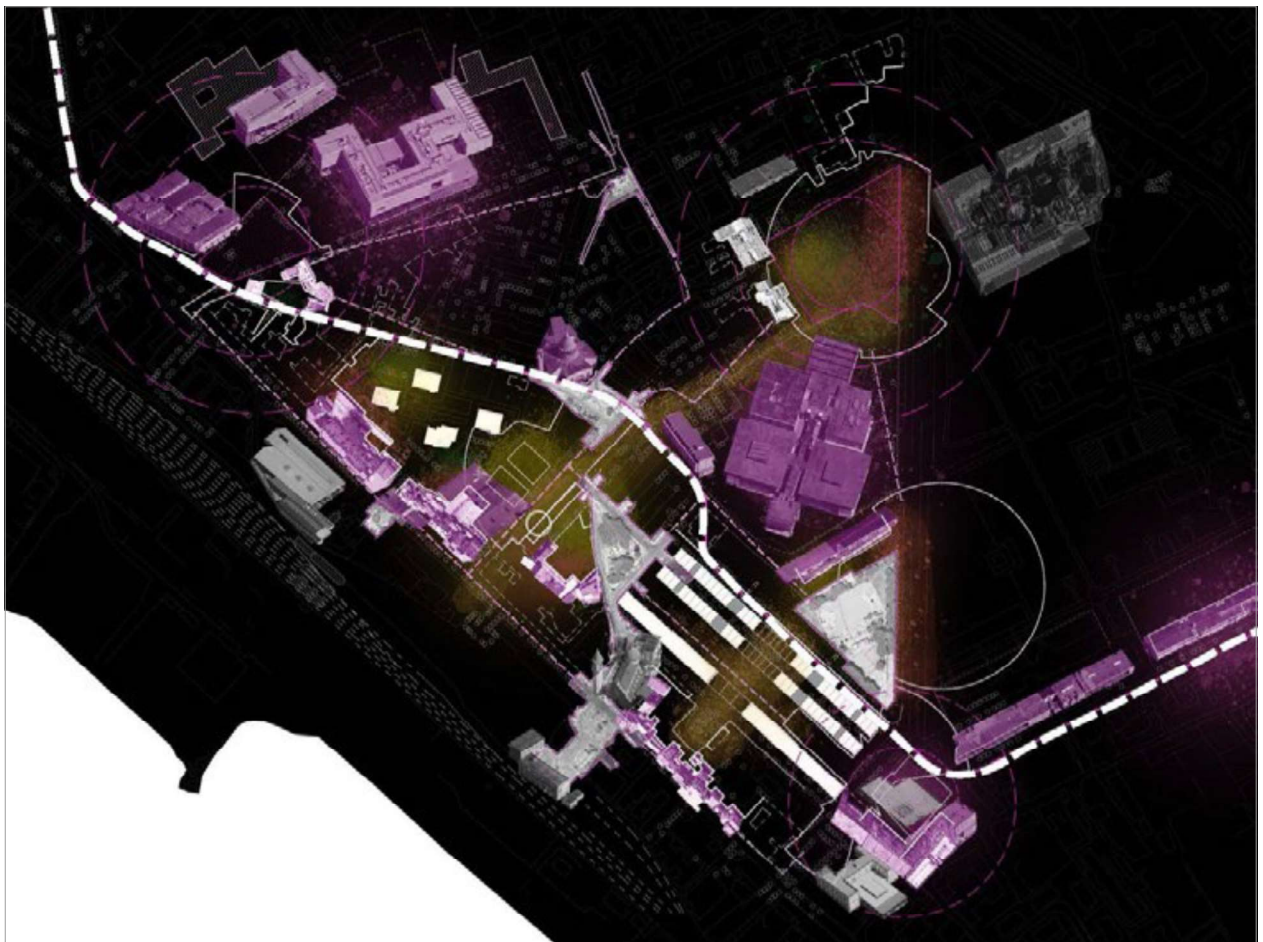
3: A set of urban micro-centralities. Miquel, J., Rius, A., Sunyer, M.

2. *Tie up loose ends.* Another fruitful approach suggests that the continuity of some traces can multiply the connectivity among the different parts of the urban fabric. The materialization of the new connectivity lines can be diverse: for instance, from a very ambitious perspective, it can be imagined to insert a new public transport line (bus or tram) to outline the new axis. But in such unstructured areas, the simple continuity of the sidewalks can be effective enough, as they are somehow the most elementary, but most essential expression, that guarantees the urban continuity (Crosas, 2013).

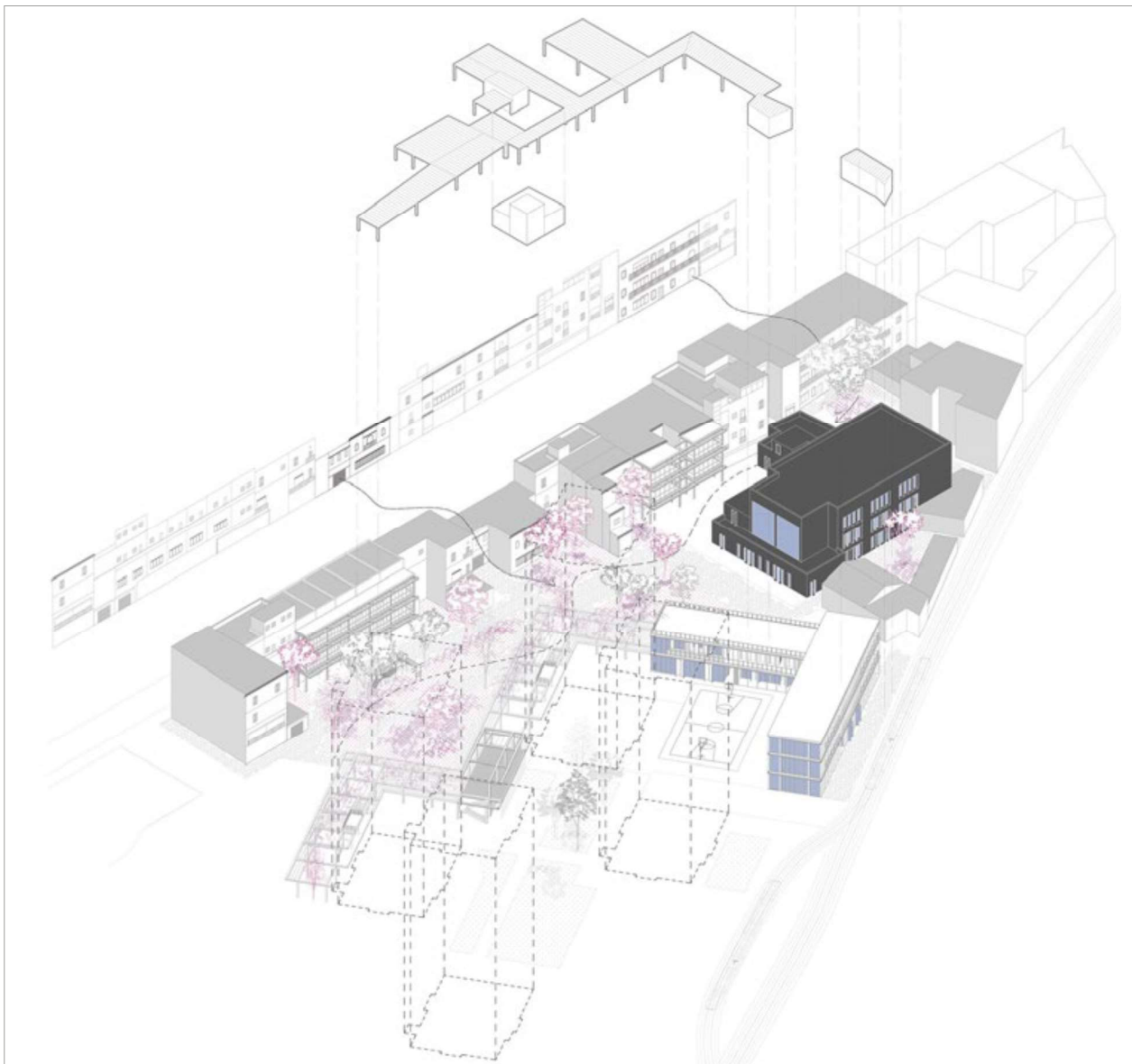
Figure 4 expresses the potential of a new civic street that could tie the old trace of Strada Comunale Taverna del Ferro (intersection with the main Corso San Giovanni), with the misused space between the back of the huge housing blocs and the Istituto-Liceo large facility.

Another longitudinal axis with a very different character could be traced alongside the railway tracks, where a linear park could qualify the leftovers of the current buildings, including the out-of-the-way railway station.

In the perpendicular sense, the mesh of streets and passageways can be reinforced and clarified with punctual openings and sidewalks extensions, finding out new cross relations between the urban strips parallel to the seafront.



4: A new civic street. Fabià, A., Rizo, M., Salas, J.



5: A new micro-centre at the back of the main-street: the permeabilization of the borders. Fabià, A.

3. *Reprogramming buildings.* Finally, on the basis of the flagship project of the new University campus, it is worth exploring other opportunities for the reuse of some of the derelict buildings. Besides de opportunities on the back façade of the railway, adjacent to the new linear park, other interesting design proposals can also be identified on the borderline between the north back façade of Corso San Giovanni and the mass-housing compounds. Herein, it's possible to infill new programs in some obsolete industrial, logistic, or storage constructions, so that all can play a new collective role in the community (Fig. 5).

Conclusions

Inserting new programs, identifying new collective spots and promoting links and continuities are different strategies that bring out the opportunities for micro-interventions at specific points, always bearing in mind the global vision of the whole. At the end of the day, urban regeneration and constant updating of many of our city fragments seems to be only possible since the project scales interactions, looking at the possible coherence between the ambition of the strategic plans and the concrete actions on the architecture and the built environment

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Sitography

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