

# URBAN HERITAGE AND METHODOLOGIES OF RENEWAL<sup>♦</sup>

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## **Abstract**

*The renewal of the city started from the examination of urban conditions of comfort/discomfort (safety, mobility, environment, social cohesion); this required the direct involvement of the city's inhabitants as experts of the urban environment, and therefore able to suggest solutions.*

*Nowadays in Italy the renewal tools of the city cannot be found in planning laws, but in new tools with participated procedures. These participated procedures have put the public administration and the private entrepreneurial class in agreement. In the '90's, the so-called Complex Programs both in the national and regional domain have been realized. The Complex Programs aim to propose urban improvement through innovative procedures to improve urban life quality. Among the Complex Programs, the District Contracts have been realized in January '98 and proposed in 2002 by the Infrastructure Administration. They set the aim of district renewal in places characterized by buildings degradation, urban environment lacking services, scarce social cohesion and marked housing problems as well as the presence of an elevated seismic vulnerability.*

*This paper underlines a methodology of urban retraining with participated procedures applied in a historical centre of a town in southern Italy.*

**Keywords:** Building Experimentation, seismic vulnerability, district renewal, strategic planning.

*JEL classification:* R52, Q01, Q54

## **Introduction**

In the last years, the retraining of degraded urban areas has represented the main field of planning action, after a long period during which the attention had been directed on the growth and development of cities.

The actions of retraining are meant to give new identity to meaningless places, which means to give new quality to the urban design through urban plans. In the planning debate, urban quality falls within the sustainable city theme, and it concerns not only the ecological - quantitative aspects, but also the meaning, identity and aesthetic values of urban areas: in other words, "landscape".

In 1990, the European Commission published the Green Book on the Urban Environment (COM (90) 218 final, 27 June 1990), where it supported an integrated approach to the cities planning theme. As a consequence of this principle, the new "European Economic Community action programs on cities" was born, which suggests the necessity to integrate the different but compatible functions in order to create more complex and complete urban spaces.

## **1. The theoretical framework**

The case study presented here can be ascribed to the themes of strategic planning and mitigation seismic risk at urban scale. This experience requested knowledge of urban planning and provided sustainable interventions, as required by the European Community.

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Since the beginning of the 1990s, an ever-increasing interest has arisen in Italy around the concept of urban renewal. In response to this new research area, the Italian Government, regional governments and local administrations developed policies and programmes to improve urban degraded centres.

The general principles of interest in citizens' welfare and in degraded urban renewal were given applicability through the delineation of further international instruments (Italian National Committee for Unicef, 2000):

- the *Green Book on the Urban Environment*, 1990, by the European Union, sought to give a complete description of territorial and urban action that could support sustainable development.
- the *Barcelona Charter on the Educative City*, 1991, delineated a complex system of parameters that express the priority of cultural growth and in progress training possibilities for citizens.
- The *Meeting of American and European cities for the Exchange of Experiences in Strategic Planning* held in Barcelona in 1993. The meeting showed that organizational synergies will develop, that will eventually improve resource management and citizens' quality of life if cooperative processes are used in large cities in order to carry out strategic planning processes, and if a reasonable degree of comprehension is reached between the administration, businesses and a wide representation of social agents.
- the *Agenda 21 Rio de Janeiro*, 1992, United Nations Conference on Environment and Development (Earth Summit) discussed the environmental problems of the planet and their links to social and economic development.
- The *Charter of Aalborg*, 1994, elaborated the idea of sustainability within the European context by devolving responsibility to local administrations for elaborating plans of action to achieve permanent, sustainable city development. The objectives were social justice, economic sustainability, and environmental sustainability.
- The *World Conference on Human Settlements Habitat II*, Istanbul, 1996, United Nations Human Settlements Programme, was the second United Nations conference on the environment and development. It dealt with the urgent problem of human habitation, as at the time, around half of the 600 million citizens lived in difficult and dangerous urban situations. The Habitat Agenda was formulated, and a Declaration in which guidelines were expounded.
- The *World Health Organization*. The programme aims to assist cities in dealing with health-related issues such as poverty and social exclusion, social support, urban planning and transport, and the special needs of vulnerable groups.

## 2. The Programs of Urban Renewal

In Italy, "modern" planning utilizes new intervention tools to operate on urban level more than past planning tools. Indeed, from the demographic growth of the 60's and 70's, to the consequent urban growth, at the end of the 70's the need was born for urban renewal, initially referred to old towns and later applied to the cities of the 90's, thus becoming a "leitmotiv" of urban degradation.

City renewal initiated from the examination of urban conditions of comfort/discomfort (safety, mobility, environment, social cohesion); this required the direct involvement of city inhabitants as experts of their own urban environment, and therefore able to suggest more adequate solutions.

Nowadays, in Italy, new tools may be found with the participation of the citizens with these new procedures. The participation of these procedures have put the public administration and the private entrepreneurial class in agreement. In the 90's, the so-called Complex Programs both in the national and regional domain have been formed.

In order to apply the Complex Programs, it was found necessary to provide:

- integration of public and private economic funds;
- easy administrative procedures;
- access to the public economic fund by exam procedures (S. Ombuen, M. Ricci, O. Segnalini, 2000).

The Complex Programs aim to propose urban improvement through innovative procedures to improve urban life quality. Among the Complex Programs, the *District Contracts* were created in January '98 and proposed in 2002 by Infrastructures Administration. They set the aim for district

renewal in places characterized by buildings degradation, urban environment lacking services, scarce social cohesion and marked housing problems as well as the presence of an elevated seismic vulnerability. The *Building Experimentation* is a part of the District Contracts, that allows for proposals of new methodologies for renewal, also through the mitigation of urban seismic risk. For this reason many Calabrian municipalities have decided to apply for Building Experimentation in seismic risk mitigation.

Through this innovative *Building Experimentation* of District Contract II it has been possible to intervene on seismic risk mitigation also through experimentation methodologies of citizens' participation (e.g. listening services for local communities, study and definition of tools of address and control of urban quality etc.).

Many Calabrian municipalities attended the District Contract II based on the *Building Experimentation* for the mitigation seismic risk. Through the *Building Experimentation* it has also been possible to suggest new constructive techniques in bio-architecture and urban ecology areas, but also the financing of research for the improvement of the urban project.

### 3. The *Building Experimentation* (B. E.)

The Italian law n. 112/1998 has conferred to the Regions all the functions of public residential house building area. The B. E. is a consequence of an innovative action in public residential house building area founded upon a system of quality requisite in the processes of building and territorial transformation.

The B.E. is applied through the "Guide to the programs of experimentation" concerning safety and available requirements, comfort and morphological quality. For many Italian municipalities, the Guide has become a successful tool for urban renewal and also for the seismic prevention pursued through experimental interventions of seismic risk mitigation.

Urban recovery interventions have been done in different ways according to the Regions. The Guide proposed by the Emilia-Romagna region, based on "Mitigation of seismic risk urban areas" regarded two experimentation themes:

- analysis and assessment of seismic vulnerability;
- mitigation of seismic vulnerability urban systems.

On the other hand, the Calabrian Region, has based the experimental programs on four general aims regarding houses in the urban complexity of districts (See the next Table).

*Table 1 – The Building Experimentation in Calabria Region*

Themes	Aims	Interventions
Morphological quality	To reach satisfactory qualitative levels concerning architectural and perceptive aspect.	Retraining of degraded consolidated districts. Interventions of preservation and enhancement of historical centres.
Ecosystemic quality	Retraining through interventions of bio-architecture and urban ecology	Separate experimental interventions in 5 categories: "Water", "Energy", "Acoustics", "Air" and "Waste"
Available quality	To support the accessibility of disabled and worse-off people.	To build: <ul style="list-style-type: none"> <li>- small lodgings;</li> <li>- lodgings for collective use;</li> <li>- house-hotels;</li> <li>- services to support the management of emergency areas</li> </ul>
Quality system	Global quality control	Containment of costs and attainment of elevated qualitative levels

The eligibility requirements from the contract corresponded to the characteristics present in most Calabrian historical centres, and particularly in the province of Reggio. For this reason, some town administrations got together through the scientific support of the Mediterranean University of Reggio Calabria.

#### 4. The District Contract in Southern Italy

Palmi, in the Province of Reggio Calabria, represents one of the greatest urban centres in Southern Italy (Mediterranean area).

Palmi is situated 250 meters above the sea level in a coastal plateau next to Sant'Elia mountain (Aspromonte mountains) in the province of Reggio Calabria and it stretches to the sea level next in the area of Piana di Gioia Tauro (Mediterranean port).

The urban area of Palmi has been designed for homogeneous areas with similar district characteristics. One of these urban areas is "Pille", selected site for the Contract of District II.

The demographic dynamics introduces a negative course up to the 70's with an inversion of tendency in the last twenty years, even though the increase of population has not been evident.

Such increase has depended above all on a lower mortality rate owed to citizens' better life condition.

The district of Pille is situated at the North/East side of Palmi urban centre. The district citizens amount to 1.031, 97 of whom live in foreign countries.

Pille has been planned in 1934 by a Regional Council Housing technical office. It is based on neighbourhood blocks situated on a much higher level of the ground, so the urban system is collocated on terracing.

The district descends from country farms and is composed of about 300 small lodging areas. The district is almost exclusively residential with the exception of a school situated in the central area.

The predominant building typology was formed by semi-detached double decker houses; the ground floors were about 2.40 meters high, and were adapted as sheds, whereas the purpose of the first floor was for domicile.

The shell typology was the so-called "collaborating masonry", very much used in Reggio Calabria where it was experimented after the earthquake of the 1908 as stiffening typology.

When the residents bought the houses where they used to live, a period of continuous "rehashes" of the buildings had started and modified all the district planning.

The consequences of these unauthorized interventions concerned:

- a total change of both planning order and buildings through the construction of unauthorized building parts and superfetations (construction parts added to some parts of buildings) and also occupying some areas;
- a general urban degradation, of urban landscape in particular.

All the rehashes, besides, were made with cheap inadequate material and constructing techniques, bringing alterations to the main building structures and thus increasing their seismic vulnerability.

The conditions of housing degradation in the district "Pille" represented, therefore, an ideal framework to participate in the Contract of District II that has been formulated with the aim to suggest an integrated renewal taking into account the following aspects:

- planning;
- building;
- environmental;
- socio-economic.

The renewal strategy has been directed particularly to the mitigation of the seismic vulnerability of the buildings.

The problems in the district "Pille" are summed up as follows:

- degradation of buildings caused by unauthorized interventions that turned them into less functional and more vulnerable buildings;
- unsuitable road system;
- degradation of lifelines, undersized about new housing requirements;
- socio-economic degradation.

##### 4.1 Landscape quality and social interactions

The inquiry of urban and social environment has headed to recognize the *strengths* related to material aspects (the morphology of the urban area), and social relationships (*genius loci*). The inquiry

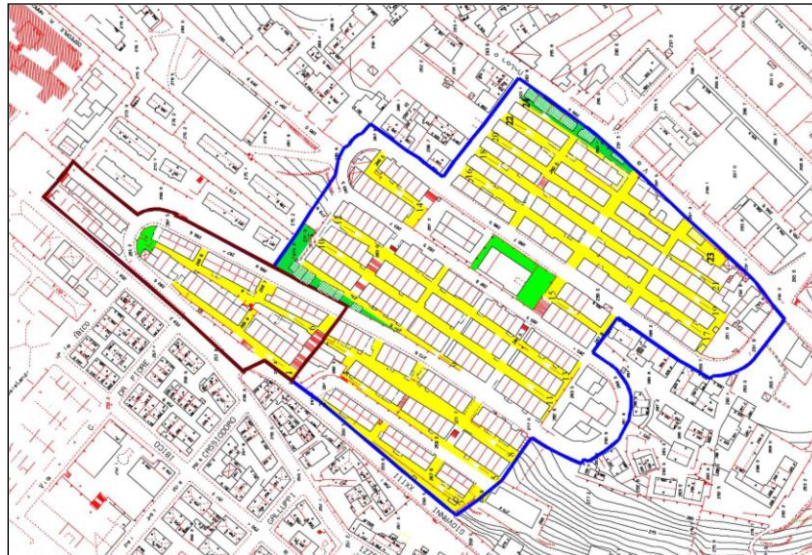
starts from SWOT analysis to evaluate the Strengths, Weaknesses, Opportunities, and Threats involved in the plan, technique, as suggests Albert Humphrey method's. (Hill T. & R. Westbrook, 1997).

The District Pille (Fig. 1) is located in a strategic position in the Palmi urban centre, which is directly connected to Bruno Buozzi street (main driveway).

The district, in this way, has become a "hinge" between the centre and the new urban growth area.

Another characteristic of the Pille District concerns the land orography as a drop between two area extremities that generated an original urban system. From the District there is a particularly nice view on the Sicilian Straits and the Eolian isles. This landscape represents an added value in the renewal of the District.

*Figure 1 – Pille District*



## 4.2 Urban vulnerability

The actual urban system of Pille District is formed by buildings constructed without rules and total absence of squares, green areas, parks and gardens. The unauthorized interventions on buildings and on public spaces caused a tightening of service roads and the increase of seismic vulnerability.

This phenomenon caused the alteration of the original typology of terraced houses into a heterogeneous typology represented by three, four or five-storey buildings with numerous superfetations (Fig. 2). The consequence of this is a new urban system that is extremely vulnerable, because of both the "heterogeneous buildings" and the total absence of public spaces as emergency areas.

## 4.3 Strategies and aims

The proposal of District Contract II has been included inside a wide strategy referred to by the Plan of Local Action 21.

The general aims are coherent with the sustainable criterions of Aalborg Charter (1994) and with the seismic security principles, and are the following:

- to improve the housing quality and citizens' life conditions;
- renewal of the urban system with interventions meant to restore the original features of buildings and public spaces;
- to promote in an integrated way the building and socio-economic renewal also through the introduction of cultural activity and social welfare;
- to improve knowledge on the sustainable theme, seismic security and urban renewal through the sharing of decisional processes.

The main aims that take into account the citizens' participation, are the following:

- to improve the residential housing quality;
- to increase and promote the relationship and the social inclusion;

- to improve the seismic security;

*Figure 2 – Unauthorized interventions*



- to promote new employment and the development of new enterprises.

The aim related to *improvement of residential housing quality*, was directed to offering innovative solutions of buildings renewal through energy saving and thermal insulation, etc.

The aim related to *the increase and promotion of relationship and the social inclusion*, was directed to the renewal of public spaces and to plan new urban and cultural spaces.

The aim related to the *improvement of anti-seismic security* was directed to the mitigation of urban and buildings vulnerability.

The aim related to *the increase of new employments and development of new enterprises* was directed to the promotion of new local activities.

#### **4.3.1 The strategy of citizens' participation**

The strategy of integrated renewal was based on the process participation suggested from Local Action 21 and adopted as guide and program framework<sup>1</sup>.

The process participation was expedited by the local Administration that has represented the leadership and the point of reference for all the citizens.

The citizens participation was started through the Urban Forum as a citizens information point where requirements and problems of different social classes were shown. Initially, the social involvement started thorough direct interviews that were necessary to direct the plan and to deepen the general information.

The Visioning approach (vision and planning)<sup>2</sup> (Longo et alii, 1999) has oriented the urban Forum and was structured by several phases referring to the first part of the participation program. The suggestions arisen from the process participation delineated a development strategy with effects on three topics (See next table).

<sup>1</sup> The Municipal Administration of Palmi had undersigned in the 2004 the Charter Aalborg, for the application of the Rio de Janeiro Local Action 21 principles.

<sup>2</sup> The Strategic planning concerns of an organization's future course. All strategic planning deals with at least one of three key questions,

1. The profile of the social community: Where are we now?
2. The future perspective: Where are we going?
3. The vision, or the future we would like to have: Where do we want to go?
4. The action plan, or the vision roadmap: How do we get there?



Table 2 – The renewal strategy

Topic	Intervention area	Aim
<i>Replacement part</i>	The housing characteristic of Pille District are so vulnerable and degraded that demolition of some urban areas is advisable.	<ol style="list-style-type: none"> <li>1. To improve the housing quality and citizens' life conditions, also increasing the seismic security and to carry out post-seismic meeting points and events.</li> <li>2. to improve relationships and social integration, with a new plan of urban spaces as relationship places.</li> <li>3. Breaking-down of architectural features that do not respect handicapped people;</li> <li>4. to integrate the residential function with commercial and service activities, to promote employment.</li> </ol>
<i>Renewal</i>	The renewal is also directed to restore buildings and public spaces to their original conditions.	The reduction of vulnerability of existing Building Stock with Building reconstruction in accordance with anti-seismic law.
<i>Citizens participation</i>	The complexity of interventions of renewal of Pille District has requested a decision-making process necessary to formulate the interventions strategy.	To promote socio-cultural activity through participated planning laboratories to improve the knowledge of local requirements.

Figure 3 – Urban project “Piazzale B. Buozzi”



#### 4.3.2 The renewal plan

The strategy of integrated renewal was realized through four projects:

1. Implementation of an *Urban laboratory of planning participation* to promote the Palmi citizens' participation and to plan integrated renewal programs of degraded areas. The Laboratory should express needs and requirements of different social classes and in particular women, children, seniors, poor people, etc;
2. to create a social state-owned company to promote craftsman's laboratories;
3. to promote a service system to improve life quality;
4. the renewal of the buildings of Pille with safety requirements. The interventions for structural and architectural renewal were directed:
  - to the replacement of structural parts and demolition of superfetations;

- the removal from buildings façades of degraded parts (paintings, plasters, external windows and door frames, etc.), the restoration of decorative parts as pilaster strip, skirt roof, cornices etc.;
  - restoration of rooflop through caulking interventions, original tiles and replacement of eaves and downpipes etc. All the renewal interventions were outlined in a Vademecum of buildings renewal, that is a part of the Renewal Plan of Palmi Administration.
5. the *removal of construction parts* in public spaces to restore them to their initial statement. The District of Pille is full of square steps which allows pedestrian crossing inside the district, so they are necessary for an easy road and local traffic. Often these pedestrian crossings are obstructed from unattended car parks or unauthorized garages.
- In order to redesign public spaces, the interventions were directed:
1. to the demolitions of unauthorized parts built on public spaces;
  2. to the retraining of square steps, with particular attention to the cultural heritage named "Fontana Muta"(Fig. 4);
  3. to the reconstruction of the paved road.

Figure 4- Urban project "Fontana muta"



#### 4.3.3 Expected results

The Districts Contract represented an innovative tool to activate contract talks between Administration and citizens for the purpose of integrated retraining.

Indeed, the Districts Contract II has allowed the planning of good effects on different aspects: urban landscape, social and economic.

The *District Contract II Plan* was included inside the *European Economic Community Plan* based on Sustainable Development (Agenda 21 local, 2002).

The expected results regarded the following aspects:

- *planning and building*. The urban plans were directed to the improvement of urban quality concerning the public spaces and the cultural and building heritage;
- *social*. The citizens' participation process through the urban forum allowed the expression of new cultural and moral forces that had never been involved in the community social life. The urban forum had the aim of improving the citizens knowledge about environmental development. The retraining of public spaces allowed to activate effortless social interactions. The participation in the laboratory of urban planning allowed the Administration to get to know the needs of citizens, above all children, older people, immigrants, etc. Besides, the Laboratory has improved the cultural participation and awareness campaign about sustainable environmental. It allowed, besides, a greater potency on decisional process;
- *employment*. The projects forming the District Contract of Pille have increased the activities in buildings, social services, artisanal areas;
- *the improvement of earthquake resistance security*. Pille District is one of the most seismic urban areas of southern Italy. The building heritage is extremely vulnerable because of several unauthorized interventions on buildings and public spaces. The projects scheduled were directed to:
  - the improvement of the knowledge about seismic risk and civil protection culture;
  - the planning of Pille Anti-seismic Urban Plan;
  - the Anti-seismic buildings adjustment;
  - the planning of safety areas as post-earthquake meeting points;
  - the creation of voluntary associations in the field of civil protection.



## Conclusion

The innovative peculiarity of District Contract II concerns the Building Experimentation, recognized to raise innovations in the fields of bio-architecture, urban ecology and seismic risk. The Building Experimentation is directed to the urban retraining of degraded districts with social, economic and buildings problems.

The District Contract II was completely suitable to intervene in a District with particular difficulties as Pille urban centre. The Retraining Programme on Pille District regarded sustainable interventions as requested from the European Community and represents an example of *good practice* in urban planning with a process of citizens participation becoming a challenge against an irreversible process of total degradation towards an opposite process of integrate renewal.

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