

The Role of the Public Municipality in Urban Regeneration: the Case of Genoa

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1 ABSTRACT

The conditions why processes of urban regeneration can be developed in modern-day cities have changed enormously over the last decade. Unlike the recent past, where the reuse for urban uses of former industrial areas was only based on maximising the amount of space, after the housing bubble began in 2008 and the pandemic crisis, the profit margins for operators were reduced, and today, they faced to a sharp contraction in demand and a surplus of supply. Consequently, the framework within which we carry out the investment decisions is increasingly complex and is characterised by the opposition of a potential conflict between two forces. On the one hand, the public administration which seeks to take full advantage of the urban transformation processes to improve the quality of life for citizens; on the other, the private entity that has the aim of maximising the profits obtainable from the intervention and to minimise business risk. Therefore, to ensure the overall feasibility of an intervention, urban viability must correspond to economic and financial sustainability. The paper analyses the role of public strategies in urban regeneration interventions through the analysis of a case study in the city of Genoa. Currently, in the city some urban transformation interventions are being implemented; most of them (and the most relevant) are all aligned along the border between the city and the port. The role of the public administration is not limited to that of regulation, but the local municipality also acts as a financier (of public works) and as owner of the areas (which it makes available in concession). In this way, an attempt is made to make the city more competitive in the international real estate market. It is essential to reduce risk and cost factors compared to the private investor. The question then arises of how to evaluate the potential public benefits of these transformation operations.

Keywords: Real Estate, Urban Policies, Urban Regeneration, Urban Planning, Italy

2 INTRODUCTION

Contemporary Dynamics in Urban Regeneration Processes, Balance between Public and Private Requirements.

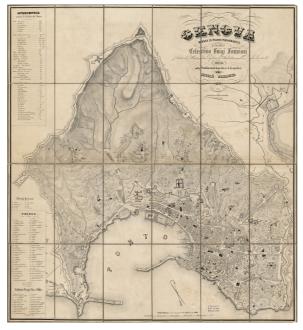


Figure 1. Map of the city and the port of Genoa, 1853. Source: Millard Fillmore, public domain.

After the intense urban transformation that characterized Genoa between 1992 (the year of the Columbian Celebrations and the opening of the ancient port front to the city) and 2004 (the year of Genoa European Capital of Culture), there has been a long slowdown in urban transformation operations. It then merged into



the crisis of the real estate market and led to a drastic reduction in urban reorganization interventions. In recent years, however, some perspectives of urban transformation have been consolidated. These new perspectives lie along the problematic port-city hinge and foreshadow a substantial reinterpretation of the sea waterfront, along an ideal line that connects the Porto Antico area, located in the center of the old town, to the western Fair. In all the examined cases, the preventive public availability of areas and buildings or, in any case, their acquisition by the Civic Administration, is the first step to give substance to the hypotheses of feasibility of the operations, in a framework characterized by a strong mixture of functions and a particularly complex physical and urban morphology. The financial commitment, the repercussions on the urban structure of an entire strategic sector, the redevelopment of important public spaces, the rethinking of the role and functions of the entire "historical" port basin and, last but not least, the opportunity to establish in the various areas, important residential and tertiary-commercial activities, make these projects the driving force on which the city is aiming for the future of urban development.

The result of the particular process of urban transformation in Genoa, is embodied in the "thin blue line" between port and city, which is characterized by an unusual (and sometimes conflictual) mix of activities. This mix gives shape to a new urban landscape bordering the sea, composed of office towers, advanced tertiary sector, production and logistics areas, accommodation facilities, residences, large commercial areas and public spaces. This new scenario is characterized by a high accessibility value (all the areas are located near the main multi-channel infrastructural axis, that crosses the city in the east-west direction), by the radical change in the destinations of use (from industrial-port to tertiary, commercial and residential), and by the huge amount of public investments it has attracted and it is still attracting.

What these interventions have in common is the pre-eminent importance of the role assumed by the public entity which initially started as a regulator and then has gradually become the fulcrum of the feasibility of operations, as owner of the areas and also as direct investor. While the coincidence between the regulator and the owner role makes it possible to affect the future uses, the additional role of investor, ended up overturning the traditional "urban planning logic" for which the (private) implementing bodies should be at least partially responsible for the urbanization and for the sale of public areas and equipment.

In the most recent cases we face a situation in which investments in public works (ranging from the demolition and reclamation of the areas to the preventive construction of a significant number of urbanizations) are the prerequisite for the (private) feasibility of investments. The public actor therefore acts as a real promoter of urban development, offering the external real estate market opportunities for localization.

2.1 Large-scale Transformations and Complex Systems

Waterfront Projects between the City and the Port

Among the most interesting large-scale transformations in the contemporary city are those involving complex systems, i.e. groups of territories sharing the same infrastructures and, above all, the same development dynamics. Some of them concern the processes of abandonment and subsequent decommissioning of large urban areas, often in the centre of the city or in a hinge position between the centre and the suburbs, such as railway yards or former industrial areas. In other cases, it is a question of territories located on the administrative border between several public authorities and which have been subject to waves of transformation for many years. This is the case of the borders between the city and the port, which are characterised by a high degree of complexity in both operational and identity terms. Such systems hold latent opportunities to reactivate a cycle aimed at exploiting the multiplicity of potentials offered.

The evolution of urban issues involving the interface between cities and ports is intimately connected, in first place, with the alteration of the balance between the coastal city and the port environment, provoked by the rapid growth of docking and warehousing structures that took place in the great European ports in the mid-19th century. Following these radical changes, the urban-port waterfront acquires a double connotation that defines the very roots of the meaning of its physical components and its spatial nature: formed by land and water, it is a dual organism that belongs both to the realm of land and to the maritime or river realm, and that is totally new from a physical point of view.

Even today, the evolution of the waterfront affects the port-city relationship due to several urban factors, resulting in different scenarios within the European context. Among this wide range, it has been possible to

identify new approaches providing perspectives on the city-port relationship, intervening in a prioritized manner on the common border. In these contexts, the capacity of port systems to engage with the city and, while still maintaining their operational aspect, to mitigate the effects of the demarcation and isolation generated by property borders can be seen.

Some processes, such as divestments, technological adaptations, and economic-commercial logics, in fact, were the occasions for local urban planning, supported by public initiatives and/or private contributions, to transform the areas between the city and the port, generating a varied collection of examples and a significant number of projects and strategies.

In Marseille, the Euroméditerranée program has worked since 1995 in the reconstruction of an ancient alignment between port and city. In this context, the redevelopment of the 400 meters of the Docks de la Joliette (2015-2016) is exemplary and based on the concept of a "narrative sequence". With this strategy, strongly embodied between the city and the port, the design of the shared waterfront is accomplished gradually, increasing its wideness by intervening on spaces and artifacts as they become available for change.¹



Figure 2. Marseille's Euroméditerranée Project (www.euromediterranee.fr).

Differently, in Copenhagen, important maritime-commercial transformations of the second half of the 20th century influenced the morphology of the three peninsulas (Prøvestenen, Refshaleøen, Nordhavn) on which most of the port is located. This has generated very different degrees of relationship and approaches to the urban-port project that are led by the subsidiary company CPH City & Port Development.

In Prøvestenen, the presence of the port is absolutely predominant, while in Refshaleøen, even if the port is no longer active in most areas, the reconversion was based on a more modulated and non-intensive refunctionalization that has not deleted the operative character of the area. Confirming the hybrid nature of the site, the outermost portions of Nordhavn, in fact, are still occupied by the port and the construction of the urban district² proceeds in parallel with a new landfill, for a cruise terminal, of about 100 hectares stretching out towards the open sea.

In Hamburg, then, the HafenCity (1997–2030)³ is a large urban project that replicates the historic city through the transformation of 157 hectares of former port territory. The first formal proposal was Vision HafenCity (1997), which established a Special Fund for City and Port dedicated to the first infrastructure projects on the site, but, above all, financed the new container terminal along the southern part of the river. The development of the area was preceded by a competition for the drafting of the master plan (1999/2000): the first buildings were realized in 2005, and the first district was completed in 2009. In 2012, the U4 metro line went into operation and, in 2014, the HafenCity university campus was opened. At the beginning of

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¹ Cf. Port of Marsiglia-Fos (www.marseille-port.fr), Euroméditerranée (www.euromediterranee.fr)

² Among the most recent projects, The Silo by Cobe (2017) (www.cobe.dk), the Portland Towers by Design Group Archi tects A/S – Denmark (2014) (www.dga.dk) and Park'n'Play by JAJA Architects (2016) (www.ja-ja.dk) come to mind.

³ Cf. HafenCity (www.hafencity.com).

2017, the building, a symbol of regeneration, was inaugurated: the Elbphilharmonie was erected on the decommissioned Kaispeicher A port depot. Inspired by the Spatial Vision of the Port Development Plan drafted in 2007, the HafenCity is an exemplary project in terms of scale, the involvement of public and private operators, and its experimentation in the field of residential building types that, however, has been carried out to compensate the city for the port.



Figure 3. Masterplan HafenCity Hamburg, ASTOC Architects and Planners (www.astoc.de)

Abandoned Railway Yard Projects between Centers and Peripheries

The transformation of disused large railway areas has been one of the most interesting urban renewal strategies in recent years, redefining the urban marketing strategy starting from the regeneration. Among the most decisive reasons, it is worth mentioning their location in the most central parts of the cities, accessible and already highly infrastructured, but also their undivided ownership regime.

In many cases, from Paris to London, Barcelona and Antwerp, the degradation resulting from the abandonment of railway yards had affected, over the years, the value of nearby districts and the social, environmental and economic quality of entire portions of the city. Because of this, public action has focused on urban regeneration processes, targeting areas and the communities that live in them, with the aim of triggering processes for new urban centralities of international significance.

A case of undoubted interest is the one still underway in the city of Milan, which began in 2007 with the identification of seven areas no longer used for railway operations with the aim of enhancing them by assigning urban planning parameters.

Together with the area that hosted Expo 2015 in the north-west of Milan and the system of disused and underused barracks, the seven railway yards (Farini; Greco-Breda; Lambrate; Porta Romana; Rogoredo; Porta Genova; San Cristoforo) represent the last reserve of large areas available for transformation, covering a total surface of more than 120 ha. A system of public areas, connected by tracks that are for the most part still in use and owned by Ferrovie dello Stato that has acted with private logic and strategies.

Since the first years of negotiation with the public administration, the seven railway yards have been considered as real estate valorisation tools, functional to promote urban development actions without further land consumption. They are areas that can increase public facilities, especially green spaces, and cycle networks, also by reconnecting parts of the city that were previously separated by them. In addition, the reuse of these areas introduces new resources to rail transport in the Milan node and to the regional railway system as a whole.

Following the Programme Agreement signed by the City Council and Ferrovie dello Stato in July 2008, in 2011 the new council of Mayor Giuseppe Pisapia advocated greater transparency and legitimacy in the management of public-private relations, seeking to ensure the public benefits of private transformations. The focus shifts to the reuse of abandoned spaces scattered throughout the urban fabric, relaunching a policy of green spaces and large urban parks. At the planning level, the seven railway yards are classified as Urban Transformation Areas (ATU) in the Piano di Governo del Territorio (Pgt) adopted in 2011.

Still in progress, the process⁴ of converting the seven areas is very complex and has different timelines. Among the first sites subject to an international competition, it is important to remember the Milano Farini



⁴ For further information, see Scali Milano (www.scalimilano.vision) and FS Sistemi Urbani Scali Milano (www.fssistemiurbani.it/content/fssistemiurbani/it/scali-milano.html)

and Milano San Cristoforo yards, for which the "Agenti Climatici" project by the OMA and Laboratorio Permanente team was the winner in 2019. In short, the proposal envisages two new environmental devices: one green (a large linear forest in the Farini yards capable of cooling the hot winds coming from the southwest and purifying the air of the most toxic particles); the other blue (a long linear system in San Cristoforo for water purification, defining a landscape for human and non-human realities).

Aware of the changes in the city, which is now responsible for a vast urban region and an increasingly multicultural population, the project for the railway yards has a great ambition, that of "making Milan through the railway yards", i.e. to be part of a fundamental infrastructure system, aimed at connecting and encouraging the implementation of effective settlement, demographic, environmental and socio-economic processes.

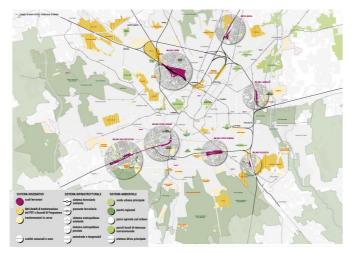


Figure 4. Map of the Milan railway yards. Source: "TRASFORMAZIONE DEGLI SCALI FERROVIARI MILANESI. Definizione di linee di intervento", Gruppo di lavoro DAStU Politecnico di Milano, 2014.

3 METHODOLOGY

Two contemporary Urban Regeneration Interventions in Genoa

In the light of these international examples, the role of public strategies in urban regeneration interventions in Genoa is undertaken by exploring two different case studies currently under implementation. One of the common traits is that the selected urban transformations are connected along the coastal margin line between land and water: in the Waterfront di Levante the interventions are all aligned along the boundary between the city and the port, in the case of the Polcevera Valley, instead, the winning project of the international competition concerns the spaces along the river and valley course.

3.1 The Waterfront di Levante. Operations along the border between the city and the port.

A Continuous and Public Waterfront

The project of the Waterfront di Levante (WdL) derives from the proposal called Blueprint that was donated to the city of Genoa in 2013 by architect Renzo Piano along with the architectural firm Renzo Piano Building Workshop (RPBW). Intended as a basis for the development of discussion activities with the institutional subjects involved, the Blueprint has been revised mainly in the light of the evolution of the city's urban dynamics and the development of production and nautical activities in the port area.

The WdL proposes an overall design aimed at developing and harmonising the urban and industrial activities present in the eastern areas of the port of Genoa from Punta Vagno (to the east) to Porta Siberia. This strip of land along the sea borders the city and sectors of the operational port occupied by ship repair industries, dry docks and areas dedicated to pleasure and nautical sports, in particular the headquarters of the Italian Yacht Club. At the eastern end, there is a trade fair area characterised by the presence of several pavilions almost entirely used for temporary functions and events with large attendance.

The overarching aim of the project is to enhance the relationship between the city and the sea in terms of environmental sustainability and the social and economic attractiveness of settlement activities by connecting the waterfront in a west-east direction. The new waterfront is in fact the completion of the work carried out for the 1992 Colombian Expo, with which the city converted large areas no longer used for port

functions into a functional programme with an urban, cultural and tourist vocation. This connection is implemented through the construction of a navigable "urban canal" close to the ancient city walls, adjacent to the causeway. The waterway, of infrastructural character and variable width, is obtained by excavating portions of the existing piers under the city walls. This action provides a new Waterfront Urban Park of approximately 16,000 square metres, extended along the waterfront and connected to a panoramic lift with appropriate landings above and below the historic walls.

Although in continuity with the Porto Antico, the WdL witnessed a different strategic approach towards the city-port relationship, the enhancement of the operational component of the place and the design of the border between the two territories. Due to the lack of space, the area presents widespread criticalities in the management of logistics and port flows, urban accessibility and, in general, difficult coexistence with functions that are not always compatible with production activities. In addition, the underuse or abandonment of some buildings has put the trade fair sector in crisis, and it has been called upon to reinvent its position in the overall urban economy. With this in mind, the WdL proposes the construction of a double operational peninsula, the so-called "Factory of the Port", which can be reached thanks to a reorganisation of the port road system, under the elevated site, which becomes an urban road system with punctual access via four new bridges. In this way, the new "port-channel" acquires greater autonomy and optimisation of some industrial sectors that will be extended towards the sea. The project is currently underway, particularly in the far eastern areas where the municipal administration has put in place, at least since 2019, an intense programme of demolition of the existing pavilions in order to free up the area for the new works.



Fig. 5. Waterfront di Levante, 2017.

Functional Program and Architectural Aspects

Overall, the WdL covers approximately 83,300 sqm of public areas. Of these, only 53,000 sqm will be converted according to a functional mix, while the remaining 30,000 sqm will remain in Pavilion S.

The functional programme envisages a part for receptive and residential buildings (15,000 sqm), a portion dedicated to the service sector (24,000 sqm) and two portions of 7,000 sqm each for commercial and multipurpose fairgrounds. Part of the nautical clubs will be relocated to the larger Darsena, in front of the sports hall, and in a position adjacent to the new Pilots' Tower at the end of the pier entrance to the port. In the same position a new branch of the Italian Yacht Club should also be built, with a more sporting vocation, maintaining the building and the historic quay as the main headquarters. In addition to the construction of the Waterfront Urban Park and the Darsena, the project envisages a new urban beach in front of Piazzale Kennedy, with a view to re-naturalising and making new public use of the river Bisagno estuary.

From a mobility point of view, the WdL is confronted with an extremely complex situation due to the overlapping of public, private, urban and port flows. It is planned to replace the elevated carriageway with a path at the level of the quay, which will be flanked by the navigable water channel for operational use. Through this operation the edge acquires depth and mixed functionality and the new activities join the rich pre-existing heritage.

In terms of volume, the project envisages the release of the areas behind Pavilion S, which has been retained and converted into a sports hall. Demolition will involve the former Ansaldo-Nira building (2020) and Pavilions C, D, M, and the former heating plant (2021). The residential volumes will be positioned along the new canal, at the water's edge, and elevated on pillars so as to maintain the physical and visual continuity of the Urban Park in which they are immersed. Most of the exhibition centre will remain on the quay in front, that is pavilion B or "Jean Nouvel" on whose sides new buildings will rise, dedicated to the tertiary sector or to the multipurpose exhibition function.

Thanks to the "New Guidelines", updated by architect Piano at the beginning of 2021, the project acquired further detail in the realisation of its components. Particular attention is devoted to the identity and connective value of the Waterfront Urban Park and the Darsena with the rest of the city, the aspect of accessibility and public continuity is repeatedly stressed as essential. As an integration, Piano provides specifications related to the architectural features with which to complete the single portions of the WdL.

Planning Tools and Ownership Layout

After the publication of the Blueprint donated by Renzo Piano to the city in 2013, the Urban Master Plan (PUC), approved in 2015, incorporated the proposal within the Transformation District no. 20 "Fiera Kennedy", in turn divided into 5 sectors. At the same time, the then Genoa Port Authority (also the subject of the Genoese architect's donation, together with the Region and the Municipality) took on the project's indications within the documentation that was supposed to constitute the emerging Port Master Plan (PRP), which was then being drafted.

In January 2016 the City Council approved the general guidelines for its implementation, which included, among other things, the provision for a design competition to be held on the areas owned by Genoa City Council and S.P.I.M. (the vehicle company indicated as the guiding entity for the transformation). In July 2016, the call for tenders was issued, with the participation of over 70 international groups. The work of the appointed Selection Committee leads to the conclusion of the procedure without any winner.

Following an update and further donation, again by Renzo Piano, the Blueprint takes on the name and features of the WdL. At that point, the conception of the design imposed a unitary intervention on the buildings of the compendium as essential elements of a single design vision. The operation requires a considerable amount of investment, which can only be partially borne by public funding, and it is therefore essential to attract private capital. For this reason, the Municipality of Genoa, which owns only a portion of the areas involved in the project (those furthest to the east), chose to proceed with the development through the sale of the entire property. The call for tenders for the sale confirms that the demolition of the former exhibition halls will be the responsibility of the buyer, who will also have to carry out the excavation for the navigable canal (excluding the inlet, which will be built at the expense of the municipality after the demolition of the former Ansaldo-Nira building). In 2018, the commission assessed the proposals received and deemed only that of the EM2C company of Lyon, which signed the preliminary purchase and sale contract at the end of 2019, eligible for the second phase (the more project-specific one).

The implementation phase began in 2020 with the drafting of an Urban Operational Plan (PUO) whose purpose is to implement sector 2 of Transformation District no. 20, "Fiera - Kennedy", i.e. the disused portions of the fairgrounds, up to the Quarry walls, including the first section of the causeway and the so-called Batteria Stella fortress. The final approval of the Operational Urban Plan (PUO) and the "Design Guidelines" took place in July 2020 and, subsequently, CDS Waterfront Genova s.r.l., designated by CDS Holding as the purchaser, signed a public deed with the municipality for the transfer of the areas.

Through a preliminary operation, during 2020 the area began its transformation. The first step was the removal of the long-abandoned former Ansaldo-Nira office building located at the junction between the trade fair area and the industrial area. Its demolition is functional to the completion of the unified WdL project and, above all, of the urban canal, the route of which insists on the site of the building.

At the beginning of 2021, the demolition of the fair pavilions, in particular pavilions B and C, became fully operational. Finally, in April, the Municipality approved the "New Guidelines" for the subsequent development of the interventions envisaged by the PUO, which replace those previously drawn up by Renzo Piano with a view to safeguarding the development of the site in harmony with the high quality objectives of the site redevelopment interventions. On this occasion, CDS Waterfront Genova s.r.l. donated the "Detail Masterplan" document which has already been favourably evaluated by the Superintendency of Archaeology, Fine Arts and Landscape for the Metropolitan City of Genoa. Meanwhile, the final deed for the sale of the remaining parts of the former fairgrounds to Cds was signed and the town-planning agreement regulating the reuse of the areas was signed.

Finally, it is important to underline that the WdL project falls within a set of areas with a heterogeneous ownership layout. The portion to the east, from Piazzale Kennedy to the areas adjacent to the former Ansaldo-Nira building, belongs to the municipality with some existing concessions, while the portion that connects to the Porto Antico is port territory, with the exception of part of the road system at the interface

with the city, which only partially falls within the urban area. The multiplicity of owners highlights the complexity of implementing the operation, especially in the light of the unitary realisation of the design.

The completion of the whole operation by the Municipality and the Port System Authority will therefore be of fundamental importance, in particular the welding up to the Old Port through the Urban Park and the navigable canal from the Darsena to Calata Gadda.



Fig. 6. Waterfront di Levante, 2017.

2.2. The Polcevera Valley.

A productive park in the river valley. The competition.

In 2018 Genoa was shocked by the tragic collapse of the Polcevera Viaduct, commonly known as Ponte Morandi, named after the engineer Riccardo Morandi, author of the project in the 1960s.

The collapse caused the loss of human life and damaged residential and productive properties and part of the infrastructure systems throughout the area under the viaduct. The transport system has suffered repercussions on an urban and national scale. Val Polcevera, the scene of the collapse, suffered the greatest economic and structural repercussions. The ruins of the Morandi viaduct were demolished and on the 4th of August 2020 the new San Giorgio Bridge was inaugurated. The design of the new bridge was built on the basis of the design idea given as a gift to the city by the architect Renzo Piano, contacted by the Region in the days following the tragedy.

A fundamental theme for the city of Genoa was also to rethink the area damaged by the collapse, taking advantage of the opportunity to regenerate a complex and problematic part of the city. On 13 April 2019, the international design competition "II Parco del Ponte. Regeneration of the Quadrante of Val Polcevera" was presented.⁵

The Polcevera valley is a particularly complex and fragmented territory. It is crossed longitudinally by important infrastructural systems, railways, roads and motorways, which have made it an important link between the city of Genoa and the rest of Italy and Europe.

The Polcevera river axis crosses the valley, dividing it into two parts with different vocations. On the right bank, the presence of production settlements and large commercial settlements has historically consolidated. The left bank is instead characterized by a predominantly residential vocation, developed along the main roads and railway infrastructures. The subway line arrives in this area and will be extended over the next few years, along disused railway tracks.

The notice of competition had as its main objective the launch of an urban regeneration process relating to the territorial and infrastructural system of Val Polcevera, the social community and the heritage of productive and economic activities established in the area.

The design of a public park, sports facilities, public square, pedestrian walkways and a memorial was required. Other objectives were the improvement of the quality of urban mobility, through the creation of

⁵ Further information on the presentation and on the schedule of the competition is available on the institutional website of the municipality of Genoa (smart.comune.genova.it) at: https://smart.comune.genova.it/comunicati-stampa/presentato-milano-il-concorso-di-progettazione-%E2%80%9Cil-parco-del-ponterigenerazione





interchange poles and slow mobility systems, and making the territory attractive from a socio-economic point of view, developing services and improving their quality.

The competition required the development of a masterplan relating to the entire area of the Quadrante; the second requirement was a project of technical and economic feasibility of the new public space (public park, sports facilities, public square, pedestrian walkways, memorial) to be built in the lots adjacent to the new bridge, with a size of approx. 120,000 sqm.

To achieve the required objectives, the entire project area was divided into different sectors with six different themes: the Production Park, the Square and the District, the Boulevard of Via Fillak, the Panoramic Park of Campasso, the hill of the hillside district and the cycle path.



Figure 7. Borders of Quadrante Area. Source: Municipality of Genoa.

The Polcevera Park and the Red Circle. Functional Program and Architectural Aspects

The winner of the competition was the group made up of: Stefano Boeri Architetti (Group leader / urban projects), Metrogramma Milano (Architectural Design), Inside Outside, Petra Blaisse (Landscape Design). The group collaborated with MIC-Mobility in Chain, Studio Laura Gatti Agronomist, Transsolar Energietechnik, Geologist Antonio Secondo Accotto, H&A Associati, Studio Luca Vitone, Tempo Riuso, The Big Picture and 46xy.

The functional program proposed is grouped into 4 macro-themes: production, residential, commercial and sports. The Boeri group's project outlines 7 main elements within its project: the Red Circle, the Polcevera Park, the Green Factory, the widespread Square, the redevelopment of existing buildings, the redevelopment of green hills and the improvement of mobility. The element that mainly characterizes the winning project is the Red Steel Circle, a large infrastructure that is at the same time a cycle-pedestrian walkway, a system for distributing the renewable energy produced within the project. The red circle, which is 1570 meters long and draws a large circle with a radius of 250 meters, aims to connect the different sections of the project

The Polcevera Park includes the arrangement of public parks and the construction of a sports centre managed by private entities. The project pays particular attention to the management of rainwater through surface treatment, with dense planting, draining pavements and water accumulation systems. The construction of a Water Park, with rain gardens and water collection system, is planned on the western side. Within the Polcevera riverbed, the intervention provides, in a small area, the creation of a slope and the consequent lowering of one of the banks of the stream, in compliance with flood regimes.

The Green Factory, located on the left bank of the river, is conceived as an innovative technological hub. The productive use is the one to which most of the planned buildings are going to be characterized; the construction of 100,000 square meters of buildings for productive use is expected.

Productive is intended with reference to the technology sector, linked to a mix of uses between logistics, technology and craftsmanship 4.0. Both at urban and at port level, there is a need and a request for more space by companies already established in the area. For the adaptation of the final project, a reformulation of the Green Factory is hypothesized, in a version that assumes less square footage dedicated to the green park space, which can become the site of a new innovation park with high-tech production activities.

In the area adjacent to the Green Factory, a mix of logistics, commercial activities and services related to the life of the neighbourhood is envisaged. The creation of the widespread square is intended as a space of connection and meeting between the different project areas and as the place of the main cultural and social activities. The redevelopment of existing buildings is planned to be a residential and commercial mix, while for the redevelopment of the green hills, the interventions involve the creation and improvement of pedestrian paths and scenic walks.

The improvement of the mobility system is planned through the creation of interchange poles, the implementation of the public service and the creation of new parking lots. A section of the roads that now run along the river will be partially removed from the embankment, by exploiting a part of the existing railway area to the east. The goal is to redevelop the Polcevera embankments and better integrate it within the overall urban project. The project also provides for the implementation of the cycle and pedestrian network.

On March 8, 2021, Radura della Memoria was inaugurated, an artistic project by Luca Vitone, in memory of the 43 victims of the collapse of the bridge. The memorial, consisting of a semi-circular wooden amphitheater, in which trees are inserted, was conceived as a temporary square; this need emerged during the participatory process "Il Tavolo del Polcevera 2.0", which identified the need for a cycle of public meetings.⁶

Planning Tools and Ownership Layout

A two-phase design competition was the tool identified by the City of Genoa to address the urban transformation of the Val Polcevera area, renamed Quadrante. Thirty-one multidisciplinary groups participated in the first phase, among which the 6 groups that had access to the next step were then selected. The entire operation was the most important design competition ever launched by the Municipality of Genoa. The ACE-UIA, Council of Architects of Europe-International Union of Architects recognized the "Parco del Ponte" as one of the four best practices worldwide on the theme of the architectural competition as a tool of urban renewal.⁷

The infrastructural scenario within the area is complex and includes various projects already planned: the construction of the "Terzo Valico Ferroviario" – Third railway Pass, the reorganization of the Genoa railway junction, the construction of the Alessandria-Genoa metropolitan railway service, the reorganization and strengthening of the motorway junction and the construction of the "Gronda di Ponente" – Western Rim. In addition to these, as mentioned above, the extension of the subway is planned. The infrastructural interventions are regulated by the current Municipal Urban Planning Plan (PUC) and by the Urban Sustainable Mobility Plan (PUMS).

Selecting activities with a high technological production content, which is the main strategy of the project, is also recognized within the PUC, which identifies the strengthening of existing activities and the inclusion of innovative activities, as necessary.

The Production Park covers zones classified as areas of industrial production requalification and as areas of redevelopment. To build the project a modification of the existing PUC is required to eliminate the identification of the services of the Special Waste Disposal System from those areas.

To realize the Campasso railway park a program agreement is necessary between the Municipality and the Railway Administration, which allows for functions of equipped green areas and sports for these lands. The regulation of the external west and east bands of the dismissed railway must therefore be changed from "Railway and public transport in existing premises" to "Territorial and neighbourhood public services and public parking" - "Public green services, play, sport and public spaces provided."

The technical-economic feasibility report of the project considers the combination of three actors: private investors or developers, public entities for the infrastructural endowment and the urban park and, finally, the utilities, for aspects related to public mobility and the energy needs.

⁷ Further information is available on official website of the Order of the Architects of Genoa (ordinearchitetti.ge.it), at: https://ordinearchitetti.ge.it/il-parco-del-ponte-designato-tra-i-quattro-migliori-concorsi-di-progettazione-al-mondo/



⁶ Further information on the project and on the program of the events is available on the institutional website of the municipality of Genoa (smart.comune.genova.it) at: https://smart.comune.genova.it/comunicati-stampa-articoli/completata-1%E2%80%99area-della-radura-della-memoria

The feasibility project planned the construction of the "Parco del Ponte" in four phases, for a total duration of eleven years. In the first phase the municipality will have to take care of the land remediation of the entire lot and the remodelling of the soils. Private investors, in this first phase, will purchase the areas to be built and will be responsible for the demolition costs of the buildings not subject to transformation. During the second phase, which has been planned for 2022-2024, public administration will be responsible of the landscape project, the Water park, the right bank under the bridge, the Piazza, the redevelopment of the hillside environments, the renovation of the local market and the main part of the mobility system realization. In this phase, the construction of the Red Circle is planned. The costs for the construction of it will be shared between the private promoters and the public administration.

Private investors will be responsible for the construction of the Green Factory, spaces for commercial, artisanal and office use, as well as for primary urbanisations of these areas and the renovation of the gym of the district. The total expenditure foreseen in the second phase is €39,685,700 for private investors and € 22,580,000 for public administration. During the third phase, 2025-27, a second part of the mobility project, the Campasso Panoramic Park and West sector of the park will be developed by the Municipality, for a total cost of € 7,670,000. In this phase, private investors will be responsible for the creation of spaces for residential, commercial, artisan and directional use, for a total of € 23,107,200. In this last phase (2028-2030) it is expected that the administration will be responsible for the construction of the sports park, for an estimated cost of € 5,335,000. Private investors will still be responsible for the construction of the spaces for commercial, artisanal and office use (estimated expense: € 13,259,200). In each of the four phases proposed by the project, and in the related expenditure forecast, costs related to temporary uses are planned. For temporary uses the winning project intends events by local associations to involve the community in the development of the area.

Even if the Polcevera Park and the Red Circle tries to balance public and private investments, the remediation works, the cost of which in the project is not estimated, and the first urbanizations are left to the responsibility of the public.

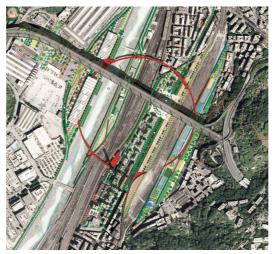


Figure 7.The Polcevera Park and the Red Circle, plan, 2019.

The area of the Polcevera Quadrante has been divided into two Sections (A and b) based on the properties of the soils, and therefore on the immediate availability of the areas. For the entire area of the Quadrante (680,000 square meters), the development of an overall masterplan was requested. The area subject to technical economic feasibility design (identified as Area B - about 120,000 square meters) is almost entirely owned by the State and the Municipality (with the exception of an area owned by IRETI). These areas have in fact been indicated in the preliminary tables for the competition, drawn up by the Municipality of Genoa and by Urban Lab, as "Immediate availability areas." The remaining areas of the Quadrante (identified as Area A, of approximately 430,000 square meters), were included in the general masterplan of the competition, but not subject to the technical-economic feasibility project, and are indicated by the same tables as "Areas available conditioning". The ownership structure of Area A was in fact mixed and included lots owned by RFI, ANAS, Filse, IRETI and Autostrade.

The role of public ownership was therefore essential to quickly and effectively start the design process and the competition procedures on the surfaces immediately available.

CONCLUSIONS

The Role of Public and Private Investors in Regeneration Processes in Genoa.

Models of Regeneration and Cooperation within Public Authorities.

The great urban transformations of the last thirty years (and even more evidently in the last ten), in Genoa, have been concentrated in the spaces located on the port-city limit, as the Waterfront di Levante and the Polcevera Park and The Red Circle clearly demonstrate working on a coastal context, on the one hand, and in a river and valley context on the other.

In this context we are witnessing a radical transformation of the actors. The figures of the owner and the operator, in fact, have long been distinct from each other, so that today the latter assumes the connotation of a highly specialized real estate investor, linked to large financial resources and coming from the external. The search for partners with those financial resources and managerial skills, that have not been found at the local level for some time (and for some aspects they had never been involved in intervening in Genoa), is a characteristic feature of recent years and goes in the direction of the entrepreneur city.⁸

Taking up the theoretical hypotheses that offer an explanation to the processes of urban renewal, it can be said that Genoa represents an emblematic case of transition from a phase characterized by "parochial capitalists" and local rentiers (which spanned the whole short century) to a phase in the which external actors, more closely linked to the extra local and international financial dimension, have appeared on the local scene.9

The predominance of the actors who hold control of the large national and international networks (physical ones, such as infrastructures for the transport or transmission of data flows, or intangible ones, such as large online service platforms) is decisive both in using the existing space of the physical city, both in modifying some pre-eminent features, where such networks find or generate new localization advantages, new polarities, new ways of using the city. By contrast, the actors who operate directly on the physical city (in the first instance, therefore, those who own land and buildings) act as facilitators of these processes (which arise according to increasingly extra-local logics, and this represents an important caesura compared to the history of the city) and, at the same time, they adapt to it, reorienting their interests in the changed geography of urban values.

The public actor (owner of strategic urban areas) makes the areas available and proposes them to interlocutors interested in urban transformation as a partner and, at the same time, as a guardian of values of public interest (uses, heritage, accessibility).

In this changing geometry of institutional relations, then, the public entity keeps the role of regulator and guarantor of the overall public interest and is thus intended as a necessary interlocutor. In the meanwhile the private subjects take the initiatives by selecting the activities to settle and, through participation in design competitions, they guide the conception and development of urban and architectural projects.

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⁸ Cf. Harvey D. "From managerialism to entrepreneurialism: the transformation in urban governance in late capitalism". Geografiska Annaler: Series B, Human Geography 71.1 (1989): 3-17.

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Figure captions

Figure 1. Relief shown by hachures. Depths shown by soundings. Includes indexes and list of altitudes. Available also through the Library of Congress Web site as a raster image. LC copy sectioned into 20 and mounted on cloth, folding to 20 x 13 cm. Signed on printed title label on verso: M. Fillmore. Dec. 3, 1855. Signed on manuscript title label on verso: Millard Fillmore. Dec. 3d, 1855. Signed on publisher's label on verso: M. Fillmore. Dec. 3, 1855.

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Figure 2. Marseille's Euroméditerranée Project.

Available at: www.euromediterranee.fr

Figure 3. Masterplan HafenCity Hamburg, ASTOC Architects and Planners for HafenCity Hamburg GmbH Freie- und Hansestadt Hamburg, completion 2030.

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Figure 4. Map of the Milan railway yards. Source: "TRASFORMAZIONE DEGLI SCALI FERROVIARI MILANESI. Definizione di linee di intervento", Gruppo di lavoro DAStU Politecnico di Milano, 2014.

Figure 5. Waterfront di Levante, prima e dopo. Credits: Renzo Piano Building Workshop (RPBW), Fondazione Renzo Piano per la Regione Liguria, Comune di Genova e Autorità di Sistema Portuale del Mar Ligure Occidentale, 2017.

Figure 6. Waterfront di Levante, functional program. Credits: Renzo Piano Building Workshop (RPBW), Fondazione Renzo Piano per la Regione Liguria, Comune di Genova e Autorità di Sistema Portuale del Mar Ligure Occidentale, 2017.

Figure 7.Borders of Quadrante Area. Extract from the Preliminary Design Document. Guidelines for the Parco del Ponte International Competition. Source: Municipality of Genoa, 2019.

Figure 8. The Polcevera Park and the Red Circle, plan. Credits: Stefano Boeri Architetti. Source: Municipality of Genoa, 2019.