

# THE ROLE OF TERRITORIAL INVARIANTS FOR REGENERATION PROJECTS IN "FORGOTTEN" URBAN AREAS. EXPERIENCES FROM THE APULIAN CONTEXT.

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#### **ABSTRACT**

In times when territories are affected by radical changes which compromise the consolidated assets of the physical space, questioning the current practices of urban development, it seems necessary to define evolutive perspectives aligned with the territory identity without leaving aside considerations on the urban form, today strongly affected by abandonment and depopulation phenomena.

Regarding these issues, in the Italian context is increasingly affirming a landscape-oriented approach to urban transformation that promotes territories valorisation on different levels by integrating environmental, landscape, social and economic dynamics.

The approach is based on the comprehension and interpretation of the territorial palimpsest, reaching the recognition of the so-called "Structural Invariants", which define the characters constituting the enduring identity of places and their landscapes. They relate to the constitutive rules, the result of co-evolutionary processes between human settlement and environment, which survive through historical fractures and changes.

The Invariants, even if protected by a regulatory constraint system for conservation purposes, as much as they express physical integrity and territory identity, may represent vulnerability elements that can generate limitations in terms of use of certain city parts, causing abandonment, degradation and exclusion from urban dynamics.

Under such circumstances, also considering the Pandemic condition and the importance of proximity as a value and the need for new spaces, it's necessary to translate the recognized value into transformation objectives to reverse the degradation and abandonment tendency, generating conditions for a different territorial development going beyond the residential use dominance and finding the opportunity to be a development driver and a generator of new local economies.

The contribution aims to highlight, through the analysis of some regeneration projects in Apulia (IT), how the acknowledgement of identity components, valorised as environmental infrastructures, with the ultimate goal of regaining and rehabilitate "forgotten" spaces, can give new meaning to certain city parts, also through the application of new generation "standards".

KEYWORDS: regeneration; forgotten urban areas; landscape approach; environmental infrastructures.

## INTRODUCTION

The phrase "forgotten areas" is a quite wide-ranging expression that can assume various meanings and assume different declinations depending on the contexts in which it occurs, the specific characteristics of a certain part of the territory to which it refers and the various causes and phenomena occurring in the urban areas considered. Here we refer to parts of contemporary cities



and urbanized areas, which take on the adjective "forgotten", "marginal", as they can be linked to structurally crisis phenomena – economic, spatial or social – in particular population loss, abandonment of the oldest parts of the city for new urban expansions, as well as environmental risk. These factors may emerge on radical dynamics of change, combined with risk factors and the ongoing crises of the last few decades, as the climatic, economic, and recently sanitary, which seriously affected cities and the way they are lived and transformed. All this comes to undermine the assets of the physical space of contemporary territories, challenging the current settlement development practices. The crisis of the contemporary city and of the urbanization processes, for example, can be ascribed to the collapse of the relation between urban settlements and their environment (Magnaghi, 2020), just recently rediscovered due to the Pandemic condition that brought many people back to rurality, trying to find again a connection with the open space.

From these considerations, the contribution focuses and analyzes some design experiences are trying to give new answers, new uses to forgotten and abandoned areas, using innovative approaches and operational tools provided by landscape planning.

## **DE-TERRITORIALIZATION IN MEDIUM AND SMALL CENTERS**

Many of the mentioned factors could be linked to the current trend identified by the Territorialist School and in particular by Alberto Magnaghi as "de-territorialization". It manifests itself as a breach in the co-evolutionary process between human settlement and the environment which characterizes the crisis of a civilization when it loses control on the factors of its own reproduction. That is with the occurrence of both external and internal agents of conflict that delocalize structures or hierarchies, as well as the features of civilization itself, which provides the fracture of the historically determined relationships with the environment.

The deterritorialization can assume a pervasive nature, both by intensity, through the boundless expansion of contemporary urbanizations, and by scalar dimension, due to the unlimited growth of the constitutive and serving structures of the urban organisms as well as the landscapes homologation, the destruction of local cultures, the uprooting of local communities and individuals from their territory (Magnaghi, 2020).

Because of this, in order to outline the evolutionary prospects in line with the territorial identity, without leaving behind any consideration of the urban form, nowadays strongly affected by this phenomenon, it seems appropriate to focus on some of its spatial manifestations, in particular abandonment and emptying.

The first one is "the Emptying", known as the great urban void. Some parts of the city, with the loss of their original function or once subject to regulatory constraints are excluded from the urban system, despite the surrounding city continues its ordinary functions.

Cities over time have expanded around large enclosures such as former industrial sites or archaeological areas, leaving a permanent trace on the ground that constitutes in most cases a large urban void, a space taken away from the city and its citizens but that remains imperative in the urban landscape. The "emptying" of parts of the city activates a process of progressive loss of meaning of these areas within the urban context.

The second one is "the Abandonment", known as the forgotten urban heritage. The Italian territory, made up of more than 70% of towns with less than 5000 inhabitants (Legambiente, 2008), has seen for years the urban heritage of minor and historical centers, a massive and ongoing depopulation with consequent abandonment of the existing building stock, with obvious problems connected to building obsolescence and precariousness. This leads in the long term to the obvious marks of loss of interest and neglect towards private properties and public spaces nearby. In addition, over time urbanization and urban development have focused attention, even in major centers, on new and modern urban districts, causing as a consequence the abandonment of the older parts. The phenomenon is emphasized where these places are in a peripheral position, in impervious geographical locations or subject to environmental risk factors.



## A PROJECTUAL APPROACH IN THE NEW GENERATION LANDSCAPE PLANNING

In Italy, some interpretative and design approaches to these phenomena could be provided by the new landscape planning approach, under regional competence, which was created in the wake of the cultural achievements of the European Landscape Convention and the Italian Code of Cultural Heritage and Landscape (Magnaghi, 2016). This is gradually transforming the landscape into the main subject of territorial planning but also of urban regeneration.

It promoted a radical discontinuity in the culture and practice of territorial planning, changing the long-established relation between landscape protection and territorial planning (Albrechts et al., 2020). Such a discontinuity is gradually transforming the landscape into the cardinal element of spatial planning, in a holistic vision of territory and transformations (Magnaghi 2020). According to the current vision, urban regeneration strategies can be linked to those for landscape quality promoted by landscape planning. Vice versa, the latter may include among the strategies urban regeneration practice, to raise the life quality and well-being of inhabitants (Barbanente Calace, 2021). The new generation landscape planning introduces an innovation to the traditional approach to protection and risks management which can be a contributing factor to the marginalization of urban areas. Given the protection and regulatory system and considered each and every one of the elements protected by it, the traditional conception of constraint as just safeguarding the existence value of an asset is overcome seeking to unlock its use value. The same objects of protection are therefore considered in the system of "Structural Invariants", generally meant as rules for the constitution and transformation of the territorial heritage, which are the foundations of territorial statutes, constructed through participatory and concerted processes.

According to the vision of the landscape plan, the significant heritage elements are assumed as dynamic planning tool, giving them new values of use and rules of transformation. The project declination assumed by the structural invariants depends on and varies according to the relations with the territorial context. Lastly, fundamental to "forgotten" and marginal territories, the new generation landscape plans refer to the entire regional territory, including degraded rural and urban areas, going beyond the perceptive aesthetic approach referring only to landscape excellences.

Among the Italian landscape plans, the Apulia Regional Landscape Plan (PPTR), in force since 2015, has developed a profound reflection on the relationship between expansion and new urbanisation of the contemporary city and historic landscapes, also considering the criticalities underlying these phenomena.

The plan has interpreted the whole regional territory starting from the recognition of urban and rural morphotypologies and has outlined a number of possible scenarios and design paths, adhering to the characteristics of the territorial invariants. Moreover, the PPTR, by orienting planning and financing tools towards territorial specificities and landscape enhancement, has proved to be a tool with which to implement EU environmental policies, integrating them with urban regeneration initiatives.

For example, some projects financed with funds from the Regional Operational Plan POR 2014-2020 - Priority Axis "Environmental protection and promotion of natural and cultural resources", show an innovative approach to urban regeneration, in which areas traditionally abandoned due to imposed constraints or environmental risk factors, can find new meanings through landscape design. In particular, the call for funding, starting from natural Invariants as recognized in the plan, through the creation of new Green Infrastructure, aimed at implementing some PPTR objectives referred to the reaffirmation of urban and rural housing quality in a multifunctional perspective. The multifunctionality is expressed especially in those peri-urban and rural spaces which combine housing quality, hydrological safety, environmental sustainability, social inclusion, food exchange, in a recreational, hygienic and functional way between city and countryside. It combines the utility dimension with the environmental, landscape and settlement quality (Fanfani and Magnaghi, 2009).



The ten winning projects (Fig. 1) of the call for funding for Green Infrastructure have developed different approaches to urban and environmental regeneration, and ecological reconnection, involving areas of ordinary or degraded natural and landscape value. They explored scenarios related to the reconversion, reforestation, and functional recovery of degraded areas on the edge of urban areas (Altamura), productive districts (San Cassiano and Bisceglie), mobility infrastructures to create greenways (Cassano delle Murge). In other cases, the projects have also addressed the theme of ecological connection that, through public spaces, hydrogeomorphological invariants and historical, cultural, and archaeological heritage (Bari, Bitonto, Canosa e Ginosa). (Vv. Aa., 2021)

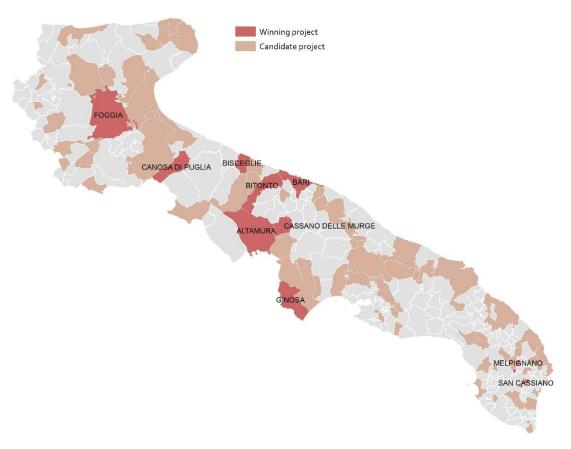


Figure 130. The ten winning projects of the Green Infrastructure call for fundin.

In the last category of Green Infrastructure projects we can distinguish two different types of relation with urban centres: in the case of Bari and Bitonto, large cities with a predominant role in the territory, the IV is developed along the hydrogeomorphological invariants focusing on accessibility, naturalization and the creation of public spaces without an explicit relationship with the urban tissues; in the cases of Canosa and Ginosa, these are small-medium size centres to be revitalized within the territorial structure, and characterized by historical centers in a state of increasing abandonment due to geomorphological risks or empty and marginal areas within the city, caused by the presence of archaeological areas. Because of these characteristics, taken as criteria for the selection of case studies, the projects of green infrastructure of Canosa and Ginosa represent emblematic cases of urban regeneration landscape-oriented aimed at the revitalization of abandoned areas. These projects, in fact, combine the ecological qualification of the territory with the reappropriation and qualification of the urban margins landscape carried out by the inhabitants. This



is also possible through the redefinition of the "standard" areas<sup>1</sup> multiple performances or the ones subject to protection constraints.

## **CASE STUDIES IN APULIA**

# Ginosa (TA), Italy

Ginosa is a municipality of about 22.000 inhabitants in the province of Taranto. The original settlement conditions, as well as the current urban development of the town, have always been linked to the presence of the "Gravina del Casale", a territorial invariant of a hydrogeomorphological nature. This is an erosive canyon of modest asperity and width in which have developed a cave settlement, typical of the rock civilization, and the historic urban core. These two living systems have coexisted for centuries in an integrated terraced system.

The geomorphological structure and hydrological regime of the Gravina have caused landslides and landslips, making part of the historic center unfit for use and triggering a process of emptying towards more recent urban areas. These places, deprived of their residential function and thus of daily human care, have in recent years experienced a progressive degradation of the terraced structures containing the Gravine, which aggravates the condition of geomorphological instability. Another critical point is the accessibility of the Gravina. It has few and impervious access points, often lacking proper access infrastructure. This further underlines the fracture between the modern and ancient city and the environment of the Gravina, which is now only used for religious rites.

The project, conceived as a piece of Green Infrastructure (Fig. 2), attempts to outline new conservation strategies through use values identified together with the community. It aims to identify new forms of use of the Gravina, integrated with systems of greening and development of native habitats, thus recovering awareness of the values of the protected natural area. The general objective is to contribute to social, cultural and economic development through the renewal of the terraces, caves and buildings from the early 20th century, which have survived abandonment and flooding events by recovering their original function. The regeneration strategy for this abandoned part of the city is based on the re-vitalization of the two extremes of the Gravina.

On one side, the re-functionalization of a private property no longer residential and its cultivable terrace to be managed by local micro-businesses, with an educational and productive function. The reuse of the building is intended as a "pilot project" to promote the rehabilitation of other buildings. On the other side, the redevelopment of a multifunctional urban park, as a gateway to the Gravina and a driver of new fluxes in the abandoned area. The park will include re-naturalization areas, planting of endemic species and the reutilization of the retaining wall system as a space for the local farmer's market. This will bring the inhabitants closer to the historic center and allow them to enjoy it during daily use.

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<sup>&</sup>lt;sup>1</sup> Introduced in Italy in 1944 with Ministerial Decree 1444, urban standards define the minimum amount of public space to be provided in relation to urban settlements for equipped green spaces, parking areas, education and health.





Figure 2 - Municipality of Ginosa (TA), regeneration of Gravina del Casale

## Canosa (BAT), Italy

Canosa is a municipality of about 30.000 inhabitants in Capitanata, a central-northern area of Apulia. It is a center of ancient origin, known as one of the main settlements in South Italy during the Roman era – from the Republican age to the Late Antique period. It is located at the crossroad of the most important historical routes in Puglia, the Via Traiana, and the Ofanto river corridor. The high presence of archaeological areas has conditioned the urban development of the city over the centuries.

The archaeological areas, which are subject to regulatory constraints, extend both towards the rural fringe areas and into the inner city's core, where "residual" and inaccessible open spaces remain within a compact urban fabric between the ancient city to the west and the regular blocks to the east. This way the buildings literally "turned their backs" on the archaeological heritage. Furthermore, the presence of a system of underground caves, located below the consolidated city, is the cause of a significant geomorphological risk. It is a type of constraint that strongly inhibits the repurposing of urban real estate.

The archaeological urban corridor (Fig. 3) is a system of open and collective spaces that crosses the city from side to side, connecting the agricultural territory, in the south-west, with the Ofanto river plain, in the north-east.

The valorization of archaeological areas, today only used by "insiders", makes it possible to avoid the cementification and degradation of the heritage, but above all to restore centrality to these areas, reconnecting strips of degraded urban fabric.

The general strategy aims, in fact, at redeveloping these open public spaces by creating a corridor to connect the archaeological areas with the system of underground quarries and the public areas (e.g. squares, streets, public urban services areas and facilities). The project includes the redevelopment of the contiguous areas as green and equipped spaces, the creation of alternative routes for the use of the archaeological sites, the de-waterproofing and greening of the paved areas, and the elimination of detractors and architectural barriers.

The strategy of enhancing the archaeological sites and underground caves, together with the ecological conversion of public areas, raises the performance characteristics of the consolidated city in ecological and social terms, providing it with new spaces that are currently unused.



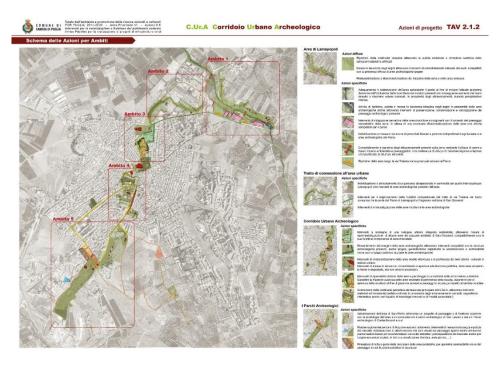


Figure 3 - Municipality of Canosa, urban archeological corridor

## **CONCLUSIONS**

The presented cases briefly illustrate how the design approach of landscape planning in the Apulian experience can rehabilitate urban areas, abandoned due to environmental risks or because they are subject to protection regimes.

In spite of the limited project extension, linked to the limitations imposed by the financial resources as well as to the availability of publicly owned areas available, it is possible to outline the general characteristics of this experience and the awareness level, achieved in relation to the potentialities expressed by landscape design.

As mentioned, this type of project, , linked to the multifunctionality of green infrastructure, has a very wide territorial coverage, integrating protected areas of great historical and environmental value with peri-urban areas and "ordinary" or degraded landscapes. This shows in particular how urban regeneration can start from the redefinition of such areas subtracted from urban development and transformations due to hydrogeomorphological and archaeological limitations.

The environmental and hydrogeomorphologic invariants, together with the public areas for standards, may in the future be the framework of the Green Infrastructure system. In other words, they could become the future frame of resilient cities, its public and the ecological, social and sense values of the communities values of the communities participating in its construction (Gasparrini, 2020). This approach allows to recognize constraints as territorial invariants, putting them at the center of future land development. This in fact overturns the traditional concept of constraints, from limitation to urban resource for development, combining environmental, landscape and housing multifunctionality with the canonical idea of monofunctional public areas, removed from the virtuous use of the city. Moreover, it should be emphasised that the real key to the implementation of these experiences must take into account the involvement of citizens and privately owned open spaces, including through governance processes. This would allow to extend these regeneration projects to other parts of the city and to develop new multifunctional economic activities that could help repopulate the abandoned areas of the city.



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