



# INNER AREAS

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In copertina Il borgo di Gangi, Luisa Lombardo







## La Rivista

In folio è la rivista scientifica di Architettura, Design, Urbanistica, Storia e Tecnologia che dal 1994 viene pubblicata grazie all'impegno dei dottori e dei dottorandi di ricerca del Dipartimento di Architettura (D'ARCH) dell'Università di Palermo (UNIPA).

La rivista, che si propone come spazio di dialogo e di incontro rivolto soprattutto ai giovani ricercatori, è stata inserita dall'ANVUR all'interno dell'elenco delle riviste scientifiche dell'Area 08 con il codice ISSN 1828-2482. Ogni numero della rivista è organizzato in cinque sezioni di cui la prima è dedicata al tema selezionato dalla redazione della rivista, mentre le altre sezioni sono dedicate all'attività di ricerca in senso più ampio. Tutti i contributi della sezione tematica sono sottoposti a un processo di *double-blind peer review*.

## Per questo numero il tema selezionato è: "*Inner Areas*"

Inner areas, as defined in the Italy's National Strategy (SNAI), are part of the territory that plays a central role in the cultural and social fabric of our communities, are an essential component of our society, economy, and environment. However, they are still often neglected and overlooked, resulting in deterioration, abandonment, and social exclusion. For this reason, it is crucial that the fields of architecture, restoration and architectural history and urban and territorial planning are committed to revitalizing and enhancing inner areas. These disciplines have the knowledge, skills, and tools necessary to create sustainable and innovative solutions that can transform these territories into vibrant and liveable communities. Moreover. inner areas are an excellent laboratory for innovation in these disciplines. These areas provide a unique opportunity to experiment with new approaches and techniques that can then be applied to larger-scale urban and territorial planning projects. The challenges posed by inner areas require innovative thinking and creative solutions, making them an ideal testing ground for new ways. The papers presented in this special issue of Infolio are the result of the conference "Inner areas' cultural, architectural and landscape heritage: study, enhancement and fruition. Potential driver for sustainable territorial development?" held in July 2022 at the University of Palermo. The conference brought together experts in the fields of architecture, restoration, and urban planning to discuss the central role of inner areas in our society and the need for innovative and sustainable solutions to revitalize and preserve them, being sometimes critical and some other prepositive. The papers explore a range of topics, including the use of technology in restoration, the importance of architectural history in urban planning and the role of

community engagement in revitalization projects. The reflections that emerged at the conference highlighted how inner areas are a crucial part of our territory and society, and their revitalization is essential for the well-being of our entire community and the

preservation of our cultural heritage.

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## Inner areas' cultural, architectural and landscape heritage: study, enhancement and fruition.

Potential driver for sustainable territorial development?

Emanuela Garofalo, Filippo Schilleci

The problems generated by the processes of gradual abandonment of inner areas that have been triggered since the second half of the 20th century, for over ten years have been the subject of a wide-ranging scientific and multidisciplinary debate aimed at developing focused political and planning strategies.

At national level, it is enough to mention in 2013 the SNAI, Italian National Strategy for Inner Areas, and later specific actions activated by the Territorial Cohesion Agency, which aimed at the reactivation of areas defined as "remote", based on their distance from basic services, with the intention of mitigating territorial marginalization.

The focus given to the phenomenon and the potential opportunities and operations to be put in place to curb or even invert the depopulation of the inner areas has further increased in coincidence with the COVID-19 pandemic. The status of health emergency COVID-19 on the one hand, given the need to actuate social distancing and other assessments related to the rapid and inexorable spread of the virus in urban settings, has produced a disaffection for the "metropolis"; on the other hand, the proliferation of remote working and the use of online mode for meetings and conferences in a wide range of fields have produced a re-evaluation effect of human-scale man-made settings.

A relevant example in this direction is a renewed re-discovery of villages - initiated even before the COVID-19 pandemic, especially in some contexts, in an almost exclusively touristic key - which has thus encountered a qualitative as well as quantitative revival. However, when mentioning inner areas, the reference is not only to villages, nor only to areas which are far from the coastline. Because of precisely their own definition, when speaking of inner areas, the reference is to all those urban centers falling in areas that are marginal with respect to the major territorial infrastructures or in a disadvantaged location with reference to the services available for the population and by the vulnerable economies, as stated by SNAI.

In the wake of the concept defined by the Italian National Strategy for Inner Areas, as well as the above considerations, what strategies can be adopted to encourage a new interest in the centers of inner areas? Which ones to support and increase a trend toward their rehabilitation and repopulation? Can the study and enhancement of cultural, architectural and landscape assets offer an answer to design a fruition capable of generating sustainable development?

The PhD program in Architecture, Arts and Planning has long been wondering about this issue both through the research conducted by PhD students and participating in national and international scientific debate through the organization of specific seminars on the topic. Recently, thanks to some funding granted by the University of Palermo in the framework of the CoRI (Commission on International Relations) 2021 program, within the training activities of the PhD program, Study Days have been organized in which researchers and PhD students, as well as graduate and postgraduate students, have discussed some concrete experiences. The Seminar, with its international and interdisciplinary dimension, was attended both by Professors of the above-mentioned PhD board, who have long been particularly involved in the study of Sicilian inner areas from different disciplinary points of view and by four Professors from foreign Universities whose presentations of best practices in an international perspective have provided important contributions to the debate. Foreign researchers involved in the seminar were Professor Sandrine Françoise Victor and Professor Ygal Fijalkowr, from Institut National Universitaire Champollion - Albi, who presented the case of Albi, son quartier épiscopal, et l'effet Unesco;

Introduction

Professor Pablo Martì Ciriquian, from Universidad de Alicante, who reflected with the participants on *El papel del patrimonio cultural y la infraestructura verde como revitalizadores del territorio y la ciudad* reporting some case studies; Professor Montserrat Bosch González, from Universitat Politècnica de Catalunya, with a communication entitled *Appropriate construction techniques for the reconstruction of housing after a seismic disaster in a rural and heritage context. Case study Colca Valley, Peru; Professor Pablo Manuel Millán, Universidad de Sevilla, who debated on Spaces and Project in the historical city centers.* 

This issue of the Infolio journal continues and develops the reasoning initiated at the seminar by collecting the contributions, in forms that are sometimes extended and developed in depth from what was presented and that take into account the reflections that have arisen in the discussions. All the contributions focused mainly on cases of contexts with vulnerable economies, where the enhancement of cultural heritage constitutes a strong economic potential for development. The focus on such areas, which are often marginal to the more usual circuits of fruition, is also due to the often very high concentration of cultural assets in a very wide sense. The key principle for the enhancement of these assets is to be found in the systemic and strategic vision as well as in the networking of resources, which can enhance their economic and use potential while bypassing the fragility of the single episode.

The topics addressed in the seminar presented the conclusive or partial outcomes of research conducted according to a wide range of targeted actions. These actions range from surveys on the consistency and qualities of cultural heritage in the examined areas to the study of best practices in the management of cultural heritage; from design scenarios for maintenance, conservation and integration, including those aimed at accessibility, to the study of compatible, low environmental impact and short supply chain materials and intervention techniques.

Linking the considerations proposed by the foreign professors with principles and objectives of the National Recovery and Resilience Plan (PNRR), the emerging themes of innovation and green were the subject of specific attention within the programmed interventions charged to the professors of the Board of the PhD in Architecture, Arts and Planning. According to different disciplinary points of view, the professors interpreted the two themes by declining, through specific case studies, the issues of repopulation and enhancement of inner areas, launching a fruitful and interesting debate that involved all those who attended.

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Fig. 1. A moment of the seminar

Opening Image: Sclafani Bagni in the Madonie inner area, Sicily (photo by the author, 2021). D

## Rethinking inner areas. A multidisciplinary approach to the revival of the territories.

Luisa Lombardo

[...] Our little villages have never been as interesting as they are now, they have the feel of the past and still manage to take in even the atmosphere of this time. They have strengths and intensities that we don't know how to draw on because we don't look at them, we don't know how to love them. [...] There is discomfort, there is loneliness, but there is also beauty. This is the starting point, the proper use of our ruins. [...]

Per un buon uso delle nostre rovine, from the book "Terracarne", 2011, Franco Arminio

Franco Arminio is a landscape expert and Italian technical referent of the Materanian Mountain Pilot Project within the National Strategy for Inner Areas. He embarked, in 2020, on a voyage in Italy together with the Minister for the South and Social Cohesion, Giuseppe Provenzano, from Irpinia to Sicily, starting from San Cataldo crossing Lucania and going as far as Daunia; crossing Campania, Molise, Abruzzo, and Salento, he went as far as Marche and Trentino, and put into practice his way of crossing territories and telling their stories. His gaze and thought blend into a unicum squares, roads, bars, cemeteries, the most sublime landscapes and the ravages of modernity, the exhaustion and desolation, the flashes and spurts of inner areas; and this is the gaze that a technician, architect or engineer that he may be, should have before approaching a territory. It is precisely from here that one must start, the study and crossing of territories to know their most secret sides, sensations, attitudes, even before acting through the identification of the project. Special issue 40 of InFolio magazine collects essays, studies, research and projects on the topic of Inner Areas related to the International Seminar "Inner areas' cultural, architectural and landscape heritage: study, enhancement and fruition. Potential driver for sustainable territorial development?" of the CoRi 2019 Project. It was organized by Professor Filippo Schilleci together with Professor Emanuela Garofalo to address the current challenge of the existing gap between large cities and smaller towns. It is a volume that intends to discuss the planning and housing processes of territories defined as "marginal" with a multidisciplinary approach and with the function of soliciting scholars, professors, researchers and doctoral students on the topic of internal areas. There are several contributions within the volume that enrich the body of knowledge on inner areas in different fields that require specific attention in the approach to be held.

Preface

## Inner areas in Europe

Inner areas have emerged strongly as possible places for investment and development, to be triggered through a strategy capable of reversing the process of depopulation and marginalization that characterizes these areas, by leveraging two main assets of economic policy: the improvement of personal services such as health, education and mobility and the triggering of local development processes. The municipalities, protagonists of this great change, represent a necessary driving force for the growth of the countries because, preserved in their uniqueness, they contain all the potential that makes inner rural areas so unique and so great, even in their complexity and the difficulties that come with it. "Smart Small Municipalities" or Smart Villages, seen as a strategic tool to strengthen the socio-economic fabric of rural areas, is one of the main topics on which the debate in Europe inherent in the new CAP Programming 2023-2027 has been focusing since the initial considerations of Reg. (EU) 2021/2115. The concept is not a new development introduced by the upcoming five-year period of EU programming. As early as 2017, the European Union developed the strategy document EU Action for Smart Villages, in which villages, or more commonly hamlets, are defined as "communities located in rural areas that use innovative solutions to improve their sustainability and resilience, based on local strengths and opportunities". It is not, therefore, a universal model to be applied everywhere indiscriminately but rather an approach that must be contextualized to the area from time to time and should be integrated into broader regional and/or territorial development strategies (such as, for example, LEADER Local Development Strategies).

The European Commission has given the CAP 2023-2027 a strategic role in promoting Smart Villages by providing support for "Smart Small Municipalities" strategies among the cooperation interventions under Article 77 of Reg. (EU) 2021/2115. To further emphasize the importance of this type of programmatic approach, the Commission has established a specific outcome indicator of the CAP Strategic Plans: this is the indicator R.40 Smart Transition of the Rural Economy, which is intended to assess the number of "Small Smart Municipalities" strategies subsidized through PSPs. This type of intervention contributes as a priority to Specific Objective 8 "Promoting employment, growth, gender equality, including women's participation in agriculture, social inclusion and local development in rural areas, including circular bio-economy and sustainable forestry" and is an additional tool aimed at fostering aggregated territorial and local approaches. In other Member States, different paths have been taken that see Smart Villages either as the exclusive prerogative of LEADER or as one of the forms of investment envisaged in Articles 73 and 74 of EU Regulation 2021/1060. However, not all Member States have explicitly referred to Smart Village strategies in their PSPs and even fewer have already tried to give an indication about the targets

to be achieved regarding their implementation; these

include Spain, Germany, Austria, Finland and Italy.

Spain is among the countries that have chosen to count Smart Village strategies among the possible projects that can be financed under the intervention Non-productive investments in basic services in rural areas. Being, like Italy, a Member State whose CAP implementation is regionalized, this intervention will be implemented by 11 of the 17 autonomous communities into which the country is divided. Galicia, for example, intends to finance investments in the provision of telecommunications-related services, from the purchase of equipment to the development of software necessary for the proper provision of the services themselves, to planning, management or any other activity that contributes to the achievement of the objectives set in the digitization plans drawn up. The Valencia Community, on the other hand, has chosen to orient its Smart Village concept toward projects aimed at energy independence with renewable energy in municipalities with fewer than 5,000 inhabitants. Germany has also chosen to direct its support for the smart transition of the rural economy to the area of digitization, with the aim of providing businesses and people in rural areas with adequate access to modern information and communication technologies: the German Managing Authority has planned to implement eleven operations for broadband expansion. On the other hand, the approach to the topic of Smart Small Municipalities adopted by Austria is different, as it preferred to identify more interventions that can contribute to the implementation of Smart Village strategies through the bottom-up approach and the planning of integrated strategies through cooperation between actors concentrated at a more local level and not extended to LAGs. With interventions 73-10-providing for the Promotion of Town Centers and 77-4 for the Reactivation Vacancies-Austria intends to finance, on the one hand, investments aimed at the redevelopment and renovation of abandoned, underutilized or misused public areas and/or buildings; and, on the other hand, to raise awareness among citizens, community representatives and economic operators on the issue of strengthening town centers by financing the preparation and updating of integrated urban development plans preparatory to the reuse of redeveloped spaces. An additional cooperation intervention called Rural Innovation Systems aims to fund cooperation strategies for non-agricultural innovation and an innovation network that synergistically links partnerships and their respective projects. Finally, Finland has set up an intervention called Smart Village Cooperation Projects, which identifies three macro-themes under

which beneficiaries can develop their strategies: economic innovation, social sphere and environmental protection. For each of the three spheres of action, a wide and non-exhaustive range of sectors is then identified towards which each strategy can focus: transportation, Smart farming, training, food districts, etc. Other member states such as Poland, Slovenia, and Estonia plan to support Smart Small Municipalities strategies in various ways, focusing particularly on the concepts of innovation and digitization and, above all, affinities with the Leader approach.

Italy has chosen to construct the intervention by interpreting it, as suggested by the EC Tools, as a methodological approach to support the implementation of "strategies" understood as integrated projects, shared by groups of local public and/or private beneficiaries, related to specific sectors/ areas of cooperation, in order to foster in communities in rural areas the use of innovative solutions to improve their resilience, economic, social and/or environmental conditions, local governance, relations and exchanges with urban areas, also exploiting digital technologies and agricultural and forestry multifunctionality. In addition, in our Pase, Smart Villages can be incentivized both within LEADER, Local Development Strategies, and through regional calls.

## Throught the development of smart villages

The development of inner areas under the name "smart villages" or "smart villages" has therefore taken the field in recent years as they are considered a key policy tool for unlocking the potential of rural communities. The aim of such projects is to identify good examples and case studies and implement pilot strategies for villages across Europe by strengthening the capacities of rural communities for smart development through technological, digital and social innovation adapted to the needs of different rural areas. The National Strategy for Inner Areas in Italy, born as early as 2013, represents one of the strategic lines of intervention using the European Structural Funds ERDF, ESF and EAFRD of the 2014-2020 programming cycle for the co-financing of local development projects, defined within the framework of the Partnership Agreement, which affects the entire national territory, but also many European countries. A direct action to support sustainable territorial competitiveness, to counter, in the medium term, the demographic decline that characterizes these areas, defined as those furthest from basic services. The innovative approach is, therefore, necessary to

combine the new financial instruments that the Union makes available to member states with targeted local projects. The Strategy - SNAI - aims to intervene by investing in the promotion and protection of the wealth of cultural and natural heritage and local communities, enhancing their resources, creating new employment circuits and new opportunities; ultimately countering their marginalization and "demographic hemorrhage." The areas selected by SNAI are 116 approved by the Inner Areas Technical Committee. There are many procedures and methodologies, including geographical ones, that enable the identification and estimation of local cultural heritage with the aim of assessing the ability of the economic-territorial system to adapt to new contexts while preserving its resources. In this type of analysis, territorial diversity assumes the role of the main variable of environmental estimation, which in turn is a means and tool with which to deal with the current period of stagnation and crisis, generating different and original competitive, polycentric, sustainable and cooperative geographic-economic models, places of investment in which the prospect of development cannot disregard long-term territorial visions and scenarios. Fragile territories that are distant from the poles and where the supply of essential services is poor and neglect is at home, covering a total of 60 percent of the entire area of the national territory, 52 percent of the municipalities and 22 percent of the Italian population. This is more than 13.5 million inhabitants; which means that about 22.8% of the national population resides in an inner area. The commune is the central element of a solid Italian civic tradition, which from the Middle Ages reaches all the way to the Republican Constitution, passing through Carlo Cattaneo, who considered communes and especially well-functioning small communes, the backbone of the nation. This is the most authentic Italy, whose primary need is to still be able to reside there, or return. If smart cities have become a popular model for years on how to operate on the ground, now, the same logical path must be applied on marginal territories, to make them smart lands. Key word is citizenship, not technology, at most digital. The problem arises because of the presence of public and private entities that fail to be smart, so clinging to old models that they fail to move. Many Italian municipalities in recent years have been the subject of a national reform plan thanks to the National Inner Areas Strategy (SNAI), which was created with the aim of reversing the negative demographic trend in the country's inner areas. The main goal is to make these hamlets more usable and attractive through the

promotion of the local market, spurring the development of strengths such as the agrifood field, culture, and tourism, and at the same time, through the restoration of citizenship, rebalancing the supply of basic services. Thanks to this national reform plan, many Italian municipalities have been its direct protagonists, and just as it happens in the most recent European cohesion policies, SNAI also shows itself with the aim, yes, of being welfare, but in support of development actions based on the strengthening and enhancement of local potential. Municipalities in inner areas are widely spread over almost the entire national territory, although it is possible to detect more of them in the south-central regions and along the Apennine ridge. Fabrizio Barca, the first proponent of a legislative proposal for a re-evaluation of inner areas, called them "areas where obstacles are particularly strong, taking as a model the three fundamental services that make people decide to live or leave a given place: schooling, health, mobility." People live well in a hub where they have comprehensive schooling, an essential level of health (and social) care, and a station from which to reach the transportation network needed for social mobility. The five main policies for the city are: mobility, knowledge economy, urban transformation, environment and culture, and tourism. These report to four priority fields of action: buildings, electricity, transportation, and cooling and heating systems. While at the spatial scale we are concerned with citizenship, development, energy, mobility, economy, spatial identity, knowledge and landscape. In the SNAI view, the role of municipalities remains central, foreshadowing a kind of neo-municipalism understood as a lever of participation and a newfound territorial representation capable of complementing the political one, starting with territory, economy, culture, environment and governance of resources, services, public spaces, and common goods. The return to the bell tower, then, is understood to "get on top of it and see far." The basic idea is economic and social revitalization and a development policy aimed at the places of which municipalities are the highest expression; to be protected and considered as the basic and strategic areas for the future of new socioeconomic balances of the whole country. Starting from the bottom, listening to the voices of the territory, meeting people; it is no coincidence that the asset of the strategy is: not projects but people. Accompany the transformation process, make reflection tables, operate bottom up that is, from the grassroots, from the territorial reality, to understand what to do and how to solve problems. In this sense, it becomes necessary to design an area strategy that is based on the ideas and practices of the territory's "characters," a social capital made up of doctors, teachers, school leaders, students, social cooperators, entrepreneurs, artisans, and stakeholders who in various capacities represent the voices of those who live daily in each municipality. The methodology of intervention is aimed at bringing out a vision of the area, to identify what are the cognitive chains, through modern participatory tools (focus groups, parallel tables, interviews, participatory surveys) to build an open, heated and informed confrontation with the real protagonists of the area. In this process, the municipalities of the inner areas have a great responsibility, that of having to build an innovative and respectful government that ensures better livability for citizens and a competitive system for businesses. They have the onus, moreover, of having to work on building a narrative of places that is engaging for those discovering them for the first time and that, at the same time, allows operators in the cultural, tourist, agri-food and artisanal sectors to invent, around the individual product, a true and exciting experience of visiting and consuming the territory. And while these areas represent a major national issue, territories with demographic problems but highly polycentric and with widespread historical-



Fig. 1. Madonie Park, the biggest inner area in Sicily (photo by the author, 2021)

territorial heritage, in some cases they show such prospects for recovery that they should be encouraged and taken as a model to follow. Through cooperation among actors and the creation of networks of stable actors over time, the capacity for vision and action of the ends to be pursued increases. While the city has always been the place of opportunities, wealth, encounters, innovation, culture; in a word, the Promised Land of Progress; the community, on the other hand, is the place of the communitarian, of being together, recognizing each other in the dimension of common belonging, the relationship of mutual assistance, solidarity and trustworthiness. Certain communitarian traits such as identity, trust, reciprocity, spontaneous solidarity, are easily declined in a territorial sense, and they do not remain alien even to that hegemonic form of territorial organization that is the city. The re-evaluation of the local is a rich field of study and research, with some scholars suggesting a revision of traditional models of growth, while the territorialist perspective tends to bring the humanresource relationship back into balance, and to transform knowledge of endogenous resources and territorial heritages into political and social consciousness, in the direction of a consciousness of place or "a new sense of place".

Starting from their specificities, taken as resources, inner areas should no longer be considered as geographically, economically and socially disadvantaged areas, but as areas with their own potential with respect to policies of economic development and social cohesion. The territory constitutes a condition of production and reproduction of life that is value and heritage, involving material and immaterial elements, which is represented by a beating heart that is the polis. Small villages constitute, therefore, a strategic choice peculiar to Italy; peripheral territories in demographic decline, often connoted by a purely rural vocation, must instead be considered as targets for socio-economic revitalization and contribution to the recovery of the country.

## Inner areas - The special issue of InFolio

The papers collected in this special volume of InFolio, a scientific journal of the Doctorate in Architecture, Arts and Planning of the University of Palermo, represent models, case studies of resilient experiences, places of elaboration of good practices, are examples of widespread virtuosity, geographically distant from each other but united by a single denominator: having developed in territories of internal areas. The aim is to

read through the holistic and multidisciplinary approach the territorial phenomena, useful to improve the present of these areas and make positive predictions for their future. The first d ay of t he International Seminar promoted by the Department of Architecture of the University of Palermo, July 12, 2022, had Professors Montserrat Bosch González, Pablo Manuel Millán and Pablo Martí as international guests during the first s ession i ntitled "Looking o ut o ver Europe". Professor Montserrat Bosch González's lecture entitled "Appropriate construction techniques for the reconstruction of housing after a seismic disaster in a rural and heritage context. Case study Colca Valley, Peru" addresses the issues related to earthquakes in developing countries and selects construction techniques that ensure resilient housing in seismic areas such these. The comparison of traditional construction techniques with the use of adobe proves to be a viable and competitive option in terms of safety, low price, and the added advantage of using traditional materials and construction methods, lower environmental impact, and good thermal performance in cold climates such as the one analyzed.

Professor Pablo Manuel Millán with "Spaces and Project in the historic city centers" focuses on the difficulty in d esigning in the historic city where the identity of the society that inhabits it emerges. The poor connection between the new populations and the city has been the genesis of the abandonment and loss of local culture causing the death of the historic city, little experienced and separated from the zoning process. Gentrification, i n f act, p resupposes the crystallization of the heritage elements that shape it, and the proposed contribution shows intervention in several historic centers to prevent it.

Professor Pablo Martí with "Location-Based Social Networks as a research line. The exploration of geolocated data for the study of the city" offers an overview of possible future lines of work in the field of social geolocated data applied to urban studies to understand a wide variety of urban phenomena in order to find their opportunities and limitations.

The second part of the day "Urban Planning & Technology," on the other hand, featured professors from the Department of Architecture, including Department Director Francesco Lo Piccolo, Tiziana Campisi, Ignazio Vinci and Maria Luisa Germanà. This was also followed by talks on the second day of proceedings "Architectural Heritage & Design", July 13, 2022, by Professors Renata Prescia, Armando Antista and Emanuela Garofalo, Giuseppe Marsala and Pasquale Mei. Professor Francesco Lo Piccolo's paper, "Planning for the UNESCO WHL sites. Controversies and conflicts between UNESCO management plans and local spatial planning," investigates the relationship between cultural heritage conservation and planning in UNESCO World Heritage List (WHL) sites, with reference to the relationship between Management Plans and other planning tools and policies (local and regional) that can influence the promotion of sustainable and responsible development. Professor Tiziana Campisi with her lecture about "The shared project "SMART REHABILITATION 3.0" for the EU architectural rehabilitation wants to show some examples of enhancement, preservation and intervention of traditional architecture in the Mediterranean area" wants to stimulate the preservation of the cultural identity of these places. Through the creation of a strong constructive-cultural identity useful for the enhancement of cultural resources and technological innovation, mainly in Sicilian Mountain municipalities. Goals of the European Smart Rehabilitation 3.0 Project, for which she is scientific h ead f or the Department of Architecture, that wants to create a common professional profile of Building Rehabilitation Expert for the historic cities of the Mediterranean, considering the awareness of cultural identity that could strengthen the positive reputation of these places and promote, through applied technologies, their rehabilitation.

Professor Ignazio Vinci, with "Exploring the 'rural' within the Italian local development policy",

analyzes the concept of "rural" with a wide range of meanings and operational uses, describing the different ways (including limits and perspectives of the urban-rural relationship) in which rural resources are conceptualized in Italian local development policies from the late 1990s until the last decade in which the national government launched the national strategy for inner areas. Professor Maria Luisa Germanà in "Architectural Heritage in Mediterranean internal areas: the concept of "baukultur" for sustainable uses and effective enhancement strategies. A case of study in North-East Sicily" addresses the need for conceptual and methodological renewal in the field of formation, transformation and management of the built environment. The paper proposes the example of Montalbano Elicona, Sicily, which is rich in remarkable natural and cultural heritage in northeastern Sicily, as a significant case study for testing the application of a holistic approach, oriented toward high-quality Baukultur, to different design opportunities.

Professor Renata Prescia with "Historic cities and inner areas in Sicily The point of view of the Restoration" emphasizes the importance of raising an awareness and care for heritage as a community identity card and not just a reason for tourist offer. The territory and cultural heritage thus become a pedagogical challenge in defining a model of heritage enjoyment, for the promotion of local contexts and in the constitution of learning communities in which restoration likewise participates. Professor Michele Sbacchi with "Against landscaping" shows how cultural assets and landscapes are almost absent from cities, but very common in inner areas. Towns and villages are strictly intertwined with their surrounding landscapes. Conservation laws and procedures thought up to now should be considered integrated with landascape, starting to talk about Landscape Urbanism.

Professors Emanuela Garofalo and Armando Antista will follow with "Renaissance Itineraries between Nebrodi and Peloritani. Architectural Heritage, History and Technology": the presentation of a Research Project of th 2017 call, "The Renaissance in Southern Italy and the Islands: Cultural Heritage and Technology", which worked on the inner area between the Nebrodi and Peloritani mountains of Sicily. Starting from the "renaissance itineraries" in the area, a deeper understanding of the overall cultural phenomenon of the island is proposed, creating an opportunity to create cultural networks among small local communities, fostering their sustainable development by exploiting the relationship between cultural heritage and new smart technologies, specifically an App for the enjoyment of cultural heritage.

Professors Giuseppe Marsala and Pasquale Mei with "Inner areas between description and transformation. The case of the disused quarries on the island of Favignana" will present the case of Favignana, an island in Sicily near Trapani. An area that has undergone a gradual process of marginalization over the years, the result of increasing depopulation of the native population, its aging and the quantitative and qualitative inadequacy of essential services. In this context where the qualities of its historical and environmental heritage and material culture have long been compromised and traversed by phenomena of physical degradation of its territory the research illustrated proposes the enhancement of its territorial resources within the strategic framework of the reconversion of its disused quarries.

Between sessions, moreover, a round table will finalize ideas, suggestions, considerations and further developments with respect to the topics discussed; confirming that confrontation, considering a holistic approach to the issue, is the mother way to find a solution and bring back the territories of the inner areas: the true heart and substance of our culture, history and tradition. In the following pages, strong is the possibility and desire to revive territories with multiple projects, proposals and methodologies through the concepts of "resilience" and "shared planning". Being resilient distinguishes individuals or communities in these places considered, by now, marginal, who have been able to not only resist stressors, but even use them as an opportunity for improvement. This also allows for a normative use of the concept, which is transformed from a metaphor for interpreting processes into the goal of a plan, project or policy. It also indicates openness to the future; it is a desirable character for a social system and a territory.

We must rely on the protagonism of citizens and local and national politics, a forge of answers, a demonstration that the inhabitants of hilly and mountainous areas possess not only an extraordinary patrimony-space, time, clean air, clear wateringredients that are crucially necessary to the quality of life, but also a quid extra, a virtuous protagonism capable of transforming the threat of abandonment into an extraordinary opportunity for territorial rebirth.

## References

Arminio F. (2011). *Terracarne : viaggio nei paesi invisibili e nei paesi giganti del Sud Italia*, Mondadori, Milano.

Barca, F. (2014-2020). *Strategia nazionale per le Aree interne: definizione, obiettivi, strumenti e governance,* Accordo di Partenariato.

Mastronardi L., Romagnoli L. (2020). *Metodologie, percorsi operativi e strumenti per lo sviluppo delle cooperative di comunità nelle aree interne italiane,* Firenze University Press, Firenze.

## Web references

UNCEM, Verso la nuova Strategia per le Montagne e le Aree interne. 2021. [Online]. Available at: www. uncem.it (last accessed 27/01/2023)

Holmes John, "The Smart Villages Initiative: Findings 2014-2017," [Online]. Available: www.e4sv. org|info@e4sv.org|@e4SmartVillages (last accessed 27/01/2023)

Società dei Territorialisti e delle Territorialiste, "Riabitare la montagna," 2016, [Online]. Available: www.fupress. com (last accessed 27/01/2023)

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Fig. 2. The heart of the Madonie, the nature that envelops the small inner areas (photo by the author, 2021)

Opening Image: Colca Valley, Peru (fonte: https://unsplash.com)

## Appropriate construction techniques for the reconstruction of housing after a seismic disaster in a rural and heritage context. Case study Colca Valley, Peru

Looking out over Europe

Montserrat Bosch

From 1970 to 2020, earthquakes in developing countries caused 1.015.000 deaths and affected 178.000.000 inhabitants. This problem requires the use of mechanisms that allow proper selection of construction techniques that guarantee resilient housing and successful experiences of reconstruction in rural populations with heritage value located in seismic areas such as Peru and Italy. The objective of our research focuses on comparing six traditional building techniques strongly related to self-building: four techniques for adobe housing, and two techniques for masonry buildings. The research results show that reinforced adobe techniques are a viable and competitive option. These techniques have safety characteristics, low price, and the additional advantage of using traditional materials and construction methods, having less environmental impact and showing good thermal performance in cold climates as Colca Valley, in Peru.

Keywords: Self-building, Sustainability index, Housing-reinforced adobe technique, MIVES methodology, Colca Valley (Perù).

## Introduction

I'm Montserrat Bosch, Associate professor at the Universitat Politècnica de Catalunya BarcelonaTech (UPC) a public institution of research and higher education in the fields of engineering, architecture, sciences and technology, and one of the leading technical universities in Europe. Every year, more than 6000 bachelor's and master's students graduate. Many of the Master's students come from Latin America which enriches us for many different reasons, but in the context of this Workshop and seminar -focused on the Inner Areas- their presence is crucial, since to talk about rurality or traditional building techniques in Spain, is certainly difficult. On the other hand, in Latin American countries there are still situations and conditions in which talking about traditional construction and self-building makes a lot of sense. When these students from Latin America come to Europe, they choose Spanish universities because of the language advantage, and they even choose Catalonia and specifically Barcelona because of the specific attraction of the city and the fact that UPC is a particularly prestigious university in the field of Architecture, as indicated by the National,

European and World Rankings<sup>1</sup>. The presence of these students, with diverse needs and training, in the different masters in technology, building and/or architecture, provides a much more social vision and approach to the disciplines, compared to our students in Spain, who are more focused on technique, on the project, and on planning for the future, but not very willing to take into account the inhabitants and the population that resides the spaces. We can assure that the Latin American movement still conserves this value, that we build and make architecture for society, not only for our personal curriculum. This reality allows us to work, from our small country of Catalonia, on various projects that extend all over the world, as can be seen in the GeoCommons open access repository that the UPC itself has, for the geolocation of the research and projects that we develop [Fig. 1]. Although our most intense extent of mobility and activity is the Mediterranean area, which includes the countries on the Mediterranean side of Africa, given the common cradle, it can be seen how Latin America is, for us, an area with which we maintain a fluid and regular relationship, from our schools (EPSEB) and specifically from our research group Interdisciplinary Group of Building Science and

Technology (GICITED). GICITED is a multidisciplinary group of university professors with very diverse backgrounds, physicists, geologists, chemists, architects, humanists and therefore we look at construction and building with a diverse perspective. As a joke we say: « I'm going to put on the geologist's glasses », to look at the building as a geologist looks through a magnifying glass; or «I'm going to put on the glasses of a humanist » who looks at the building as the coexistence between neighbours. This diversity of visions works very well for us. We also collaborate closely with another research group more dedicated to heritage and to intervention and restoration, the Rehabilitation and Architectural Restoration Group (REARQ)<sup>2</sup>, because, although we develop research in new technologies, we are also dedicated to the development of intervention technologies and materials for rehabilitation and restoration. In an attempt to respond to the objectives and values of the UPC, and after detecting that university students are much more empathetic with the society in which they live when they begin their studies, thinking of an architecture of service, than when they finish their academic career, for years we have been trying to change these dynamics and introduce content in the curriculum more related to the humanities and professional ethics. In fact, since the constitution of the Ethics Committee of the UPC<sup>3</sup>, of which I am a member, we seek to involve the community in the ethical perspective that humanism gives on the studies of applied sciences and technology as part of the UPC's competence repertoire.

## Some examples of working in "Inner Areas" perspective

In this context, I'd like to present a couple of examples of Latin American students who have completed their final work of the Master's degree in Advanced Building Construction, focused on "mud" construction. The first one, "Technological innovation in earth constructions: prefabrication, 3D printing, drones" [Pichazaca, 2020], deals with new mud (Loam) construction technologies, based on the recognition of traditional techniques in their own countries. This project comprises all the experimental phase until reaching the 3D printing system with mud, precisely developed from Italy, and which we follow closely because we are interested in innovation without losing the fundamentals and cultural tradition. The second project, "Earthquake-resistant techniques in earth: a constructive alternative for rural housing in Peru", [Cárdenas, 2018], that we will describe in detail below, proposes an environmental evaluation of various earthquake-resistant reinforcement techniques in mud self-building.

I would also like to refer to the work developed by a student from Ecuador, "Revaluation of totora reeds as a construction material" [González, 2020], on the use of totora reeds, which is a plant that grows in Lake Titicaca; an extremely light plant that allows the construction of floating houses and which today is the object of research for the development of new materials and new uses without forgetting the management of the plant resource, since if the plant

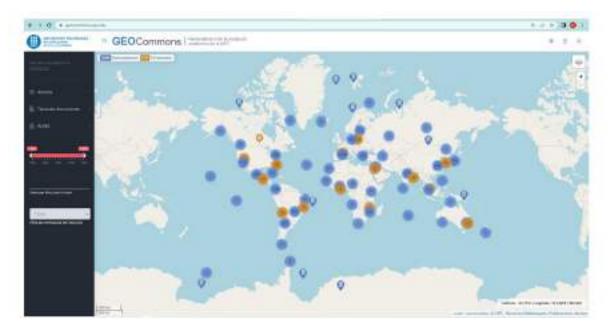


Fig. 1. GeoCommons tool, where you can navigate to geolocate projects, https://geocommons.upc.edu/.

grows in an uncontrolled manner, it drowns the lake itself. Returning to the work of José Carlos Cárdenas, which we have presented at various congresses and of which a scientific article has been published "Evaluation of reinforced adobe techniques for sustainable reconstruction in andean seismic zones" [Cárdenas, 2021], I would like to highlight a strategy that I consider to be very intelligent of the Faculty (School) of Civil Engineering, National University of San Agustín de Arequipa (Peru). When a student from their university is awarded a scholarship, with good academic results, when they return to their country with their Master's degree, they can apply for grants to spend a year doing research and publish an article related to their research carried out in Spain, together with the teaching staff from their own university. This strategy makes it possible to link their own teaching staff with professors from other universities, and to improve productivity in order to meet the quantity and quality requirements of publications and doctoral programmes. José Carlos Cárdenas had worked in the Colca Valley in Peru - his place of origin-after 2016, when an earthquake affected this zone and traditional unreinforced earthen buildings suffered serious damage. The objective of this research focused on comparing six traditional building techniques strongly related to self-building: four techniques for adobe housing-reinforced with cane (CRA), wire mesh (WMRA), geogrid (GRA) and halyard ropes (HRRA); and two techniques for masonry buildings, confined (CM) and reinforced (RM). For this purpose, the authors used the Integrated Value Model for Sustainable Assessment (MIVES), a Multiple Criteria Decision Analysis (MCDA) model used to compare alternatives by assigning a "sustainability index" to each evaluated construction technique.

This research study included two types of variables: such as economy (\$/m2) and quantitative, environmental impact (kgCO2/m2), among others, and gualitative, such as perception of safety, respect for the urban image and popular knowledge. The research results showed that reinforced adobe techniques are a viable and competitive option, highlighting the cane reinforced adobe technique (CRA). This technique has the same safety characteristics, but at almost half the price, with the additional advantage of using traditional materials and construction methods, having less environmental impact and showing better thermal performance in cold climates. The interest of this work lies in highlighting the value of traditional construction techniques, affordable for the local population

located in rural areas, difficult to access and to where aid arrives late and badly because, when it arrives, it imposes delocalised techniques and often, too much subjected to the concrete culture.

We were interested in developing self-construction techniques, which could be reinforced by the inhabitants themselves with an appropriate technology to their knowledge, their local knowhow, and giving value to their heritage built in mud, in adobe, because replacing all the houses meant destroying all the existing legacy, which is the little that is touristic. Those who visit these inland areas are looking to see villages built with love, with tradition and with their own character, so demolishing the damaged traditional buildings meant making them disappear and losing all their essence.

This is a strategy that is easily scalable. As can be seen in the map [Fig. 2] adobe housing in Peru is very widespread: in dark brown the areas where between 76% and 100% of the buildings are adobe, and it can be seen that in the highlands, which are the poorest areas of the country where the voracity of concrete does not reach, most of the houses are still built with adobe. If earthquake relief does not reach these areas either, it is extremely important that people are able to adapt their homes and improve them so that they are able to withstand an earthquake.

In the next image [Fig. 3], we can observe inhabitants that build and self-construct their houses with the help of the neighbours, with the knowledge transferred between generations. We feel deeply attached with the concept of "supported self-construction", since we consider that the architects and technicians are meant for assist the communities to build, with the expertise we can contribute, with any impose but offering recommendations, mostly in terms of safety. In order to evaluate seismic self-construction techniques, we have used the MIVES methodology, of which Professor Oriol Pons is an expert. He is also a professor at the UPC and also collaborates with UNIPA in various teaching and research projects. MIVES is a methodology to evaluate technologies from a social, economic and environmental point of view and compare them to determine which seems the most appropriate. It is a robust, numerically verified and a decision-making system, where options are analysed from different points of view, through the evaluation of indicators and from which very interesting conclusions can be drawn.

The evaluation process has been carried out according to the following schedule: firstly, the six construction techniques that the university had



Fig. 2. Map of Peru, with the intensity of mud constructions, by provinces (from INEI census, 2017).

already validated with the seismological table in Peru were chosen, and which are considered to be already standardised, validated by regulations, and deemed to be suitable techniques for the reinforcement of adobe dwellings. With the seismic-resistance issue already validated, we took these six reinforcement techniques and evaluated them according to different criteria: who had developed these techniques, who knew about these techniques, and whether the scientific literature validated the results and behaviour of these construction techniques. We also defined indicators, in terms of cost and time criteria from an economic point of view; indicators from an environmental point of view such as related carbon footprint, waste generated and thermal performance; and social indicators such as participation, based on the possibility of involvement of the users themselves and the social acceptance of these solutions [Fig. 4].

We made a comparison of economic indicators, based on the construction techniques that had already been implemented in some buildings -from the developers themselves, including Caritas, which is linked to the church, or other associations that have made housing reinforcements- and how much this intervention in the reinforcements had cost. We also looked for environmental indicators, on thermal behaviour, the emissions associated with the materials -because some have plastic mesh, others have steel mesh, or esparto rope flanges, and therefore we also had to compare these emissions- and we even compared the emissions related to transport and how far the material came from, because if the material comes from France it is very expensive to reach the Colca mountain range, while the esparto ropes perhaps have lower seismic performance but having them on hand means it is not necessary to wait for the shipment to arrive. Then we analysed the social acceptance and also how many people were involved in the application of the techniques, because if it is a technique that requires a lot of manpower, even if it is cheap, it has to be taken into consideration, and if a reinforcement can be done in a weekend, it is much more effective than if it needs two months of work. We must be particularly sensitive to these social aspects. We often find that the users themselves consider adobe housing to be unsuitable and prefer, in principle, to have a new concrete house built for them. It is therefore necessary to work on the perception of the population until the reinforced adobe house is considered safe. If the only experience the inhabitants have is that the adobe house did not resist the earthquake, it is important to educate and work on the acceptance of these reinforcement systems.

Finally, the MIVES system involves a valuation of all these variables in indicators [Fig. 5], through a consultation with experts who participated in a panel, and who were asked how they would value each of these indicators, from an environmental, social and economic point of view. In this process, it was important to choose the right people from different profiles to evaluate. The selection was made among groups of experts in seismicity and post-disaster interventions, experts in thermal behaviour of building solutions, and among local and international social agents. With this information we obtained some variables, and incorporated some result functions and values. This is how we determine which technique is, from a social, environmental and economic point of view, the most appropriate. By modifying the values according to the needs of each case, we could choose the criteria, based on meetings with the users and analysing the surrounding conditions.

The chart with the final indicators also includes different ways of expressing the results, because it is also important to know how to communicate the data to the end users. José Carlos Cárdenas did



Fig. 3. Construction of a house based on collaboration between neighbours and popular knowledge (photo by J. Cárdenas).

an immense amount of field work to find out the needs from the territory and to discover first-hand the difficulty of working with ropes, mesh or metal reinforcements. Based on the results obtained in this research project, another Master's student, from the next promotion, wants to continue in this line developed in the Colca Valley and intends to transfer this analysis methodology to seismicresistant solutions for mud and adobe construction in Ecuador, based on her own experience, as she has already worked in her country on solutions that have proven to be feasible and functional, but of which the perception has spread that they are not safe or that they are not accessible, which is not true.

## Conclusions

If humanity identifies a glimmer of hope, it is in the youth. Young architects and engineers are the ones who are going to solve the disaster that the elders have caused as a generation. Examples include the work of a group of young architects (Alberto Sánchez, Ismael Pizarro and Guillermo Bosque) developing an initiative in Used, a village in Aragon (Spain) which is the emptiest territory, and from which movements such as "Teruel exists" and others have emerged to reclaim rurality and to give value to a territory that is being abandoned. They found another village called Alhajara, where they work with architecture, buying ruined houses at a very low price through crowdfunding and working with students on projects, recovering construction techniques and organising workshops for young people, to come to the field and spend a week working on those projects. This is something that Camila Mileto and Fernando Vegas also do in Valencia. You can count on the university professors, but you have to look for these spaces of opportunity and pull these carts because you are the ones who are going to work in the future.

I would like to end with a sentence I read in "Architecture for the poor" [Fathy, 2016]. The first chapter of the book says «adobe is the only solution for local reconstruction», and he said this in 1973, so 50 years have gone by and we still have a slow reflex ear. I am not saying that we are going to rebuild the



Fig. 4. Tree of requirements with the associated weights given by expert groups. Tree of requirements with the weights given by groupings (digital elaboration by J. Cárdenas, M. Bosch, C. Damiani).

					EVALUACIÓ	N GLOBAL	DE LAS TECN	ICAS				
	REQUERIMENTO	ECONONÍA			MEDIO AMBIENTE			BOCIAL				
	CRITERIO	CRETERIO Costo T		Ткерь	Eniskee	Reides	Confort Nirmico	Padiopastin		Acaptación		INDICE
	INDICADOR	Fabroaste y inartop	Acres 4 mitted	Terps sporady	Hada Cabore	Fiscolar referal	Conductividad Brenica	Gonophieth Borist		Twoquits or reported	terthain	
NOON NEDGEDADO	Got cañas - ARC	0.076	D.101	0.119	0.067	0.058	0.114	0.026	0.051	0.048	0.054	0.714
	Con-cuentio-ARCD	0.086	0.112	0.117	0.066	0.058	0.114	0.006	0.051	0.045	0.054	6.709
	Cos promalia-ARG	0.078	0.015	0.120	830.0	0.058	0.114	0.023	0.041	0.053	0.054	0.620
	Cos male weblics-ARM	0.068	0.015	0.109	0.064	0.058	0.114	0.032	0.043	0.050	0.054	0.607
Akaliinta controda - AC		0.010	0.112	0.040	0.028	0.017	0.069	0.090	0.032	0.064	0.023	0.475
Albertilerio Armode - AA		0.039	0.015	0.086	0.004	0.032	0.077	0.024	0.015	0.057	0.021	0.361



Fig. 5. Evaluation of techniques based on tables easily understood by the community (digital elaboration by J. Cárdenas, M. Bosch, C. Damiani).



*Fig.* 6. Observing spaces of opportunity in interior areas, identifying, evaluating and proposing based on knowledge and respect. *El Roussillon, France (photo by M. Bosch).* 

world with adobe, but where there is adobe avaliable, we have to rebuild with adobe, which is the most sustainable material and adapted to the territory, with local techniques and with local people. The important thing is for the territory to recognise these techniques as their own, to feel empowered and say "I can do this", because as long as they can't do it, we will continue to be butterflies that will land in a moment and fly away until the next opportunity [Fig. 6].

## Notes

- 1. https://www.upc.edu/ranquings/en
- 2. https://futur.upc.edu/REARQ
- 3. https://comite--etica-upc-edu.translate.goog/ca?\_x\_
- tr\_sl=ca&\_x\_tr\_tl=en&\_x\_tr\_hl=en&\_x\_tr\_pto=wapp
- 4. https://futur.upc.edu/OriolPonsValladares
- 5. https://elpais.com/eps/2022-03-04/nueva-vida-parala-arquitectura-de-frontera.html
- 6. https://resarquitectura.blogs.upv.es/

## References

Cárdenas, J. (2018). *Técnicas sismo-resistentes en tierra: alternativa constructiva para la vivienda rural en el Perú*. Projecte Final de Màster Oficial, Màster universitari en Construcció Avançada en l'Edificació. Universitat Politècnica de Catalunya.

Cárdenas-Gómez, J., Bosch, M., Damiani, C. (2021). "Evaluation of Reinforced Adobe Techniques for Sustainable Reconstruction in Andean Seismic Zones". *Sustainability*, vol. 13, 9, pp.?? 4955. https:// doi.org/10.3390/su13094955

Falthy, H. (2016). *Architecture for the Poor. An experiment in rural Egypt.* The American University in Cairo Press, Cairo.

Gonzalez, E. 2020. *Revalorización de la totora como material de construcción*. Projecte Final de Màster Oficial, Màster universitari en Construcció Avançada en l'Edificació. Universitat Politècnica de Catalunya.

Pichazaca, M. 2020. Innovación tecnológica en las construcciones de tierra: prefabricación, impresión 3D, drones. Projecte Final de Màster Oficial, Màster universitari en Construcció Avançada en l'Edificació. Universitat Politècnica de Catalunya.

## Web References

https://www.upc.edu/ranquings/en https://futur.upc.edu/REARQ https://comite--etica-upc-edu.translate.goog/ca?\_x\_tr\_ sl=ca&\_x\_tr\_tl=en&\_x\_tr\_hl=en&\_x\_tr\_pto=wapp https://futur.upc.edu/OriolPonsValladares https://elpais.com/eps/2022-03-04/nueva-vida-para-laarquitectura-de-frontera.html https://resarquitectura.blogs.upv.es/

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## Work in the historic city: Interventions, reflections and experiences.

Pablo Manuel Millán

Looking out over Europe

## Abstract

To work in the historic old city is to work in the most sensitive part of the city. The heritage city concentrates the identity of the people and the society who are its inhabitants. Lack of connection between the new inhabitants and the patrimonial city where they live, is the genesis of the abandonment and loss of the patrimonial cities. City zoning has been the death of the historic city. We need the historic city to be lived in, far removed from the theme parks we are turning it into. The heritage city should not just be the city of tourists. Gentrification means the crystallisation of the heritage elements that shape it. The article shows the intervention in several historic centres based on a research process.

Keywords: Heritage, Historic city, Architecture, Architectural projects, tourism.

## Dimensions of heritage intervention

Working in the heritage city implies assuming a series of responsibilities that are not only material. Clearly, to project onto the material inheritance of past generations implies a profound reflection on what and how this inheritance is bequeathed to the society of the future. Thus, we speak of the heritage city as a sensitive and complex area that requires a series of specific determinations. It could be said that these are the needs inherent to its material nature. They are linked by a series of needs generated from an economic dimension, which is the value enhancement for tourism purposes. The heritage city, being the main object of identity of the urban nuclei, is under constant revision, a fact that has possibly generated the greatest problem: the depopulation of the original society that inhabited these places, generating an area devoid of tradition, of roots. Beyond entering the already well-known discourse about gentrification, and the increase in the price of land in these areas for speculative purposes, the draining of the original population from the heritage city is a major loss, reflected in the proliferation of spaces and flats for tourist purposes but lacking the sense of the social

ritual of the population that generated this material heritage. If designing architecture, in a broad sense, involves continuous research, in the heritage city, the design becomes research with a purpose. There is no intervention in heritage without prior research, at the historical, archaeological, social, and material level. Only by reaching conclusions in this research process will it be possible to deal with and work with resolve on the heritage element. Thus, each intervention involves a triple dimension. The Vitruvian triad applied to the heritage city could be rewritten as the firmitas or technical dimension; the utílitas or social dimension; and the venustas or aesthetic dimension. Technical dimension: the project and its parallel research must address all the technical requirements necessary for the optimum conservation and enhancement of the element which is the object of the intervention. This dimension in the heritage context involves applying a material logic from the perspective of restoration. It must be stressed here, that not everything applies to the historic city. Possibly this thinking has led us to observe inherited architectures stripped of their very nature by the execution of projects without the collective understanding required by heritage. Aesthetic dimension: heritage and ruins have always been the muse of artists, painters, and architects because of the intrinsic correlation between beauty and the past. It seems as if time has been purifying and eliminating all the added or superfluous elements to strip everything down to the bare essentials, without noise or contamination. Intervention in the historic city and in heritage contexts requires the search for the logical purity and austerity of the beauty of the past. For this reason, the search for aesthetics through simplicity is a necessary condition of heritage interventions.

Social dimension: The enhancement of the historic city must be the result of a social commitment between those who reside in the area and the local authorities. It makes no sense to restore fragments of the city and conduct significant enhancements if the society that inhabits is obliged to leave its dwelling places (another heritage element) due to speculative processes such as gentrification or crystallisation. Intervention in the patrimonial city requires a process of dialogue, seeking always to ensure the permanence of the very customs generated by the physical support of constructed heritage.

The article presents two experiences carried out on two different scales in which these three dimensions have been considered: one on an urban scale, the enhancement of the fortress and castle of Beas de Segura (Andalusia, Spain) and the other on an architectural scale in the historic centre of Porcuna (Andalusia, Spain).

## Experience of intervention in the fortress and castle of Beas de Segura (Andalusia, Spain).

Beas de Segura is a village situated in the homonymous valley in the Segura Mountains, in the province of Jaen (Andalusia). Its territory has a tradition of constant occupation by diferent cultures - Paleolithic, Roman, Islamic, Christian, and Modern - generating a complex "meld of overlapping layers and time: a palimpsest [Fig.1]. The principal cultural heritage structures emerge mainly in the old centre of the village, the Villavieja district, as well as in the archaeological sites scattered around the urban area. This area is characterised by two elements: a natural limestone promontory and the walls of an ancient, long abandoned fortress. Nowadays, the defensive constructions merge into a residential fabric that arose in the 19th and 20th centuries and transformed the image of the hill from that time onwards. The fortress and castle of Villavieja was built during the Islamic period and was subsequently extended by the Christian conquerors.

Nevertheless, despite the patrimonial values existing in this area, it has been repressed by a process of apathy on the part of both the inhabitants and the local authorities during the last century, resulting in the current image of abandonment. This has brought the site to a watershed moment, where an intervention is mandatory in order to keep the memory of the development alive and reactivate the socioeconomic activity of the area.



Fig. 1. General plan of the Castle and Fortress of Beas de Segura, Jaén.

The blurred boundaries between patrimonial collapse and zeitgeist.

The cultural heritage situation in the Villavieja district must be declared critical: the ruins of the castle and the remaining walls are at risk of disappearance, mainly because of the indolence and apathy of the local inhabitants. The population has begun to forget the historic and cultural values of this area, and the importance it once had in local heritage. [Fig.2].

Reasons for the abandonment of the district are varied and have been evidenced in the frequent surveys and participative processes undertaken by the local authority in recent years. First, the increasing mobility of the social centre of the village must be highlighted: starting in the modern age, the inhabitants continue to prefer to live along the unadorned riverbanks, rather than in the ancient streets on the promontory. Military defense is no longer needed, although the steep topography does signify a disadvantage for people in terms of accessibility to their homes. Also, this process has affected the social perception of the historic Villavieja, from the city centre to an abandoned area, with marginal tendencies. On one hand, the new generations have no recollection of the district's historic meaning, because the oral history passed down from one generation to another has been interrupted. On the other, as the original inhabitants left the area, the dwellings were rented to temporary agricultural workers, viewed by some sectors of the population as strangers due to their often-foreign origins.

The main landowners of the olive groves hire transient migrant labour to reduce salary costs, and, in many cases, workers are accommodated in old houses in the Villavieja or adjacent areas. This creates a vicious cycle which accelerates the depopulation process, threatening to leave Villavieja as a place for neither heritage nor residence. As previously stated, these factors have brought the heritage area to a critical point: What if the fortress falls into ruin? Will the inhabitants experience any loss? Do they have any vivid, living memories of their castle?

Indeed, such a loss of the collective memory must be halted if we are to preserve Villavieja's cultural heritage for future generations. Currently, the patrimonial area is crystallized in many ways, while the progressive



Fig. 2. North view of the fortified enclosure and dwellings.

unravelling of the memory of the fortress and the castle continues, there is a real risk of collapse, which is almost imperceptible, due to increasing apathy. It's possible that by the time people become aware, it will already be too late to reverse the process.

While the physical damage is severe, it is the changes in the zeitgeist (the spirit of the age) that have condemned the Villavieja fortress and castle to complete oblivion, if no immediate action is taken. For this reason, physical restoration alone is not enough to protect the area. The required recuperation must take place within the context of shared identity and belonging. In this way, a sense of pride and ownership of their heritage will be fostered among the Beas population. The memory itself needs to be restored.

Currently, as a general diagnosis, the former defensive complex maintains its historic, archaeological, and social values in many ways, despite having been affected by the abandonment process: there is a heritage resilience. At the same time, the Villavieja promontory represents a strong connection to the surrounding landscape, and there are various public places of interest which function as viewpoints across the Beas valley. At present, there is considerable scope for the recuperation of the ancient structures, and for attracting visitors and investors, especially given the renewed interest in the rural way of life following the pandemic. On the other hand, the heritage area faces many risks, including, as mentioned, the loss of collective memory, the demise of local business, accessibility, the absence of cultural resources and the demographic sectorisation.

This demonstrates the requirement for a multidisciplinary vision to begin revitalising the area [Fig.3].

## Director Plan and axes of intervention

Given the complexity of the task, the Municipality of Beas commissioned the Director Plan for the Villavieja fortress and castle, developed by a multidisciplinary team, while they started to acquire those private houses which interfered with the patrimonial environment. The structure of the Plan aimed to record the characteristics of the area from every angle, resulting in several documents: historic study, archaeological study, architectonic plans, pathology maps, landscape study, socioeconomic analysis, urbanistic study, juridic

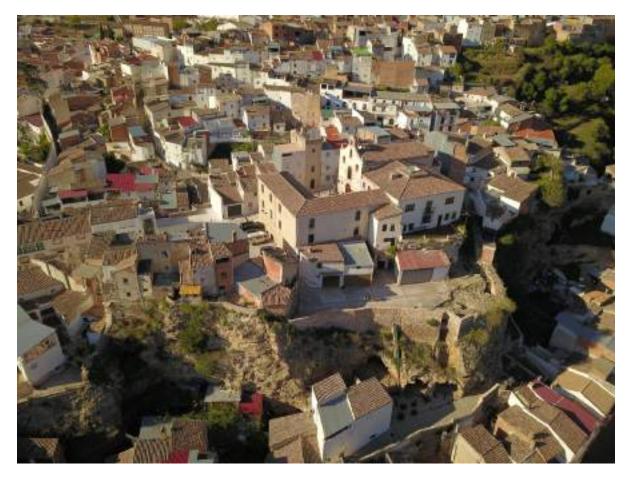


Fig. 3. South view of the enclosure.

study, cultural proposal and architectonic proposal. The Plan organised the interventions for the coming years in the period 2020-2028, as well as set priorities for the various actions already underway: house acquisitions, the consolidation process, architectural interventions, etc. Approaching the complexity of the patrimonial area gradually became an essential tool. Following the approval of the Director Plan, it was necessary to define the master lines for the Patrimonial re-activation of the district: the restoration of a collective memory, the development of a cultural system, the creation of a focus for tourism, and improvements in accessibility. The selection of the scale of intervention, was particularly crucial, since the Villavieja urban area occupies up to 15.000 square meters, thus a surgical selection of the elements for intervention was required, leaving only those that affected the balance of the whole system. Reversal of the obsolescence process was necessary for the inhabitants of Beas to feel reconnected with their heritage. It has been shown that people protect what they feel is their own. How could past memory be restored? First, by renovating the ancient fortress as far as possible, restoring the architectural structures, and secondly by reconstructing the history of the village and the lost memories, using cultural resources. The heritage area requires cultural policies that can activate the many existing, empty buildings: there is no point restoring without purpose. The current interpretation centre of the town must be updated and transformed to become the intersection of the incoming Beas cultural system, creating a kind of museum island adapted to the local scale. In any case, the cornerstone lending accuracy to the Plan is the touristic activation of the area. While there are heritage points where tourism presents some risk as a catalyst for gentrification, in the current Beas case, it is almost the opposite: the district is on the brink of obscurity, and collapse if no measures are taken, and tourism can play a leading role. 'Driven by tourism, heritage transcends its cultural dimension as historical legacy and collective memory and transforms into a productive resource'. Furthermore, to encourage tourism, it is essential to improve accessibility - both to Beas de Segura from the province, and to the Villavieja area from the town. Lack of mobility and isolation has a direct influence in the emergence of ghettos or marginalized communities.

In summary, in order to positively address the watershed where the Villavieja heritage area now finds itself, the full application is required of the Director Plan and the development of the four transformation axes: memory, culture, tourism and mobility. On this

basis, the evolution of the area will dictate the next steps, with the crucial issue of the residential areas still to be resolved, depending on how the population reacts to the new actions. Whatever the outcome, the guarantee of success completely correlates to the economic activation of the area relying on tourism and cultural centres, so that the inhabitants of Beas and tourists will visit the area and start the process of reconnection with the town residents. Therefore, a sustainable transformation balanced between culture, economy and society is encouraged [Fig.4].

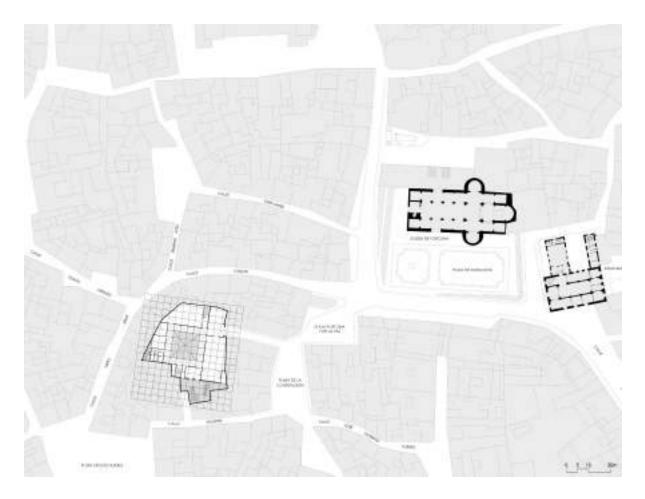


Fig. 4. Volumetry of the recovery of the walls of the Castle of Beas de Segura, Jaén.

## Experience of intervention in the historic centre of Porcuna (Andalusia, Spain)

Porcuna is a small Andalusian municipality located in the southeast of Spain. This town has a long history, a fact that has provided it with more than sixty centuries of uninterrupted presence in the same area of the territory, generating a significant archaeological wealth beneath the town. This fact is what has endowed the municipality with its identity and personality, given that the architectural heritage has been demolished to make way for the construction of the new city. The subsoil, therefore, has been left with an abundance of archaeological traces of the past as well as important urban voids, inexplicable were it not for the logic of archaeological losses [Fig.5].

The object of our intervention is precisely that, an important urban void in the centre of the city as a consequence of the demolition of an important house



## Fig. 5. Map of the location of the Porcuna Parish Center (Jaén).

in the municipality. Although it might appear to be a specific element (an old house), this intervention is accompanied by an urban study of the heritage city and therefore a project to analyse the elements that make up this urban environment. The new project sought the construction of a Parish Centre, a semi-public building that would allow activities of various kinds but retain a strong local character. The project was conceived as an opportunity to recover an important space lost after the demolition of the previous house.

The technical dimension of the project required resolving several contingencies: the pre-existence of the medieval wall of the fortified enclosure of the castle, the Roman ruins underlying the building, and the vestiges of the house that remained before it was demolished, etc. All these elements would have to be reintroduced into dialogue with the new project. On the other hand, the aesthetic dimension sought to ensure that any intervention would not cast any doubt on its contemporary character, nor could it be understood as a historical faux pas. For this reason, the geometry of the previous building was studied to perfection in order to make a volumetric recovery faithful to the original building which would allow its neighbours to see what the building was like in its volume, without any added elements. Simply a sober and simple volumetry. Finally, and as a fundamental axis of the project, the need for an important social connection. Although this space was private, its links with the community would be strong, given that the centre of parish life in this municipality was this building.

Furthermore, the new intervention would show people the different heritage elements that were located in this context, serving as a link between the history of the municipality and its new population [Fig.6].

## A full-scale model

The project was developed with the idea of an ephemeral but permanent installation. For this reason, it was decided to propose a 1:1 scale model, on a real scale. A building that, while being very aseptic in its appearance, would be capable of bringing together all the existing elements, giving them a uniform language and capable of explaining the pre-existing elements. Thus we thought of an intervention of an urban nature, in terms of its size, but a unitary building in terms of its functionality. Opting for a precise geometry in plan, within a historic city, implies an important objectual



Fig. 6. View of the intervention performed.

singularity. We understand that intervening in the historic city implies inserting a new order that allows all the pre-existing buildings to be read logically. The plot on which we are working has all the determining factors of an area of a town that is demographically declining, but which is also one of the oldest municipalities in Andalusia. An important ancestral home that was demolished in the 1950s left an important urban void. This house was heir to medieval structures attached to the wall and in turn inserted into the architecture of the Roman city of Obulco [Fig.7]. In this complex city fabric, and almost as if from a dreamlike image by Giorgio de Chirico, we designed a clean, stripped-down, essential architecture with wide passageways as meeting places, and large open-plan rooms to accommodate the programme. The project must take on board the pre-existence of some rooms and give order to everything. The intervention foresees the construction of a building that recovers the volumetry of the original, but with neutral materials and textures, in short, a model on a scale of 1:1. The tension of the project lies in the contact between the pre-existing and the new construction. The self-built semi-detached architecture shows the contrast between the rough textures and noise of a city consolidated by the weight of history and the sobriety and silence of the new architecture. The plan for the entire parish centre consisted of spacious classrooms for various educational activities as well as important areas for recreation. The project



Fig. 7. General view of the new parish center of Porcuna, Jaén.



Fig. 8. Detail of the intervention.

was also to include a kitchen and dining room for social activities as well as a living area, assembly hall and chapel. The phase currently being implemented is that which includes the spaces allocated for teaching as well as the requirements linked to the social nature of the project. To execute this programme we took on a historical structure, the cloister corner vault, and as R. Moneo underlines in La vida de los edificios, by means of an ordered, rhythmic and silent repetition, we inserted a contemporary reading into this historical window of the town. The project opts to insert an important geometry, an ordering layout that allows us to bring balance at all times to this large space rich in an important historical heritage in the face of the disordered rear and party walls [Fig.8].

## References

Campo A. (2017). *La suspensión del tiempo*, Fundación Arquia, Barcelona.

Linazasoro J.I. (2021). *La arquitectura del contexto. Una respuesta antimoderna*, Ediciones Asimétricas, Madrid.

Moneo R. (2017). *La vida de los edificios*, Acantilado, Barcelona.

Purini F. (2022). *Discorso sull'architettura. Cinque itinerary nell'arte del costruire*, Marsilio Biblioteca, Venezia.

Venezia F. (2013). Che cosa è l'architettura. Lezioni, conferenze, un intervento, Electa, Verona.

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Opening image: Population density in Southern Europe (Authors' image based on data from The Global Human Settlement Layer (GHSL), European Commission)

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## Location-Based Social Networks as a research line The exploration of geolocated data for the study of the city

Looking out over Europe

Pablo Martí - Álvaro Bernabeu-Bautista - Leticia Serrano-Estrada

This work offers an overview of possible future lines of work in the field of social geolocated data applied to urban studies, implementing a selection of social networks that have been used to understand a wide variety of urban phenomena. To this end, a review of recent specific literature with several experiences that use these networks data to address urban studies is conducted, followed by an exploration of the information and data that these social networks provide and a series of research lines proposal in urban studies, as well as their opportunities and limitations.

Keywords: Social Media Data, Location-Based Social Networks, Urban studies, Urban activity, Cities

## Introduction.

The first approaches to social network data within the authors' research group have been through research associated with several works in which social network data was used as a source of information that offered a series of data that, related to physical reality, could be of great interest. From these initial enquiries, we have seen that numerous studies from different disciplines have used social network data as their main source. In general, we can highlight works that analyse human behaviour --- consumption, opinions and preferences- from economics, tourism, marketing or political science [Peña-López et al., 2014; Croft, 2013]; or health habits - analysis of personality patterns, social groups or behavioural habits- from anthropology, sociology or medicine [Chen et al., 2016; Chorley et al., 2015; Moon et al., 20161.

Specifically, the study of urban issues began to develop in the context of large metropolises the size of New York, London or Tokyo, based on social networks such as Flickr, Facebook, Foursquare or Twitter [Ratti et al., 2006; Fujita, 2013]. Currently, the increase in the use of mobile devices has made it

possible to obtain sufficient data in other areas and to extend this type of study to smaller cities —between 50 and 100 thousand inhabitants— [Morstatter et al., 2013; Lansley et al., 2016]. Also, the rise of other social networks such as Foursquare, Google Places or Pinterest, has allowed us to broaden the topics of study, thus opening new lines of research [Martí et al., 2017; Béjar et al., 2016].

Among the most recurrent themes are:

• the identification of itineraries and places of interest using data from Twitter, Foursquare and Flickr [Huang et al., 2015];

• attractive places and tourist consumption using Flickr, Instagram, Twitter, Foursquare and Airbnb [Martínez et al., 2014; Morandi et al., 2014];

• the perception of urban space through Twitter, Instagram and Flickr — interpreting the psycho-perceptual side of social network data— [Aiello et al., 2016];

itinerary and mobility infrastructure planning with Twitter, Foursquare and Instagram [Mcardle et al., 2014];
cycles of user presence and concentration in an urban space [Luo et al., 2016].

The different approaches used in these and other works show that the authors attach different analytical values to the information provided by social network data. Their different approaches can be classified according to four positions considering the correspondence relationship established between urban reality and its reflection in the form of virtual information. Among the different approaches, some authors consider that:

• Virtual information represents, to some extent, the physical reality of the city [Agryzkov et al., 2016].

• Virtual information has a relevant potential to identify non-explicit phenomena that occur in the city and thus represent certainly invisible phenomena [Saker et al., 2016; Sutko et al., 2011].

• The physical-virtual relationship is understood as a new hybrid space in which the activity that takes place in one reality implies a consequence in the other, with increasing interaction between the two [Almazán et al., 2013; Ling et al., 2011].

• Virtual information, generated on a voluntary basis, can be part of citizen participation processes — Volunteered Geographic Information— [Campagna et al., 2015], although, in the latter case, the contribution is only effective if those who generate the information are committed to taking action for the local community [Kleinhans et al., 2015; Crooks et al., 2016].

In short, these four conceptions that emerge from the relationship between virtual information and the physical environment in which it is generated are not mutually exclusive but complement each other when it comes to analysing complex issues, such as urban phenomena and dynamics. Our position on the role that each of these approaches can play in the analysis of urban issues is that, depending on the context, each of these four positions may be valid, but not always and not everywhere. Therefore, we understand these data as information that should not be disregarded when interpreting what is happening in the city, and therefore, information to be taken into account but which needs to be verified by other statistical methods and field studies, based on the premise that the four conceptions are possible.

To put it more succinctly, the hypothesis of the research we have been working with over the last few years is that social media data can help interpret what is happening in the city and can therefore provide strategies and guidelines for urban design and intervention.

Likewise, derived from this hypothesis, the different objectives we have set ourselves have arisen with regard to finding out the patterns and patterns of users of social networks related to:

- preferences in the use of the city's spaces;
- perceptions of different urban spaces;

 the configuration of economic and urban activities in the city;

• patterns of presence and their temporality in different urban spaces.

Furthermore, from these patterns, we have tried to infer design and intervention strategies in the city.

## Social networks for the study of the city

Although the number of social networks that exist today is enormous, few of these networks are useful for the objectives we set out to achieve, as selection requires the fulfilment of two conditions: to provide us with relevant information on the use of the city by its users; and that the information obtained is geolocated, i.e. to know the exact location to which the information refers. With these starting conditions and taking into account the selection made by the main authors who use social networks in urban studies [Bahrehdar et al., 2019], we describe below the four main sources of information that we have been using:

 Google Places is part of the Google Maps mapping database. It contains the identification of commercial, professional and service activities in the city. It also includes the names of streets, parks and squares. It has become a digital directory, equivalent to the old yellow pages but with much more information. Each of the places identified is called a place. In the different works carried out, this information has allowed us to know the offer of economic and urban activity in the city.

· Foursquare is a social network in which registered users indicate, in real time and through an application designed for mobile phones, the places where they are physically located and their preferences about them, including free spaces as well as shops and other urban activities. By recording users' preferences, it is possible to obtain ordered lists or rankings of spaces and activities. Each of the places identified is called a venue. The different works developed have used Foursquare to identify the presence and preferences of users about urban spaces and economic activities. Twitter is a social network that allows the exchange of short texts, originally with a maximum of 140 characters, but in 2017 it was extended to 280 characters. It also allows the exchange of images, videos and links in real time. Each text sent is a tweet. Not all tweets are geolocated as the user can keep the mobile device's GPS on or off when sending messages. The studies related to Twitter that have been developed exclusively use geolocated data and focus on the monitoring and presence of users in the

Location [LOC]LengthLengthLength-Location [LOC]Street, number, neighbourhood, district, town, city, countryCity, countryStreet, number, neighbourhood, district, town, city, countryStreet, number, neighbourhood, district, town, city, countryTemporary information [TEMP]Cumulative data since the creation of the venueDate and time of the tweet (maximum 7 days in advance)Last date when the record is in the databaseCumulative tim since publicatio Date of creation the record with limitsName of the site -venue-TweetsName of the place -text-Photography of videoNumber of registrations and visits -check-ins and visitsNumber of tweets per userNumber of - -Number of photographs p location pin outed of the site ITXT, FOT, VAL]QuantitativeQuantitativeQuantitativeQuantitative	ne n / r of	
Location [LOC]Street, number, neighbourhood, district, town, city, countryStreet, number, neighbourhood, district, town, city, countryLocation pin, 	ne n / r of	
neighbourhood, district, town, city, countryCity, countryneighbourhood, district, town, city, countryLocation pin, markerTemporary information [TEMP]Cumulative data 	ne n / r of	
Temporary information [TEMP]Cumulative data since the creation of the venueDate and time of the tweet (maximum 7 days in advance)Last date when the 	n / of	
-venue-     -text-     -place-     video       Number of registrations and visits     Retweets     Number of comments     Number of like       Representative information [TXT, FOT, VAL]     number of visitors -visitors-     Number of tweets per user     -     Number of photographs pulses       Quantitative     Quantitative     Quantitative     Quantitative		
Number of registrations and visits     Retweets     Number of comments     Number of like       Representative information [TXT, FOT, VAL]     number of visitors -visitors-     Number of tweets per user     Number of tweets per user     Number of comments	or	
Representative information     Representative     Number of visitors - check-ins and visits     Number of tweets     Number of tweets       [TXT, FOT, VAL]     Quantitative     Quantitative     Quantitative     Quantitative		
Representative information [TXT, FOT, VAL]     number of visitors -visitors-     Number of tweets per user     -     photographs p       Quantitative     Quantitative     Quantitative     Quantitative	S	
Quantitative	ər	
assessment -rating assessment -ratingrating-		
Photographs Photographs Photographs Photographs		
QualitativeQualitativeassessment-assessmenttips-comments		
Classification of Category, Hashtags (#) - assigned, geographical and geographical and	Hashtags (#) - geographical and non-geographical tags	
Data ID [ID]         Venue ID         Tweet ID         Place ID         Image ID and U		

Fig. 1. Summary of the data obtained from each of the social networks.

#### city, as well as on the opinions issued.

• Instagram is a social network where users share photos and videos. It provides information about users' perceptions of urban spaces. The network allows users to geolocate their images, either through sites created on Facebook or by using the # symbol hashtag— linked to a location. This makes it possible to study the areas with the highest density of images or their subject matter, and therefore the preferences and perceptions that users have of urban spaces. Although these four networks are the main sources of information we have been using, we have also used more specific sources of information:

• Airbnb is a short-stay accommodation rental platform where users can advertise their accommodation - or part of it - and make it available to other users. From its data it is possible to identify the distribution of this type of unregulated accommodation in a given area, rental prices, occupancy and user preferences regarding this type of accommodation.

• Idealista is a real estate portal that advertises properties for sale and rent. The data from Idealista provides information on the characteristics of the properties and the prices for rent and sale. It has been used as a source of information in studies on the spatial distribution of housing prices, making it possible to differentiate the different market segments within the city and to analyse the relationships established between prices and the urban areas in which they are located.

#### Information and data provided by social networks

With regard to the data obtained from each of the social networks, the content and specific characteristics in each case are summarized below [Fig. 1]. The location, both in text and in coordinates, common to all the networks, was one of the conditions we had established. Similarly, the quantification of their data and users can be extracted from all the networks. All four networks also contain photographs. However, the valuation or rating of places can be obtained both on Foursquare and Google Places, although in the latter case the possibility of rating a place on the platform is more recent and, therefore, many of the places are not rated, unlike Foursquare which offers, in addition to the quantitative and qualitative valuation, several indicators of presence in the places.

Thus, in the user registration data on Foursquare, there are different categories that the network uses to classify the presence of its users. This information has a significant impact depending on the type of study carried out. In this sense, the information contained in Foursquare offers 3 types of records associated with each place:

• Users —each unique person registered on the platform who has been to that place—;

 Visits —each of the times a Foursquare user has visited a place without explicitly registering their presence on the platform—;

• Check-ins —each of the check-ins at each location that a user intentionally makes on the social networking platform Foursquare—.

Therefore, depending on the objective of the research, it will be appropriate to use one or the other data. If we want to know the number of people in an urban space, we will use the number of Visits or check-ins. If, on the other hand, we want to know the number of different people visiting that place, we will use the Users.

Regarding the temporality of the information, there are networks that offer all the updated or accumulated information on certain places, as in the case of Google Places and Foursquare respectively. Instagram, for its part, offers accumulated information with chronological limits. And in the case of Twitter, it does not allow us to obtain data older than 7 days and, therefore, requires listening to tweets over the period for which we want to obtain the information. However, the latter network offers additional temporal information of some interest, as it contains the day and time of the tweet's emission. This information makes it possible to follow the route, movements or presence of a user in certain spaces and time slots.

Another relevant issue in the management of the information contained in social network data is the classification or categories into which the different registered sites are grouped. In the case of Foursquare, there are 10 main categories in which all venues are classified: Residence, Travel & Transport, Shop & Service, Professional & Other Places, Nightlife Spot, College & University, Event, Food, Arts & Entertainment and Outdoors & Recreation. Each of the categories is further divided into sub-categories and these are further divided into sub-sub-categories [Fig. 2]. details the division of the Outdoors and recreation category, in which outdoor and recreational spaces are grouped.

However, in the case of Google Places, there are 128 non-hierarchical categories, of which 99 represent an economic activity [Fig. 3].

The fact that there are different classification systems

Subcategorías 1 Athletics & Sports 2 Bathing Area 3 Bay 4 Beach 5 Bike Trail 6 Botanical Garden 7 Bridae 8 Camparound 9 Canal 10 Canal Lock 11 Castle 12 Cave 13 Cemeterv 14 Dive Spot 15 Dog Run 16 Farm 17 Field 18 Fishing Spot 19 Forest 20 Fountain 21 Garden 22 Gun Range 23 Harbor / Marina 24 Hill 25 Hot Spring 26 Indoor Play Area 27 Island 28 Lake 29 Lighthouse 30 Mountain

31 Mountain Hut 32 National Park 33 Nature Preserve 34 Other Great Outdoors 35 Palace 36 Park 37 Pedestrian Plaza 38 Playground 39 Plaza 40 Pool 41 Rafting 42 Recreation Center 43 Reservoir 44 River 45 Rock Climbing Spot 46 Roof Deck 47 Scenic Lookout 48 Sculpture Garden 49 Ski Area 50 Skydiving Drop Zone 51 Stables 52 State / Provincial Park 53 States & Municipalities 54 Summer Camp 55 Trail 56 Tree 57 Vineyard 58 Volcano 59 Waterfall 60 Waterfront 61 Well 62 Windmill

Fig. 2. List of subcategories corresponding to the main category Outdoors and Recreation on Foursquare.

Subcategories						
1	accounting	34	establishment	67	night_club	
2	airport	35	finance	68	painter	
3	amusement_park	36	fire_station	69	park	
4	aquarium	37	florist	70	parking	
5	art_gallery	38	food	71	pet_store	
6	atm	39	funeral_home	72	pharmacy	
7	bakery	40	furniture_store	73	physiotherapist	
8	bank	41	gas_station	74	place_of_worship	
9	bar	42	general_contractor	75	plumber	
10	beauty_salon	43	gym	76	point_of_interest	
11	bicycle_store	44	hair_care	77	police	
12	book_store	45	hardware_store	78	post_office	
13	bowling_alley	46	health	79	premise	
14	bus_station	47	hindu_temple	80	real_estate_agency	
15	cafe	48	home_goods_store	81	restaurant	
16	campground	49	hospital	82	roofing_contractor	
17	car_dealer	50	insurance_agency	83	rv_park	
18	car_rental	51	jewelry_store	84	school	
19	car_repair	52	laundry	85	shoe_store	
20	car_wash	53	lawyer	86		
21	casino	54	library	87	spa	
22	cemetery	55	liquor_store	88	stadium	
23	church	56	local_government_office	89	storage	
24	city_hall	57	locksmith	90	store	
25	clothing_store	58	lodging	91	subway_station	
26	convenience_store	59	meal_delivery	92	supermarket	
27	courthouse	60	meal_takeaway	93	synagogue	
28	dentist	61	mosque	94	taxi_stand	
29	department_store	62	movie_rental	95	train_station	
30	doctor	63	movie_theater	96	transit_station	
31	electrician	64	moving_company	97	travel_agency	
32	electronics_store	65	museum	98	veterinary_care	
33	embassy	66	natural_feature	99	Z00	

Fig. 3. List of Google Places categories representing an economic activity.

forces us to establish a new common basis when it *is* necessary to analyse activities in an urban area globally or to compare results. In this sense, in the different experiences, according to the objectives of the research, we have used two systems, on the one hand, to reclassify Google Places according to the 10 main categories of Foursquare and, on the other hand, to establish a new common classification

system. Thus, when it has been convenient to have a new classification that allows linking the data from the two social networks, we have had to adopt a new one. In this case, we have used the American Planning Association's Land Based Classification Standards categories —LBCS—, which establishes a hierarchical classification organized into 10 broad categories for level 1, 47 sub-categories corresponding to level 2 and 159 sub-sub-categories in level 3. The division of level 1 corresponds to the following list in Fig. 4.

The division and subdivision —levels 2 and 3— of

1000	Residence or accommodation functions
2000	General sales or services
3000	Manufacturing and wholesale trade
4000	Transportation, communication, information, and utilities
5000	Arts, entertainment, and recreation
6000	Education, public admin., health care, and other inst.
7000	Construction-related businesses
8000	Mining and extraction establishments
9000	Agriculture, forestry, fishing and hunting

Fig. 4. American Planning Association Level 1 categories (Land Based Classification Standards categories).

the 2000 General sales or services category, one of the most widely used in the study of the economic activities carried out in the city, is presented in Fig. 5. Among the different existing classification options for urban land use categories, this proposal has been chosen due to its hierarchical structure that allows different levels of approximation and because, at level 3, its detailing allows the identification of the different commercial uses at street level and, therefore, those businesses with the greatest impact on public space

# Proposed approaches for the study of cities through social networks data

Based on previous experiences, we propose to address four themes that bring together the study of different urban issues and that can contribute to a better understanding of the city and, equally, help decision-making in its planning, intervention and design.

Preferences in the use of urban spaces and activities Users' preferences about urban spaces based on the combination of data from social networks have been analysed in the work corresponding to the Integrated Sustainable Urban Development Strategy —EDUSI— of Cigarreras in Alicante [Martí et al., 2019]. In this analysis, in addition to identifying the main open spaces, such as Mount Tossal or the Ereta park and the various urban squares, it was possible to identify spaces that apparently had neither the configuration nor the quality of urban public spaces but which were reflected both on Foursquare and through the sending of tweets from these places. These were public spaces, such as the access stairs

to the Instituto Jorge Juan, at the end of Avenida de Marvá, or its surrounding areas. The same applies to the urban spaces where the pedestrian walkway starts in the Carolinas neighbourhood at the access to the Plaza Mar 2 shopping centres. These are urban spaces which, despite not being designed as public spaces, have this urban functionality. Similarly, certain bus stops with activity on Foursquare and Twitter stood out from others that might seem less relevant. In this sense, those bus stops that are selected by users, as opposed to others, have clearly greater urban potential. All these data indicate where there is a potential social and urban activity in these neighbourhoods and what characteristics they have. This information can be of interest to the intervention or regeneration of these urban areas.

## The image of urban spaces and their perception

Although all social networks share photographs, Instagram in particular has a huge amount of visual information that shows us how its users perceive and use the city. In the case of Alicante, we have been able to study this issue in two different areas. On the one hand, the presence of the Explanada of the city of Alicante, from the point of view of the density of photographs in this urban space, as well as the imaginary that users have of this space, photographing the pavement and the double rows of palm trees that delimit the promenade. And, on the other hand, in the case of the previous neighbourhoods of the Cigarreras EDUSI in Alicante, the selection of photographs from Instagram allows us to identify the visual references in each of the neighbourhoods that make up the EDUSI. In addition, the photographs of the networks that are associated with certain public spaces make it possible to study what types of activities users carry out in the public space, what type of users are in that place or what elements are relevant in that environment.

#### Spatio-temporal patterns of use of urban spaces

We have been using Twitter to identify spatiotemporal patterns at different scales in the city. The fact that it is possible to know the exact place and time at which the messages emitted are generated makes it possible to associate the influx of people to certain urban spaces and their fluctuation over time. This information makes it possible to analyse the intensity of the presence of users according to time periods: weekdays or weekends, during the day or at night. The tweets can also be classified according to the words they contain. Thus, the tweets issued in different time slots and according to their location and

2000 General sales or services				
2100 Retail sales or service				
2110 Automobile sales or service establishment				
2120 Heavy consumer goods sales or service				
2130 Durable consumer goods sales and service				
2140 Consumer goods, other				
2150 Grocery, food, beverage, dairy, etc.				
2160 Health and personal care				
2200 Finance and Insurance				
2210 Bank, credit union, or savings institution				
2220 Credit and finance establishment				
2240 Insurance-related establishment				
2300 Real estate, and rental and leasing				
2320 Property management services				
2330 Rental and leasing				
2400 Business, professional, scientific, and technical services				
2410 Professional services				
2420 Administrative services				
2430 Travel arrangement and reservation services				
2450 Services to buildings and dwellings				
2500 Food services				
2510 Full-service restaurant				
2520 Cafeteria or limited service restaurant				
2540 Bar or drinking place				
2550 Mobile food services				
2700 Pet and animal sales or service (except veterinary)				
2710 Pet or pet supply store				

Fig. 5. Level 2 and Level 3 categories of the 2000 General sales or services category of the American Planning Association (Land Based Classification Standards categories).

theme have been grouped, allowing us to appreciate the temporal evolution of user activity —the afternoon being the time when most activity occurs in the case of Valencia, for example— and the use of the city according to the different activities manifested in the words and themes of the tweets.

Supply and demand of economic and urban activities The social networks Google Places and Foursquare are the most useful networks for identifying the distribution of the supply of economic activities and their demand, respectively, both because of the fact that in both there is a rating of each place —rating and because of the possibility of classifying the activities according to different categories as we have seen above. The concentration of certain commercial, professional, equipment or other urban activities contributes to the creation of areas of specialisation which, although sometimes not formally recognised, can be identified through these data. An example of urban diagnosis, based on the classification and assessment of urban activities, can be found in the study carried out on the Domplatz square in Hamburg. A square very close to the city centre and the commercial axes of the city, but with little urban activity. From the data, it was identified as an urban space in whose surroundings there was a lot of activity, but mainly linked to professional services compared to the commercial axes located further north. In this sense, it was possible to distinguish and analyse, both in Google Places and Foursquare, the shops and commercial activity as opposed to the activity of professionals. This situation suggested that, in order to revitalise the square, it would be more appropriate to provide this urban space with street-level activities that would attract more professionals than shoppers. In the case of Alicante's neighbourhoods, the classification according to APA 2100, corresponding

to those businesses that are preferably located on the ground floor, allowed for the recognition of different corridors of economic activity with an influence on urban life. Also in this area, data from the Airbnb social network was incorporated, through which the supply and demand of accommodation more closely linked to tourism was identified. In this sense, it is possible to propose strategies to limit the growth of this type of activity in areas where it already has a large presence, to avoid saturating certain areas of the city, as is already happening in some cities. As a summary, we present the urban themes and issues that can be studied through geolocated data from social networks [Fig. 6].

Limitations of the use of geolocated social network data in the study of urban phenomena Finally, it seems appropriate to point out with some clarity that the use of this type of data is not without difficulties and limitations. In this sense, it is important to recognise the possible lack of representativeness with respect to the total population and the fact that

Thematic	Urban issues	Foursquare	Instagram	Twitter	Google Places	Airbnb
	What are the most relevant public spaces and/or economic activities according to the number of users and their valuation [LOC, VAL]?	•			•	•
	Identification of social activities that are preferentially carried out in some urban spaces [LOC, FOT].	•	•		•	
	Identification of attractive places close to the unregulated accommodation according to their best or worst rating [LOC, VAL].	•			•	•
Preferences for activities and spaces	Characterisation of areas, spaces and economic activities according to user preferences [LOC, TXT, CLAS, VAL]. Identification and location of "third places" (Oldenburg 1989)	•		•	•	
-	[LOC, CLAS]. Physical characterisation of urban spaces [LOC, TXT, FOT].	•	•	•	•	•
Urban image and its	Opinions and perceptions of urban spaces and/or economic activities [LOC, TXT].	•	•	•	•	•
perception	Identify the predominant user profile in an urban environment [LOC, FOT]. Identification of characteristic elements of a public space [LOC, FOT].	•	•	•	•	
	Number of users who have visited a place [LOC, VAL].	•		•		
Spatio- temporal	Location of users in public and/or private space [LOC, TXT, CLAS].	•	•	•		
patterns of space use	Identification of temporal patterns of spatial presence [LOC, TEMP].	•		•		
	What are the most demanded types of economic activities [LOC, VAL]?	•			•	•
Supply and demand for	Patterns of location of economic activities [LOC]. Characterisation of the supply of economic activities according to types [LOC, CLAS].	•			•	•
economic activities	Characterisation of the demand for economic activities by type [LOC, CLAS].	•				
	Characterisation of the tourism offer - accommodation and activities - [LOC, CLAS].	•			•	•
	Localisation of areas of specialisation according to economic activities [LOC, CLAS, TXT]. Characterisation of urban areas according to habits and/or				•	
Identification	routines [LOC, TXT, FOT].		•	•		
of areas of activity	Characterisation of an urban area according to its economic specialisation [LOC, CLAS, TXT].	•			•	•
	Identification of meeting points in the city [LOC, TXT, VAL, FOT]. Character of an area according to its attractiveness for social activities [LOC, CLAS].	•	•	•		
	Identification of tourism specialisation areas [LOC, CLAS].	•	•		•	•

Fig. 6. List of some urban themes and issues that can be studied through geolocated data from social networks.

there are not enough records. However, considering the growing number of social network users and the variety of their profiles, it is likely that both limitations will tend to be reduced in the future. In addition to these issues, there are other difficulties related to data collection and verification. Two limitations are noteworthy:

 access to social network data is vulnerable as it depends on the access conditions set by their management companies;

• the interpretation of the databases must be done and supervised at some stages manually to ensure the validity of the results.

Also, another issue that needs to be qualified with respect to these data is the fact that they come from companies with economic interests on the one hand, and political and socio-economic influence on the other. Therefore, their data may be heavily conditioned by the above circumstances.

Despite the aforementioned limitations, the analysis of geolocated social network data for urban studies offers interesting results in the interpretation of certain phenomena that occur in the city. Thus, we understand that, despite these limitations and biases, these data allow us to study what happens in urban squares, streets, neighbourhoods and cities in order to increase knowledge about these spaces and, therefore, to analyse them and identify design and project and intervention strategies for them.

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## References

Agryzkov T., Martí P., Nolasco-Cirugeda A., Serrano-Estrada L., Tortosa L., Vicent J.F. (2016). "Analysing successful public spaces in an urban street network using data from the social networks Foursquare and Twitter", *Applied Network Science*, 1.

Aiello L.M., Schifanella R., Quercia D., Aletta F. (2016). "Chatty maps: constructing sound maps of urban areas from social media data", *Royal Society Open Science*, 3. Almazán J., Okazaki R. (2013). "A morphological study on the Yokocho bar alleys: urban micro-spatiality in Tokyo", *Journal of Architecture and Planning*, 78, 1515-1522.

Bahrehdar A.R., Koblet O., Purves R.S. (2019). "Approaching location-based services from a placebased perspective: from data to services?", *Journal of Location Based Services*, 1-21.

Béjar J., Álvarez S., García D., Gómez I., Oliva L., Tejeda A. (2016). "Discovery of spatio-temporal patterns from location-based social networks", *Journal of Experimental & Theoretical Artificial Intelligence*, 28, 313-329.

Campagna M., Floris R., Massa P. (2015). "The role of Social Media Geographic Information (SMGI) in spatial planning", *Planning Support Systems and Smart Cities*.

Chen W., Gao Q., Xiong H. (2016). "Temporal predictability of online behavior in Foursquare", *Entropy*, 18, 296.

Chorley M.J., Whitaker R.M., Allen S.M. (2015). "Personality and location-based social networks", *Computers in Human Behavior*, 46, 45-56.

Croft R. (2013). "Blessed are the geeks: an ethnographic study of consumer networks in social media, 2006-2012", *Journal of Marketing Management*, 29, 545-561.

Crooks A.T., Croitoru A., Jenkins A., Mahabir R., Agouris P., Stefanidis A. (2016). "User-generated big data and urban morphology", *Built Environment*, 42, 396-414.

Fujita H. (2013). "Geo-tagged Twitter collection and visualization system", *Cartography and Geographic Information Science*, 40, 18.

Huang L., Ma Y., Liu Y. (2015). "Point-of-interest recommendation in location-based social networks with personalized geo-social influence", *China Communications*, 12, 21-31.

Kleinhans R., Van Ham M., Evans-Cowley J. (2015). "Using social media and mobile technologies to foster engagement and self-organization in participatory urban planning and neighbourhood governance", *Planning Practice and Research*, 30, 237-247.

Lansley G., Longley P.A. (2016). "The geography of Twitter topics in London", *Computers, Environment and Urban Systems*, 58, 85-96.

Ling R., Horst H.A. (2011). "Mobile communication in the global south", *New Media & Society*, 13, 363-374.

Luo F., Cao G., Mulligan K., Li X. (2016). "Explore spatiotemporal and demographic characteristics of human mobility via Twitter: A case study of Chicago", *Applied Geography*, 70, 11-25.

Martí P., García-Mayor C., Serrano-Estrada L. (2019). "Identifying opportunity places for urban regeneration through LBSNs", *Cities*, 90, 191-206.

Martí P., Serrano-Estrada L., Nolasco-Cirugeda A. (2017). "Using locative social media and urban cartographies to identify and locate successful urban plazas", *Cities*, 64, 66-78.

Martínez M.P.L., Berrozpe T.I., Lasarte M.P. (2014). "Image-focused social media for a market analysis of tourism consumption", *International Journal of Technology Management*, 64, 17.

Mcardle G., Furey E., Lawlor A., Pozdnoukhov A. (2014). "Using digital footprints for a city-scale traffic simulation", *ACM Transactions on Intelligent Systems and Technology*, 5, 1-16.

Moon J.H., Lee E., Lee J.A., Choi T.R., Sung Y. (2016). "The role of narcissism in self-promotion on Instagram", *Personality and Individual Differences*, 101, 22-25.

Morandi C., Palmieri R., Tomarchio L. (2014). "Digital social media to enhance the public realm in historic cities", *Social Informatics*, 1, 34-39.

Morstatter F., Pfeffer J., Liu H., Carley K.M. (2013). "Is the sample good enough? comparing data from Twitter's streaming API with Twitter's firehose", *Proceedings of the International AAAI Conference on Web and Social Media*, 7, 400-408.

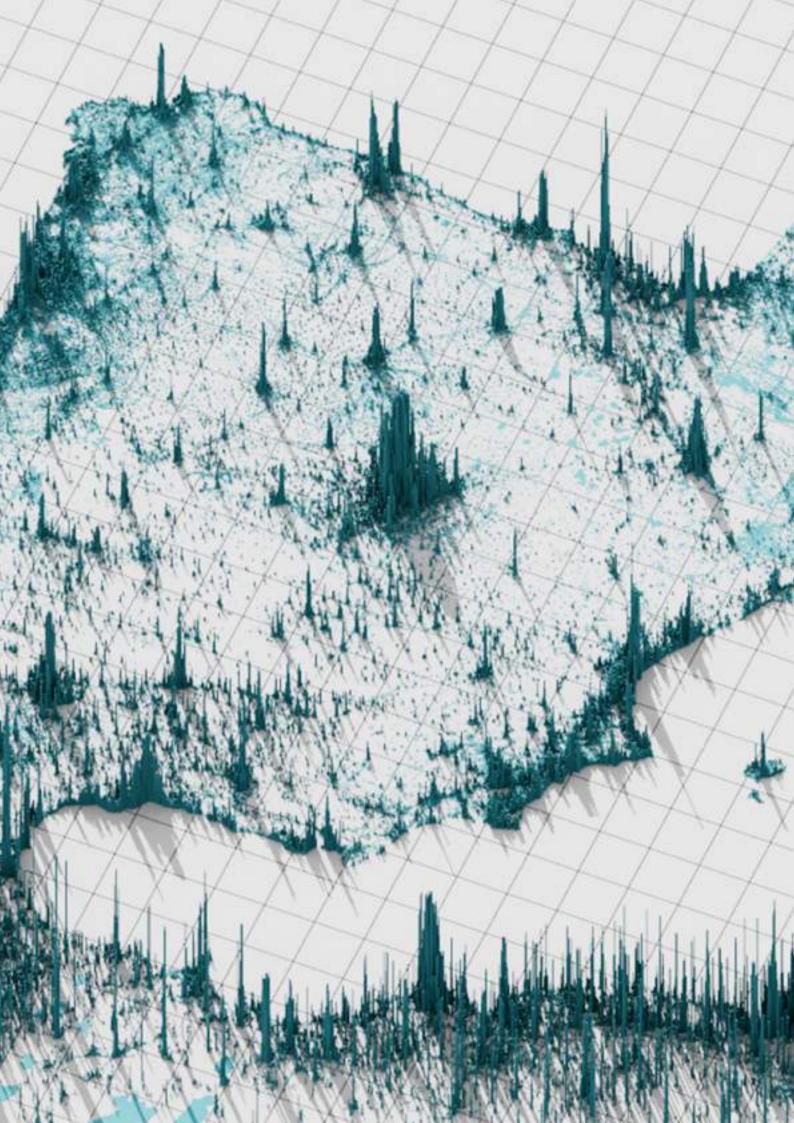
Peña-López I., Congosto M., Aragón P. (2014). "Spanish Indignados and the evolution of the 15M movement on Twitter: towards networked para-institutions", *Journal of Spanish Cultural Studies*, 15, 189-216.

Ratti C., Pulselli R.M., Williams S., Frenchman D. (2006). "Mobile landscapes: using location data from mobile phones for urban analysis", *Environment and Planning B: Planning and Design*, 33, 727-748.

Saker M., Evans L. (2016). "Everyday life and locative play: an exploration of Foursquare and playful engagements with space and place", *Media, Culture & Society*, 38.

Stock K. (2018). "Mining location from social media: A systematic review", *Computers, Environment and Urban Systems*, 71, 209-240.

Sutko D.M., De Souza e Silva A. (2011). "Locationaware mobile media and urban sociability", *New Media* & *Society*, 13, 807-823.



# **Round Table**

At the end of the morning session a discussion was opened by the following participants:



Antonino Margagliotta Associate professor Department of Architecture University of Palermo



**Montserrat Bosch Gonzàlez** Associate professor Department of Architecture Universitat Politècnica de Catalunya



**Federica Fernandez** Assistant professor Department of Architecture University of Palermo



**Pablo Millàn** Ph.D

Department of Architectural Projects University of Seville



Emanuela Garofalo Associate professor Department of Architecture University of Palermo



**Sandrine Victor** Associate professor Departement of Human and Social sciences, University of Albi



Daniele Ronsivalle Associate professor Department of Architecture University of Palermo



Maria Luisa Germanà Full Professor Department of Architecture University of Palermo



Francesco Lo Piccolo Full Professor Department of Architecture University of Palermo **AM** In addition to the technological aspect, did this experimentation you have done in Peru also include a spatial and architectural design?

**MBG** The student is an architect, he was dealing with issues related to the territory and technology. He also found these aspects within the Master done in Spain, because our school deals with technological and social matters and it is not about architectural design.

**FF** Are you certain that you looked into the connection between constructed heritage and society with regard to the subject of urban and architectural design that you addressed and that was covered in your presentation today? And how are the two concerns being discussed?

**PM** The project in addition to the redevelopment of the environment involved several different studies on the "viviendas" and we also did several working tables with the inhabitants who are 78% Moroccan and sub-Saharan immigrants. Since they can no longer live in these types of buildings they have also had several meetings with the mayor of the city to bring to light the urban and sociological distress.

**FF** The people who live in these houses, do they own the walls or are they renting?

PM No, they are owned but have very little economic value. Obviously people who don't have many other options and they have to live like that. At first the proposal was not well received. however, various solutions were organized together with the community. The working table consisted of architects, engineers, anthropologists, sociologists, and a new place was chosen, which was accepted by these families because their only interest was to have a comfortable home. (see Fig.1, page 47) The difficult part was convincing the municipality that the solution was not to eliminate a house but to create new ones and take those families out of the viviendas. The constructions that have



Fig. 1. View of the intervention performed (photo by P. Millàn)

been built for this project are on a municipal lease.

**MBG** The university has an important role in this area, the scholars, researchers and professors, they are the intellectual elite of the country, but they are not sufficiently interested in these issues. And that creates harm, because you cannot leave heritage to politics or economics or whatever, because intellectually the power is the scholars. The problem of architectural heritage has to be approached from several different intellectual points, not only structural, but also housing, social. It is architecture that has to give solutions.

**EG** I have a question for Sandrine, so the question is how this situation interacts with university and studies if something chenged in Albi, that is as well a city of university, and also in the study of this really important heritage for us, that we study both this period of late gothic in the Mediterranean. if something changed in the interaction with the university of the people in Ambitance, the others, the students, dysfunction, and also for the studies of this heritage.

**SV** Let's say that it changes very little for the university, except that from this year we will have a Master's degree in Public History, because finally what we have seen is that in this neighbourhood this UNESCO effect has generated a phenomenon whereby people produce and disseminate their own stories, i.e. videos in Youtube, stories in Twitter, audio podcasts, etc. And so the university has decided to activate a new Master's degree, with me as director, in Public History, to help people take ownership of their own history, learning how to transmit it in a

correct and appropriate form; this is what I was talking about earlier in my speech, that is, that the people of Albí become guides for their own family, or network of friends, and we detected this aspect from a real expectation in wanting to find and learn a way of communicating a story. Otherwise, for example, there is no willingness on the part of public political institutions to collaborate more with the university to study the effect; for example, what the chair of Sociology at my university, with Professor Ygal Fijalkow, has done is to give substance to the willingness to study the UNESCO effect, as opposed to the public authorities who have never shown a willingness to study the effect. So collaborations are limited, it depends more on the university towards UNESCO than vice versa.

**DR** Professor Ronsivalle wanted to add to his comments and opinions at the end of the presentations and started his discussion with the peripherial areas in the city centers where there is degredation and the communities which are working on those areas. The argument continued with several examples of the communities including Living Lab of Palermo and their co-responsibility with the institutions on the regeneration of those degraded areas. Then he continued with the "non distinguishable" features of inner areas and the "chemical reaction" between those areas and the communities working on them, in a manner of speaking. After referring some of his experiences with communities, he finished his discussion by mentioning the similarities between the Spanish experiences and the South Italian experiences regarding the inner areas and the communities handling the improvements of those areas.

MBG Professor Bosh, who is a Professor from the Polytechnic University of Catalonia, started her talk by giving the examples of two projects that are going on in the old town of Barcelona. She mentioned about the physical condition of the old town where the buildings need to be renovated because of danger of demolition. During the project, the community working on the old town had round table meetings with the locals to listen their ideas and to find solutions together by involving them to the process. The topics of those meetings were basically the fire detection system of old buildings and their rehabilitation. She pointed out an interesting topic related to rehabilitation process and pandemic at the same time. As the Professor claimed, the roofs were forbidden to use in the neighborhood they were working on. Due to the Covid 19 pandemic and the guaratine period, the people who do not have the facilities as windows or balconies, had suffer from being closed for a long period. So, during the rehabilitation works, they focused on the roofs to supply people an open space to move and limitedly socialize, especially to children and elders.

# **MG** *Is there an alternative to the UNESCO management plans?*

Because We need a management of the sites, because not just a lab, a club, but is important to evolve that after the listed the site, the site is not abandoned. So maybe the answer is an interdisciplinary comparison between the approaches to avoid making real the management of the UNESCO sites? Also, the risk is to control only the UNESCO sites, and not all-around site because they have not any management. For example, Agrigento is an UNESCO site, "Valle dei Templi", but all around we have a lot of really interest sites without any management plans.

**FL** The Distribution of economic resources no just in this area but everywhere. Considering old systems of plans project another management plans of the UNESCO list, older resources are distributed and allocated in Times of other plans and policies. The UNESCO list and management plan is not the source of Investments just because other resource is allocated considering old other systems local but even national or even extraordinary.

The area is she's the resources and consequently Investments are different totally in teams of the name of the Planet.



Fig. 2 . The Episcopal Quarter of Albi (photo by S. Victor)

Opening image: Top view of the urbanisation of Ortigia (photo by G. Vinci, RedTomatoAadv.com).

# Planning the Unesco sites in Syracuse: Inefficacy and ambiguity in WHL Management Plans

Francesco Lo Piccolo

**Urban Planning & Technology** 

The article proposes to investigate the relationship between sustainable development and urban planning in UNESCO World Heritage List [WHL] sites. The focus is on the relationship between Management Plans [MP] and other [local and regional] planning instruments/policies that can influence the promotion of sustainable and responsible development. This focus will be instrumentally explored through the case study of the Syracuse and the Rocky Necropolis of Pantalica site. The interpretative analysis of this case will highlight the challenge of integrating different 'planning regimes' that refer mainly to a performative model within a [still] fully conformative planning system. The contribution will show how supranational policies often lose their effectiveness in relation to regional and local planning systems, sometimes displaying conflicting characters with respect to these systems.

Keywords: UNESCO, World Heritage List, Planning, Syracuse

#### Introduction

Since its establishment in 1950, the Italian National Unesco Commission has always been attentive to what is happening in civil society, collaborating, within the scope of its competences, with central and peripheral bodies in order to spread the ideals of safeguarding and enhancing the heritage of cultural and natural interest.

The selection of the Sicilian case study of Syracuse and the Rocky Necropolis of Pantalica moves in the direction of this perspective, as it represents a significant or even extreme counter-example of the gap between the supranational performative approach of the UNESCO Word Heritage List [WHL]/Management Plan [MP] model and the conformative nature of the Sicilian planning system; at the same time, the case highlights difficulties in the use of standard procedures and guidelines in the experience of UNESCO sites management plans for specific local contexts.

Indeed, the Convention Concerning the Protection of the World Cultural and Natural Heritage [World Heritage Convention], adopted by the UNESCO General Conference in 1972, established an international instrument [the management plan] that recognises and protects cultural and natural heritage of outstanding universal value [UNESCO, 1972].

Potential conflicts between conservation and development of sites have gradually become a focus of attention for UNESCO, with an increasing emphasis on management as a solution [UNESCO, 2002, 2005, 2015, 2021]. Through these protection systems, WHL should contribute to sustainable local and regional development [Rössler, 2006]. On the other hand, most countries are certainly interested in promoting the inclusion of their monuments in the WHL in order to enhance their prestige and economic growth, in particular with regard to the enhancement of the tourism offer: a country obtaining a place in the WHL can be compared to a restaurant receiving a Michelin star [Brattli, 2009, p. 37]. An extensive literature shows how tourism benefits from this [Staiff, Ongkhluap, 2012; Sõrensson, Von Friedrichs, 2013; Roh, Bak, Min, 2015; Pencarelli, Conti, Spendiani, 2017; Yang et al., 2019]. However, at the same time, UNESCO promotes awareness of the protection of world heritage sites also with respect to mass tourism phenomena, advocating the principles of sustainable tourism [Drost, 1996; Evans, 1999; Jones, Munday, 2001; Lyon, 2007]. This raises important questions about the sustainability of the development model. Furthermore, the implicit assumption that the presence of sites in the UNESCO WHL 'automatically' promotes sustainable development is questionable, as data on the increase in presences do not always confirm this assumption. The aforementioned potential conflicts between conservation and development of sites have gradually become an object of attention for UNESCO [UNESCO, 2002, 2005, 2015, 2021], which to this end made the preparation of a management plan mandatory for the candidature of new sites to the WHL with the Operational Guidelines of 2005 [UNESCO, 2005]. This plan will then be extended to all sites, including those already on the list [Blandford, 2006]. This obligation was reinforced after negative experiences in some cases due to the lack of adequate management systems. The MP is not only concerned with the protection of assets, but also with their management, because one of the main objectives to be achieved is the integration of the management of the protected heritage into the socio-economic dimension of the communities to which it belongs [Solar, 2003]. Starting from the values that led to the inscription in the UNESCO WHL, the MP prepares a management system that develops an integrated analysis of the state of the site, identifies the changes taking place and evaluates the future scenarios that can be achieved through possible interventions, also assessing their impact on the territory. The two fundamental elements of a MP are therefore its strategic dimension and its operational characteristics.

#### Main sources of conflict between WHL Management Plans and local planning

The UNESCO site management plan should not only be understood as a protection and conservation tool in itself, but it should establish an effective management model for historical, cultural and natural resources. This model should also be able to direct urban and economic planning choices for the development and enhancement of a large area. In this perspective, the MP represents the link between different planning tools and policies in order to:

• preserve over time the integrity of the values that lead to the inclusion of sites in the UNESCO WHL;

• combine protection and conservation through the integrated development of local economic resources;

• involve numerous actors [even with opposing interests] in a shared decision-making process at the local level [Feilden, Jokilehto, 1998; UNESCO,

#### 2005; UNESCO, 2021; Blandford, 2006].

This underlines how the interrelation between the MP and other [local and regional] plans is on the one hand necessary and on the other hand problematic, due to the diversity of planning systems in different national and local contexts. This is also the reason why the UNESCO World Heritage Committee has not prepared a single management plan model. In our experience, this complex relationship between supranational and local levels of protection and enhancement policies is mainly due to the different and sometimes opposite nature of planning models: performative vs. conformative models. Mastop, Faludi [1997, p. 820], referring to Barrett and Fudge's [1981] reflections on the distinction between performance and conformity, state that "conformity has to do with the consistency between the original plan and changes in the external world. Performance, on the other hand, has to do with how a strategic plan holds its value during the deliberations that follow its adoption». However, there are further sources of conflict, in particular, the general one between conservation and development [Tunbridge, Ashworth, 1996], implemented by a substantial process of homologation of places and sites, due to a great acceleration of transformation processes. Growing urbanisation, with its standardised development models, unrelated to local times and contexts or aimed exclusively at land consumption and the use of irreproducible resources, clashes in fact with the conservation of cultural, historical, artistic and environmental heritage. Another source of conflict is the difficult relationship between procedures and contents of the WHL MP and those of the local and regional planning systems. Italian legislation has regulated the management plans of UNESCO sites through Law no. 77 of 20 February 2006 'Special measures for the protection and enjoyment of Italian cultural, landscape and natural sites, inscribed in the World Heritage List, under UNESCO protection'. This law identifies the Advisory Commission for the management plans of UNESCO sites and local tourism systems, established at the Ministry of Cultural Heritage and Activities. The MP represents, in the Italian legal system, a flexible tool capable of dialoguing with plans of different nature [local and regional, regulatory and strategic] to ensure the protection of the site and its development as a cultural and tourist resource. However, some problematic aspects emerge. The first concerns the competent Ministry of Cultural Heritage and Activities which, in Italy, is not responsible for spatial planning. The second problem concerns the implementation of management plans in Italy, which lack the necessary

conformity with respect to the local level planning system [Rivolin, 2008].

The Case of the Syracuse Site and the Rock Necropolis of Pantalica: Conflicting Aspects between the UNESCO WHL Management Plan and the Local Planning System

There are currently seven sites in Sicily included in the UNESCO WHL:

- The Archaeological Area of Agrigento [1997];
- The Villa Romana del Casale in Piazza Armerina [1997];
- The Eolie Islands [2000];
- Late Barogue Towns of the Val di Noto [2002];
- Syracuse and the Rock Necropolis of Pantalica [2005];
- Mount Etna [2013];
- Palermo Arabo-Normanna [2015].

These sites differ significantly in relation to their nature and size, as well as the type of entity in charge of their management.

Going into the structural, political and technical factors that make the local application of WHL management plan provisions complex, the case study of 'Syracuse and the Rock Necropolis of Pantalica' was selected. In 2005, UNESCO recognised the 'Outstanding Universal Value' of the site 'Syracuse and the Rock Necropolis of Pantalica' and declared it a 'World Heritage Site'. In relation to the recognition of the site, UNESCO, referring to specific criteria used [Jokilehto, 2008], justified the reasons for its decision by stating that:

«The UNESCO site consists of two distinct parts: Syracuse and the Necropolis of Pantalica. Together, these areas represent a heritage of exceptional historical value, testifying to the continuous development and integration of different models of anthropisation of the territory, starting from the Neolithic period, uninterruptedly for almost four thousand years, up to the present day. The boundary of the site relative to the Syracuse area includes the entire island of Ortigia [historic centre of Syracuse] and the areas of Epipoli, Acradina, Neapolis, Castello Eurialo, Scala Greca and the Dionysian walls. The buffer zone includes the areas of 'Porto Grande', 'Porto Piccolo', part of the coastal system and areas of 19th century urban development»

The other part of the UNESCO site is the Necropolis of Pantalica, which features over 5,000 rock-cut tombs dating from between the 13th and 7th centuries BC.

It is therefore a site that has components of archaeological interest from different periods



Fig. 1. Sites included in the UNESCO WHL (Ministry of Cultural Heritage).

[Neolithic, Greek, Hellenistic, Roman], components of architectural interest [from the Middle Ages to the Baroque], and elements of natural and landscape interest.

The reasons for selecting the site 'Syracuse and the rock necropolis of Pantalica' as a case study are, therefore, manifold and are based on two main aspects:

• Timing and level of implementation of the management plan;

• The value and international relevance of the site. With regard to the first aspect, the chosen case study is the first of the UNESCO sites in Sicily for which, as envisaged by the UNESCO Guidelines, the MP was prepared on the occasion of the site's candidature for inclusion in the WHL. In addition, the time elapsed since the site's recognition [2005] [in fact, the 5-year duration of the plan has been exceeded] allows for a complete analysis in evaluating the effects of the management plan [Lo Piccolo et al., 2012]. Regarding the second aspect, the site represents an internationally recognised 'historic urban landscape' [Rodwell, 2010] of exceptional value. With respect to the planning and development models of this territory, however, some conflicts

emerge that do not only concern the inconsistency/ divergence between preservation and enhancement policies. However, the Unesco site, especially in the part that concerns Syracuse, is affected by intense phenomena of urban transformation that lead, through multiple forms of urban impact on the cultural and environmental heritage, to the disregard of the richness and value of this heritage [Lo Piccolo, 2007]. More generally, in Sicily, these transformation processes do not disregard factors such as development and building speculation, which have played a relevant and controversial role in the region's economy. While in the rest of Italy construction played a leading role in the post-war economic recovery, in Sicily, as in much of southern Italy, this sector has taken on exceptional importance as a result of the fragility of the region's socioeconomic and production system. An analysis of the real estate market, land prices and production costs reveals economic mechanisms that are in some ways 'anomalous', the direct effect of a marginal context that is lagging behind in development and, in the specific case of the construction sector, of a productive sphere closely linked to the Mafia criminal system.

This phenomenon is the result of the prevalence of private entrepreneurial interests and financial



Fig. 2. The 'Grande Porto' of Syracuse and the interventions of the project for large ships, Syracuse, 2004.

AREA NAME	CORE	BUFFER ZONE	TOT
Necropoli OF Pantalica	205.86 ha	3699.76 ha	3905.56 ha
Syracuse			
Epipoli, Acradina, Tyche,	635.96 ha	870.45 ha	1510.41 ha
Neapolis, Castello Eurialo,			
Fortificazioni di Dionisio e			
Scala Greca,			
Ortigia	56.54 ha	945.25 ha	1001.89 ha
ТОТ	896.46 ha	5519.40 ha	

Tab. 1 - Extent (in hectares) of the areas belonging to the UNESCO site of Syracuse, 2004.

lobbies over a weak and often unscrupulous public administration, which first pursued a development based on the hetero-directed industrial model, and then on that of mass tourism, which turned out to be totally unrelated to the socio-economic profile of the territory, and in many cases fatal to the natural and cultural heritage. In the specific case of Syracuse, disordered building growth initially corresponded to the gradual abandonment of Ortigia and then, from the 1990s onwards, to the urban redevelopment process triggered by the detailed executive plan, approved in 1990 [Pagnano, 1989]. This was followed in recent years by various urban regeneration projects, with incentives for the realisation of redevelopment and socio-economic revitalisation initiatives.

The island of Ortigia was then involved in a renewal process that, also through the localisation of important administrative functions, restored centrality to the island, which became inhabited again by Syracusans [Liistro, 2008]. This process led to the reactivation of the real estate market, also thanks to the significant presence of foreign investments, significantly increasing property values and bringing with it well-known gentrification phenomena [Cannarozzo, 2006]. The WHL MP operates in a context in which the valorisation of the archaeological heritage [necropolis, archaeological areas and the historical urban network], still remains an inadequately pursued objective [Lo Piccolo, 2007].

The WHL MP intends to act on this heritage through conservation and enhancement interventions, promoting a model of sustainable development that integrates protection actions with the expectations of socio-economic growth of the local community.

To achieve these objectives, the WHL MP was divided into three sub-levels:

• the plan for the protection and preservation of knowledge;

• the cultural and social promotion plan;

• the socio-economic and cultural enhancement plan.

In relation to the above-mentioned objectives and intervention strategies, the WHL MP appears to be an instrument of broader ambition. However, if we look at its specific actions in detail, the MP's choice seems clear: to introduce measures already proposed by other existing plans, rather than to build a coherent system of innovative policies from scratch. In particular, the instruments from which the WHL MP's actions and interventions originate come from:

• Integrated Sustainable Development Plan;

• Urban Renewal Programme;

• Community Initiative Programme [CIP] URBAN;

• Community Initiative Programmes [CIP] Leader II and Leader Plus;

- · Territorial Pact for Agriculture;
- Integrated Territorial Project [ITP];
- Environmental Restoration Plan;

• Urban Regeneration and Sustainable Territorial Development Programme [URSTDP] Akrai and Ecomuseum.

Indeed, the presence of actions already undertaken by other existing plans and the lack of an innovative strategy appear as a serious weakness, mainly due to two factors. First, the clash between the performative model of the WHL MP and the conformative nature of local plans, the consequence of which is that the WHL MP becomes the recipient of actions and forecasts of other plans.

Paradoxically, the result generates an 'inverse', and totally inefficient, conformity, which is that of the WHL MP with respect to other existing local plans.

The new instruments [and the related funds] are considered income-generating and demandsupporting instruments; that is, they implement distributive and redistributive policies and have considerable financial resources at their disposal. In contrast, urban policies are essentially perceived as regulatory or, even worse, as restrictive [Lo Piccolo, Schilleci, 2005]. Moreover, looking specifically at the outcomes of these plans, an urban context is generated, being significantly influenced by changes in physical, economic, social and environmental components. However, some critical issues emerge. Although the island of Ortigia has attracted the interest of planning and programming over the last twenty years, the instruments activated, especially the older ones, have led to the implementation [sometimes only partial] of 'punctual' interventions that have not followed a project design and a unitary path [Lo Piccolo, Schilleci, 2005; Lo Piccolo, 2007]. This is demonstrated, in fact, by the evident imbalance between the location of rehabilitation works carried out near areas of archaeological, historical-monumental or seafront interest and inland areas, which are still characterised by serious conditions of physical and social degradation. Added to this is the growing investment by private individuals and real estate companies, not adequately regulated by public action, which leads to the progressive replacement of the traditional socio-economic network with external commercial and tourist activities.

It is, however, in relation to the General Master

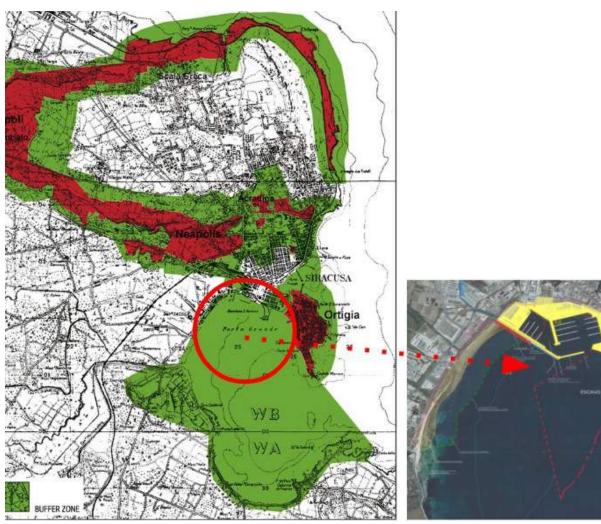


Fig. 3. Zoning of the site [Syracuse], the project of the new marina.

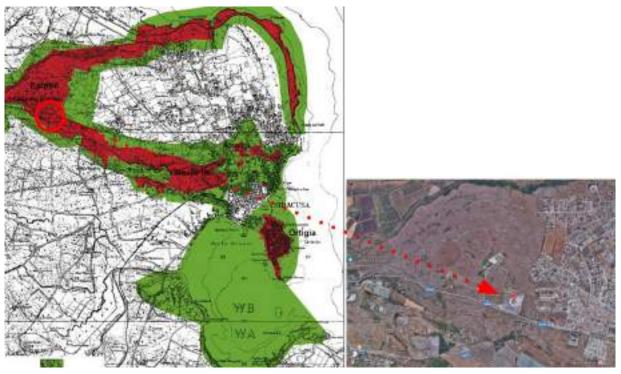


Fig. 4. Zoning of the site [Syracuse], the project of the "Fiera del Sud shopping mall".

Plan (GMP) forecasts that we find significant critical elements mainly linked to two different aspects: the different nature of the instruments and the difference between the forecasts.

Among the GMP forecasts we find several planning actions that are critical:

1. The construction of a shopping centre at Epipoli near the former Fair of the South, a UNESCO site. The GMP envisages the possibility of increasing the areas allocated to existing commercial activity by 20%.

2. The construction of new large residential areas in the Buffer Zone of the UNESCO site [at Epipoli and Tremilia].

In addition to these actions, the GMP authorises building permits for much of the land south of Syracuse, particularly along the coastline, which, although outside the perimeter of the UNESCO site, should be preserved for its environmental, landscape and cultural characteristics, also for the purposes of more sustainable tourism. Finally, other serious conflicts concern the construction of two new marinas [one for large cruise ships, authorised in 2007 and already partly built, and one for pleasure boating, authorised in 2008] within the Porto Grande of Syracuse, which falls within the Buffer Zone of the UNESCO site and has been declared a Site of National Interest.

# Conclusion

The different purposes of the planning instruments analysed [land use planning instruments and socio-economic planning instruments], their different nature [conformative and performative] and the different spatial articulation and temporal duration have not allowed the MP to elaborate long-range and, consequently, effective action. Due to the MP's inefficiency, the presence of the UNESCO site not only does not represent real added value for local economies, but also generates effects opposite to the level of site conservation it should guarantee, leading to anomalous and contradictory interpretations of the values it represents. If the purpose of this contribution was to understand if and how it is possible to verify the effectiveness of the actions of a WHL MP, the analysis conducted on the case of Syracuse, also through previous studies [Lo Piccolo et al., 2012], shows with extreme clarity how the implementation of the actions envisaged by the management plan is inadequate [or even non-existent], taking second place to what appears to be the main objective of the process: inclusion in the UNESCO WHL. Inclusion in the WHL is generally considered a factor that contributes significantly to increasing the popularity of the site, in its 'appeal' and, consequently, in the promotion of the various forms of tourism development attributable to it. In the case of Syracuse, the extreme consequence of this condition could lead to the impairment of the value of the cultural heritage for which the site has been included in the WHL due to the growth of the tourist offer, together with forms of speculation that are directly or indirectly attributable to it.

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## References

Barrett S., Fudge C. (1981). *Policy and Action: Essays in the Implementation of Public*. Methuen, London.

Blandford C. (2006). "Management Plans for UK World Heritage Sites: Evolution, Lessons and Good Practice", *Landscape Research*, 31(4), pp. 355–362.

Brattli T. (2009). "Managing the Archaeological World Cultural Heritage: Consensus or Rhetoric?", *Norwegian Archaeological Review*, 42(1), pp. 24–39.

Cannarozzo T. (2006). "Dal piano ai progetti. Due interventi pubblici di recupero residenziale a Ortigia", in Trapani, F. (ed.), *Urbacost. Un progetto pilota per la Sicilia centrale*, FrancoAngeli, Milano, pp. 194–201.

Drost A. (1996). "Developing Sustainable Tourism for World Heritage Sites", *Annals of Tourism Research*, 23(2), pp. 479–484.

Evans G.L. (1999). *Heritage Tourism*, Icomos, London. Feilden B.M., Jokilehto J. (1998). *Management guidelines for Word Cultural Heritage sites*. ICCROM, Roma.

Jokilehto J. (2008). The World Heritage List: What Is OUV? Defining the Outstanding Universal Value of Cultural World Heritage Properties, Hendrik Bäßler, Berlin.

Jones C., Munday M. (2001). "Blaenavon and United Nations World Heritage Site Status: Is Conservation of Industrial Heritage a Road to Local Economic Development?", *Regional Studies*, 35(6), pp. 585–590. Liistro M. (2008). *Ortigia: memoria e futuro*. Edizioni Kappa, Roma.

Lo Piccolo F. (2007). "Siracusa: misconoscimento e potenzialità dell'identità locale", in Rossi Doria, B. (ed.), *Sicilia terra di città*, Istituto Geografico Militare, Firenze, pp. 150–175.

Lo Piccolo F., Schilleci F. (2005). "Local development partnership programmes in Sicily: Planning cities without plans". *Planning Practice & Research*, 20(1), pp. 79-87.

Lo Piccolo F., Leone D., Pizzuto P. (2012). "The (Controversial) Role of the UNESCO WHL Management Plans in Promoting Sustainable Tourism Development", *Journal of Policy Research in Tourism, Leisure and Events*, 4(3), pp. 249–276.

Lyon S.W. (2007). "Balancing Values of Outstanding Universality with Conservation and Management at Three United Kingdom Cultural World Heritage Sites", *Journal of Heritage Tourism*, 2(1), pp. 53–63.

Mastop H., Faludi A. (1997). "Evaluation of Strategic Plans: The Performance Principle", *Environment and Planning B: Planning and Design*, 15(4), pp. 299–318. Pagnano G. (1989). "Recupero di Ortigia centro storico di Siracusa", *Recuperare*, 40, pp. 164–173. Pencarelli T., Conti E., Splendiani S. (2017). "The experiential offering system of museums: evidence from Italy", *Journal of Cultural Heritage Management and Sustainable Development*, vol. 7, 4, pp. 430-448.

Rivolin J.U. (2008). "Conforming and performing planning systems in Europe: An unbearable cohabitation", *Planning, Practice & Research,* 23(2), pp. 167-186.

Rodwell D. (2010). "Historic Urban Landscapes: Concept and Management", *World Heritage Papers*, 27, pp. 99–104.

Roh T.S., Bak S., Min C.K. (2015). "Do UNESCO heritages attract more tourists?", *World Journal of Management*, vol. 6, 1, pp. 193-200.

Rössler M. (2006). "World Heritage Cultural Landscapes: A UNESCO Flagship Programme 1992–2006", *Landscape Research*, 31(4), pp. 333–353.

Solar G. (2003). "Site Management Plans: What Are They All About?", *World Heritage Review*, 31, pp. 22–23.

Sõrensson A., Von Friedrichs Y. (2013). "An importance-performance analysis of sustainable tourism: A comparison between international and national tourists", *Journal of Destination Marketing & Management*, vol. 2, 1, pp. 14-21.

Staiff R., Ongkhluap S. (2012). "Tourism and the perceptions of local communities: case study of the World Heritage site of the Historic City of Ayutthaya, Thailand", in UNESCO, *Community development through World Heritage*, Parigi.

Tunbridge J.E., Ashworth G.J. (1996). *Dissonant Heritage: Dissonant Heritage: The Management of the Past as a Resource in Conflict*. Wiley, Chichester.

UNESCO (1972). Convention Concerning the Protection of the World Cultural and Natural Heritage, Adopted by the General Conference at its seventeenth session, Paris, 16 November.

UNESCO (2002). Operational Guidelines for the Implementation of the World Heritage Convention, Paris: UNESCO World Heritage Centre.

UNESCO (2005). Operational Guidelines for the Implementation of the World Heritage Convention, Paris, 2 February, UNESCO World Heritage Centre.

UNESCO (2015). Operational Guidelines for the Implementation of the World Heritage Convention, Paris, 8 July, UNESCO Word Heritage Centre.

UNESCO (2021). Operational Guidelines for the Implementation of the World Heritage Convention, Paris, 31 July, UNESCO Word Heritage Centre.

Yang Y., Xue L., Jones T.E. (2019). "Tourism-enhancing effect of World Heritage Sites: Panacea or placebo? A meta-analysis", *Annals of Tourism Research*, 75, pp. 29-41.



Opening image: Caltavuturo, Calcibaida masseria, detail of ruined storehouse (photo by the author).

# The shared project SMART REHABILITATION 3.0 for the EU architectural rehabilitation

Examples of enhancement, preservation and intervention for traditional architecture in the Mediterranean areas

Tiziana Campisi

Urban Planning & Technology

Sicilian Mountain municipalities and inland areas are the engine for the harmonious development of the entire region. Saving the cultural identity of these places, encouraging entrepreneurial activity, optimizing the network of services, especially in education and healthcare, is an act due to the new generations. This article wants to stimulate the creation of a strong constructive-cultural identity in resident citizenship and to hypothesis communication strategies which are useful for the enhancement of cultural resources and also of compatible technological & sustainable innovation.

To this challenge is associated the shared creation - through the European Erasmus+ Project Smart Rehabilitation 3.0 - of a common professional profile in Building Rehabilitation Expert (BRE), as a model of rehabilitation for historic Mediterranean cities and landscape.

Keywords: EU projects, Building Smart Rehabilitation, Tradition & Innovation, Inner Areas, Sicily

# Introduction. Living into the beauty of cities and places inside Europe and Mediterranean Basin

For many people all over the world, Europe is the continent of deep culture. Europe's architectural heritage is the direct result of centuries of construction history. During the time in all countries of our Continent we have built a complex and multilayered melting pot of common construction knowledge, being we now responsible for its safeguarding and improving.

This shared heritage, along with this sense of togetherness, is the real foundation on which Europe is built. Europe's architecture represents also a multifaceted mosaic that is both complex and interrelated. It does not belong to a specific period or a single community or Country. We can discover that all our construction knowledge can be shared as it is European, and often connected to other EU Countries and also of Mediterranean basin. Many cities and villages, as well as the many monuments and sites which reflect our rich and diverse cultures, history and universal values are the occasion for a respectful but also innovative rehabilitation/restoration.

Living into the beauty means taking care of cities and places not only in a perspective aimed at the maintenance and conservation of assets, but also at their enrichment and transformation in terms of technological innovation and compatible functional rehabilitation, also in terms of extended accessibility and implementation of integrated services.

The changing in social and economic needs impose increasing pressures on historic buildings and ancient centers, with the risk of obsolescence and abandonment, or of often invasive adjustments. Significant portions of the historical heritage, that is presently in disuse, can only be preserved through the introduction of new functions. Even in cases where the continuity of current use appears sustainable, the assessment of the achievement of functional, technological-performance and conservation objectives requires a multidisciplinary effort, which takes into consideration various aspects such as the compatibility of the proposed interventions, the requests for structural/seismic improvement or adaptation.

For the use and reuse of existing buildings, the main performance needs and compatibility could be identified as: legislation and performance requirements; resilience/resistance strategies; knowledge, materials and technologies for the intervention; compatibility of methodologies; changing restoration/rehabilitation techniques; energy efficiency, accessibility, safety, structural adjustment; compatibility assessment; control and monitoring techniques; maintenance programs and user role. We have to create a common construction language and repository of knowledge and interventions, preserving and restoring great cities and little historical centers and villages, the tens of thousands of monuments, widespread buildings and vernacular or rural architectures, sites and cultural landscapes across Europe, permitting to each building to survive, promoting a new idea of technician that can be an expert both of traditional construction techniques and architectural typologies and also a perfect specialist of the technological innovation linked to rehabilitation and restoration. In this optic, the European culture and heritage could represent a powerful catalyst for a real change and a vital component of the New European Bauhaus and Baukultur, as an integral part of the necessary social, economic, environmental and cultural transformation of our Europe. We need well-planned rehabilitation/ restoration design and competitive and well-trained

professionals to regenerate our landscapes, revitalize the beauty of our cities, and find innovative ways of using our cultural heritage to strengthen local communities and create new jobs. We also need to fully embrace the digital transformation and use its benefits to amplify the impact of our architectural interventions. However, this can only be successful with the active participation of local communities and facilitated by national, regional and local governments, and the European institutions, as well as private sector. Traditional architecture is a part of EU cultural h\eritage; it adapts to the natural condition of territory, is dynamic and sustainable because reuse the same traditional materials, and represent itself a lesson of contemporary architecture [Fig.1] [Fig.2].

# Italian inner areas & EU rehabilitations goals and challenges

Inner areas are defined as territories that are significantly distant from the centers of essential services (education, health and mobility), rich in important environmental resources (water, agriculture, forestry, landscape) and cultural resources



Fig. 1. Vernacular architecture in a village of Cyprus (photo by M. Saeli).



Fig. 2. Example of rural architecture (masseria) in the inner Madonie mountain area of Sicily (photo by the author).

(archaeological heritage, historical settlements, ....). They are part of a highly diversified territory for natural systems and as a result of centuries-old processes of anthropization. About a quarter of the Italian population lives in these areas, in a portion of territory that exceeds 60% of the total and which is organized into over 4000 municipalities/villages.

In Italy small villages or internal areas constitute a third of the national territory in which only the 7% of the Italian population lives. They are characterized by a progressive depopulation and aging of the resident population, with a strong reduction in the supervision and maintenance of soil, landscape and buildings, with serious effects also on the other territories of the country. These areas have lost also sometimes tourist attraction, reducing their important contribution to quality agri-food and artisanal productions. Rehabilitation will be a challenge capable to increase the attractiveness of the territories involved, the fruition of the historical and cultural heritage and the promotion of tourism through the improvement of urban decorum and the recovery of the original and historical features of the villages and architectural emergencies; the enhancement of accessibility conditions and the supply of infrastructures for sustainable mobility; the provision of services and the activation of systems, including innovative and eco-sustainable ones, for tourist reception also through the functional/structural/ technological rehabilitation or restoration of buildings and public spaces. The real problems of accessibility to basic services in these areas significantly reduce the well-being of population, limiting the field of choice and opportunities for individuals, who are now forced to move searching useful services in distant locations from one's territory of residence, giving

rise to a phenomenon that strongly undermines the sense of belonging to places, associated with the abandonment of the traditional building heritage existing in these areas.

A substantial part of the internal areas has undergone and is still undergoing a strong process of marginalization, which has manifested itself through phenomena linked to the quality of life of the resident population (also due to the low interest shown in the existing buildings, to be protected and reported to constructive-structural and typological-housing standards appropriate to contemporary living), to its average age and to its degree of occupation, through the scarce valorization or non-use of the rich territorial heritage and through deficiencies in the provision of public and private services and collective. [Fig.3]

Through conscientious restoration and/or building rehabilitation interventions, urban/architectural regeneration approaches can be activated which are based on the reinterpretation of the urban context, through its compatible transformation, which nevertheless preserves its identity. This regenerative process should be dynamic, acting on elements that represent the physicality of a place, but also its economic, social, constructive, cultural and landscape fabric.

Rehabilitation action has traditionally been oriented towards the structural and technical aspects of the buildings. Nowadays, the global concept of urban regeneration is considered one of the main sustainable development goals of the United Nations 2030 Agenda in order to make inclusive, safe, resilient and sustainable cities. EU Ministers for Urban Development approved in 2010 the Toledo Declaration, focused on the importance of integrated urban regeneration and its strategic potential for a smarter, more sustainable and socially inclusive urban development in Europe, supporting the importance of the rehabilitation of the existing housing stock from different perspectives. At the same time, multiple international agreements, such as the Climate Summit COP21 of Paris in 2015 or the recent actualization of the European Directive on energy efficiency of buildings (2018/844), have chosen to accelerate the renovation of existing buildings to reduce the energy consumptions and to reach a sustainable, competitive, safe and decarbonized energetic system for the planet [Fig. 4]. At European level, we take into account the Construction 2020 Strategy for the sustainable

competitiveness of the construction sector and its enterprises, in particular the related Action Plan

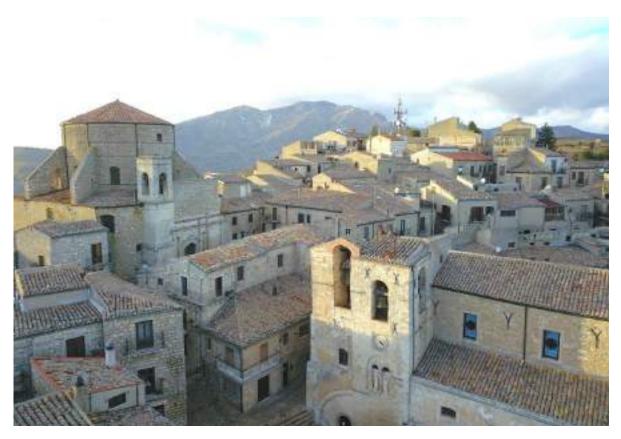


Fig. 3. Overall view of a part of the historical center of a Madonie village (photo by L. Lombardo).



Fig. 4. Detail of the state of abandonment of traditional architecture inside the Madonie inner area (photo by S. Lo Piccolo)..

aiming at the "improvement of specialized training and making the sector more attractive". In any case, today the building renovation is a clear priority of the Commission and the "Renovation Wave" is a flagship initiative under the EU "Green Deal" for the construction sector. The European Commission is strongly encouraging Member States to reflect building renovation as a top priority in their national Recovery and Resilience Plans, which aims to rehabilitate millions of buildings in Europe over the next decade. Its objectives are clear: to boost our economy in a period of recovery, improve the quality of life in citizens' homes and, collectively, move towards the goal of climate neutrality by 2050. Doubling the annual renovation rate in the EU and ensuring high quality renovations will bring valuable benefits to European citizens and will mobilize considerable private and public investment, supporting the green and digital recovery, and a just clean energy transition. The "Technical Support Instrument", prepared by the EU, will support the Member States in designing, developing and implementing reforms in the area of building renovation. This includes technical support for: targeted reforms aimed at scaling up investments in building renovation, including private homes and public buildings; promote the buildings data availability, providing information for citizens interested in renovating, and support digital technologies in the building sector; developing and implementing sound long-term renovation strategies, roadmaps, policies and programs; improving the capacity of public administrations involved in building renovation, to ensure that the public administration has the necessary skills in the area; refining the capacity of social housing associations by participation of owners and residents in renovation and housing projects.

Achieving these very reasonable goals cannot be done simply by wishful thinking, legislative action or funding. All this is necessary but, as shown by a survey carried out at the European level on this subject, it is also essential to aware the society and prepare all the agents of the sector to be able to face the great challenge that this political commitment represents. Architects, Engineers, Builders, etc. have already had the opportunity to enter into rehabilitation, but the effort that is required now requires expert professionals in the different fields of rehabilitation.

The aim is to develop a training program, for the world of engineering and architecture, shared at European level, which responds to the need to train true experts in the European subsector of rehabilitation,

restoration and maintenance. A professional trained to interact with building owners, to understand their needs and with the technical ability to draft the rehabilitation and restoration projects that each case requires, reaching the highest levels of quality and creativity. A professional aware of respect for traditional techniques and prepared to introduce the most innovative techniques and new materials offered by the market, always adapting to the requirements and characteristics of each building. We cannot forget that rehabilitation and restoration require a balance of two complementary disciplines: technological, related to the world of engineering and artistic, related to architecture, aesthetics and heritage values. The training of the rehabilitation expert must address these two areas of knowledge, in order to provide an adequate response to the demands of a very active economic sector, without forgetting a social component, necessary for this type of intervention. Today we have reached the "Rehabilitation 3.0 model", which greatly expands its possibilities and its objectives, since it has become the true engine of local and social economies, and is attributed a fundamental role to achieve the essential challenges of improving the quality of life of the population and achieve a decarbonized society by 2050, improving the energy efficiency of the built park. Rehabilitation has also shown itself to be a great source of quality jobs. This requires unprecedented multidisciplinary cooperation between hard sciences (hard skills), technologies, social sciences, arts, humanities and the increasingly essential soft skills. In terms of well-being and health, there are many studies that show how rehabilitation has decisive and relevant effects on the health, life expectancy and well-being of families in their social context. All of this is accompanied by one of the greatest innovations in the sector, such as the introduction of BIM and HBIM computerized processes, within the framework of a 9% improvement in the innovation capacity of the different European Countries, measured by the European Innovation Scoreboard 2020, since 2012. In conclusion, the role of rehabilitation in future systems of innovation, social cohesion and wellbeing of citizens, in the cultural and creative spirit has very important macroeconomic implications and can be revolutionary for EU policies, at a time when that the large investments of the EU Reconstruction

and Resilience Funds, for the recovery of the European economy as a result of the crisis caused by COVID-19, must have rehabilitation as one of their fundamental pillars. One of the important qualities

of rehabilitation of traditional architecture in the inner areas is that it remains stable and acts as a regulator of the market and the activity of the sector. This is possible thanks to the objectives it raises and to which it responds, directly related to people's quality of life and far from speculative movements in the newly built real estate market, which have nothing to do with the needs of the population. The objectives of sustainable rehabilitation, always focused on improving the guality of life of its inhabitants, can be summarized in the following aspects: improve the conditions of structural safety offered by the building; protect the building against decay/damages and humidity also improving technological features of materials and construction systems; repair, upgrade and modify the general gas, water, electricity or sanitation facilities of the building; adapt accessibility conditions by removing architectural barriers and installing elevators; optimize and improve the lighting and natural ventilation of architectures; optimize or substantially improve the energy efficiency of the building; incorporate access to audio-visual, information and telecommunications services [Fig.5]. The rehabilitation of architecture has to be set in

the framework of a process of revitalization and regeneration of the territory of which it forms part, whether an urban or a rural environment. It has to be

understood as an intervention on both the physical environment and on the population it hosts, and the series of cultural, social and economic activities that define the 'social environment', with the main objective of improving the living conditions of this population as well as the quality of the area and the 'built' environment, maintaining and promoting its cultural and heritage values, and at the same time guaranteeing its coherent adaptation to the needs of contemporary life. Rehabilitation has to be a slow, programmed process of transformation with mid- and long-term objectives and no fast or sudden interventions. It has to begin with a firm political decision that leads not to the carrying out of specific projects but calls instead for action and ongoing evaluation in accordance with the evolution of the area and its inhabitants.

It is therefore necessary to be ready to face the challenges that the building renovation expert will have to face in the future with a unified professional profile at European level. The profile of a renovate "Building Rehabilitation Expert" (BRE) should contemplate:

ability to look at the project of preservation as a team work;

· dissemination and design skills based on the



Fig. 5. Example of wooden architecture in Lithuania, object of a necessary rehabilitation intervention (photo by the author).

innovative use of historic building assets;

• ability to solve any problem related to the rehabilitation and consolidation of the historical building, to manage the procedural phases and the construction site;

• ability to foresee in the idea of architectural, technological-structural and executive project also the necessary maintenance activities that the building must have during its future life cycle;

• ability to look at the functional rehabilitation of a building as a new use, different from the original one, but compatible with it;

 ability to keep into account the specific characters and uniqueness of the building to avoid the risk of losing its historical identity;

 knowledge of the building process and its management, knowledge of the construction site (historical and contemporary), management of complex construction sites, knowledge of safety and health regulations in the working-place, projects of scaffolding, and fall protection systems from above (as the roofs);

 ability to deal and develop a project of conservation/ modification of an existing building, proceeding from the recognition of the forms of physical-chemical and mechanical degradation and functional deficit, to the definition of effective and adequate techniques of rehabilitation, consolidation, requalification, and improvement of the energy behavior;

• full knowledge of the historical building typologies;

• ability to grasp the original potentialities to identify useful strategies of re-functionalization in a project of preservation;

• deep knowledge of the materials and the construction technologies of the historical architecture, with the ability to analyse, from the typological and technical-structural point of view, an ancient building organism, also of considerable complexity, capable of coordinating and verifying the results of investigations and tests on the building;

• assessment of the safety on the existing buildings;

• knowledge of the concepts of durability, Life Cycle Assessment (LCA);

• technical skills in identifying processes of reuse/ recycling of the historical building materials;

• skills of design and verification in terms of regulatory feasibility, integration with the most modern systems (including fire safety) and principles of environmental sustainability, reduction of seismic vulnerability, etc.;

• graphical and manual knowledge, on survey, thematic mapping of the constituent materials, surveys of the technological details, thematic mapping of the materials degradation and structural instability, diagnostic survey; • knowledge and mastery of digital tools such as BIM and H-BIM design;

• skills regarding energy requalification of the underperforming architectural heritage.

Preservation can be fully considered an activity that concerns an optimal use of the territorial resources, such as historical centers, rural areas, abandoned industrial areas, historic-cultural infrastructures, etc., with deep interventions, even if not conservative, on the existing structures. Preservation includes a series of design operations on the existing building and must face not only with its physical protection but also with its most intimate meanings, especially if the considered building shows some historical features, aiming at improving the performance, also thinking about its possible re-functionalization, with a new one sometimes different from the original. That is better, in our opinion, if it is compatible with the original characters of the building.

Nowadays, the building restoration and rehabilitation suffers a lack of highly specialized professional figures, prepared to face the competitive challenges of the technological, structural and plant rehabilitation, also using modern design tools such as BIM or H-BIM, which must be done without depressing and/ or debasing the architectural qualities of the original building.

In addition to this, the architectural rehabilitation and wider urban regeneration project should include, in the internal areas and villages, interventions aimed at:

• favor the reuse of already urbanized areas to avoid further land consumption and make their transformation attractive;

favor the densification of urban areas for the best economic sustainability of collective mobility systems;
maintain and increase the attractiveness of urban contexts due to the plurality of functions present;

• ensure the ordinary and extraordinary maintenance and innovation of urbanization works and collective facilities;

• favor, also with civic participation procedures, the verification of the collective utility of urban regeneration interventions;

• improve relations with the surrounding urban fabrics or the re-composition of urban margins;

• improve and enhance urbanization works, services and urban green areas;

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• improve relations with the surrounding urban fabrics or the re-composition of urban margins;

• improve and enhance urbanization works, services and urban green areas;

• ensure the coexistence of diversified and complementary urban functions and the achievement of a balanced social composition [Fig.6].

## The Smart Rehabilitation 3.0 EU project

Despite these premises, however, it is noted that most European universities still consider building rehabilitation a marginal discipline, compared to new construction activity and fail to adequately and synergistically train the professionals required by the sector at a European level. In the past, the rehabilitation activity has traditionally been oriented on structural and technological aspects, today the global concept of urban regeneration of the United Nations 2030 Agenda represents one of the main objectives of sustainable development, in order to make cities inclusive, safe, resilient and sustainable. The European Commission has launched the "New European Bauhaus" initiative and, through a website, ideas can now be shared to create the new paradigm of a more sustainable and inclusive way of life. The New European Bauhaus is an environmental, economic and cultural project that wants to develop an innovative framework that sustains, encourages and accelerates ecological transformation, combining urban regeneration, culture, circular economy, design and architecture to contribute to the fulfilment of the Green Deal and the Renovation Wave for Europe. In this framework, Smart Rehabilitation 3.0 is a 30 months multidisciplinary and transdisciplinary long project co-funded by the Erasmus+ Programme of the European Union - Key Action 2, Strategic Partnership for Higher Education - and with the participation of four Universities (Universitat Politècnica de Catalunya (Spain; scientific responsible prof. Montserrat Bosch González), University of Palermo (Italy; scientific responsible prof. Tiziana Campisi), University of Cyprus (Cyprus; scientific responsible



Fig. 6. Example of rural architecture in Sicily, object of a necessary and compatible rehabilitation intervention (photo by the author).

prof. Maria Philokyprou), and Kauno Technologijos Universitetats (Lithuania; scientific responsible prof. Rasa Bertašiūtė), being Lead Partner the Rehabimed Association of Barcelona (president prof. Xavier Casanovas), that promotes sustainable rehabilitation and socio-economic revitalization of historic centers in the Mediterranean area, projecting the experience in other continents. The project aims to mitigate and cover the gap between educational offer and the social reality, by defining a new professional profile of Building Rehabilitation Expert (BRE) and the creation of homogeneous curricula, validated at EU level, for the training of these experts, within the framework of higher education: a professional aware of respect for traditional techniques and prepared to introduce the most innovative ones, always compatible with the existing buildings. The aim is to develop a training program, for EU engineering and architecture, which responds to the need to train true experts in the European subsector of rehabilitation, restoration and maintenance, interacting with building owners and

possible stakeholders as building firms, municipalities safeguard valorization and and Institutions. understanding their needs and offering the technical ability to draft the rehabilitation and restoration projects that each case requires, reaching the highest levels of architectural and technological quality. The project general aim is to deepen knowledge about existing up-to-date technological tools for building assessment, through the collaboration among international Partners, and consequently to upgrade existing training tools and professional gualifications curricula [Fig.7]. The "3.0 concept" become a new paradigm in interaction, making online interface easier and more intuitive for professionals, as smarter applications such as better search functions give users exactly what they are looking for as "digital literacy". The results that offer this innovate project are that to promote the development of training programs for a new professional gualification and also a "rehabilitation Syllabus" (IO1), in order to train these experts, favoring also the creation of online training obtained through



Fig. 7. Traditional architecture and its integration into surrounding the landscape (photo by the author).

four "Massive Open Online Courses" (MOOC, IO2) on rehabilitation and restoration, basing on a high-quality educational experiences. The project would also implement specific tools for the access to technological and innovative interventions in rehabilitation (IO3) and create a repository for "Databases" and digital information on rehabilitation and restoration (IO4).

The Digital Library is a repository open access and freely available accessing to the website where teachers, students and professional experts can directly and freely access multiple information and files on rehabilitation and restoration. It is an open-source network for information distribution, built with the involvement and contributions of specialized experts and companies working in rehabilitation. The two different Databases collecting information relating to technological innovations and innovative interventions in building rehabilitation. Each Database will gather an adequate number of sheets, simple or complex, depending on the study-case. One database organizes the technological innovations by referring to the different building parts/ construction systems, using a particular attention to the original construction materials and to the innovative construction techniques that it will be introduced. Each Partner of the project must involve local stakeholders and industries because they produce innovative materials or construction companies engaged in the experimentation/implementation of cutting-edge construction systems. The second database subdivides the innovative architectural interventions related to the rehabilitation and restoration by referring to specific categories/examples and emblematic study-cases, using a particular attention to the original design and to the innovative architectural intervention that it will be introduced. Also collecting the sheets of this Database, each Partner must involve local stakeholders and architects with innovative rehabilitation/restoration buildings interventions. The MOOCs are a free available on the project website and a flexible way to increase your skills through high-guality educational experiences. The University of Lithuania (UNIKA) will create an online course that provides a comprehensive analysis of the renewal of wooden heritage, combining heritage protection requirements with modern needs and technical possibilities. The Cataluña University (UPC) will do an online course, able to provide useful techniques and successful interventions for an "accompanied self-renovation", showing 'bottom-up' rehabilitations based on the needs and capabilities of the resident population. The Cyprus University (UCY) will produce an online course able to provide an introduction to the environmental features and strategies of vernacular architecture encountered in

both urban and building scale, highlighting vernacular heritage significance, incorporated lessons regarding sustainability, threats related to physical degradation and lack of maintenance, as well as international regulatory framework regarding vernacular dwellings. Finally, the University of Palermo (UNIPA) will create its online course focusing on restoration/rehabilitation techniques and interventions, also explaining virtuous examples of Italian, but nor only, recovery/restoration practice; the course is based on a practical approach to solve different technical problems that may arise in the rehabilitation/restoration of the traditional architectural heritage, with a particular focus on the Mediterranean area. The project in all its intellectual results is therefore configured as a fundamental opportunity for connection and exchange between Universities, the world of work and the involved stakeholders, constituting, above all, in the two Databases available on the website and in the online courses, an essential opportunity for easy and direct communication. - even if virtual - of data and highly professional training.

Various professionals have to participate in a common discipline of the rehabilitation and restoration process and this requires true training that guarantees good link/communication and appropriate coordination in the implementation of the work, following the standards, guidelines and regulations criteria regarding technical, environmental, economic and cultural specifications required at European level; the main and obtained skill is an all-inclusive approach to buildings, based on architectural, technological and cultural diversity, well-Known and accepted by EU professionals, builders and administrations. During the organized "Short-term joint staff Training Courses about technological innovation in heritage buildings rehabilitation/restoration", the Partners will exchange in presence - visiting building yards and rehabilitated architectures - knowledge and experiences, learning one from each other, and debate about how to develop training methodologies and tools on specific topics concerning the technological innovation in heritage buildings restoration. The aim of the events is to agree on a common pattern to be applied to training programs for "Building Rehabilitation Experts" (BRE) in the partner Countries; at the same time Partners from the different countries will check their own state of the art on the comparative research, orientating and focussing it to the issues emerged during the discussions. The participants will be selected as experts able to give elements for the debate for the development of intellectual outputs, as extensive research activity carried out between the Universities experts. In the website it is possible to find a page containing different photos of rehabilitation and restauration projects in Spain, Lithuania, Italy and Cyprus. They have been collected by the partners of the Smart Rehabilitation 3.0 project and are supposed to give an idea about the different fields of restauration they are involved in. Smart Rehabilitation 3.0 has been conceived as a "formative" tool supported by "informative" content (technical-descriptive) to facilitate to the professional the knowledge of the different options of products and technologies to be applied in their rehabilitation and restoration projects and interventions. That is why, since the beginning and for the success of the proposal, we look for the collaboration and support of the institutions, organizations and companies in the respective sector, allowing us to integrate the results of their experience, research and innovation and joining the search for excellence by rehabilitation professionals. Institutions, organizations and companies can participate during the initial period of development of the project (above all during the years 2021 and 2022). On the one hand, they are invited to share the objectives of the project and be incorporated into its structure and participate in its



Fig. 8. Traditional construction systems, sometimes simple and necessary of a compatible technological check (photo by the author).

evolution, contributing ideas, knowledge, strategies, and ultimately, establishing synergies. Also, the agents of the sector who consider that they can add value (in services or products) to the rehabilitation and restoration, may choose to take advantage of the tool to pass it on to their current and future users, through constructive solutions and good practices.

Working together with institutions, organizations and companies, will allow us to nurture the platform with those specialized content that provide it with greater value, due to its innovative training methodology, and the scientific and technological innovation of its content. With the incorporation of their own content, the agents of the sector are able to promote leadership, give prestige to their products and guarantee permanent dissemination.

At the end of October 2022, the final Conference of the Smart Rehabilitation 3.0 Project was held at the UPM in Madrid, within the framework of the Erasmus+ Program, with the participation of some 150 professionals from various European Countries and from the MEDA region, aimed at developing innovative professional skills for the building rehabilitation and monumental restoration sector. The Mediterranean Sea can be considered the common link between all the Countries surrounding it. Different peoples, cultures, arts, crafts, religions and traditions have passed through it, forging both a shared cultural identity and also differences, which can be easily traced in a lot of cities and territories. The Mediterranean city suggests unions and dissonances, sealing the alliance pact that has seen peaceful coexistence, albeit after the imposed dominations of a multi-ethnic and multicultural society. Many cities overlooking the Mediterranean Sea, still today impose a reflection about how is strong the evident relation between their different ways of living. Even today we could talk about a "Mediterranean model" of development, which must be based/re-based on the enhancement of real resources and local identities, founded on an internal condition of balance of sustainability between human settlements and the environment, between natural and man-made territories. This condition can only be sustained on the premise of an adequate protection and improvement of local communities, cultural differences and specificities, through the conscious growth of inter-community relations, the right relationship between majorities and minorities, the respect for cultural heritage and for the legacy of a millenary history. All these topics will be aimed at the recovery of local traditions, representing a cornerstone of the past, but also of the contemporaneity of living and common feeling.

Under the title "Rehabilitation in Europe. Renovation Wave and NextGenerationUE", the Conference was attended by various of leading European experts and was a unique opportunity to learn about the possibilities that rehabilitation offers to Universities, professionals and the sector in general to open up new fields of work and to internationalization. Today, the renovation of the building stock is a driver of economic activity and job creation throughout Europe and it is one of its fundamental pillars to boost the green economy and combat climate change. It is an energy challenge, but it also involves improvements in structural safety, comfort, accessibility, quality of life, the promotion of the circular economy and the revitalization of local economies.

As final act of this project, the Conference was organized in 4 different sections: section I, Traditional materials for traditional architecture rehabilitation; section II, Rehabilitation and social goals; section III, Environmental; section IV, Presentation of the Smart Rehabilitation 3.0 results [Fig.8].

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#### Notes

1. prof. Tiziana Campisi would thanks all the Partners of the EU Smart Rehabilitation 3.0 project. This article represents a brief summary of many documents and intellectual output of the SMART REHA 3.0 project, free available and open access into the website of the same project.

## References

Barca, F. (2014-2020). Strategia nazionale per le Aree interne: definizione, obiettivi, strumenti e governance, Accordo di Partenariato.

De Rossi A. (ed., 2020). *Riabitare l'Italia. Le aree interne tra abbandoni e riconquiste.* 

Marchetti M., Panunzi S., Pazzagli R. (eds., 2017). Aree interne. Per una rinascita dei territori rurali e montani, Rubettino.

PRiNT Collettivo (Ed., 2022). Aree interne e comunità. Cronache dal cuore dell'Italia, Pacini Editore.

# Web references

European Commission (2021), New European Bauhaus – Shaping more beautiful, sustainable and inclusive forms of living together. [Online] Available at: europa.eu/new-european-bauhaus/index\_en.

European Parliament and the Council (2018), Directive (EU) 2018/844 of 30 May 2018 amending Directive 2010/31/EU on the energy performance of buildings and Directive 2012/27/EU on energy efficiency – Text with EEA relevance, Document 32018L0844, L 156/75. [Online] Available at: eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32018L0844&from=EN.

Urban Agenda for the EU et alii (2019), Sustainable & Circular Re-Use of spaces and Building – Handbook. [Online] Available at: futurium.ec.europa.eu/en/ urban-agenda/sustainable-land-use/news/handbooksustainable-and-circular-re-use-spaces-and-buildingsnow-available.

https://smart-rehabilitation.eu/the-project/ (last accessed 12/01/2023)

https://smart-rehabilitation.eu/partners/ (last accessed 12/01/2023)

https://smart-rehabilitation.eu/moocs/ (last accessed 12/01/2023)

https://smart-rehabilitation.eu/digital-library (last accessed 12/01/2023)

https://smart-rehabilitation.eu/photo-gallery (last accessed 12/01/2023)



Op<mark>ening</mark> image: Rural landscapes of south-east Sicily (photo by the author).

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# Exploring the Rural within the Italian local development policy

Ignazio Vinci

The countryside has a major role in Italy's territorial identity and organization. The way agriculture has shaped the Italian territory and society, however, is a very complex historical process, marked by different political and economic purposes. By looking at the national territory under such an evolutionary perspective, and the changing approaches to rural development due to the influence of EU policies, this paper describes the main policy instruments that have been implemented across the Italian regions in recent decades. After this overview, the paper concludes with a critical discussion on the limits and potential of rural areas in the country's development process.

Keywords: Rural development; Inner areas; Local development policies; Italian regions.

## The countryside in Italy's territorial structure: a brief historical overview

The countryside is a building block of Italy's cultural identity and territorial organization. The fascination generated by the landscape or the reputation the country has gained in the food sector (just to) mention Italian excellence in the collective imagination) are a reflection of the role agriculture has played over the centuries. The formation of 'rural Italy', however, is a very long and complex historical process. In fact, the way agriculture has shaped the Italian territory and society itself is through the overlapping of different stages of civilization, with their own political and economic aims. This process as a whole has been thoroughly investigated by Emilio Sereni, one of the leading historians of Italian agriculture. According to Sereni (1961, 1972), the evolution of agriculture in Italy is marked by different periods of development and decline, with production and territorial organization affected by factors that include political stability, the organization of powers, and technological innovation. Behind these factors is the role played by the diversity of the Italian territory in terms of landform and fertility, which are the reasons (not the only ones) of the strong

divide between Northern and Southern regions, as well as between coastal and inner areas of the country. Limiting our observation to the historical periods with greatest impact on the social and environmental structure of rural Italy, we firstly need to refer to the Roman colonization.

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The Romans started to see the countryside as a territorial dimension not completely separated from urban areas. Their effort to divide the land through *centuriation* – what Goethe has described as a 'second nature' created for civil purposes – ended up having a major impact both on the rural and suburban areas, able to structurally modify the landscape and to influence the location of human settlement [Sereni, 1961].

After a long decline that started with the fall of the Roman Empire, the new millennium brought a renewed attention to the rural world. Between the 11th and 13th centuries, the growth in population had the effect of increasing the demand for food and agricultural products, bringing the demography of rural areas back to the values of the Roman period.

This later period, however, is characterized by a more marked territorial differentiation, due to the fragmented political situation across the country. In some Northern regions (e.g. Lombardy, Veneto, Tuscany), rich in plain and fertile areas, the rural economy started to benefit from structural interventions (irrigation) and from a more efficient organization of farming. By contrast, in many Southern regions the development of new agricultural products and techniques (such as those brought by the Arabs and Byzantines) was not accompanied by significant innovation in the social and territorial organization of farming, paving the way to landlordism.

The consequence of the late industrialization of the South of Italy was to further slow down the penetration of scientific principles within the overall process of farming and the emergence of the food industry. With few exceptions in the largest urban areas (i.e. Naples, Palermo, Catania), often under the impulse of external investors, in the late 19th century the industrialization process still had a weak relationship, or none at all, with the transformation of agricultural products, with clear effects on the rural economy as a whole and the life conditions in the countryside. Looking at the national territory as a whole, the industrialization process and the transition towards a modern agriculture has resulted in the emergence of various – and contrasting – development patterns.

The first of these contrasts is between the Northern and Southern regions of the country. Although regional disparities in Italy cannot be limited to the performance of the agricultural sector, the slow modernization process of farming in a large part of the Mezzogiorno offers a key perspective to understanding the shift in the rural world that has taken place in recent decades. A second conflict we can historically perceive across the country is that seen between the valley and the mountain areas, the coastal and the inner areas. It is a contrast between the "flesh" and "bones" areas, according to the brilliant metaphor used in the late Fifties by Manlio Rossi Doria (1958), another prominent historian of the Italian rural economy in the 19th century. In his studies, Rossi Doria was among the first to highlight the decline of inner areas throughout the country, the cause and effect of depopulation, abandonment of soil, isolation, socio-economic distress, and emigration.

The last, but not the least, dichotomy through which we can analyze the rural dimension in Italy lies in the conflict between the cities and the countryside. This relationship – so relevant in the Marxist interpretations of the spatial effects of capitalism –is marked in Italy by the extremely polycentric character of the national territory. To some extent, this makes less relevant the contrast between urban and rural areas, which in many regions of the country arespatially and economically intertwined.

Through the perspective adopted in this introduction, 'rural Italy' can be described as an archipelago of various socio-territorial structures, whose variety is relevant to understand the transition taking place with the most recent local development policies.

#### From agriculture to rural development

The complexity of the Italian territorial structure is thus a key element to understand the changes that have taken place in the rural economy (and landscape) during the last four decades. At the same time, we have to take into consideration the paradigms dominating Italian agricultural policy after the Second World War, the crisis of which is among the reasons for the emergence of alternative ways to rural development in the country.

Agricultural policy in the Fifties was widely inspired by a sectoral approach based on large infrastructure projects and incentives to mass production. This approach is perfectly represented by two major reforms, both of which started in the climate of post-war reconstruction: the last Agrarian Reform, that promoted a redistribution of land (especially if abandoned) to small farmers and the creation of cooperatives to reach a critical mass in production to enter the market, and the 'Intervento straordinario', which started a massive infrastructure plan in the Southern regions, not limited to rural areas, to develop irrigation, roads and rural settlements in the countryside [Martinico and Nigrelli, 2022].

The limits of these policies were clear already in the Eighties, when the failed modernization of rural areas was recognized in many regions and globalization also started to affect the agricultural sector. Most Italian farming companies, in fact, had no size and organization to compete in the emerging international markets, with the consequence that their economic potential was reduced and, in the worst cases, businesses closed down. Even the EU Agricultural Policy in that period proved to be ineffective to protect most Italian agriculture products, putting great emphasis on the production volumes of each country and less on product quality and origin.

In the same period, however, there were also cultural processes that started to re-conceptualize the role of agriculture in contemporary society, attributing new values to the countryside that would be of critical importance for its future prosperity. In the context of the sustainability concept, the rural space started to be perceived not only as being in a position of subalternity to urban areas, but rather the source of increasingly

sophisticated products for city-dwellers (quality food, rural culture, alternative hospitality, etc.). In the geography literature there are works – see, for instance, Charrier (1991) and Ilbery (1998) – that perfectly represent the structural changes that took place in the countryside as a result of the consumption models emerging in the urban areas. Rural economists Basile and Cecchi (2001) have described this process as the 'post-industrial transformation of the countryside', highlighting the analogies with the process that – in the urban areas – was replacing manufacturing with the service sector.

This new perception of agricultural resources, strictly bound to the cultural economy of cities, started to have an influence on the rural communities closer to (or embedded within) the largest urban regions in Western countries. At the same time, due to its relevance for territorial development as a whole, this view ended up also contaminating the debate around regional development across Europe, preparing the ground for the renewed attention to rural areas we find in the structural funds reform the European Community started in 1987 [Bryden, 2019]. Here, experimental approaches to rural development are promoted through a dedicated community initiative - LEADER which would later become the most successful local development project of the EU, going through five programming cycles and transferred into thousands of local action plans across Europe.

The key element of the LEADER approach is the promotion of a multidimensional perspective on local development, where agriculture is only one driver of the rural economy. As a result, action plans combine material and immaterial interventions and different kind of beneficiaries, trying to implement within rural areas the 'integrated approach' the EU was promoting at various territorial levels. Furthermore, and no less importantly, projects are designed and implemented by Local Action Groups, i.e. partnerships between local institutions and stakeholders being involved through participatory processes.

In the light of the policy innovation achieved in Europe, but also with an eye to the progress still needed in many developing countries, in 2006 the OECD started a campaign to promote a 'New Rural Paradigm' (NRP) with the power to drive local development policies for rural areas across the globe (OECD, 2006). According to the OECD, this paradigm includes a "new, multi-sector, place-based approach to rural development that claims a need for closer linkages between the rural and urban economy, and to see rural development as a close interplay with regional development more generally" [OECD, 2006]. A key element of this paradigm is that the countryside is no longer exclusively tied to food production, but rather the place where a variety of amenities and products, linked to regional assets and identities, are provided [Horlings and Marsden, 2014].

From a policy perspective, the New Rural Paradigm implies, for instance:

a shift from an approach based on subsidies to declining sectors to one based on strategic investments to develop the most productive activities of rural areas;
a focus on local specificities, such as amenities (environmental or cultural) or local products (traditional or labelled) able to generate new competitive advantages;

• a shift from a sectoral to a territorial policy approach, to integrate various sectoral policies at regional and local levels and to coordinate them as much as possible at national level;

• an increased use of partnerships between public, private and voluntary sectors in the development and implementation of local and regional policies.

## Rural areas in the local development policies: two examples

The policy challenges set out in the OECD's New Rural Paradigm may appear not totally relevant to some European countries, where they have been widely implemented through EU or even national policies. The EU's LEADER initiative, as we said, has played a major role in spreading these principles across various European countries since the beginning of the Nineties, and Italy is no exception.

A recent report by the National Rural Network [RRN, 2022] illustrates to what extent the LEADER initiative has impacted on the Italian regions from a quantitative point of view. After the inaugural programming cycle (1989-1994), when the number of local action groups on the national territory was just 29, projects grew up exponentially in the following years, reaching a total of 203 in the 1994-1999 period, approximately the number of projects approved in the 2014-2020 period (200). In financial terms, such a huge number of local action plans has meant investments of around 3.5 billion, 70% of which was spent in the last two programming cycles (2007-2013 and 2014-2020).

The impact of the LEADER initiative on regional development, however, goes beyond this quantitative data. If we look at the territorial distribution of LEADER action groups, in many rural and inner areas they represent the first, and sometimes only, attempt to experiment a place-based approach to local

development. Moreover, if we overlap the project areas throughout the programming cycles, we discover how many LAGs have survived for a long time and how many are still in operation after being started in the early Nineties. In many cases, these networks have operated beyond the implementation of the LEADER action plans, becoming a kind of 'cognitive infrastructures' for the design of local development strategies, as well as to attract other external investments.

The 'geography' deriving from the LEADER implementation across the country is of key importance to understand the latest policy experiment in reducing underdevelopment of marginal areas in Italy, namely the National Strategy for Inner Areas (SNAI, to use the Italian acronym). The project was initiated in 2013 by the national Agency for Territorial Cohesion as part of an overall strategy to address territorial inequalities in the country [Barca, Casavola and Lucatelli, 2014].

Despite the intrinsic rural nature of most inner areas in the Italian regions, the SNAI approach conceptualizes marginality as the coexistence of factors such as demographic decline, lack of basic services for the residents (first of all health and education facilities), and poor accessibility to the transport networks. As a result, the identification of the SNAI's territorial targets differs from the LEADER approach in respect of the lower consideration given to the economic structure of the territory and the application of more selective criteria.

According to the latter, inner areas are classified by their distance, in terms of travel time, from the urban poles where primary public services – such as hospitals with emergency departments, secondary schools, railway stations – are located. The action plans funded by the SNAI, in particular, must be within 'peripheral' or 'ultra-peripheral' areas, which means being at least 40 minutes away from the abovementioned service infrastructures. If we include the so-called 'intermediate' areas, separated from the urban poles by at least 20 minutes' travel time, the national territory covered by internal areas amounts to 60% of the total, corresponding to 23% of the country's population, and to a half of the municipalities.

After the selection made among the classified inner areas, and a consultation process with regional and local stakeholders, the first 72 target areas were identified in 2020 to start the planning experiment. The action plans of these networks, involving around a thousand municipalities across the whole country, are firstly directed towards working for the 'precondition' for local development, i.e. removing the main drivers of depopulation and spatial marginality.

Example of these actions include, for instance:

• projects on public health services, to strengthen local assistance through telehealth, mobile health, and home care;

 actions on the school system, aimed to improve infrastructures, on the one hand, and to promote innovative models of education, on the other;

 actions on mobility, with projects on conventional transportation systems to reduce travel time, but also on innovative mobility models (shared and on-demand). Besides working on the local development precondition, the SNAI also stimulates local partnerships to identify actions to fully exploit the endogenous potential of these territories, generally characterized by relevant landscape and cultural resources. At the same time, action plans are required to consider projects to deal with the environmental risks due to hydro-geological or seismic conditions, as well as innovative energy projects (smart grid, decentralized energy storage) to reduce dependency on the urban areas.

After a slow start due to the complexity of the planning process, local action plans are now accelerating their implementation. The value of the initial investment in the SNAI was around 1.14 million euro, 60% of which was derived from EU funds. Paradoxically, the pandemic has helped in further strengthening public investment in the strategy: in fact, an additional 300

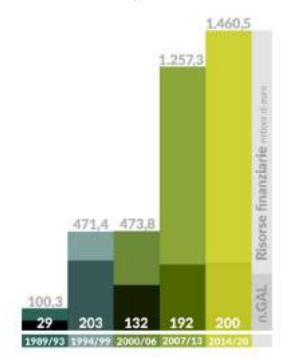


Fig. 1. Number of Local action groups and LEADER financial investment in Italy in the last five EU programming cycle (from RRN, 2022)

million was allocated in 2020 to widen SNAI's targeted areas, while 2.1 billion will come from the Italian Recovery Plan to project the policy into the 2021-2027 EU programming cycle.

## Future perspectives for rural development and inner areas

The aim of this paper was not to provide a complete overview of the various policy instruments that may have affected the development process within rural areas in Italy, nor an exhaustive evaluation of the impact of these policies across the national territory. Instead, the focus has been placed on the two planning experiences that best represent the shift of the policy approach over the years, in the context of a country where rural areas reflect an extremely complex archipelago of territorial identities. From this more limited perspective, however, there is a series of questions and processes that, in conclusion, can be critically scrutinized to drive territorial policy-making in the near future.

The first question that must be addressed when we deal with rural areas in Italy is recognizing the polycentric nature of the Italian territory, which makes it extremely hard to separate what is rural from what is not. In many Italian regions, polycentric spatial structure is the legacy of a very long-lasting development process (with small towns networking with each other), but it is also true that recent trends in urban growth are rapidly disrupting the equilibrium between cities and countryside. Evidence suggests that soil consumption is unstopped throughout the country [ISPRA, 2022] with low consideration of the environmental risks deriving from improper land use in the most fragile territories. This process has clear implications also on the socio-economic structure of the rural areas closer to large urban systems, where agriculture is gradually abandoned and replaced with second homes or tertiary activities.

Looking on the bright side of such a hybridization between urban and rural areas, this interplay is increasingly recognized as a source for reciprocal advantages and new perspectives for sustainable development [Vinci, 2015, 2020]. There are at least two dimensions that are worth considering in the light of some planning experiments taking place in the country. The first one relates to the potential of peri-urban rural areas in providing the ecosystem services that most densely populated built-up areas are lacking. For instance, spatial and strategic plans at the metropolitan level are increasingly exploring urban-rural linkages for a variety of purposes, from the enhancement of rural landscapes to the implementation of sustainable mobility through large-scale greenways. The second dimension concerns the role agriculture can play in the protection of peri-urban ecosystems and, at the same time, in shortening the supply chains in the provision of

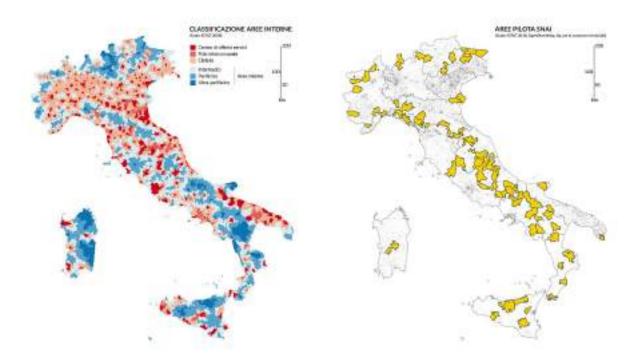


Fig. 2. Classification of SNAI's inner areas and distribution of action plans (from Agenzia per la Coesione Territoriale, 2022)

quality food to metropolitan dwellers. In this direction, there are food policies being implemented within various Italian urban regions, proving that agriculture can greatly help to keep environmental preservation not separated from social and economic sustainability. The function of rural areas in providing wider environmental benefits for the core regions is even more relevant if we look at the potential these places can have in the production of clean energy. This perspective is particularly relevant for the most remote (and internal) rural areas, where agricultural activities are less competitive and conventional local development policy seems to have played a limited role in fighting depopulation and territorial marginality.

This strategic perspective, however, is still highly controversial, not being supported by policies and regulations able to equally distribute the benefits of energy production among strong and weak areas, and between private and public players. Just to give an example, in the face of the quick spread of renewable energy plants in many rural regions there is no legal system to recompense local communities for the impact on landscape and natural resources made by energy infrastructures. The larger benefits remain in the hands of energy operators and landowners, while no (or very weak) compensation measures are provided for other local stakeholders. Additionally, in the Italian inner areas there is still an untapped potential due to the enormous availability of biomasses, which are not turned into sources for the sustainability of both urban and rural areas because of limited production and distribution systems.

The two questions just raised, among many others, suggest that rural development (particularly in remote areas) should not be approached without a full awareness of the many interdependencies the social and economic structure of these territories may have with urban areas. There is evidence across Europe [OECD, 2013] that urban-rural partnerships are a key instrument to address the development issues of agriculture and the countryside, because it is within the culture of cities that the added value given to rural products is created and reproduced. On the other hand, in order not to reproduce ancient urban-rural dependency mechanisms, public policy must be aware that local development policy cannot be successfully implemented without a wider environmental equity. This means creating more effective governance relations across institutions and, most importantly, legal mechanisms to compensate for territorial disadvantage.

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#### References

Barca F., Casavola P., Lucatelli S. (2014). *Strategia nazionale per le aree interne. Definizioni, obiettivi e strumenti di governance*, Materiali UVAL, 31, Ministry of Economic Development, Rome.

Basile E., Cecchi C. (2001). *La trasformazione postindustriale della campagna. Dall'agricoltura ai sistemi locali rurali*, Rosenberg & Sellier, Torino.

Bryden J.M. (2019). "Rural policy in Europe", in Vittuari M., Devlin J., Pagani M., Johnson T.G. (Eds), *The Routledge handbook of comparative rural policy*, Routledge, London-New York.

Charrier J.B. (1991). *Geografia dei rapporti città-campagna*, Franco Angeli, Milan (original ed. 1988).

Horlings L.G., Marsden T K. (2014). "Exploring the 'New Rural Paradigm' in Europe: Eco-economic strategies as a counterforce to the global competitiveness agenda", *European Urban and Regional Studies*, 21(1), 4-20.

Ilbery B. (Ed., 1998). *The geography of rural change,* Longman, London.

ISPRA - Istituto Superiore per la Protezione e la Ricerca Ambientale (2022). *Consumo di suolo, dinamiche territoriali e servizi ecosistemici*, ISPRA, Rome.

Martinico F., Nigrelli F.C. (2022). "Mezzogiorno e aree interne. Una valutazione degli effetti delle politiche dal 1950 ad oggi sul sistema insediativo meridionale per una terza via tra pianificazione centrale e sviluppo locale", Rivista economica del Mezzogiorno, 1-2, 261-301 (DOI: 10.1432/105560).

OECD (2006). *The New Rural Paradigm: policies and governance,* Organization for Economic Cooperation and Development, Paris.

OECD (2013). *Rural-Urban Partnerships. An Integrated Approach to Economic Development,* Organization for Economic Cooperation and Development, Paris.

Rossi Doria M. (1958). *Dieci anni di politica agraria*, Laterza, Bari.

Sereni E. (1961). *Storia del paesaggio agrario italiano,* Laterza, Bari.

Sereni E. (1972). "Agricoltura e mondo rurale", in *Storia d'Italia: I caratteri originali,* Einaudi, Torino.

Vinci I. (2015). "Verso lo scenario 'rurban': forme plurali del progetto in Europa per una nuova alleanza tra città e campagna", *Scienze del Territorio*, 3, 301-310 (English version: "Towards the 'rurban' scenario: plural forms of planning in Europe for a new alliance between city and countryside", 495-502). (DOI: 10.13128/Scienze\_Territorio-16283)

Vinci I. (2020). Progettare lo sviluppo sostenibile nelle città. Temi, metodi e strumenti, Carocci, Rome.

#### Web references

RRN - Rete Rurale Nazionale 2014-2020 (2022), "Stato di avanzamento sulla programmazione e attuazione di Leader 2014-2020" Av. at https://www.reterurale.it/flex/ cm/pages/ServeBLOB.php/L/IT/IDPagina/24322 (last accessed 14/01/2023)

Opening image: an example of caring-use in a historical center in Southern Italy (photo by M. Listri, 1985).

### From disuse to the caring-use for the built environment A further key strategy to enhance the inner areas

Maria Luisa Germanà

Urban Planning & Technology

Abandonment characterizes the inner areas: in fields, infrastructures, public spaces, productive and residential buildings, the use which constitutes an indispensable reference in analytical, evaluation and design approaches concerning the built environment has now almost completely ceased. The restitution of a use is often indicated as the goal of strategies for revitalization; however, use is not enough as a tool in itself, if it does not meet the multifaceted requirements of sustainability, acting as a 'caring-use', in which users are custodians and not carefree profiteers. After having extended some considerations on sustainable use from the architectural heritage to the common built environment, the contribution refers to an applied research experience that exemplifies the application of a holistic approach to different forms of the built environment, which concerned Montalbano Elicona, a place that summarizes many of the typical characteristics of inner areas.

Keywords: Built environment; Sustainable use; Architectural Heritage; Inner Areas; Baukultur

#### Inner areas and abandonment

In the description of urban settlements, the adjective 'inner' qualifies parts of cities characterized by socioeconomic problems, regardless of location<sup>1</sup>. In the Italian context, 'inner' is often used as an alternative to 'inland' to translate 'internal'. This adjective is often used to indicate the areas characterized by the coexistence of some main key-problems that results to be more evident than in the rest of the territory. Problems such as: distance from collective services especially education, health and mobility; digital divide; demographic decrease; critical conditions in production activities especially agriculture. Important government decisions, guided by the Italian SNAI (National Strategy for Inner Areas) in the last decade have focused on these areas, within the general framework of the European cohesion policies of the European Network for Rural Development<sup>2</sup>.

The set of critical factors of inner areas synthetically appears, in the phenomenon of abandonment, which can be observed at various scales: in agricultural areas; in infrastructures of any type; in buildings, both traditional and more recently built, public or private, residential or specialized, located within urban areas or scattered in the countryside<sup>3</sup>. In general, abandonment – as a direct consequence of lack of use – is a serious risk factor for any artifact, intended as the result of any intentional transformation process of anthropogenic origin. In fact, it is true that, the use inevitably generates wear, but, it also poses the preconditions for caring and triggering and facilitating the implementation of continuous maintenance processes. This is even more evident in artifacts that, like buildings and other forms of the anthropization of the natural environment, even if unused are exposed to decay factors, such as atmospheric agents.

Since the multi-scalar phenomenon of abandonment is one of the most characteristic of the inner areas, it follows that the fight against abandonment is often indicated as an objective and/or as a tool, to solve the critical conditions of these territories, through the re-proposal of the original uses, or the attribution of renewed or new uses. However, such proposals can hide the misleading preconception, that choosing one particular use rather than another is enough to reverse the processes of demographic decline and aging of the population.

The very identity of these territories, which during the

second half of the twentieth century caused their marginalization, is today the basis of resourcebased local development policies, which enhance it in close links with the specific natural context and cultural heritage. These development policies have found support, fueling it at the same, in the profound paradigm shift that has taken place in recent decades in the general vision of the built environment, which has consolidated the trend towards new approaches, in which the twentiethcentury segmentations are gradually fading.

This is made evident by looking at the topic of use from the most different angles: at the large scale, in the fact that the links of inner areas, mainly rural, with the surrounding urban poles are increasingly highlighted [Vinci, 2015], at the scale of public spaces, in the fact that different uses and different users over time are encouraged, to distribute management costs, maximize efficiency and ensure maintenance [Carta, 2015, 33]. Within this framework, the cultural heritage – of which the inner areas are rich – occupies a central position, most of the time connected to tourism, in line with the cohesion policies underlying the Italian SNAI [Battino et al., 2017]; [Cerquetti et al., 2019].

#### The use in the approach to the built environment

The use is one of the traditional pillars of the theory of architecture since the Vitruvius treatise and, over time, it has contributed to the definition and to the assessment of the quality of the built environment. In fact, use remains at the heart of the definition of the architect's skills, as can be seen, for example, by comparing the words of Leon Battista Alberti with the EU Directive 2005/36/2005 on the *Recognition of professional qualifications*, despite the five centuries between the two definitions<sup>4</sup>.

The theme of use pervaded the disciplines that deal with architecture and the built environment, becoming, especially during the twentieth century an undisputed reference, albeit at times controversial. Some relevant examples are the relationship between form and function (the latter term which actually fits more to a machine than to an anthropized place); the idea of "intended use" in the identification of homogeneous areas in urban and territorial planning; the definition of building quality as a complete response to the needs that derive from the activities deriving precisely from the uses, basis of the performance approach to the technological design of architecture<sup>5</sup>.

The current prevailing trend considers the use a theme that shuns the rigid twentieth-century segmentations, to actualize in any intervention (regardless of scale) the mixed-use of the pre-industrial built environment, paying attention – as well as to the benefits of the integration of different uses – also to the possibility of future evolutions, through the orientation towards flexibility and reversibility [Di Battista et al., 1995].

To some extent, the reasons for this trend can be traced back to the gradual adaptation of the technological culture to the prevalence of interventions on existing buildings, which began to characterize the areas affected by the construction boom in the second Twentieth century. If in general the intended use is among the objectives of justifying the subsequent



Fig. 1. An example of hostile architecture: "Concrete spikes under a road bridge in Guangzhou city, Guangdong, China" (photo by Imaginechina/REX" published in "The Guardian" 18/02/2015).

design choices, this becomes particularly relevant in the interventions on an existing building, where the use is a part of the analytical data, to be critically evaluated taking into account the qualitative and quantitative aspects, the tangible and intangible dimensions, and the Time variable (previous, current and potential uses).

Recognizing that most of the criticalities encountered in any anthropic settlement can be traced back to this multifaceted theme, the use today is confirmed as one of the indispensable references in any approach to the built environment, with both analytical, evaluative or design purposes. It is an even more strategic reference in those situations in which the absence of use and/or abandonment occurs, such as in the inner areas, provided that one substantial fact is taken into account: if certainly disuse is a risk factor, the use in itself is not enough to prevent it.

#### 'Caring-use' VS 'Consumer-use'

The use of the built environment depends on a set of conditions that are not easily determined by applying top-down models and that is even more complex extending the observation scale. Many examples demonstrate the close connection between the use of the built environment and the consequences, in the short and medium term, of financial facts: for example, the global phenomenon of unfinished construction following the 2008 financial crisis [Germana, 2020]; the numerous cases of gentrification in urban centers; the countless cases of regeneration of urban districts grafted by adaptive reuse interventions, activated by public administrations or private investors. A similar connection suggests the need to reflect on the use of the built environment to circumscribed case studies, applying rather a bottom-up model, to find a more concrete field of application. In the contemporary vision of architectural heritage, which includes the built environment if invested by «conspicuous historical, archaeological, artistic, scientific, social or technical interest» [CoE, 1985], the theme of use, long neglected or opposed to conservation, has become a prerequisite of an ethical nature, indispensable for reliable and inclusive conservation and enhancement processes [Germanà, 2021]. In this field, the role of users (visitors and general public, individuals and communities) has become a key issue, which thanks to the IV Industrial Revolution always encounters new opportunities and potential for the management of architectural heritage. Some ideas taken from the reflections on use in this

specific field [Germanà and Nicolini, 2021], remain valid even if they refer to the ordinary built environment, such as the distinction between direct and indirect use. The first presupposes a physical contact between place and user, which could be intentional or unintentional, sporadic or continuous, individual or collective, always generating consequences on the material essence of the built heritage. The second type of use occurs through cultural mediation (historical or artistic narration) which amplifies the evocations generated by a place, which can attract visitors, producing a deferred indirect effect on a physical level. The distinction between the intangible dimension of use, linked to the socio-cultural context, and the tangible dimension also remains valid. The latter much depends on the physical characteristics of the built environment that can prevent or limit accessibility to certain categories of people (contextual environmental and anthropogenic conditions; type, size and interrelation between spaces; indoor or outdoor finishing materials). In the direct and tangible use, some quantitative characteristics can be recognized (frequency and intensity, referring to the chronological extension of use and the number of users), which coexist with some qualitative aspects. The latter affect the ways of using a certain part of the built environment, for example tending towards inclusion (if they favor its use by anyone), or deliberately towards exclusion (if they apply 'hostile' solutions, limiting or preventing use, with the most varied reasons, such as safety, public order, decorum, etc.) [Fig. 1]. Taking into account the quantitative and qualitative aspects and the tangible and intangible dimension, an evaluation of the direct use of the built

an evaluation of the direct use of the built environment can be determined in an objective and more useful way to achieve its improvement, within a scale in which in the one extreme we find disuse and in the other one the sustainable use. Among these extremes, different types of unsustainable use can be identified, such as: abuse (illegal use, in which individual interests prevail to the detriment of public ones); misuse (inappropriate or harmful use, with respect both to the characteristics and meanings of the built environment and to the categories of users); overuse (excessive use, when excessive crowding compromises a satisfactory quality fruition).

Sustainable use, a precondition for the overall quality of the built environment, is a goal that requires continuous confirmation, due to the variability of what affects it. It can be read with reference



Fig. 2. The "Festa Aragonese" every year in August commemorates the entry of King Federico II of Aragon in Montalbano Elicona (photo by the author, 2015).



Fig. 3. Montalbano Elicona (ME). The unfinished public building seen from the Swabian-Aragonese castle (photo by the author, 2020).

to the three usual dimensions of sustainability: for the economic aspects, some uses can be more advantageous, triggering win-win situations thanks to virtuous management models; for social aspects, some uses more than others result in greater involvement of people in the management of the built environment, encouraging responsible, supportive and cooperative attitudes; for environmental aspects, some individual and collective behaviors, influenced by the built environment, substantially affect the consumption of natural resources and emissions, at all scales of observation. Keeping in mind how the reckless use of the built environment can be erosive of natural resources and compromising the quality of life of users, the neologism 'consumer-use' is proposed here in addition to the previous forms of unsustainable use (abuse, misuse, overuse). In contrast, in a certain sense sustainable use can be understood as a 'caring-use': a kind of use that is careful and thoughtful, that controls, fine-tunes and adjusts while using, in which the user is active and aware because it attributes the right value to what is used. Taking care brings together qualitative and guantitative, tangible and intangible aspects in the use; it represents a challenge that requires to be based on fundamental educational and ethical principles, because it requires us to feel like only temporary users [Rifkin, 2000] and not carefree takers of what we use, of which we will be required to give account, sooner or later.

### Baukultur and sustainable use of the architectural heritage in inner areas

The theme of the sustainable use of architectural heritage in the inner areas must necessarily take into account the numerous risk factors that are extremely accentuated in these territories. With reference to the well-known classification of risk within the built heritage<sup>6</sup>, the prevailing intrinsic conditions produce an intertwining of vulnerability factors. In fact, we are looking at constructions often built with poor techniques and materials, inadequate to contemporary standards of comfort and usability, that have come down to us in ruderal conditions or distorted in material and structural consistency by subsequent interventions. In addition, the prevailing conditions in the inner areas, both in the natural context (inaccessible places or buildings, exposed to landslides and often with high seismicity), and in the anthropic context (demographic and economic aspects of abandonment) aggravate the effects of these intrinsic vulnerability factors [Germana, 2022]. Risk is a common condition in the entire built environment in the inner areas; when concerning parts with cultural significance, it hinders the processes of conservation and enhancement, jeopardizing the very identity of the places, more or less guickly and clearly. On the other hand, the cultural heritage of the inner areas possesses an inherent aptitude for resilience, in the intertwining



Fig. 4. Poster of the public conference held in Montalbano Elicona in October 2019, in order to involve the local community in the choice of the intended use of the unfinished building (poster by C. Belvedere, 2019).

of its material and immaterial dimensions, thanks to the inherent ability to adapt and the high potential for innovation [Fabbricatti et al., 2020]. The widespread belief that every strategy for the enhancement of the inner areas must deal - in one way or another - with heritage (considered as an irreplaceable development lever) and the relevance of the phenomenon of abandonment that characterizes these territories, confer on the theme of sustainable use a centrality even more marked than elsewhere. However, referring in an abstract way to the persistence of the heritage isn't enough for the rebirth of inner areas and generates unsustainable uses in various ways. This is the case of the occasional scenographies (i.e. living nativity scenes, historical commemorations) to which the built heritage remains confined, deprived of the daily care enabled by uses more really integrated with the Present [Fig. 2].

In light of the contemporary vision of heritage, based on the *people-centered* approach [Wijesuriya, 2015], sustainable use can only be integrated with contemporaneity, helping to pursue the objectives of human development and quality of life (CoE, 2005, art.9 "Sustainable use of the cultural heritage"). Today it is now clear that the preferable form of heritage conservation is the use compatible with its cultural meanings [ICOMOS, 2013, art.1-11-23],



Fig. 5. Poster of the didactic seminar held in October 2019 by the designer of the unfinished building (poster by V. Melluso, 2019).

in line with the objective of sustainable tourism also for areas at risk of abandonment [García-Esparza et al., 2018]. For this reason, forwardlooking strategies for the enhancement of internal areas must involve the protagonists of the use of the architectural heritage (visitors and host communities) within a unitary framework, in which every process of transformation and management of the built environment is inspired by the *baukulture* (Swiss Confederation, 2018 and 2021), which shuns the segmentations to which the legacy of the last century has accustomed us.

The trend towards a unitary approach, which implies important methodological consequences on analytical and design activities, manifests in three interrelated aspects:

• the vision of the built environment, as a unique entity that includes contemporary buildings, infrastructures and public spaces and to which the architectural heritage is an integral and inseparable part;

 the vision of the building process as a sequence of phases that adapt to the specific intervention;

• the request for convergence between bearers of different interests (individuals and communities, public institutions and private subjects, technicians and economic operators) in order to achieve satisfactory results, from an intergenerational perspective.



Fig. 6. The unfinished building seen from the northen entrance of the city (photo by G. Mignacca, 2018).

### Some proposals for Montalbano Elicona with a view to caring-use

Montalbano Elicona, a town of about 2100 inhabitants located at 900 m asl in the north-eastern part of Sicily, provides an example of the unresolved coexistence of lights and shadows that often hinders lasting enhancement strategies for the inner areas. Despite being the scene of a dramatic process of demographic decrease (a quarter fewer residents from 2001 to 2019), Montalbano Elicona has put in great efforts to enhance its territory, leveraging its extraordinary natural and cultural heritage (both tangible and intangible)<sup>7</sup>. However, the tendency to apply a vision of heritage still anchored to the segmentations of the last century and not fully integrated with contemporaneity has produced uncertain results, where flows of sometimes intense

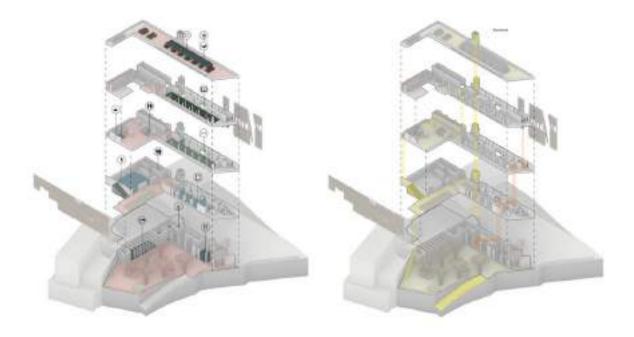


Fig. 7. One of the completion projects of the unfinished building, elaborated during the Environmental Design Laboratory of the Master's Degree in Architecture of the University of Palermo, Department of Architecture (from E. Cicala, 2019)



Fig. 8 One of the completion projects of the unfinished building, elaborated during the Environmental Design Laboratory of the Master's Degree in Architecture of the University of Palermo, Department of Architecture (from E. Cicala, 2019).

use do not touch pockets of abandonment, in which the built environment is more or less ruined. One year after hosting the ICOMOS ICAHM international meeting dedicated to the theme "Discover Sicily's Argimusco. A Holistic Approach to Heritage Management", in 2019 the Municipality of Montalbano Elicona has entered into an agreement with the Department of Architecture of the University of Palermo dedicated to promoting technological design studies for architecture, with the aim of supporting the enhancement strategies already launched in its territory.

Precisely the holistic approach has inspired some design experiments which, although applied to different case studies, have followed the same methodology (oriented to bio-climatic and Design for All criteria) [Germanà, 2022], indicating some perspectives for sustainable uses of the built environment of public interest in Montalbano Elicona. In addition to improving the use of the Argimusco plateau and the general accessibility conditions of the oldest part of the urban settlement [Renda et al., 2021], most of the activities developed in the agreement concerned the hypothesis of completion of a municipal building unfinished for about thirty years [Fig. 3].

The never finished constructions, regardless of the different levels of material incompleteness, are always hopelessly useless, precisely because of the functional incompleteness [Germanà, 2020]. Therefore, even in the case of the unfinished building of Montalbano Elicona, the choice of a destination was the first step to take, considering the fact that the original one (bus station with a multifunctional center) was no longer feasible, also because it was connected to never realized urban planning forecasts.

A public conference was dedicated to this topic [Fig.



Fig. 9. One of the completion projects of the unfinished building, elaborated during the Environmental Design Laboratory of the Master's Degree in Architecture of the University of Palermo, Department of Architecture (from E. Cicala, 2019)

4], in which the municipal administration called the citizens to express opinions on the possible fate of the never completed structure. The shared reflection on that occasion confirmed the opportunity to enhance the concept of the original project (designed by Prof. Vincenzo Melluso, with Giuseppe Arena and Michele Ministeri), that was based above all on the urban role of the building and on the functional mixite, as the designer has explained during a didactic seminar [Fig. 5]. The completion hypotheses developed<sup>8</sup> took both these aspects into consideration. As for the urban role, the visibility of the building, whose dimensions are significant compared to the surrounding urban fabric, makes it a visiting card for those who come from the Tyrrhenian coast [Fig. 6].

Furthermore, the particular location, at the junction between areas of public interest placed at different heights (the town hall square, bordering the oldest part of the settlement and a twentieth-century expansion area further downstream), has placed the accent on the definition of paths (horizontal, vertical and inclined), strategic for the mobility of people with motor difficulties [Germanà et al., 2020] [Figg. 7-10]. As for the intended uses, collecting some ideas provided by the public conference, the proposals - keeping account of the public nature and of the urban role of the building – have largely maintained a balance between uses of a continuous nature, by residents, and discontinuous uses, by visitors. In the light of the holistic vision of the built environment of Montalbano Elicona, the choice of the potential uses of the never-finished building was oriented towards those that, due to regulatory problems or distributive conditions (especially of multi-scale accessibility), cannot be adequately hosted in the historic buildings of considerable relief that are available to the Municipality (first of all, the imposing Swabian-Aragonese castle), without compromising their conservation. The mocking fate had willed that the experience on the unfinished building of Montalbano Elicona was also incomplete, compared to what had been planned: in February 2020 all activities on the site were stopped by the pandemic, hindering the exposure and verification of the results by the local stakeholders<sup>9</sup>.

Despite its limitations, the experience has however highlighted the benefits of a holistic approach oriented by the concept of baukultur and by the issue of the caring-use: instead of emphasizing the distinctions, this approach relies on the relationships that substantiate every complex reality as the built environment is always, in any of its manifestations.

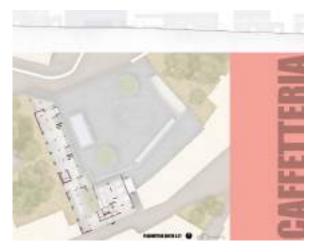


Fig. 10. One of the completion projects of the unfinished building, elaborated during the Environmental Design Laboratory of the Master's Degree in Architecture of the University of Palermo, Department of Architecture (from E. Cicala, 2019)

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#### Notes

1. «You use inner city to refer to the areas in or near the centre of a large city where people live and where there are often social and economic problems».

2. «"Inner areas" is, therefore, an Italian concept that profoundly underscores the cultural identity of the nation's territory and culture, and has been the object of increasing attention» [Cerquetti et. al. 2019, p. 16].

3. «Demographic decline and population ageing is more pronounced in Inner Areas than in the rest of Italy, although it is counterbalanced by a strong growth in immigration (which doubled in the last decade across all regions). Farm abandonment and unused land is also a bigger issue in Inner Areas, due to lower land productivity in these areas. Economic productivity and the quality of services in these areas is also affected by the digital divide».

4. «Chiamiamo architetto colui che ha appreso (...) a divisare e anche nei fatti a eseguire tutte quelle cose che (...) meglio si possono adattare all'uso degli uomini; e per poter far ciò, bisogna ch'ei conosca e padroneggi cose ottime ed eccellenti» [Leon Battista Alberti, *De re aedificatoria*, 1485, IX]. Architectural training "must maintain a balance between theoretical and practical aspects" and must guarantee, between others, "the necessary design skills to meet building users' requirements within the constraints imposed by cost factors and building regulations" EU Directive 2005/36/2005.

5. In this approach, the theme of use refers to the Usability (*Fruibilità*) requirement class, defined as set of conditions relating to the ability of the building system to be adequately used by users in carrying out the activities. The related requirements are: Constitution and sizing; Functional equipment; Accessibility; Furnishing; Adaptability; Privacy; Correlations, Aggregability (Italian UNI 8289:1981).

6. The "Carta del rischio" (Risk Charter) is a government decision support system launched in Italy in the last quarter of the twentieth century. It distinguished between individual vulnerability, deriving from intrinsic conditions (original materials and construction systems; anamnesis of transformations and damage suffered) and territorial danger, deriving from: 1. static risk of different structural factors (due to the eventuality of earthquakes, floods, landslides, volcanic eruptions); 2. environmental risk (linked to climatic factors and atmospheric pollution); 3. anthropic risk (linked to demographic processes, tourist flows, thefts, vandalism). The Carta del Rischio was supposed to provide a tool aimed at planned conservation. Instead, the ambitious project was implemented leopard-

skinned in the national territory and then abandoned, to give way to sectoral visions, such as the one focused on seismic vulnerability [Petraroia, 2014].

7. Montalbano Elicona can be considered a case study of general interest, because it has many specific characteristics of the Mediterranean Inner areas. This town has an extraordinary location, featured by the abundance of water of excellent quality and the beautiful landscape, nestled between the Aeolian islands to the north and the Etna volcano to the south.

Despite the remarkable heritage and the vitality of the human factor (religious traditions; historical commemorative events; traditional activities in the artisanal, agricultural, and gastronomic fields, etc.), some critical conditions of abandonment still threaten its built environment, both in the town and in the scattered settlement [Germanà, 2022, 4].

8. These are design experiments produced during the Environmental Design Laboratory (course A) of the single-cycle master's degree course in Architecture of the University of Palermo during the academic year 2019/20. The design solutions developed have included passive solutions for comfort and the integration of renewable energy sources, aspects that are not explored here as they transcend the issue of use, being essential in any part of the built environment.

9. The results were however presented in November 2020 (on the occasion of the "European Researchers' Night Sharper") in the virtual gazebo "Costruzioni incompiute: infrangere l'incantesimo" (Unfinished constructions: breaking the spell)

#### References

Battino S., Lampreu S. (2017). "Strategie di valorizzazione e promozione in chiave turistica del patrimonio culturale nelle aree interne. Un caso in Sardegna", *Annali del Turismo*, VI, 2017.

Carta M. (2015). "Innovazione, circolarità e sviluppo locale. La sfida dei territori interni", in Carta M., Ronsivalle D. (eds.), *Territori interni*, Aracne, Roma, pp. 23-35.

Cerquetti M., Sánchez-Mesa Martínez L. J., Vitale C. (2019). "Introduction", *Il capitale culturale*, n. 19, 2019, pp. 15-23.

Fabbricatti K., Boissenin L., Citoni M. (2020). "Heritage Community Resilience: towards new approaches for urban resilience and sustainability", *City Territ Archit* (2020) 7:17.

Di Battista V., Fontana C., Pinto M.R. (eds., 1995). Flessibilità e riuso, Alinea Firenze.

García-Esparza, J. A., Altaba Tena, P. (2018). "Time, Cognition, and Approach: Sustainable Tourism Strategies for Abandoned Vernacular Landscapes". *Sustainability* 2018, 10, 2712.

Germanà, M. L. (2020). "The suspended time of the interrupted process: beyond repression, a future for unfinished buildings", *TECHNE - Journal of Technology for Architecture and Environment*, (20), 89-97.

Germanà M.L. (2021). "Ethics, use, and inclusion in managing archaeological built heritage: the relationship between experts and visitors/users" in Smith C. (ed.), *Encyclopedia of Global Archaeology Living Edition*, Springer Nature Switzerland AG 2020.

Germanà M. L. (2022). "Holistic Approach to the Mediterranean Architectural Heritage at risk of abandonment: the case study of Montalbano Elicona (Italy)" in Carta M., Fratini F., Galassi S., Hadda L., Mecca S., Pancani G., Pittaluga D. (eds.), *Villages et quartiers à risque d'abandon. Stratégies pour la connaissance, la valorisation et la restauration*, Firenze University Press, pp. 358-373.

Germanà M. L., Nicolini E. (2022). "Towards a Sustainable Use of Architectural Heritage: How to Assess Accessibility and the User's Role", in Versaci A., Bougdah H., Akagawa N., Cavalagli N. (eds). *Proceedings V International Conference IEREK Conservation of Architectural Heritage*, ASTI Series, Springer Swizerland, pp. 213-258.

Germanà M. L., Pons Izquierdo J. J., Lecardane R., Trapani F. (2020). "Vertical Mobility: a multi-faceted Tool for enhancing Architectural Heritage", in Trabucco D., Giacomello E., Belmonte M., *Mobilità verticale per l'accessibilità - Oltre il Quadrato e la X / Vertical Mobility for Accessibility*, Anteferma, Treviso, pp. 32-39.

Petraroia P. (2014). "Carta del rischio: linee guida e normativa recente. Una lettura critica", *Economia della Cultura 3-4/2014*, pp. 303-320.

Rifkin J. (2000). *The Age of Access. The New Culture of Hypercapitalism, Where All of Life Is a Paid-For Experience,* Penguin Puthnam, New York.

Vinci I. (2015). "La prospettiva "rurbana" nello sviluppo regionale: risorse, opportunità e nodi per le aree interne della Sicilia", in Carta M., Ronsivalle D. (eds.), *Territori interni*, Aracne, Roma, pp. 55-63.

#### Web references

https://icahm.icomos.org/2018-icahm-annualmeeting-sicily/ (last accessed 14/01/2023)

https://www.collinsdictionary.com/it/dizionario/ inglese/inner/related (last accessed 14/01/2023) https://enrd.ec.europa.eu/sites/default/files/tg\_ smart-villages\_case-study\_it.pdf (last accessed 14/01/2023)

https://www.eumonitor.eu/9353000/1/j9vvik7m1c3gyxp/ vhckn7aqfiyq (last accessed 14/01/2023) http://www.cartadelrischio.beniculturali.it/ (last accessed 14/01/2023)

https://www.sharper-night.it/evento/conferenzacostruzioni-incompiute-infrangere-lincantesimo/ (last accessed 14/01/2023)

CoE Council of Europe (1985). Convention for the Protection of the Architectural Heritage of Europe (Granada Convention). Av. at: https://rm.coe. int/168007a087 (last accessed 14/01/2023)

CoE Council of Europe (2005). Framework Convention on the Value of Cultural Heritage for Society (Faro Convention). Av. at https://www. coe.int/en/web/conventions/full-list/-/conventions/ rms/0900001680083746 (last accessed 14/01/2023)

ICOMOS (2013). Charter for Places of Cultural Significance. The Burra Charter. Av. at https://australia.icomos.org/wp-content/uploads/The-Burra-Charter-2013-Adopted-31.10.2013.pdf (last accessed 14/01/2023)

Renda F., Coppola R. (2021). "Accessibilità a Montalbano Elicona: un approccio multiscalare" in Germanà M. L., Prescia R., (eds.), L'accessibilità nel patrimonio architettonico. Approcci ed esperienze tra tecnologia e restauro, Edizioni Conegliano (TV), pp. 218-225. [http://www.sitda.net/downloads/biblioteca/ Volume\_Accessibilit%C3%A0%20nel%20patrimonio\_ Germana.pdf] (last accessed 14/01/2023)

Swiss Confederation - Swiss Federal Office of Culture (2018). Davos Declaration. Towards a high-quality Baukultur for Europe [https://davosdeclaration2018.ch] (last accessed 14/01/2023)

Swiss Confederation - Swiss Federal Office of Culture (2021). Eight criteria for a high-quality Baukultur – the whole story [https://issuu.com/bak-ofc-ufc/docs/01-it\_davos\_Baukultur\_kurzbroschure\_web\_210428] (last accessed 14/01/2023)

Wijesuriya G. (2015). Living Heritage: a summary. Rome: ICCROM. Av. at https://www.iccrom.org/wpcontent/uploads/PCA\_Annexe-1.pdf. (last accessed 14/01/2023)

#### **Round Table**

At the end of the afternoon session a discussion was opened by the following participants:



Alejandro Gana PhD student Department of Architecture University of Palermo



Francesco Lo Piccolo Full Professor Department of Architecture University of Palermo



Emanuela Garofalo Associate professor Department of Architecture University of Palermo



**Tiziana Campisi** Associate professor Department of Architecture University of Palermo



Mauro Filippi PhD student Department of Architecture University of Palermo



**Montserrat Bosch Gonzàlez** Associate professor Department of Architecture Universitat Politècnica de Catalunya



Maria Luisa Germanà. Full Professor Department of Architecture University of Palermo



**Gloria Lisi** PhD student Department of Architecture University of Palermo



**Federica Fernandez** Assistant professor Department of Architecture University of Palermo

# **AG** Could you dig a bit more into the difference between conformative and performative planning?

FL Performative is in terms of not establishing hierarchies in terms of tools, but also in terms of levels of administrations or levels of institutions (vertical but also horizontal ones). Conformative is when the actions, or forecasts or processes are accepting a previous or a much more general framework in terms of another level of planning. It is linked to the idea of hierarchy: to conform to a law, to conform to a guideline, or to another plan, and so on. It is a question of hierarchies: performative is the idea of a model and the plan just achieving targets, being evaluated in terms of which performance will be (involving numerous actors even though having opposite interests). But in this case, we are talking about a performative model that has to take in consideration the supranational values and aims of UNESCO in terms of heritage, but not in terms of accepting some rules or guidelines, but showing in terms of performance (and so management) the good results of the actions and policies. This would need a monitoring system of the management plan: you can have a performative model (or plan) if, after the approval, then there is in times (every 3/5 years) a monitoring system measuring the performances of the plan. If you do not have all of this, and you have just a plan which is performative in its idea and then not a procedures and a system which is evaluating the real results of that plan: we are talking about an abandoned process

**EG** I want to ask you if you can precise better what you intend as smart rehabilitation, if it's just a matter of use technology as the use of databases or in another sense?

**TC** In this kind of interpretation, we could also add the research of Luisa Lombardo a Ph.D. in sustainable technological design of the internal areas of the Madonie (from the University of Palermo) which it gives new perspectives. Thinking "smart" is a concept very well known

about digitalization and it also involves the innovation of technology itself. For traditional architecture, in my opinion, thinking smart is untraditional, therefore the use of contemporary building systems and materials to reinterpret traditional architecture resulting in new kind of technological systems and therefore new kind of buildings, it could be an interesting field of research. So, to better understand the meaning of this approach it is important to consider also the social and sustainable aspects, in facts, the rediscovery of the past technological systems may form new motivations to repopulate small villages or inner depopulated areas. For example, the use of natural ventilation through the use past technological system and strategical positioning, may be an incentive for tourism and therefore to visit and/or repopulate certain villages in windy inner areas.

**MF** Many of the presentations in both sessions stressed the importance of participation and applying ethical principles in the research and design processes. Still, one word was missing through the discussion: "democracy".

Considering "cultural heritage" as a "common good" clearly emerges the need to ensure a transparent and collaborative decision-making process, able to view all the diverse voices and conditions of the community at all scales.

Sometimes, those needs contradict each other, so it becomes challenging for a designer in the role of community facilitator to decide which one to follow and support. When research demonstrates that one solution is technically better than the others but all the stakeholders at the decision table - politicians, organizations, companies, or citizens - vote and prefer another one, how should the designers deal with that? How can they balance persuasion and democracy?

**MBG** Democracy hides a few problems in the process of its development. In terms of scale and territories, for example, who should decide on a specific heritage site? Who is in charge and responsible for its management? The local community? The Regional Administration or the State? Because all of them defend different interests.

In Catalunya, for example, there was a case related to the definition of the skying areas. Some local communities proposed the extension of the perimeters to foster economic development, but at a regional level, there was a different political view. They wanted to keep the mountains and the parks in their original destination for public use. The towns' mayors wished to protect their citizens' economic interests, but the regional administration kept defending the rights of its whole population.

We could also consider the European decisionmaking level in this case, even if it appears inappropriate. It is difficult to imagine solutions

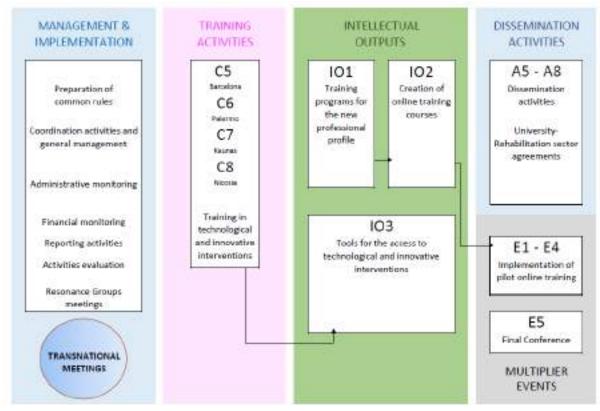


Fig. 1 . General contents of the project: SMART REHABILITATION 3.0 for the EU architectural rehabilitation



Fig. 2. View of the Madonie

that could fit northern and southern regions. So yes, it is complicated to answer this question.

**MF** In the decision-making process, it is essential to consider the perception of the problems by the participants. For example, most indirect effects of many actions, which often affect our current climate crisis, are not perceived by many as urgent or critical. They are often considered secondary after their primary interests and needs because they're not very tangible and visible. This aspect adds a layer of difficulty to the decision-making facilitation process for the professionals and the technicians. To maintain an ethical approach, which is the line a designer should not cross to overcome a mode of persuasion and enter a manipulative practice?

**MLG** People's needs can be defined technically, and in fact, they've been defined yet by the ISO normal rules. This approach may appear too simplistic, but it is the first step to discussing and comparing different viewpoints and finding a collaborative solution. There are personal views and opinions, but there is also research and scientific data, so the university aims to start from that, finding previous research and avoiding starting from scratch.

**MF** Standardization can be criticized as a solution. It is very challenging, in fact, to avoid the biases of the people in charge of the standardization itself. Who decides what has to become standard and with which criteria?

**MLG** Standards are not the overall solution, but it's something, and above all, it is the first step.

**GL** It is critical to also think about the urgency of some of the issues and topics related to the political decision-making processes associated with the cultural heritage (e.g., the climate crisis) and compare it to the speed and level of upgrading of academic research. Sometimes, the approaches seem obsolete because social phenomena are going much faster than before. In any case, the number of previous studies on specific topics, even if extensive and gualitatively authoritative. is not enough to address and help the decisionmaking process because they're still far from the current reality and its continuous and faster evolution. So far. academic research demonstrated to be "slow" and not sufficiently up-to-date compared to the speed of the change in the world. As researchers, teachers, and students, we should actively contribute to speeding up the research and making it more adaptive to our contemporary scenarios and needs if we want it to be valuable and impactful. Contemporary global facts, such as the FF Covid crisis and the Russian-Ukrainian conflict. offer us a time to reflect and understand that innovations from inner areas could help us solve numerous issues. In agriculture, for example, national and international funds offer opportunities for private investors, which are not always aligned with the collective interests of the communities. As researchers, we aim to merge all those interests within collaborative and more comprehensive policies.

**EG** Democracy means listening to everybody, but then there's always someone in charge of making synthesis and deciding at the end of the participatory process. It is important then to try to engage as many voices as possible at the decision table to consider as many needs and views as possible.



Opening image: view of Licodia Eubea from Santapau Castle (photo by C. La Mantia, January 2023).

### Historic cities and inner areas in Sicily The point of view of the Restoration

Renata Prescia

The discipline of restoration has long established a cultural background on the subject of historic cities as a heritage area to be safeguarded, beginning with the Amsterdam Declaration (1975), which introduced the fundamental concept of «integrated conservation». The purpose of this contribution is to emphasize the importance of raising an awareness and care for heritage as a community identity card and not just a reason for tourist offer. The territory and cultural heritage thus become a pedagogical challenge in defining a model of heritage enjoyment, for the promotion of local contexts and in the constitution of learning communities in which restoration likewise participates.

Keywords: Sicily, Conservation, Valorization, Pedagogical value.

«The heart of the problem does not lie in the decay and instability of physical urban and building structures but lies, as they say, "upstream," and that is where action needs to be taken: not on things but on the diminished interest in them, in the economic, social, and cultural decline of their inhabitants, in that of customs and traditions» [Boscarino, 1994, 10].

#### Premise

The disciplinary field of restoration has contributed to the establishment of a culture of the historic city with the extension of the concept of "monument" from the individual object to the urban or landscape environment, developed in the so-called Restoration Charters, not norms, but cultural references that anyone working in monument restoration is required to respect [Prescia, 2016].

«The notion of historical monument includes both the isolated architectural creation and the urban or landscape environment that constitutes evidence of a particular civilization, significant development or historical event. This notion applies not only to major works but also to modest works that have acquired cultural significance over time» (Venice Charter) [International Congress of Architects and Technicians of Historic Monuments, 1964, art.1].

The next innovative and pragmatic step is that taken

by the Amsterdam Charter of 1975, which introduced the concept of «integrated conservation» «as a result of the joint use of restoration technique and the search for appropriate functions» [point 7] opening up to economic needs, to be evaluated in any program of concrete implementation which, however, cannot disregard the «permanent educational value» inherent in architectural heritage for which:

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«it is necessary to preserve the testimonies of all eras and experiences because this allows the meaning of forms to be documented and compared and constitutes a way of examples of their use. These testimonies can only survive if the need for their preservation is understood by the majority of the population, especially the younger generation» (Amsterdam declaration) [Congress of EU Ministers, 1975, point 5].

Based on these assumptions, restoration engages in the current debate on the subject of historic cities, which has now taken on a broad international scope, monitored by Unesco, which in 1972 with the «Paris Declaration» identified a cultural heritage (monuments, complexes, sites) and a natural heritage (natural monuments, geological and physiographic formations, natural sites) to be protected through their recognition in «lists of goods». The «historic center» already extended into «historic city» with the Washington Charter in 1987, is transformed into «historic urban landscape» that is, «the urban area understood as the result of a historical stratification of cultural and natural values and characteristics that go beyond the notion of historic center to include the broader urban context and its geographical location» [Unesco, 2011] [Verdini et al., 2016]. In Italy, the cradle of an ongoing elaboration on theories of restoration throughout the 20th century, which has a duty to establish a national identity, without yielding to globalized visions, a new process of meaning to be given to heritage is initiated starting with the «Cultural Heritage Code» [Ministry of Cultural Heritage and Activities, 2004] and with the ratification in 2011 of the «Council of Europe Framework Convention on the Value of Cultural Heritage for Society» [Council of Europe, 2005], which later became Law no. 133 of 1/10/2020.

It, by assigning a centrality to the pedagogical value of monuments, constitutes a turning point in the process elaborated so far, putting «heritage communities» and «heritage» at the center, empowering populations to play an active role in the recognition of cultural heritage values, forcing specialists to find a new role, and inviting states to promote a participatory valorization process based on the synergy between public institutions, private citizens and associations.

With it, the «stylistic restoration» of nineteenth-century origin definitively ferries into the current «critical preservation» to be exercised, through the drafting of rigorous cognitive and interpretive programs, not as instruments of embalming intangibility, but as a coherent, coordinated and planned objective of a process of control and measurement of transformations, through the stages of prevention, maintenance, restoration<sup>1</sup> and subsequent management for the transmission of cultural values as flywheels of development and cornerstones of social welfare.

Setting aside the ideologies of inane preservation or therapeutic overkill on the one hand and restitution to the origins on the other, interventions characterized by balanced choices can find space, which, in their ability to return the heritage to the new reality in a better state of preservation, with the maximum preservation of the stratified phases, deliver us a renewed testimony dense with meaning.

By recomposing the disciplinary shattering between restorers, planners and urbanists, initiated since the post-war years, in the current socio-political context we can recover an organic approach to the "city" question, actually impossible to treat individually. The primary consciousness of heritage conservation is to protect not only things but what in things has value for the psychic and spiritual life of man; conservation is no longer a goal but a means of applied ecology for the preservation of the human environment; just as enhancement is no longer an end but a means of contributing to the care of the monument and man.

An urban "regeneration" process that is incapable of understanding the plurality of values stored in the physically and historically stratified environment in which we are embedded and whose provisional heirs we are, or of addressing the issue of the economy of the future and environmental sustainability, would be partially and culturally poor [SIRA, 2017].

In more recent times, and even more so after Covid, interest on the issues of historic cities is renewed around the dimension of «inner areas» and the observation of a gradual disappearance, for multiple reasons, of so many small towns, located in them. There are several causes of this danger: a high geomorphological hazard and a widespread level of risk of the monumental heritage, first and foremost structural, but also of materials, which has not been countered by a continuous state of monitoring, prevention and maintenance and by a general state of serious neglect; an exaggerated and solipsistic tourist function. And again, especially in the south, an endemic lack of jobs, with the correlated exodus of young people; the lack of a collective consciousness capable of participating in public affairs and afflicted, moreover, by an endemic lack of entrepreneurial capacity that has fueled a policy that is rather welfarist than a tool for the growth of local communities [Stella et al., 2015].

A useful review on these issues was rendered in the emblematic International Conference «"A Country It Take" Studies and Perspectives for Abandoned and Depopulating Centers» held in Reggio Calabria in November 2018 [Oteri et al., 2020] in which a vast and diverse field of research at the international level emerged. Launched as a joint initiative of the CROSS Laboratory active in the PAU Department of the University of Reggio Calabria and formed by researchers in history and restoration, in a region, Calabria, where the phenomenon of depopulation has always been, for a long time, massive and around the cry of alarm of the anthropologist Vito Teti<sup>2</sup> [2018].

Since then, with reference to Sicily, the theme continues to be carried out by restoration scholars, through various contributions [Campisi, 2020] [Vitale et al., 2020a] and specific research and teaching

actions on areas of Palermo, Enna [Vitale et al., 2020b]: dissertations [Fig. 6] and/or doctoral theses<sup>3</sup>; or, also, with specific reference to the new Regional Law on historic centers [Campisi, 2017] [Sanfilippo, 2020]. All highlight the continuous hemorrhaging of inhabitants, in the face of 'ineffectiveness of traditional urban planning, and culpable inattention on the part of politics, claiming the need for an urgent "paradigm shift". *«Staying means maintaining the feeling of places and walking to build a new world here and now. a great project of rebirth and reconstruction, presupposes totally new, loving gazes, immediate interventions and long-lasting projects; ability to create an experience of "restanza"»* [Teti, 2018].

#### The Sicilian situation: policies and practices

In Sicily, a very complex region rich in many identities, in the face of limited planning [Trombino, 2022] [Fig. 1] and ineffective conservation action carried out by conservation bodies, moreover isolated from the rest of Italy by a pernicious idea of "autonomy"<sup>4</sup>, a process of development that is indifferent and unrelated to places is put in place in the last fifty years, with devastating outcomes for each of them<sup>5</sup>.

Entirely abandoned centers are relatively few: those ruined by earthquakes (1693 Val di Noto earthquake

and 1968 Belice earthquake) and the «fascist villages» built in the first half of the 20th century; many are those where the population has significantly decreased for various reasons: lack of work, hydrogeological disruptions, difficulty of connection, lack of services. Others, for which restoration can do something are: abandonment of building structures, limited planning and/or conservation action, loss of affection for places. In the face of this framework, the Strategy for Inner Areas (SNAI) developed by the national government was certainly a turning point, the start of a different political process It was shared by the Region of Sicily in the project «Liberating roots to generate culture» hinged in the programming cycle of the European Regional Development Fund 2014/2020 (ERDF, ESF and EAFRD), in which, out of the 291 municipalities identified as inland areas, 72 were included in the aforementioned "strategy" that assigned a central role to local development and territorial policies. The areas were identified on the basis of their high distance from the centers of supply of services-base related to the areas of health, education and accessibility<sup>6</sup>; a special project is that of the «Minor Islands» which in Sicily includes the Pelagie, Aeolian and Egadi Islands.

The interventions and resources provided in the plan are, consequently, aimed at raising the quantitative and qualitative level of essential services aimed at the

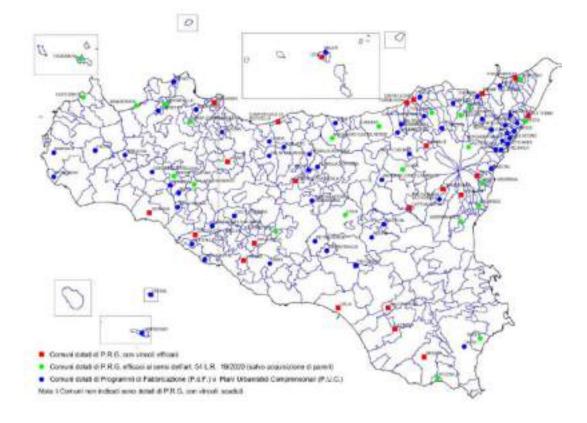


Fig. 1. Distribution of the different instruments of protection on the Sicilian regional territory (from Trombino, 2022, pp.20-21).

population: education, health, digitization, roads, land protection, crafts, energy, agribusiness.

Five of Sicily's first inner areas formed into consortia: Madonie, Simeto Etna, Nebrodi, Terre Sicane and Calatino, characterized by a higher and more differentiated degree of marginality and disadvantage. We are not yet able to take stock of how much this strategy has made possible in these contexts that, as we said before, are severely depleted of young people and, in particular, of technicians who should manage the proposed projects as well as in need of a process of «cultural re-education» informed by the new models of development. This is absolutely evident with regard to the «measure», launched with the PNRR, in favor of a «Village Plan» that awarded 21 municipalities throughout Italy 20 million euros for each regeneration project presented, in which the emphasis on the concept of «village» as opposed to the more suitable one of «town», the allocation of huge economic resources to individual places, and the priority given to a touristic rather than structural spinoff [Martinelli, 2022] [Chetta, 2022] [Chiapperini et al, 2022], raise several perplexities and concerns about the preservation of the historical-testimonial values of the chosen places, as in the case of the Cunziria of Vizzini, the only Sicilian case chosen [Fig. 2]. Cunziria is a small group of houses and factories, in which hides

were tanned, an extraordinary catalog of authentic building techniques, strongly degradable but still recoverable, immersed in a wooded landscape crossed by the Masera creek, and particularly characterized by an original growth of prickly pears; values all strongly at risk if attentively targeted by tourist «branding» rather than by authentic restoration work as protection and maintenance rather than remaking.

Interesting, however, seems to be the work that can be accomplished with the establishment of Ecomuseums (R.L. 16 of 2014), designed to respect the process of territory, community and heritage, insisting on central themes such as «participation, mediation, consultation and co-decision»:

«a deal by which a community commits to taking care of an area and is implemented through a shared and integrated project for the protection, enhancement, maintenance and production of culture of a geographically, socially and economically homogeneous territory, marked by historical, cultural, material and immaterial, landscape and environmental peculiarities»<sup>7</sup> [Sicily Region, 2014, Art.2].

Or, as Hugues De Varine, the founder of the ecomuseums, states:

«The ecomuseum is a community and a goal: the development of the community itself. The ecomuseum has,



Fig. 2. The village for leather processing called "Cunziria" in Vizzini, Catania (photo by C. La Mantia, January 2023).

in addition, a general educational function that is based on a cultural heritage and walks on the legs of the actors of a community. It is, finally, a model of development-oriented cooperative organization and a critical process of continuous evaluation and correction» [De Varine, 2022, 15].

In the context of a «meridian thought» according to which the south, with its slowness, with times and spaces that resist the laws of universal acceleration, can become a resource [Cassano, 2005, 7] a new cultural sensibility has spread in recent years that has produced various bottom-up initiatives among which some manifest, in a more popularized way, the same values carried out by the scientific and third mission initiatives of restoration and universities [Prescia, 2017] [Pretelli, 2020], on the themes of heritage and art: broadening the participation and cultural growth of young people and society as a whole, accessibility and inclusion, development of a sense of community, and transmission of memory, which we could distinguish in two broad areas: those fostered by a charismatic personality and investing in the social, and those formed by networks of associations active on the cultural heritage of an area.

The first include the activity of Antonio Presti who, from a personal vision of life, in which the pursuit of beauty is understood as a condition of redemption from degradation, first and foremost social, has established the «Fiumara d'arte», the first open-air museum in Sicily, and specific social actions in the Librino neighborhood on the outskirts of Catania [Fig. 3] and in the areas of the Oreto River in Palermo; but also the activity of the notary Bartoli in Favara (AG) and, now, in Mazzarino (CL) for a revitalization of abandoned historic centers through a promotion of visual art and architecture<sup>8</sup> [Fig. 4] [Pierro et al., 2022].

Among the latter, certainly the «Belican Museum and Nature Network»<sup>9</sup>, desired by a group of associations, active in the towns affected by the earthquake of 1968, was born in 2012 from the awareness that the identity of any place or small town has the possibility to consolidate only in an integrated system on a territorial scale that, starting from the individual communities, offers a continuous reading of the territory, art, material culture that allows their knowledge, preservation and enhancement; the «Road of Writers» initiative, along the SS 640 linking Agrigento with Caltanissetta, retraces the places of Sicily's most brilliant writers. Among the initiatives, the master of writing. The VI edition of the initiative, organized with the scientific direction of the Treccani Cultura Foundation (president Massimo Bray), was launched on July 7. Theme of 2022 is that of «Words of Sustainability»; the «Festival of the Villages of Treasures » organized every year by the association of the same name, which brings together



Fig. 3. Antonio Presti with students and teachers of the Liceo artistico «Renato Guttuso» in Giarre (CT) at the inauguration of the work «Kalokagathia», part of the Project "the door of butterflies" in Librino (photo by Officine Demetra, january 2023).

56 Sicilian municipalities, with the opening of hidden and little-known places, by the young people of the villages themselves, in the wake traced by the project «Le vie dei tesori» (the routes of treasures), which started its activities in 2006 from Palermo and dedicated to the narration and discovery of the material and immaterial heritage of the Island, to enhance it by networking its best resources. A project that believes, with a civic commitment even before a cultural one, in the infinite potential of a productive South, freed from welfarism<sup>10</sup> [Fig. 5].

### An urgent paradigm shift: the contribution of restoration

A paradigm shift is needed whose principles are:

• «a holistic approach», leaving behind intransigent ideological positions and willingness to be part of a set of interdisciplinary strategies (European Quality Principles European Council, 2019);

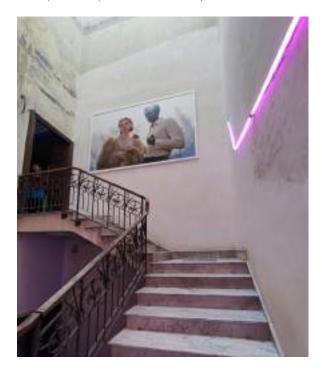


Fig. 4: «Embassy of farm», in Tortorici Palace, Mazzarino (photo by F. Trapani, 2022).



Fig. 5. Logos of «La strada degli scrittori», «Sistema museale e natural belicino» and «Borghi dei tesori» foundation, initiatives that network municipalities in inner areas of Sicily for their enhancement (www. comune.palmadimontechiaro.ag.it; https://retemusealebelicina.it/; https://leviedeitesori.com/borghi-dei-tesori).

idea of conservation as "care" not disconnected from the architecture, shifting the point of view from the conservation/innovation dialectic to the necessity/ compatibility dialectic. Development of conservation programs for material heritage [lcomos, 2008a] [UNI, 2006];
idea of conservation not disconnected from urban planning, a restoration that reconnects with urbanism by offering him his ability to see things up close with that ability that is inherent in his DNA, to read stones, to know how to take "care" of them and, with that, to connect with the people who live among those stones<sup>11</sup>;

 Idea of conservation as "care" not disconnected from economic evaluations, which introduced the concept of «integrated conservation» which opens to economic issues that cannot be disregarded in any program of concrete implementation. (Amsterdam Charter 1975); The objectives of these strategies (or actions) are:

• ensuring a housing rebalance in the target area to increase the number of inhabitants, better distributed and place-focused tourism;

• reducing the distance between specialists and the community/Reconnecting people with places.

A "fragile" territory and heritage needs first and foremost «securing» through the drafting of protocols and operational codes for the knowledge of widespread heritage and related conservation and prevention programs [Oteri, 2019].

The latest earthquakes have made possible a post-seismic regulation [Ministry of Infrastructure and Transport, 2018; Ministry of Infrastructure and Transport, 2019], which has introduced new reading tools elaborated for the identification of architectural components, with specific reference to the technicalconstructive characteristics that, especially for basic building, are primary values to be safeguarded (maps of materials and construction techniques), and for the identification of the «state of preservation» declined in degradation and disruption [Varagnoli, 2009]. Cognitive abacuses of materials and building techniques have been drawn up to supplement «new generation» Plans or Building Regulations in the cases of Cagliari [Giannattasio, 2009] and Ferrara [Fabbri, 2009], while the urgency of knowing and managing ever better a heritage at risk (geological instabilities, floods), which should be the main objective of every administration today, informs a mighty research work being carried out by a team of researchers coordinated by Donatella Fiorani that aims at a classification of historic centers according to specific indices of vulnerability and transformation [Fiorani, 2019; Fiorani 2020] .

After the issue of security, the other issue, equally central, is that of fruition - the trait d'union between conservation and enhancement - for which each

municipality should draw up, overcoming the proposition of generic options, preliminarily to an implementation plan, a «reconnaissance of the heritages» in particular those of the State and Curia that make up the bulk of it, and today the subject of ongoing processes of divestment, whose location, very often within historic urban fabrics, and whose size, always very extensive, makes them nevertheless nodes to be addressed.

These complexes, despite having lost their founding function, are still bearers of their original cultural, historical and spatial values as well as holders of new economic, urban and social potential.

Their strong identity connotations and their heritage of meanings, psychological and social, as well as their considerable economic potential, together with the testimonial values that pose pressing conservation needs, are the issues to be considered when choosing a new function to which to assign them.

Since the enactment of the Cultural Heritage and Landscape Code [Ministry of Cultural Heritage and Activities, 2004], issues of public enjoyment, including for the disabled, have become the priority vocation of cultural heritage [Ivi, art. 2], along with those of enhancement [Ivi, art.6]. In this sense, accessibility is a key-word that breaks free from the limiting reference exclusively to the disabled and widens to a much broader field of reflection that is expressed in terms of Universal Design and in terms of a new «education» to heritage, moreover triggering significant bottom-up experiences by associations, youth cooperatives, and small cultural enterprises. Objectives to be pursued, for those concerned with heritage, and as recommended by the «Ename Charter for the Interpretation and Presentation of Cultural Heritage Sites» [Icomos, 2008b], therefore become the useful actions to:

• facilitate understanding and appreciation of cultural heritage sites and promote public awareness of and commitment to the need for their protection and preservation;

• communicating the significance of heritage sites to diverse interlocutors through deep and welldocumented recognition of this significance through recognized methods of scientific analysis and research in addition to living cultural traditions.

And likewise, the Florence Declaration - Heritage and Landscape as Human Values<sup>12</sup> [Icomos, 2014] recommends the following:

 establish for communities' general practices for action within formal planning/management systems, giving the community a voice within conservation decisionmaking processes;

• sharing the "value" of traditional knowledge and practices as the basis for innovative technological balanced development programs and sustainable development;

 foster community engagement in the development of their home areas through the provision of services, entrepreneurship, and cultural production or volunteer activities, which can lead to the revaluation of cultural heritage and provide opportunities (supported by capacity building) to positively promote the diverse



Fig. 6. Educational experience of a master's thesis in architecture (University ofi Palermo, Department of Architecture, supervisor prof. Renata Prescia, co-supervisor prof. Emanuela Garofalo, a.y. 2020/2021) on Ciminna, a little town in the hinterland of Palermo with a very rich cultural heritage and landscape that we want to highlight, to counter the only identifying reading of the town, exclusively known for being one of the sets of the famous film «II Gattopardo» (graphic elaboration by A. Alesi, 2020).

identities of resident communities. It is a revival of the forces of humanism [Prescia, 2020] or «of the contemporary post-human», as Caffo [2017] says, returned to take up the challenge of governing the excess of technologism and technocracy that we experienced during the twentieth century and that, in deference to the model of infinite growth, which today is perhaps understood to be a myth, needs to be endowed with appropriate correctives, in order to achieve higher levels of individual and collective «well-being»<sup>13</sup>.

The «bottom-up» initiatives that seem to be working in the direction of «defining and consolidating the symbolic characterization of the territory and connecting it to strategies for constructing individual and collective identities» must be able to converge, with the help of particularly aware and alert cultural mediators, in «cultural districts» in which the challenge lies in the attempt to decline culture not as a mere product to be sold (which leads to the death of art cities) but as a permanent source of regeneration to be nurtured and put into circulation in order to increase the «cognitive balance» as a product of active and conscious participation in experience [Caliandro et al, 2011] [Hinna, 2015] [Tavano Blessi et al., 2006]. Of course, these are processes that take a long time, and they can be helped by structuring governance networks: Unesco Serial Sites or SNAI Internal Areas. However, the «community», disproportionately invoked, needs modern administrations and university networks to ensure real policies, «cared for» territories and architectures, respecting a balanced dialectic between conservation/development<sup>14</sup>, sustainability or a new ecology [Pope Francis, 2015] [Schilleci 2012], increasing the desire and the right of «restanza» [Teti, 2018].

In this sense, Sicily can be a candidate, to live a new model of development if we all understand that, in the global political instability, there is a need for shared responsibility on the part of every community and, in it, every individual.

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#### Notes

1. Cultural Heritage Code [Ministry of Cultural Heritage and Activities, 2004], was implemented by the Sicilian Region by Circular No. 7 of March 9, 2006 of the Regional Department of Cultural and Environmental Heritage). In Section II - «Conservation Measures», Art. 29 «Conservation», Paragraph 5 adds that «the Ministry defines, also with the help of the regions and with the collaboration of universities and relevant research institutes, guidelines, technical standards, criteria and models of intervention in the field of conservation of cultural heritage».

2. From Teti's thought, the association Riabitare l'Italia was born in 2020, which brings together scholars around a manifesto that has its programmatic heart, which is absolutely shareable, in «reversing the gaze» [Cersosimo, 2020].

3. The Ph.D. in «Architecture, Arts and Planning» of the University of Palermo, in its address «Representation, Restoration, History: studies on architectural cultural heritage», is in the process of carrying out a municipal doctoral grant, provided for by the Relaunch Decree -Conversion Law No. 77/20 (Department for Cohesion Policies, ministroperilsud.gov.it), for the towns of Vizzini, Licodia Eubea and Grammichele aimed at the recognition of the monumental values of the three centers. An interesting government measure this one, for the structuring of integrated relationships between administrations and universities, which unfortunately it seems will not be proposed again.

4. Legal protection in Sicily, region of special status since 1945, became operational by Law n.80 of 1977 with the establishment of the 9 «Soprintendenze Uniche» (Unique Superintendencies), and of the CRICD e CRPR, similar to the corresponding national centers (ICCD and ICR).

5. Please refer to the full reading rendered in Lo Piccolo and Schilleci [Lo Piccolo et al., 2003].

6. www.euroinfosicilia.it.

7. To date, 25 eco-museums have been recognized in Sicily.

8. Farmculturalpark.com; [Pierro et al., 2022].

9. www.retemusealebelicina.it

10. www.leviedeitesori.com

11. Noteworthy in this direction is the research of the «territorialists» [Magnaghi 2012] and of the Association Riabitare l'Italia [Cersosimo, 2020]; [Barbera et al., 2022]; [Lucatelli, 2022].

12. These cultural elaborations, of course, fully flowed into the Faro Convention, now Law 133 of 1.10.20 [Council of Europe, 2005].

13. Beginning with Ruskin's enlightened thinking in the

early twentieth century [Prescia, 2019].

14. In Sicily, a joint path of scientific research and operational practice between conservation and development, between culture and economics, was initiated by the collaboration between Professors Salvatore Boscarino (restoration) and Francesco Rizzo (economics) that produced a substantial bibliography. See in [Albanese et al., 2011].

#### References

Albanese A., Prescia R., Giuffrida S. (2011). "Approccio valutativo ed ortoprassi del restauro per un centro storico siciliano", *Territori*, 5, pp. 45-70.

Barbera F., De Rossi A., Cersosimo D. (2022). *Contro i borghi*, Donzelli, Roma.

Boscarino S., Federico A., Giuffrida S., Prescia R., Rizzo F. (eds., 1994). Petralia Soprana. *Ipotesi di restauro urbano e studi di analisi multicriteriale*, Medina, Palermo.

Caffo L. (2017). *Il territorio fragile umanità. Il postumano contemporaneo*, Einaudi, Torino.

Caliandro C., Sacco P.L. (2011). *Italia reloaded, II Mulino*, Bologna.

Campisi M. T. (2017). "Nuove leggi per una presunta conservazione dell'edilizia di base dei centri storici", in Giusti M. A. (ed.), *Questioni teoriche: tematiche specifiche*, section 1B, in Fiorani D. (coord.), *RICerca/REStauro*, Quasar, Roma, pp. 177-186.

Cassano F. (2005). *II pensiero meridiano*, Laterza, (1 ed. 1996), Bari-Roma.

Cersosimo D., Donzelli C. (2020). *Manifesto per riabitare l'Italia*, Donzelli, Roma.

Chetta A. (2022), "Quei borghi da top ten, bellissimi ma finti. Dal Piemonte al Sud", *Corriere Torino*, 30/07/2022, https://torino.corriere.it/cultura/22\_luglio\_27/piemontequei-borghi-top-ten-bellissimi-ma-finti-3f20f1dc-0cfe-11ed-aed2-a42341ad3613.shtml.

Chiapperini C., Montenegro E., Viesti G. (2022). "Ventuno fortunati borghi", in Barbera F., Cersosimo D., De Rossi A., *Contro i borghi*, Donzelli, Roma, pp. 161-168.

De Varine H. (2022). L'ecomuseo singolare e plurale, Utopie concrete, Udine.

Fabbri R., "Manutenzione delle facciate nel centro storico di Ferrara. Linee Guida per l'integrazione del regolamento edilizio", in Varagnoli C. (ed.) *Muri parlanti,* Alinea editrice, Firenze, pp. 197-208.

Fiorani D. (2019). *Il futuro dei centri storici. Digitalizzazione e strategia conservativa*, Quasar, Roma.

Fiorani D. (2020). "Conoscenza e intervento come processo dinamico. L'impiego della carta del rischio

come strumento di gestione conservativa dei centri storici", in Fiorani D., Romeo E. (eds.), *Realizzazione degli interventi. Gestione, valorizzazione, prevenzione,* section 4.1., in Musso S. F., Pretelli M. (coord.), *Restauro. Conoscenza progetto cantiere gestione,* Quasar, Roma, pp. 569-579.

Giannattasio C. (2009). "Il quartiere Stampace in Cagliari: dalla conoscenza al progetto di restauro urbano", in Giannattasio C. (ed.), *Antiche ferite e nuovi significati. Permanenze e trasformazioni nella città storica*, Gangemi, Cagliari, pp. 225-240.

Hinna A. (2015). "Tipologie di distretti culturali a confronto: politiche, governo e gestione", *Il capitale culturale*, supplement 3, pp. 43-59.

Lo Piccolo F., Schilleci F. (2003). "Ambiguità e pluralità del paesaggio siciliano: una possibile lettura", in Lo Piccolo F., Schilleci F. (eds.), *A Sud di Brobdingnag. L'identità dei luoghi: per uno sviluppo locale auto sostenibile nella Sicilia occidentale*, Franco Angeli, Milano, pp. 52-83.

Lucatelli S., Luisi D., Tantillo F. (2022). *L'Italia Iontana. Una politica per le aree interne*, Donzelli, Roma.

Magnaghi A. (ed., 2012). Il territorio bene comune, Firenze University press, Firenze.

Martinelli L. (2022). "Contro i borghi, per i paesi. Perché dobbiamo ridare dignità ai territori", Altraeconomia, 29/07/2022, https://altreconomia.it/contro-i-borghi-per-i-paesi-perche-dobbiamo-ridare-dignita-ai-territori/.

Oteri A. (2019). "Historical buildings in fragile areas. Problems and new perspectives for the care of architectural heritage", *ArcHistoR EXTRA*, 11, 2019, pp.169-205.

Oteri A., Scamardì G. (eds., 2020). One needs a town. Studies and perspectives for abandoned or depopulated small towns, Conference proceedings, november 2018, ArcHistoR EXTRA, 7, 2020, supplement of ArcHistoR 13.

Pierro L., Scarpinato M. (2022). "«Embassy of farm», Farm Cultural Park raddoppia a Mazzarino", *II Giornale dell'architettura*, 12/01/2022.

Prescia R. (2016). "Criteri e principi per il restauro architettonico", in Trombino G. (ed.) *Modica. Contributi per il recupero e la riqualificazione del centro storico*, 40due edizioni, Palermo, pp. 237-244.

Prescia R. (2017). "Comunicare il restauro", in R. Prescia (ed.), *Valorizzazione e gestione delle informazioni,* section 4, in Fiorani D. (coord.), RICcerca/REStauro, Quasar, Roma, pp. 867-877.

Prescia R. (2019). "L'eredità di John Ruskin critico della società", in Caccia Gherardini S., Pretelli M. (eds.), *Memories on John Ruskin. Unto this last*, vol. 2, special issue of Restauro Archeologico, XXVII, Firenze, pp.34-39. Prescia R. (2020). "Abandoned small towns in

Sicily. Strategies and proposals for recovering and enhancement. Strategie e iniziative per il recupero e la valorizzazione: un bilancio sui centri storici siciliani", in Oteri A., Scamardì G. (eds., 2020). One needs a town. Studies and perspectives for abandoned or depopulated small towns, Conference acts, november 2018, ArcHistoR EXTRA, 7, 2020, supplement of ArcHistoR 13, pp. 1625-1641.

Pretelli M. (ed., 2020). "Heritage communities: cambio di paradigma?", section 2, in Musso S.F., Pretelli M. (coord.), *Conoscenza progetto cantiere gestione*, Quasar, Roma 2020, pp. 353-358.

Sanfilippo G. (2020). "Processi conoscitivi per la conservazione dei piccoli centri storici. Normativa ed esperienze in Sicilia", in Boato A., Caccia Gherardini S. (eds.), *Conoscenza previa (preventiva) e puntuale (mirata). Metodologie*, section 1.1., in Musso S. F., Pretelli M. (coord.), *Restauro. Conoscenza progetto cantiere gestione*, Quasar, Roma, pp. 118-125.

Schilleci F. (ed., 2012), *Ambiente ed ecologia*, Franco Angeli, Milano.

Stella G. A., Rizzo S. (2015). Se muore il Sud, (1 ed. 2013) Feltrinelli, Milano.

Tavano Blessi G., Sacco P. L. (2006), "Verso un nuovo modello di sviluppo sostenibile: distretti culturali e aree urbane", *Working papers*, Dipartimento delle arti e del disegno industriale, IUAV, 6, agosto, pp. 2-32.

Teti V. (2018). "Riabitare i paesi. Un "manifesto" per i borghi in abbandono e in via di spopolamento", *Il corriere della Calabria*, 30/09/2018.

Trombino G. (ed., 2022), *Paradigmi siciliani. Rapporto sullo stato della pianificazione urbanistica comunale in Sicilia*, INU, Roma.

Varagnoli C. (ed., 2009), *Muri parlanti*, Alinea, Firenze. Verdini G., Re A., Fayad S., Zhou J., Rogers A. P., Juma M., Veldpaus L. (2016). *The HUL Guidebook: UNESCO Historic Urban Landscape Guidebook*, Fondazione Santagata, Torino.

Vitale M. R., Sanzaro D., Circo C. (2020a). "La marginalizzazione dei centri storici in Sicilia. Fenomenologie, esperienze e strumenti di intervento", in Veropalumbo A., Pascariello M. I. (eds.), La città palinsesto, *Acts of the CIRICE 2020 international conference*, 2 voll., FedOA University Press, Napoli, t. II, pp. 495-504.

Vitale M.R., Versaci A. (2020b). "Un destino di marginalizzazione. Il ruolo delle politiche urbane nell'abbandono del centro storico di Leonforte", in Oteri A., Scamardì G. (eds., 2020). One needs a town. Studies and perspectives for abandoned or depopulated small towns, Conference acts, november 2018, ArcHistoR EXTRA, 7, 2020, supplement of ArcHistoR 13, 1948-1969.

#### Documents and directives

Congress of EU Ministers (1975), European Architectural Heritage Charter (Amsterdam Declaration), Amsterdam. Council of Europe (2005), Council of Europe Framework Convention on the Value of Cultural Heritage for Society (Faro Charter), Faro.

Icomos (2008a), Glossary on stone deterioration.

Icomos (2008b), Charter for the Interpretation and Presentation of Cultural Heritage Sites (Ename Charter), Quebec, Canada.

Icomos (2014), Heritage and Landscape as Human Values. Declaration of Principles and Recommendations on the Value of Cultural Heritage and Landscape for Building a Society of Peace and Democracy (Florence Declaration), Firenze.

International Charter for the Preservation of Historic Cities (Washington Charter) (1987), Washington.

Ministry of Cultural Heritage and Activities (2004), *Cultural Heritage code*, D.Igs. n.42.

Ministry of Infrastructure and Transport (2018), Aggiornamento delle Norme tecniche per le costruzioni. Ministry of Infrastructure and Transport (2019), Istruzioni per l'applicazione dell'«Aggiornamento delle "Norme tecniche per le costruzioni"» di cui al decreto ministeriale 17 gennaio 2018.

Pope Francis (2015), *Laudato sì. Encyclical on Care for the Common Home*, San Paolo, Milano.

Sicily Region (2014), Istituzione degli ecomusei di Sicilia.

SIRA (2017), Letter to all the Italian Departments of Architecture, 28.11.2017

Unesco (2011), *Recommendation on the Historic Urban Landscape*.

UNI (2006), Italian standards on the degradation of stone materials, 111182/2006.

#### Web references

www.euroinfosicilia.it (last accessed 16/01/2023). www.farmculturalpark.com (last accessed 16/01/2023). www.leviedeitesori.com (last accessed 16/01/2023). www.retemusealebelicina.it (last accessed 16/01/2023).



Opening image: view of Alcara li Fusi (photo by A. Antista).

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# Renaissance Itineraries between Nebrodi and Peloritani Architectural Heritage, History and Technology<sup>1</sup>

Architectural Heritage & Design

Emanuela Garofalo, Armando Antista

Within the general framework of a research Project of Relevant National Interest (PRIN 2017), entitled "The Renaissance in Southern Italy and the Islands: Cultural Heritage and Technology", the research unit based at Palermo University focused on the inner area that includes Nebrodi and Peloritani mountains, as a quite unexplored and stimulating environment in the specific field of investigation. The scientific relevance of the investigation on "Renaissance itineraries" in this territory, for a deeper understanding of the overall cultural phenomenon in the island, guided this choice, as well as the opportunity to create cultural networks among small local communities, encouraging their sustainable development. This aim will be pursued by exploiting the relations between cultural heritage and new smart technologies, developing the prototype of an App facilitating the actual possibility of visiting monuments and sites.

Keywords: Southern Renaissance, Cultural itineraries, Architectural heritage, Nebrodi, Peloritani

# History, technology and communities

In January 2020, a research project entitled The Renaissance in Southern Italy and the Islands: Cultural Heritage and Technology began, funded by the Italian Ministry for Universities as a part of the 2017 call for "Projects of Relevant National Interest" (PRIN), in the action line dedicated to the South. The project's partnership includes four universities in the main cities of the South of Italy and its larger islands, namely Naples, Cagliari, Messina and Palermo<sup>2</sup>. The overall project intends to pursue two main objectives, which are on the one hand addressed to the national and international scientific community and on the other hand to local communities, trying to establish connections between them. As a first instance, the research aims at investigating the diffusion and interpretation of classical models in art and architecture within this large territory, as a complex cultural phenomenon that could be defined as a Southern Renaissance [de Divitiis, 2020]. New perspectives in the study of Renaissance have been largely explored in recent decades, also focusing on the wide range of "antiquities" that inspired artists, architects and their clients between the end of 15th and the 16th centuries, sometimes also including medieval

heritage [Ottenheym, 2021]. As had already been done by scholars in recent decades for Southern Gothic or Mediterranean Gothic [Zaragozá, Mira, 2003], the general aim is to go over the usual historiographical approach, according to which the definition of Southern Renaissance was used to indicate backwardness and a cultural gap with the Italian Renaissance courts. What we are trying to do is substantially redefine the concept of Southern Renaissance by developing the idea of another Renaissance [Nobile, 2002], changing the evaluation parameters used until now. This approach is also important for a better understanding of the cultural network linking Southern Italy with other European areas<sup>3</sup>. The other main goal pursued by the project - equally important to the first one - goes to the heart of the topic addressed in the seminar Inner Areas' Cultural, Architectural and Landscape Heritage: Study, Enhancement and Fruition, trying to answer the question posed by the seminar's subtitle, that is: A potential driver for sustainable territorial development? The interaction and the dialogue with local communities have been a constant during the fieldwork, with the aim of also stimulating a collaboration among them in a systemic perspective. In our opinion, the creation of a network, resulting from the collaboration among local communities, is a fundamental step towards driving a sustainable territorial development, with a pivotal role of cultural heritage, especially the architecture. Technology helps to achieve this goal, especially exploring the potential of digital tools to reach a wide audience. The most innovative research results will be disseminated through digital tools, designed with the aim of contributing to enhancing a network of the small towns investigated. Besides the creation of an online database, the prototype of an App will be developed that gives all users the possibility of generating their own itineraries and of making appointments to visit monuments and cultural sites. The fruition of cultural heritage in small towns in Southern Italy, especially in inner areas, is often made uncomfortable by the difficulties of visiting (eg. many churches and other historical buildings are usually closed to the public; it is difficult to establish who the contact person is; there are no guides available). The App will make it easier to overcome such difficulties by creating a direct interaction with local communities, also contributing to increase the attractiveness of the individual locality.

In this general framework, the research team based at Palermo University identified a stimulating and challenging field of investigation in the inland area including Nebrodi and Peloritani mountains [Fig. 1], where both the main aims of the overall project could be verified and pursued. To date, this area has been little studied by Renaissance scholars, also because of logistical problems due to its complex morphology, in addition to the limited availability of archival sources [Paolino, 1995; Accascina, 1996; Scaduto, 2008]. Despite this neglect, distributed among the small towns in this difficult area, there are numerous valuable architectural and artistic works, especially in the religious sphere and dating back to the 16th century, reflections of a past prosperity related to the lucrative silk production industry concentrated in this very area during that century [Laudani, 1996; Ciolino Maugeri, 2002; Monreale, 2018; Sutera, 2020]. In our research, we try to reconstruct the relations among these architectural and artistic works (investigating their authors and clients, but also the construction characteristics and the building sites) and between them and the main coastal cities from where models, master masons, architects and artists hailed (namely Messina and Palermo).

From a scholarly point of view, interest in the study of this cultural heritage is enhanced by the extensive destruction experienced by the coeval architectural heritage in Messina, for which it could provide important insights. The Nebrodi and Peloritani districts also offer appropriate ground for experimental research linked to the project's second general objective, that of involving local communities to make them more aware of the cultural heritage that they are 'keepers' of, and of the possibilities for interaction that can be activated from it, including the use of technology.



Fig. 1. Map of the inland area including Nebrodi and Peloritani mountains, in evidence the visited towns (https://www.google.it/maps).

# Heritage and rooting

The work of mapping the historical-architectural and artistic heritage of the centers that fall within the district of the Nebrodi and Peloritani mountains, dating back to the 15th and 16th centuries<sup>4</sup>, was based on preliminary research, carried out by starting from the available bibliographic information<sup>5</sup> and from datas found on the institutional websites of the municipal and provincial administrations, and of the dioceses. The social pages of local cultural and tourism promotion organizations, such as the so-called "Pro Loco" and other associations, have also proved to be surprising sources of information, useful for enriching the analytical database used to catalog the monuments and artifacts. On-site inspections, and contextual photographic campaigns aimed to complete a systematic recognition of the architectural emergencies and of the numerous traces often found in profoundly transformed building contexts. The attempt, therefore, was to map architectures and fragments as far as possible, which is useful for constructing comparisons and reasoning. There was also the hope that, over the years, they may become the object of attention and vertical insights through educational experiences and research. A documentary research campaign has also been launched<sup>6</sup>, limited so far to preliminary surveys carried out in many parish archives7, the Diocesan Archive of Patti, the State Archive of Messina, the Municipal Archives of Patti and Santa Lucia del Mela, to be followed by further investigations in the State Archives of Palermo. In the documented towns, ecclesiastical architecture constitutes by far the largest group of buildings. Each of them has, in fact, a mother church of considerable size and often also a second parish church, buildings that strongly characterize the urban scenario with their masses and bell towers, often crowned by spires. As can be expected, the presence of religious orders is widespread, (the most numerous are the Franciscan and Carmelite complexes) and is linked to the close alliances with feudal families, and to the subsidies these families gave to the churches where they would be buried. These were mostly built in the 16th century, sometimes modifying, or expanding pre-existing architectures, whose traces is however possible to recognize, also dating back to the previous century, consisting above all of portals and windows. The identified buildings, which offer a surprising sequence of Renaissance projects, have some constant features in common, such as the use of columns to articulate the naves - a precise choice that falls within the Sicilian tradition that favors column supports over pillars [Nobile, 2010; Piazza, 2021; Garofalo, 2021] – and an inclination towards *varietas* in the use of architectural orders, sometimes even within the same building. The constructive implications of the columnar system, linked to the slender proportions of the supports and to the alternatives for their construction – in drums or with monoliths – suggested paying particular attention to the construction techniques, with the aim of improving knowledge of the materials used,



Fig. 2. San Marco d'Alunzio, church of S. Maria in Aracoeli, view of the naves (photo by A. Antista).



Fig. 3. Cesarò, Colonna castle, remaining of the main portal with flanking herms (photo by A. Antista).

the extraction and transport systems, and their trade. The widespread use of monolithic columns [Fig. 2] is, in fact, inevitably linked to the availability of quarries in the area from which blocks suitable for their packaging, or for their importation, could be extracted.

Evidence of civil architecture is rarer, most often annexed to military complexes which are only integrated into the urban fabric in a few cases. The most conspicuous exception is the castle of Roccavaldina, one of the most refined examples of Sicilian Renaissance civil architecture, transformed between the end of the sixteenth and seventeenth centuries by an ambitious project and maybe the involvement of famous architects such as Giacomo del Duca and Camillo Camilliani [Paolino, 1990, 55-78]. Palazzo Valdina also stands out due to the close link it maintains with the small, inhabited center, founded with a privileged reference to the palace: the access portal to the palace, in fact, is positioned at the bottom of the spine axis, the current Via Umberto Primo. On the other hand, also due to its nature as a fortress, Palazzo Branciforte in Raccuja is more isolated. It was the seat of an active court during the 16th century, to which the substantial surviving portions of the building can be referred today. In other centers, more isolated but interesting traces are found, such as the beautiful 16th-century portal flanked by herms of the Colonna residence in Cesarò [Fig. 3]. The urban contexts examined are characterized by transformations, often due to traumatic events such as landslides or earthquakes, as well as the abandonment and neglect that have increasingly characterized the internal areas since the last war. The isolated architectural elements that have been cataloged enrich the knowledge of the widespread heritage, reveal new pieces that are useful for understanding the integration of these territories with the wider regional historical-architectural events, and for this reason they perhaps constitute one of the most intriguing leitmotifs of the Renaissance itineraries in northeastern Sicily. Inspections revealed doors and windows, uncovered staircases, inscriptions, vaults, and decorative elements reused in different contexts, fragments that can be grouped together in sequences united by typological and formal characteristics, establishing many connections between the centers that were examined. See the case of the twin aedicules found in Ficarra and Raccuja [Fig. 4], which testify to the circulation - among the small mountain towns - of models, solutions, decorative repertoires and, inevitably, workers.

There is no lack, albeit in an episodic manner, of cases of reuse of architectural elements that seem to testify attention to the local antiquity. One case of long-term building continuity is the church of All Saints in San Marco d'Alunzio, built on the structures of a temple [Miracola, 2008, 145], while a more evident symbolic character is covered by the fragments of columns and the capital, probably ancient ones, positioned at the corners of two buildings of Alcara li Fusi, clearly visible below facades that also mercilessly testify to the most recent building events in these historic centers [Fig. 5].



Fig. 4. Raccuja, church of San Nicolò del Fico, pieces of an aedicula (photo by A. Antista).



Fig. 5. Alcara li Fusi, fragments of a column and a capital (possibly ancient ones), reused in a corner (photo by A. Antista).

Further ideas come from buildings that have disappeared, witnessed only in photographs, such as the one that portrays the portal of the Franciscan church of San Piero Patti preserved in the sacristy of the Mother Church in the same town, and published in a volume with limited circulation, therefore almost unknown [Pintabona, 1965, 63; Antista 2021]8. The recovery and return to communities of the memory of partially or completely disappeared architectures are, on the other hand, central objectives of the work. In some cases the remains of ruined buildings, even of considerable size [Fig. 6]<sup>9</sup>, are sufficient to hypothesize possible virtual reconstructions using 3D-technology tools, useful for enriching the historiographical investigation and returning pieces of the lost heritage to the communities, to which the PRIN project "The Renaissence in Southern Italy and in the Islands" intends to address a large part of the impact of the activities. The visits and photographic campaigns, for example, were organized trying to involve not only the institutions, whose representatives in many cases responded with enthusiasm and willingness, but also the "third sector" entities, in addition to the inhabitants,

who often play a fundamental role in the keeping and ordinary maintenance of heritage, even if only by holding the keys to a church and offering to open it to the visitor who knocks on their doors. This strategy has given us a measure of the degree of awareness and affection that communities have for their heritage, a fundamental ingredient of local roots. The third sector entities constitute the most promising incubation reservoirs of energies within the communities. Generally speaking, to these realities the inner centers owe the activism, the stimulus to the institutions so that they facilitate the organization of festivals and cultural activities, entry into wider networks and territorial promotion initiatives which are largely based precisely on collaboration with local groups, and sometimes even attempts to manage common goods, which is a very problematic challenge for collaboration between public and private. With the ultimate common goal, to which we hope to contribute to some extent, to counteract the depopulation that threatens the entire hilly and mountainous territory of Sicily. In this regard, one of the most striking and painful cases concerns the very small towns of Giampilieri, Molino and Altolia, devastated by the flood



Fig. 6. Ucria, ruins of the church of Santa Maria delle Scale (photo by A. Antista).

of October 2009, which swept away entire portions of those historic centers, as well as spaces, heritage and memory. Here the phenomenon of abandonment is even stronger, and many associations are fighting it, working, for example, to animate community life, to promote heritage and to recover paths and trails between the tiny villages perched along a fragile valley of the Peloritani mountains. Thanks to the help of these community actors, we have carried out the richest and most in-depth inspections, we have met local history experts, and we have been granted access to generally closed or private places. These are the subjects that we intend to involve in the network generated by the application designed to improve the usability of places. Our work, therefore, tries to intercept the most fertile energies, drawing from them the advantage of a more agile and complete current knowledge of the territories, useful for historiographical research, and proposing to offer intellectual and technological tools in exchange, for a better awareness of the cultural, historical-artistic and architectural heritage, and for its effective promotion. Since the research work, therefore, heritage and community have been held together, with the ultimate aim of stimulating the territorial roots of the latter.

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# Notes

1. This essay is a product of the combined work of the authors, however the first paraghaph, entitled *History, technology and communities,* is by Emanuela Garofalo, the second one, entitled *Heritage and roots*, is by Armando Antista.

2. The Principal Investigator of the national project is Professor Bianca De Divitiis, historian of art and architecture working at the University of Naples Federico II. The other three research units, one at the university of Cagliari, one at the University of Messina and one at Palermo University, are respectively lead by Professors Marco Cadinu, Roberto Cobianchi and Emanuela Garofalo.

3. The Iberian Peninsula is the main comparison context, but you can also find similar dynamics for the spread of Renaissance artistic language in the 16th century in many regions of France.

4. The chronological margins of the research actually extend up to the first decades of the 17th century, to include buildings whose construction events began in the previous century

5. Among the numerous volumes and essays consulted we indicate, without any claim to exhaustiveness, only a few texts that offer a privileged view of the architecture of the inner towns between Nebrodi and Peloritani mountines: Samonà, 1931-32, 517-524; Basile 1942; Boscarino, 1961; Accascina, 1966; D'Amico, 1978; Novarese, 1986; Foti, 1992; Di Bella, 1993; Paolino, 1995; Aricò, 1999; Scaduto, 2008; Aricò, 2013.

6. The activity was strongly affected, especially in the first year, from September 2020 to the summer of 2021, by the limitations imposed by the health measures adopted during the COVID-19 pandemic.

7. Reconnaissance mainly aimed at taking account of the consistency of the funds, and was carried out at the mother churches of San Piero Patti, Castroreale, Galati Mamertino, Sant'Angelo di Brolo.

8. The portals, on the other hand, outline one of the most fertile sequences, on which it is possible to build comparative reasoning on the circulation of architects and design models.

9. They lend themselves to studies to be conducted also with the aim of elaborating surveys of the existing buildings and reconstructive hypotheses such as the churches of Santa Maria delle Scale in Ucria, San Sebastiano in Raccuja, San Michele Arcangelo in Monforte San Giorgio.

# References

Accascina M. (1996). "Indagini sul primo Rinascimento a Messina e provincia", in Facoltà di Architettura dell'Università di Palermo (ed.), *Scritti in onore di Salvatore Caronia*, La Cartografia, Palermo, pp. 9-24. Aricò N. (1999). *Illimite Peloro*, Mesogea, Messina.

Aricò N. (2013). Architettura del tardo Rinascimento in Sicilia: Giovannangelo Montorsoli a Messina (1547-57), Olschki, Firenze.

Basile F. (1942). *Studi sull'architettura di Sicilia. La corrente michelangiolesca*, Edizioni L.I.B.E.R., Roma.

Boscarino S. (1961). "L'attività di Giovanni Angelo Montorsoli", in *Studi e rilievi di architettura siciliana,* Raphael, Messina, pp. 7-45.

Ciolino Maugeri C. (2002). *La seta e la Sicilia*, Editoriale Umbra, Messina.

de Divitiis B. (2020). "Architettura e cultura nelle corti del Rinascimento meridionale", in Delle Donne F., Pesiri G. (eds.), *Principi e corti nel Rinascimento meridionale. I Caetani e le altre signorie nel Regno di Napoli*, Viella, Roma, pp. 43-64.

D'Amico E. (1978). "Contributi allo studio dell'architettura dei secolo XVII e XVIII a Milazzo sulla base di documenti inediti", *Archivio Storico Messinese*, vol. 36, pp. 153-190.

Di Bella S. (1993). "Scalpellini marmorari e "mazzunari" a Messina nel Seicento", *Archivio Storico Messinese*, vol. 65, pp. 105-122.

Foti G. (1992). *Storia, arte, tradizioni nelle chiese dei Casali di Messina*, Grafo, Messina.

Garofalo E. (2021). "Tra mito e modello. Le cattedrali normanne nell'architettura religiosa del Cinquecento in Italia meridionale", in Ottenheym K. (ed.), *Romanesque Renaissance. Carolingian, Byzantine and Romanesque Buildings (800-1200) as a Source for New all'Antica Architecture in Early Modern Europe (1400-1700)*, Brill, Leiden-Boston, pp. 45-67.

Laudani L. (1996). *La Sicilia della seta: economia, società e politica*, Donzelli editore, Roma.

Miracola S. (2008). San Marco D'Alunzio (pagine d'archivio), Circolo ANSPI "Demenna", San Marco d'Alunzio.

Monreale A. (2018). *Capitalismo in Sicilia: grano, zucchero, seta nei secoli XV-XVII*, Rubettino, Catanzaro.

Nobile M.R. (2002). *Un altro rinascimento. Architettura, maestranze e cantieri in Sicilia 1458-1558,* Hevelius, Benevento.

Nobile M.R. (2010). Chiese colonnari di Sicilia (XVI secolo), Palermo.

Novarese D. (1986). "Gli statuti dell'arte dei muratori,

tagliapietre, scalpellini e marmorai di Messina", Archivio Storico Messinese, vol. 47, pp. 75-112.

Ottenheym K. (ed.) (2021). Romanesque Renaissance. Carolingian, Byzantine and Romanesque Buildings (800-1200) as a Source for New all'Antica Architecture in Early Modern Europe (1400-1700), Brill, Leiden-Boston.

Paolino F. (1990). *Giacomo del Duca. Le opere siciliane,* Società Messinese di Storia Patria, Messina. Paolino F. (1995). *Architetture religiose a Messina e nel suo territorio fra Controriforma e Tardorinascimento,* Società messinese di Storia Patria, Messina.

Piazza S. (2021). "Il ruolo della memoria normanna nella cultura architettonica siciliana della prima età moderna", in Ottenheym K. (ed.), *Romanesque Renaissance. Carolingian, Byzantine and Romanesque Buildings (800-1200) as a Source for New all'Antica Architecture in Early Modern Europe (1400-1700), Brill,* Leiden-Boston, pp. 24-44.

Samonà G. (1931-1932). "L'influenza medioevale per la formazione degli elementi architettonici del secolo XVI nella Sicilia orientale", *Bollettino d'Arte del Ministero della Pubblica Istruzione*, a. XXVI, serie III, vol. XI, pp. 517-524.

Scaduto F. (2008). "Fra Tardogotico e Rinascimento. Messina tra Sicilia e il continente", *Artigrama*, vol. 23, pp. 301-326.

Sutera S. (2020). *La produzione della seta in Sicilia. Galati Mamertino e la Valle del Fitalia*, ABC Sikelia Edizioni, Barcellona Pozzo di Gotto (ME).

Zaragozá Catalán A., Mira E. (eds.) (2003). *Una arquitectura gótica mediterránea, vols. 2, Generalitat Valenciana,* Conselleria de Cultura i Educació, Valencia.

# Web references

https://www.tre60lab.it/ (last accessed 28/12/2022) https://www.diocesipatti.it/ (last accessed 28/12/2022) https://www.diocesimessina.it/territorio/ (last accessed 28/12/2022)

https://www.cittametropolitana.me.it/il-territorio/icomuni/ (last accessed 28/12/2022)

http://www.terredidioniso.it/index.php/it/19-pro-loco (last accessed 28/12/2022)

https://www.bottegaculturalesicilia.com/chi-siamo/ (last accessed 28/12/2022)



# Against landscaping

Michele Sbacchi

Cultural assets are mostly located within big cities. Landscapes are almost absent from cities. This condition is reverted in inner areas where the primacy of landscapes is overwhelming. Furthermore towns and villages are strictly intertwined with their surrounding landscapes. Yet conservation laws and procedures tend to consider built forms and landscapes as disjointed. The same unsuitable conceptual separation of buildings from the surrounding areas happens by means of the design procedure labelled as "landscaping". Integration is instead pursued by Landscape Urbanism.

Keywords: Landscape, Architectural Design, Landscaping, Landscape Urbanism, Design Methods.

Cultural assets are mainly located within cities. This implies that they are unquestionably urban entities. In territories like Europe, where the origin of settlements dates back to very old times, cities turn out to be literally reserves of cultural assets. It is well-known that the notion of cultural asset has replaced, in modern culture, what was, in older times, simply called monument. And we perfectly know how restricted this notion of monument happened to be. This stretched notion of monument – turned into cultural asset – together with the concentration of cultural assets in old cities get us to the point that often even an entire part of the city – if not the city as a whole – can be appropriately considered as a cultural asset itself.

It is quite clear how this leads to a realm which is mainly urban, as we have already pointed out. In this context, consequently, landscape, in all its forms, is less present. Indeed from most parts of a big city landscape is not perceivable. It only interferes with the city on the borders, and often, in ambiguous and unclear ways. This condition has originally generated the wrong idea that landscape did not fall within the domain of cultural asset. Later, when landscape has been fully recognized as a cultural asset, nevertheless it was taken as something unavoidably separated from the cities. This happened because cultural assets where fully in the cities and, to them, landscapes have been later merely "added". Addition implied separation. I have somewhat dwelled upon the development of this idea because I believe that within it we can understand the genesis of the rather incorrect clear-cut separation of landscape from the city. And, as we will see later, we will also find the separation of landscape from any built form, not only cities. This conceptual split applies also to villages and isolated buildings within the landscape. Actually, as it has been often pointed out, landscape is not an only natural or vegetal entity. Annalisa Metta recently has been acute in stressing this aspect with her ironic concept that "landscape is a monster". In her study she has inscribed the attitude of separating landscape from the cities, which we have dealt with so far, within a wider context. It encompasses all the other misleading attitudes towards landscape that crop up now and then in contemporary culture. This uneasiness to treat landscape has indeed a common root: the refusal to accept that landscape is something unavoidably hybrid. Indeed like a "monster", as in Metta's approach. Yet contemporary attitudes, of course spring from an historical development of the

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Fig. 1. Claude Lorrain, Paysage pastorale, 1644, Musée de Grenoble (www.museedegrenoble.fr)

idea of landscape based on the of "pure" landscape rather than a hybrid one. This is quite rooted, for example, in the very idea of "picturesque" and its highly influential aesthetic theories. Picturesque, as we know, means literally: "as a picture" i.e., something that exists when it looks like a painting. Therefore something that, paradoxically, derives its essence from the possibility of its own representation [Fig. 1]. And, within this idea, there is also a strong emphasis again on the idea of separation. To consider landscape as a picture means to consider it as something which is framed. And, consequently, something which is separable and separated from reality. In other words something abstract. In this perspective, going back to our concern for cultural assets, we can better understand how landscape has been seen in the past as quintessentially "opposite" to the city. And also we can understand how nowadays, even in the modern notion of cultural asset, landscape is something that can be more easily recognized, if it drives towards "purity". We have seen how this is rather radical in the case of big cities. Yet it is interesting to note how the condition is reverted as we move to inner areas, where we actually find a different situation: cities are much smaller and, consequently, they do not

overshadow the presence of landscapes. Furthermore the relationship between length of the borders and surface of the town is different than in cities: the smaller is the town the higher is the ratio between borderline and total surface. This condition brings about that landscape is much more perceivable. We all have experienced the pleasurable feeling that occurs in small towns or villages, from which the surrounding landscape is guite often visible. In some cases this perception happens even from the very center of the town. We can say that in inner areas towns act as actual "observatories" of the landscape. Incidentally we can recall that this notion was radically taken by Palladio in his villas that unfold as urban fragments within the countryside from which it is possible to observe the landscape. Of course this is stretched to its extreme point in the renowned Rotonda which is a 360° degrees observatory not only of the surrounding countryside but of all the seeable realm. It is meaningful yet that the villas emphasize an urban aspect in their external appearance. In the context of this essay it is not useless to stress that this peculiar condition of towns and villages in inner areas is seldom acknowledged. Most often people tend to consider that sort of "beauty", or

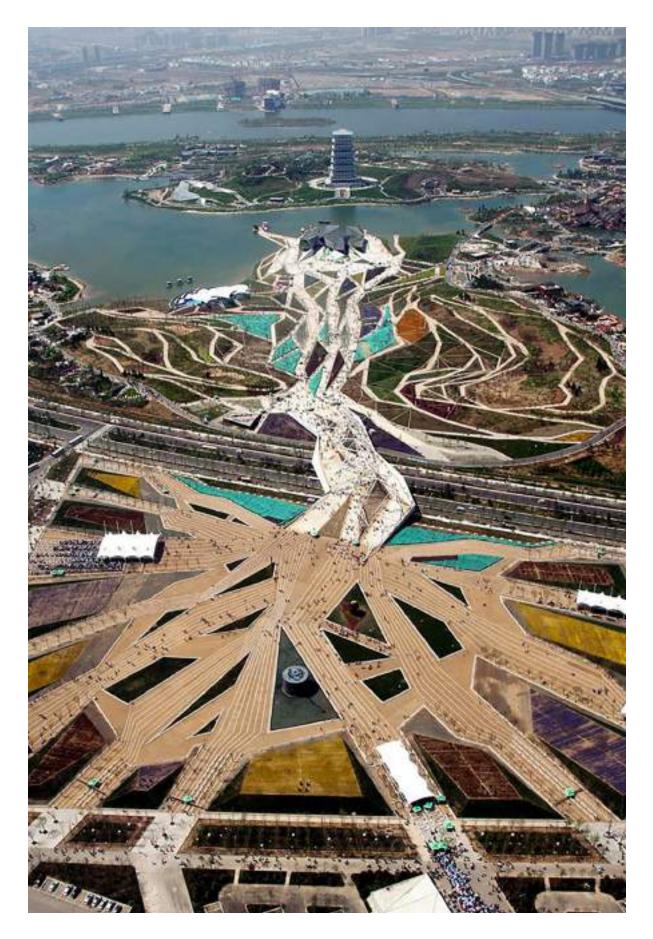


Fig. 2. Plasma Studio, Xi'an Horticultural Expo, 2011 (www.plasmastudio.com/en)

pleasure, that small towns and cities cause as something due only to their historical buildings or indeed, we should rightly say here, to their "cultural asset". Doing so they miss that often this pleasurable effect is mostly produced by the strict visual and physical integration with the countryside/landscape. In inner areas sometimes, if not often, we can even say that the primacy of landscapes gets to the point of being literally overwhelming. Under the light of these considerations inner areas therefore assume a further peculiarity: they are the place where mostly landscape unfolds its values. Something which is almost impossible in big cities.

Yet the connection between landscape and cities is actually wider. Indeed so far we have only stressed the connection in terms of visibility. But landscape is not something that is only seen, it is something that is touched, inhabited. Towns and villages of inner areas are physically melted with the surrounding landscape or countryside. The notion of "cultural territorial systems" needs to be considered. It brings together landscapes and towns but also monuments. nature and agriculture. In Italian language this connection is shown by the very etymology of the word paesaggio that stands for landscape. It actually derives from paese, which rather strikingly means village. Not less interestingly in old times paesaggio was the area immediately around the village, an area that was rural and urban at the same time, or rurban, to use a contemporary term. Of course this recalls the notion of "periurban countryside" of Pierre Donadieu [Donadieu 1985]. In other occasions it has been proposed the notion of "agro-urban unity" to define certain cities, especially in South Italy where the countryside is inhabited in the same way of the town. Later the term *paesaggio* was extended beyond the limits of this sort of inhabited country. In my view it is quite striking that landscape takes its name from something that is generally meant as its opposite. Therefore landscape does not appear as an autonomous entity. Towns, villages and other forms of building groups are to be considered as united with their surrounding landscapes. Yet conservation laws and procedures unfortunately tend to isolate the two groups: landscape on one side and town or buildings on the other side.

All we have described so far can be traced in a similar attitude, rather widespread, in professional practice of architectural design under the somewhat awkward label of "landscaping." Of course, as we move into this realms, we perfectly understand that the outcome are physical and therefore much more dangerous. Indeed what we have been described so far applies to a theoretical framework. It is important but it has less direct effect on the reality, even if it constitutes the ground for the practical approach. What is meant by a certain kind of architects by "landscaping" is a sort of separate procedure that is implemented once the more fully architectural configuration of the building is concluded. According to this idea "landscaping" is an autonomous procedure aimed at contextualizing an already designed building.

It is a strongly object-oriented idea of architectural design, which accepts the role of context yet it treats it as a sort of "garnish" of the building: not differently from a side-dish. Within this approach design is fragmented basically into three separated realms: a main and prior architectural design procedure and the two following procedures of interior design and landscaping. These latter are not secondary: to them is attributed a very important role. Indeed they behold the very important role of "dressing" the building, one internally and the other one externally. As someone has rightly remarked, according to this approach architectural design if confined to the centimetered width of the façade, leaving the treatment of all the other space to interior design and to landscaping.

We can further note that in this approach architecture - or, better, architectural design - drives towards engineering. Using an extreme metaphor, it becomes a sort of "hardware" for the "software" of interiors and landscaping. A structural framework concerned mainly with solidite and distribution. In the case of interior design this can be partly accepted even if without such a drastic divorce. It is true that interior design beholds a certain degree of autonomy, which has been somewhat radically pointed out by none other than Adolf Loos in his renowned essay on interior design, in which provocatively declares that the core of architecture is interior design. Yet we have to note further that, despite this theoretical declaration, in Loos' buildings this clear-cut separation of architecture and interior design does not take place. Of course the problem lies in the impossibility of separating. Much more inadmissible is the split between building and context implied in the procedure of "landscaping". It is symptomatic of the inappropriate conceptual separation of buildings from the surrounding areas that we have already noticed in the case of cultural assets.

Despite its name landscaping reduces the rich notion of landscape to something that can merely be considered gardening or decoration. This approach is rather diffuse in big corporate offices that nowadays are the majority in the architectural design world. Therefore it is having a strong negative impact on the built environment. It performs exactly in the opposite way in which architects like Palladio of Aalto have taught us to do. More responsible architects, on the contrary have developed in the last 20-30 years the well known Landscape urbanism trend [Fig. 2]. According to this latter theory urbanism can derive its forms and rules from the landscape. But also landscape can be shaped according to urbanism in a mutual interplay that leads finally to the ultimate configuration of the territory. It is important to note that Landscape urbanism is deeply grounded on the idea that building and landscape are tied to the point of a real fusion. This is totally the opposite of the separation between landscape and building that characterizes both "landscaping" and certain conceptions of cultural assets, as we have seen in this essay. It is important nowadays to pay attention to the perils of this schism when implementing new forms of interventions such "green infrastructures" or "urban forestations". All the more so we have to be careful since we are already within the beginning of a massive new building activity within landscape. It encompasses all the new energy artifacts. Lack of consideration of the integration between artifacts and landscape could cause irreversible mistakes.

# References

Donadieu, P. (1998). *Campagnes urbaines*, Parution, Paris.

Metta, A. (2022). *Il paesaggio è un mostro. Città selvatiche e nature ibride*, Deriveapprodi, Roma.

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# Inland areas between description and transformation. The case of the disused quarries on the island of Favignana

Architectural Heritage & Design

Giuseppe Marsala, Pasquale Mei

The Municipality of Favignana is registered in the List of Municipalities of the 'Inland Areas' drawn up by the 'Agenzia per la Coesione Territoriale". It is an island in Sicily and belongs to the inter-municipal pole of the city of Trapani. Its municipal territory is spread over the three islands of the Egadi archipelago and therefore also includes the islands of Levanzo and Marettimo. It is classified under category 'E' indicating 'peripheral territory' [Fig. 1]. As is the case for many of the Italian islands included in the same census, the Egadi archipelago lives its meaning of periphery both in terms of geographical position and, above all, condition. External to the territory of Sicily, and separated from it by the sea, it is in fact an area that has undergone a gradual process of marginalisation over the years, the result of a growing depopulation of its indigenous population, its ageing and the quantitative and qualitative inadequacy of essential services. The drop in births and the demographic index has also resulted in the weakening of the educational offer, forcing the few young people of school age to emigrate to the Trapani inter-municipal pole to access school services. The same applies to health services and dependence on tanker service for water supply. This particular condition of marginality is also linked to its distance from the mainland, which also makes the connections, to date guaranteed exclusively by sea, unstable, favouring the everincreasing abandonment of the archipelago by its inhabitants. This ongoing process produces a phenomenon of marginalisation that does not guarantee a fair distribution of the wealth accumulated during the summer season, limiting a sustainable and cohesive growth of its social fabric. Within this context, therefore, the riches of its historical and environmental heritage and its material culture have long been compromised and traversed by phenomena of physical degradation that respond to an overall impoverishment, both cultural and social, of its territory. The research illustrated in this essay has as its objective the valorisation of its territorial resources within the strategic framework of a landscape and environmental reconversion of its heritage of disused quarries.

Keywords: Egadi Islands, Favignana, Quarries, Transformation, Sustainable development

# Favignana between geography and history

Favignana, in Sicilian *Faugnana*, is the largest of the islands belonging to the Egadi archipelago in Sicily [G. Scarcella, 1977]. It lies about 7 km off the west coast of Sicily, between Trapani and Marsala, and is the seat of the Egadi Islands Municipality [Fig. 2]. Favignana's current name, formerly Favognana, derives from the Latin *favonius* - Favonio -, a term used by the Romans to indicate the warm wind from the south-west, which determined its mild climate during the winter season. Its inhabited centre rises around a natural inlet where the harbour is structured, on the banks of which are the buildings of

the old Florio tuna-fishing nets [Fig. 3]. The island's architecture is characterised by regular, stereometric volumes, with small windows strategically placed in the direction of the winds and to protect the dazzling Mediterranean light, and is all made of calcarenite stone quarried directly in its territory [G. Marsala, 2021]. The island is home to typical Mediterranean scrub and its vegetation consists mainly of bushy shrubs: oleaster, lentisk, carob, euphorbia and sumac. There are some interesting endemisms such as the sea cabbage (*Brassica macrocarpa*), the maritime flower (*Calendula maritima*) and the Boccone fennel (*Seseli bocconi*). The vegetation is completed with Mediterranean pine forests that have been the

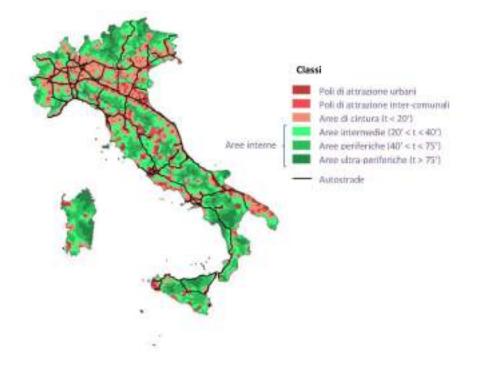


Fig. 1. Map of the internal areas of Italy (UVAL-UVER elaboration on Ministry of Health, Ministry of Education and FS data)

subject of a reforestation campaign carried out since the 1950s<sup>2</sup>. The island has an area of around 19 km<sup>2</sup> and a coastline of 33 km that is indented and rich in caves and grottoes. In ancient times, Favignana's name was Egusa - Aegusa for the Latins -, from the Greek Aigousa - Aiyoüoa, meaning 'having goats', due to their abundance on the island. It was also known by other names such as Aponiana. Katria. Gilia and is mentioned by numerous writers, including Pliny, Polybius, Nepotian and the anonymous Ravennate. By Arab geographers, it was known by the name Djazirat 'ar Rahib - 'island of the monk' or 'of the hermit' -, because a castle from the Norman era, the so-called Castle of St Catherine, is located on the island, where a monk is said to have lived. The painter Salvatore Fiume called it a 'butterfly on the sea' because of its morphological configuration. The island is criss-crossed from north to south by a mountain ridge whose highest peak is Mount Santa Caterina, 314 metres. Two other peaks are Punta della Campana, 296 metres high, and Punta Grossa, 252 metres. On the southern side are the islets Preveto, Galera and Galeotta, little more than rocks. Human presence in Favignana dates back to the Upper Palaeolithic: traces of ancient human settlements can be found mainly in the Faraglione and Pozzo caves in the San Nicola area. The Phoenicians settled in Favignana from the 8th century B.C. until the year 241 B.C. when the Roman army led by Gaius Lutazio Catulo routed the Carthaginian fleet in the final battle of the First Punic War, known as the Battle of the Egadi Islands, in which Sicily was definitively annexed to Rome. After the collapse of the Roman Empire, the islands fell into the hands of the Vandals and Goths and later the Saracens. In 1081, the Normans, under the rule of Ruggero d'Altavilla, built a village and mighty fortifications there: Fort San Giacomo, and that of Santa Caterina, at the top of the mountain. It then followed the fate of Sicily until the 16th century, passed under the Bourbons [F. Maurici, 1999]. and became, together with the entire archipelago, the property of the Pallavicini-Rusconi family of Genoa and then, in 1874, of the Florios, who strengthened the island's tuna fisheries. From the Bourbon period until Fascism, the island was used by the government mainly as a prison and place of confinement for political opponents<sup>3</sup>. During the Second World War, the island was equipped along the coast, given its strategic position, with an impressive network of casemates and military fortifications, most of which are still preserved today. Favignana, since the time of Roman rule, has been the quarrying site of calcarenite used for the construction of houses not only on the island, but also of public and sacred buildings throughout much of the southern territory of the Roman Empire. Mining was an important

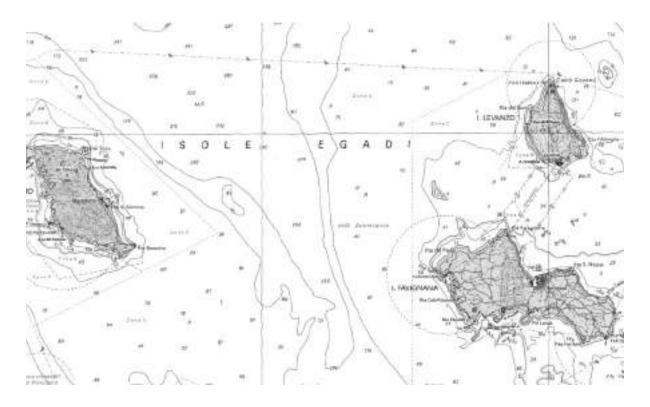


Fig. 2. Bathymetry of the archipelago of the Egadi Islands (https://egadi.wordpress.com/area-marina/cartografia-nautica-isole-egadi/)

economic source for the inhabitants, and strongly influenced the eastern part of the island, with its peculiar moats, gorges and caves, some of which have now been transformed by private citizens into picturesque vegetable gardens, gardens and dwellings. Another economic source on the island of Favignana is tuna fishing [V. Consolo, 1986], which found its main focus in the Tonnara dello Stabilimento Florio<sup>4</sup> for the processing and distribution of the catch. With the construction of the plant, the renewed impetus given to the fishing and marketing of bluefin tuna, on the main domestic and foreign markets, was amply rewarded with success, both in terms of image and profit. And even when, in the early decades of the 20th century, what had been Sicily's most important industrial and financial group went bankrupt, the Florio factory remained fully productive, passing, in the early 1930s, first among the companies owned by IRI, and in 1938 into the hands of the Genoese entrepreneurs Giovan Battista and Vittorio Parodi. In 1985, the management of the business was entrusted to Trapani entrepreneur Nino Castiglione, owner of a canning industry. In 1991, the factory was acquired by the Sicilian Region, which began major restoration work entrusted to the Trapani Superintendency for Cultural and Environmental

Heritage and completed in 2010. Today, the factory is an important cultural centre whose potential, however, remains partly unexpressed.

# Favignana and its economies

In the face of a significant history that has seen the island as the epicentre of the Mediterranean and its trade and cultural routes [F. Braudel, 1987], Favignana is today experiencing a phase of crisis - economic, social and identity - if we make an exception for tourism, the activities of which, however, are affected by an imbalance that is discussed later in this paper and which the research also takes as data to be elaborated for a hypothesis of the island's regeneration. While today, in fact, the island lives mainly on tourism, until a few decades ago Favignana counted on a number of flourishing activities that characterised both the economy of its community and its social identity. These certainly included tuna fishing and the extraction of tuffaceous calcarenite for construction. Both of these activities, now abandoned, constituted over the centuries an economic wealth of knowledge and trades that ensured the subsistence of the favignanese community over time and its identification with those trades. Tuna fishing, in particular, experienced a flourishing season in the Florio era, between the late 19th and mid-20th century, which made Favignana one of the most important European centres in that sector, to which the extraordinary architecture of the Florio factory bears vivid witness. Recently, a number of policies supporting the archipelago have been moving in the direction of re-establishing tuna fishing for productive purposes and not just for tourism, as was the case in more recent times. The same can be said for calcarenite guarrying, a widespread and capillary activity throughout the island's lowlands that saw its closure around the 1960s. Present since Roman times, this activity constituted for centuries a strong boost to employment and a flourishing economy that provided raw material for the construction of the architecture of many Sicilian cities. Its decommissioning, linked to the transformation of construction production cycles, today raises the issue of reading, interpreting and re-introducing into the island's metabolism a heritage equivalent to 25% of Favignana's territory. Maria Guccione, a connoisseur of the island's history and culture, writes: 'There is a parallelism between calcarenite and tuna. Both are 'extracted', one from the land the other from the sea. Both have very distant origins rooted in the mists of time. Suffice it to recall Homer who, in the 9th century B.C., describing the precision with which Ulysses struck the Proci, demonstrated his knowledge of these fish by stating that the hero «killed them as if they were tuna», which are known to be harpooned one at a time. But even before that, men had sought shelter by digging caves in the soft, malleable stone of the island in prehistoric times. And when nets were lowered to prepare for tuna fishing, they were anchored to the bottom not only by anchors but also by tuff ashlars known as rusazze. These were well-squared ashlars that, instead of being thrown away as waste, were given each year to the tonnara, which used a few hundred of them to ballast its underwater architecture. Tuna and calcarenite: a constant in the life of the people of Favignanesi'5. The role of tourism is particularly important in contemporary Favignana. The seasonal nature of this economy, however, makes this area a lung that is too full in the summer months and too empty in the remaining months, when the residual, meagre, resident population does not experience an active economic and social cycle. In fact, there is a vertiginous increase in the population, which from June to September rises from 1,500 residents to peaks of even 60,000 throughout the archipelago -



Fig. 3. Tonnara of the Florio establishment.



Fig. 4. Cala Rossa beach.

with an obvious insufficiency of services to receive the massive and concentrated presence in just three months. This condition is today accentuated by an absence of complementary activities that would allow, on the one hand, the deseasonalisation of the tourism economy; and on the other, to guarantee the repopulation of the community even in months other than the summer months. The Quarry Island research<sup>6</sup> identified the disused quarry basins as a strategic resource on which to focus for an economic, social, landscape and environmental regeneration of the island.

# Favignana and its Quarries

The system of quarries on the island of Favignana defines a veritable palimpsest of the territory <sup>7</sup>. They draw on the soil, signs, traces and shadows, each time of different intensity in relation to the depth of



Fig. 5. Quarry model.

the excavation [T. La Rocca, 1995]. In addition to the type of guarries defined as "open-cut", there are also "underground" quarries obtained using the "ingrottamento" technique. In the latter, excavation took place horizontally, laterally to the rock face in order to build galleries capable of reaching the deepest parts where more valuable calcarenite characterised by greater compactness and therefore solidity could be found. Often the tunnels excavated, as in the case of Scalo Cavallo, faced directly onto the sea, so as to facilitate the loading of stone material to be transported on boats to reach its destination. This last type of quarry, defined hypogean, constructed labyrinthine architecture defined as 'pileri', in which large masses were left as pillars to support the rocky vaults8. A dark spatiality typical of the underground world, which recalls the narrative of the 'underworld', counterpointed by clearings illuminated by zenithal light called 'puzzu lumi', i.e. small holes dug in the open sky from which excavation operations could begin according to the technique of 'ingrottamento'. This set of figures subtracted from the earth have over the long term defined a geographical region 'Khora' of the island of Favignana and imprinted its 'Topos'.

# Favignana island of water

Below the deepest guarries, at a depth of about 30 metres, the underground water table is intercepted. A natural resource of fresh water, which over time has allowed the island's inhabitants, more than three thousand <sup>9</sup>, to be self-sufficient for their water needs. Today, however, this condition of self-sufficiency of the population is only guaranteed for a certain period of the year, excluding the summer, putting the island's conditions for living sustainably with its resources at great risk. In addition to the described tourist factor of being the preferred destination of the smaller Mediterranean islands, there are also the particular consequences of climate change. It is against this backdrop that an ENEA research group has developed a multidisciplinary methodology that has made it possible to quantify the potential water reserves of the aquifers in the eastern part of the island, toponymously referred to as the 'Piana'. The area is strongly characterised by the presence of disused quarries beneath which lies the shallowest aquifer, where the water is not contaminated by salty sea water, unlike the deeper aquifer in the western part of the island beyond Monte Santa Caterina. The special geological conditions still allow the water needs of the island's inhabitants to be met. In fact, the underground waters are still today, as in the past, pumped up through wells that dot the ground, each as a stronghold of every single agricultural property. A natural water supply system capable of satisfying, while respecting the island's natural ecosystem, some 20,000 inhabitants on a daily basis [Fig. 4]. This delicate natural system, unfortunately, now risks being put in crisis by the impact of climate change, which involves the Mediterranean Basin, with significant variations not only in temperatures but also in rainfall, with consequent repercussions in terms of the availability of water resources. In fact, a study published in Nature Climate Change in 2018 reveals that in the entire Mediterranean Sea, temperatures have increased by 1.4 °C and a reduction in summer rainfall estimated at up to 30%.

# Favignana's quarries as counterform of geographical space

The quarries on the island of Favignana can be described as solids, according to a procedure of abstraction that reverses the relationship between void and full. The assumption is to define a possible counterform of the quarries [Fig. 5], in which the excavated volume can be understood as a full, according to the Cartesian definition of void. But the quarries on the island of Favignana, in addition to being a tangible geographical condition from a spatial point of view, now constitute a true cultural heritage in the collective imagination of the population. The system of disused

quarries represents a potential resource available for the definition and construction of future scenarios for the island. The expedient of the counterform finds clear references in the history of architecture to a particular and precise season of studies conducted, in the last century, by Luigi Moretti and applied to the modelling of certain historical works - churches, monuments, etc.. - and also to the critical and historiographical readings of Bruno Zevi. A fortunate and internationally recognised season of Italian architecture. According to Moretti's assumption, the emptiness of Favignana's quarries can be conceptually transported as masses of volumes, capable of relating to the elements and parts of the island's body - coastline, farmland enclosures, mesh of road connections, promontories, etc The description of the counter-form of the guarries on the island of Favignana makes it possible to transform the void inherited from stone quarrying into a resource understood as an asset to be reused in a sustainable manner, and no longer as a criticality.

# Quarry Island. A research for the landscape and environmental transition of Favignana

The study adopted disused quarry basins as a field of prospective investigation, looking at them as a potential resource for environmental, landscape, economic and social reconversion. It aims to describe these endogenous resources and reinvent them for their valorisation. In doing so, it also looks at the transformations taking place on the planet, the



Fig. 6. Agenda 2030. Goals for sustainable development (from: https://www.agenziacoesione.gov.it/comunicazione/agenda-2030-per-lo-sviluppo-sostenibile/).

crisis due to climate change, global warming and the particular condition that the Mediterranean coastal areas present in relation to this issue. It has in the rise of sea water one of its major aspects and the ENEA research centre estimates that, in the absence of mitigation policies, by the end of the 21st century the land on the Italian coast at risk of flooding will amount to approximately 5,686.4 square kilometres, equal to the entire surface area of Liguria. The research, therefore, intends to convert disused guarries from a place of waste into an environmental resource and its focus adopts the United Nations 2030 [Fig. 6] Agenda as the horizon for a valorisation of the area of the entire archipelago, within a design guideline aimed at starting the ecological transition and securing the planet and its resources.

The research project, Quarry Island, identified five horizons for a semantic re-signification of the disused guarry sites and their regeneration from new forms of need. Just as guarried stone has for centuries condensed the economy, sustainability and self-sufficiency of a community, putting it in relation with the world beyond itself - today the world seems to suggest five landscapes to Favignana for its near future. Five landscapes that correspond to as many themes of the United Nations 2030 Agenda. Quarry Island has thus given rise to a workshop of projects that have made some prefigurations starting from the five themes outlined above. Scenarios of a possible future in which quarries assume a strategic centrality for the environmental conversion of the island. By adopting a sample guarry, understood as the genome matrix of the island's landscape (C. Ravagnati, 2018), the projects are configured as variations on the genome and measure its future possibilities of use.

# They are:

# • Agricolture Scape/New Farm.

It concerns the use of quarries for proximity agriculture and social self-sufficiency, partly experimented during the pandemic crisis by the island community.

• Water Scape/New Sea and New Basins.

Concerns the use of quarries for the supply of groundwater and sea water as endogenous resources to be developed as new basins for irrigation and artificial bathing.

• Energy Scape/New Garden.

Quarries as energy gardens and climate crisis mitigation devices

• Waste Scape/New Ecology, Compost and Phytodepuration.

Quarries as basins for composting and phytodepuration, also understood as a reduction of the current costs for transporting and storing waste on land.

• Cultural Scape/New Public Space.

Quarries as squares, agora, museums en plen air and public spaces for culture and live performance.

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# Notes

1. Data available on the Agenzia per la Coesione Territoriale website, https://www.agenziacoesione. gov.it/strategia-nazionale-aree-interne/laselezione-delle-aree/ (last accessed 12/01/2023).

2. A study on the vegetation of the Egadi Islands reports around 570 species in Favignana. It has been part of the Egadi Islands nature reserve since 1991.

3. During the Bourbon period, the Mazzinian Giovanni Nicotera, who was later freed by the Garibaldini after the landing of the Thousand, was imprisoned in the Santa Caterina pit

4. The building, with its 32,000 square metres, three quarters of which are covered, is one of the largest tuna fisheries in the Mediterranean. The factory was leased by the Florio family in 1841 from the Pallavicini family of Genoa. The islands of Favignana and Formica were purchased and fishing rights were acquired in 1874 by Ignazio Florio, who entrusted the work of enlarging and renovating the tuna fishery to the architect Giuseppe Damiani Almeyda, building the tuna storage facility.

5. Report presented on the occasion of Dr. Maria Guccione's speech at the W.A.Ve 2021, IUAV of Venice.

6. The research, conducted through several scientific fields, conferences, workshops and publications, was awarded by the International Jury of the W.A.Ve 2021 IUAV for the Bachelor section; and was presented at the Architectural Association School of Architecture of London; at Le Vie del Mediterraneo MedWays - Accademia Nazionale dei Lincei in Rome, and at the Uniscape 2021 International Conference in Florence.

7. In the eastern part of the island, bounded by the urban centre in the west to the sea ox beach in the east, the surface of the quarries reaches an extension equal to one fifth of its surface. A ground marked, after having freed it from the so-called 'cappellaccio', i.e. the layer of the first 1 or 2 metres of non-usable stone, by incisions, excavations, caverns and caves that the skilful quarrymen with their labourers drew on the ground, defining a veritable architecture of absence

8. The stone ashlars, perfectly squared, were extracted by local 'pirriatura' stone cutters, measuring 25x25x50 cm.

9. Currently, the island of Favignana has 3,407 residents, while the entire archipelago (including the islands of Levanzo and Marettimo) has 4,314 residents. ISTAT figure updated to 2017.

# References

Augé M. (2012). Futuro, Bollati Boringhieri, Turin.

Braudel F. (2017). *Il Mediterraneo: Lo spazio, la storia, gli uomini, le tradizioni,* Bompiani, Milan.

Cusenza M. C. (ed., 2018). *"Il restauro monumentale delle Isole Egadi. Studio, analisi e progetti"*, Conference proceedings (Favignana, 12-13 October 2007), Tipolitografia fashion, Syracuse, Sicily.

La Rocca T. (1995). *Gli indistinti confini: Osservazioni e progetti per l'isola di Favignana,* Medina, Palermo.

Marsala G. (2021). Hafriat #1 Favignana. Prima dell'architettura. Paesaggi di cava tra descrizione e trasformazione, 40due Edizioni, Palermo.

Maurici F. (1999). *Le Egadi della tarda antichità agli inizi dell'età moderna,* La Fardelliana, Trapani.

Ravagnati C. (ed., 2018). *Favignana come un'infanzia. Il cromosoma terrestre dell'architettura,* LetteraVentidue, Syracuse, Sicily.

Scarcella G. (1977). *Favignana: La perla delle Egadi,* Europrint Editore, Milan.

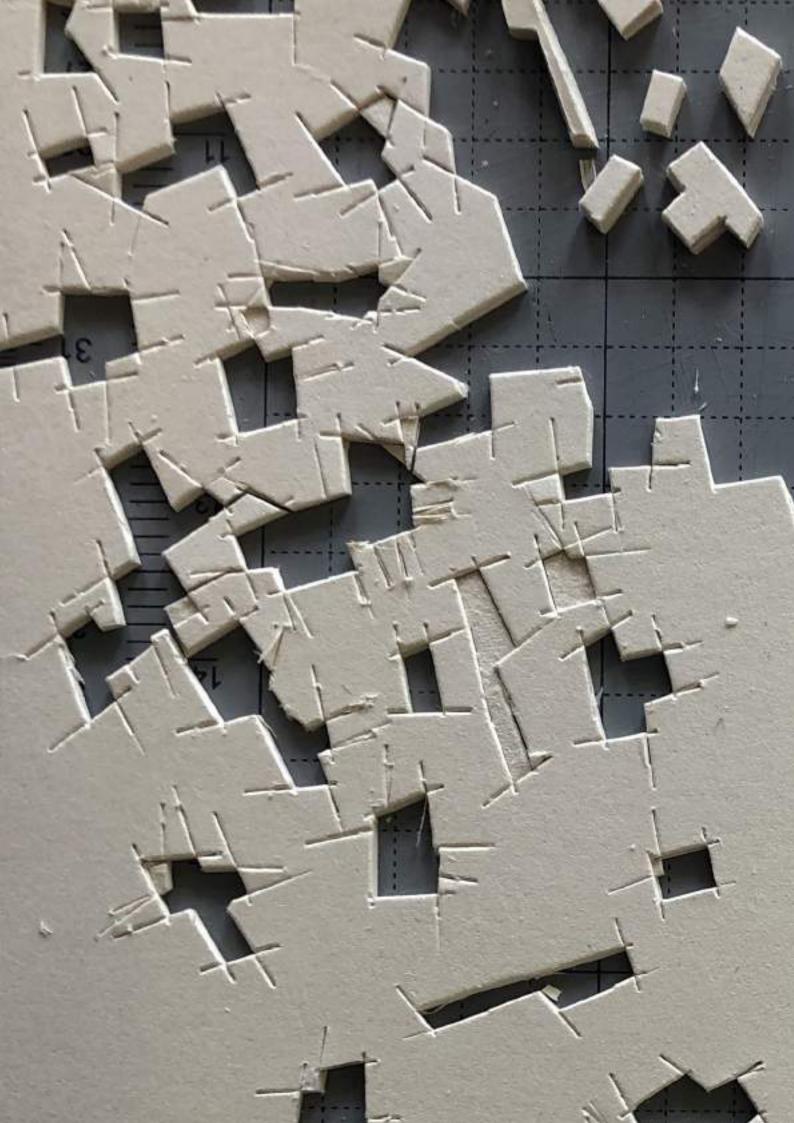
# Web references

https://www.agenziacoesione.gov.it/strategianazionale-aree-interne/la-selezione-delle-aree/ (last accessed 12/01/2023).

https://www.agenziacoesione.gov.it/comunicazione/ agenda-2030-per-lo-sviluppo-sostenibile/

(last accessed 12/01/2023).

https://egadi.wordpress.com/area-marina/cartografianautica-isole-egadi/ (last accessed 12/01/2023).



# **Round Table**

In the second day of sessions a discussion was opened by the following participants:



**Gloria Lisi** PhD student Department of Architecture University of Palermo



**Emanuela Garofalo** Associate professor Department of Architecture University of Palermo

**Tiziana Campisi** Associate professor Department of Architecture University of Palermo



Renata Prescia Full Professor Department of Architecture University of Palermo



**Erica La Placa** *PhD student Department of Architecture University of Palermo* 



Alejandro Gana PhD student Department of Architecture University of Palermo



**Giuseppe Marsala** Associate professor Department of Architecture University of Palermo **GL** I was interested in the app designing which is meant to be done during the PRIN presented in the previous presentation (Prof. Garofalo and Prof. Antista). I was wondering if you are in touch with some guide editors. In particular, I was thinking about the Touring Club one and theri "Red guides" (Guide Rosse), which have had an important role in the definition of our heritage in the last fifty years, moving the attention from city centers to smaller villages around the Peninsula.

EG The idea is to create a prototype: there is not so much money for this project at the moment. A little part of the funding is specifically dedicated to the creation of this app we are referring to now and it is going to be developed by the central unit of the PRIN (Naples). Moreover, the idea to create it is of the principal investigator. What you suggest is actually a very good idea, but first we have to develop the prototype, trying to do it with a small number of villages and towns, so that we can test it, and after that this could be a very good path to create new connections. I want to put in evidence that the very simple idea but the essential one is that you are going to be able not only just to virtually visit, to have information and to create itineraries, but also to have access to these places, since they are often closed. Indeed it is not easy at all in many places: so the opportunity is also for the local communities which can enter in new networks.

**TC** I wanted to thank Professor Prescia for her beautiful presentation and, specifically, to thank her for this new and dynamic perspective on the restoration action. As we know, very often the restoration action is accused of remaining clinged on some positions that are static and not dynamic: on the contrary, her perspective and this possibility of giving a new interpretation of the restoration can guarantee to a whole category of technicians trained at the University to be themselves promoters of a new dialogue with the administrations. I think that, for some time now, many associations dealing with the promotion of Cultural Heritage have made a bit

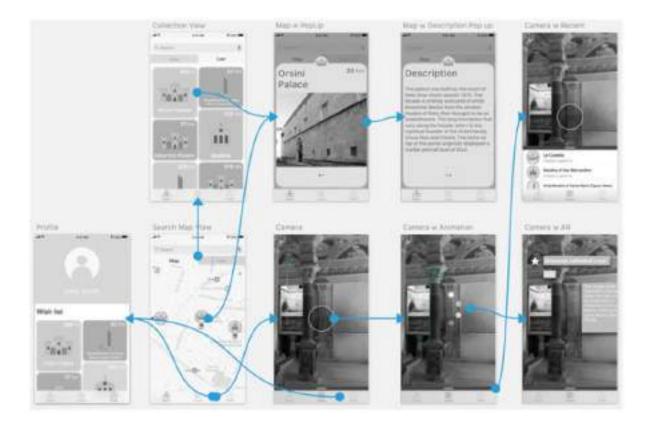


Fig. 5. The App that will be developed in collaboration with the local communities which, taking advantage of the possibilities of smart technology, will become co-managers of their own heritage.

of self-criticism and have identified opportunities of improvement in their methodologies. Could you tell us more about this new interpretation of the dialogue between the different actors involved in the restoration action? For example, I am thinking about Palazzo Butera which is a virtuous example of how an effective dialogue between professionals and institutions can result in an intelligent restoration showcasing a desire to find a compromise with opennes, since compromises are sometimes the key to making the action on Cultural Heritage useful and accessible.

RP Difficult to answer this question in a short time! My position is not a new position, but it is the prevailing position within the Restoration Scientific Society, taking for granted that, as in any other group, there may be for sure positions that remain more isolated, and that continue to see restoration from a perspective that leaves little room for action. Even this perspective is not to be despised, but maybe it can be suitable only in certain isolated cases: I'm thinking, for example, to the restoration of cathedrals or other untouchable mega monuments, but I believe that in every other scenario, such a rigid position would be far to excessive, to say the least. Mine is now the prevailing position in the world of restoration in Italy, a world very often misunderstood or little known because of the fact that, at some point, a disconnection between different disciplinary areas

occurred, leading to a lack of communication that brought too many people to believe that, even today, our discipline continues staying attached to those megalithic positions that have actually alredy been overtaken a long time ago. Unfortunately, we do not yet have a proper and real dialogue with the guardianship bodies also because, not wanting to play any blame game, they have spent the last few years behind their desks, escaping these crossdisciplinary contaminations that have brought to their unaware decision to remain clinged to a conceptions of restoration as retrieval, and even return to a prior original state. Of course, there are also isolated cases, such as the aforementioned Palazzo Butera, where people, rather than institutions, who shared the same positive and dynamic perspective have been able to meet, but these remain fortuitous event that, unfortunately, cannot be generalised at a national or even regional institutional level. Today we observe that more and more associations are very active after years of inactivity, and we can feel the wind of change bubbling like lava from below, and pushing a change that we ourselves are learning from the bottom-up rather than dictating it top-down.

**ELP** The PhD student reports her personal experience on the theme of inner areas, as she

comes from the Madonie territory, an inner area of Sicily. Many young emigrants, today, would be willing to return to the Madonie. A problem that often emerges with respect to the depopulation of inner areas is attributed to the lack of work, for which young people are increasingly forced to emigrate to find work. In September 2018, some young people from Petralia Sottana subjected a survey to the emigrants of the Madonie area, addressing the issue of depopulation. One of the questions that found the most interest is linked to the question of work, it was asked: "Ideally, with the same working or study conditions, would you be willing to return to the Madonie?" 39.1% answered no. A fundamental fact therefore emerges: the lack of work is not the only cause of depopulation but, even, it could be a consequence of a much more complex and difficult to notice territorial situation at a first superficial analysis.

**RP** The professor argues that the work aspect is changing due to the Covid-19 pandemic. During this period smart working has developed a lot and several wonderful initiatives have been born such as South Working. Young people have understood that the quality of life in inner areas is higher than in large cities, such as Milan.

**ELP** The PhD student says that many people returned to inner areas during the pandemic, thanks to smart working, but to date most of them have been forced to return to their physical places of work. Another problem linked to depopulation refers to the lack of essential services for life. In inner areas, the right to health is often denied. Specifically in the Madonie, the only hospital is located in Petralia Sottana and in recent years it has been severely weakened. In addition, the road network is in a bad state of maintenance and connections with cities are limited. Allowing people to live in internal areas means creating the boundary conditions guaranteeing services and rights.

**RP** In this context, the SNAI (National Strategy for Inner Areas) is working in order to guarantee essential services to the population.

**ELP** The bond between people and the territory, cited by Prof. Prescia during her speech, is present and strong in every young person, but unfortunately the conditions and opportunities to return to live in inland areas are not so frequent. According to the PhD student La Placa, a very important aspect is the education imparted by the parents. The generation of "Millennials", of which she is part, grew up with the idea that emigrating was the best condition to have more job opportunities. She believes that today, young people have to change the paradigm.

**RP** The professor argues that young people should accept new challenges, bringing forward new ideas and developing entrepreneurial skills, naturally accepting the risks that come with them. The issue of depopulation is a complex problem.

**AG** I was thinking about the conception of an island as a periphery, asking myself about this point of view in territorial terms. I would like to know whether the population of this island has some property of the land, and if they have or not the chance to make decisions about the local territory. Reflecting about the difficulties of the local management in those distant areas, I'd like to ask: would this island territory needs a different statute or legislation than the major regions, and the non-peripheral areas

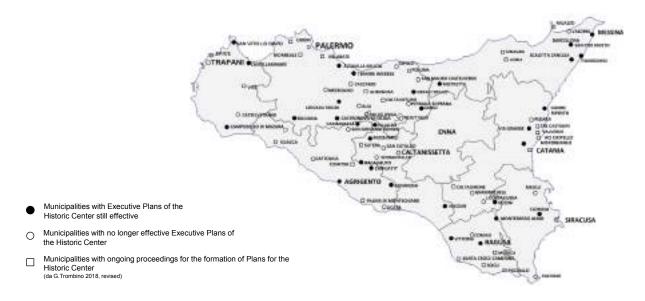


Fig. 6 . Limited planning action in Sicily

allowing maybe more access for the inhabitants to the property of the land, more participation in the local management, and simplify for them some bureaucracy processes?

**GM** It is clear that there are very specific conditions, and it is very difficult to generalise even in terms of regulations that may apply in all cases. Research is conducting a census of these areas, they are all disused areas, so they are all unused quarries. Some areas within the island pose completely different issues than those we have now seen in Favignana, so within the census we are also trying to build hypotheses of categories, or at least family memberships, of issues and themes that need specific and direct looks.

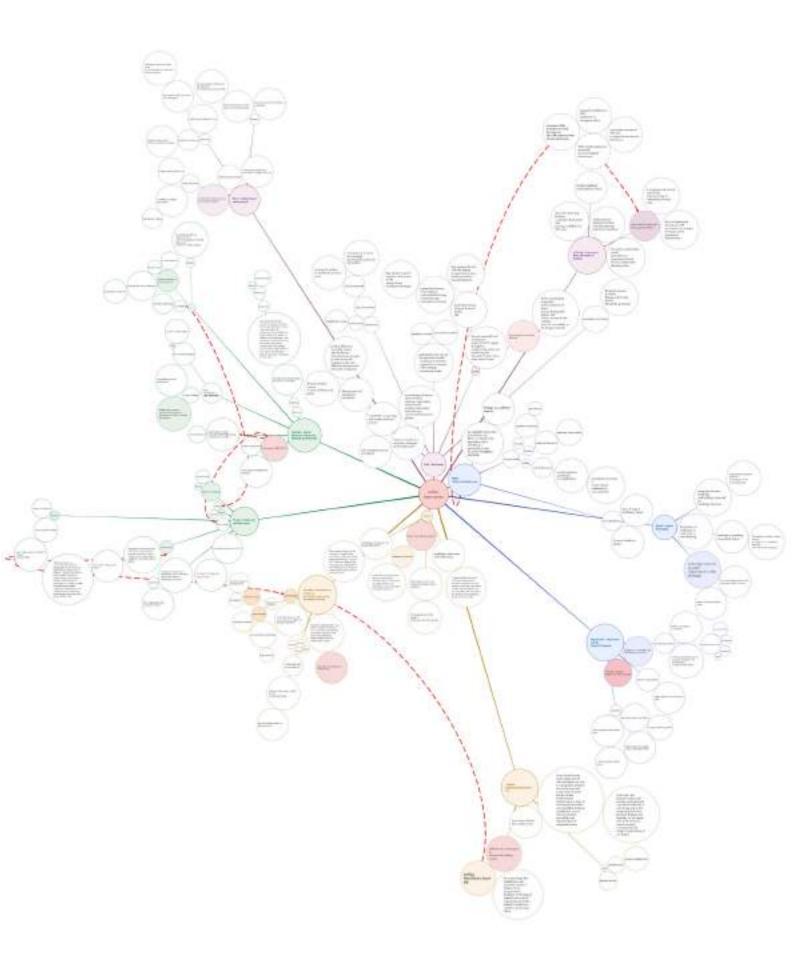
Islands in particular are so because they are peripheral by condition, more than their etymological meaning, they are not only around the centre, but also far from the centre because there is water separating them perceptually, physically, from many points of view. So in this sense, specific reasoning is also needed from a normative point of view. The interesting thing about citizen involvement is that many of these quarries are private, only a few are publicly owned. This is little by little, slowly producing activism by these owners, in the possibility of reusing these quarries. A very happy example, not in Favignana, but in Mazzara del Vallo is of an artists' collective called 'periferica', which has adopted one of these guarries and is continuing to adopt others. Private property allows citizens to play an active role in these transformations. But it is clear that if there is no overall direction and no strategic vision of their future, there is a risk of partiality, and vice versa, it could be that of having projects that go too far in a dimension of dispersion of the general objectives,

which for me always remain the conversion of this heritage -very important from many points of view, testimony, history, material history, economy, etc.- within a perspective that must be general, and that must have the ecological transition as the final horizon.

That's why in our proposal we have identified these five goals of the 2030 agenda, which would be quite easily achievable within this territory, due to a series of conditions that the quarries present, not least this issue of water, because the quarries have a certain depth, and because beyond a certain depth they cannot go because in Favignana there is an aquifer very close to the earth's surface. This, which was a limitation at the time when tuff was produced - because wet calcarenite was not useful for construction - today it would be enough to dig a few more metres to find water. This is relevant on an island that is a slave to the tanker that has to bring water at exorbitant costs to ensure the supply of its citizens, so you can well understand how a conversion of this heritage, starting with water, would also open up scenarios of selfsubsistence, not only of economic sustainability but also of vital sustainability, and would allow, for example, the irrigation of vegetable gardens.



Fig. 7 . Aerial view of Ciminna



Opening image: Study outline relating to the contributions proposed within the special issue. The colours represent the various disciplines: architectural design, history of architecture and restoration, technology for architecture and planning, (elaboration by the author).

# Inner Areas between theories and practices. An ongoing laboratory.

Gloria Lisi

# Abstract

The contribution proposes a reflection on the laboratories that are being formed in inner areas, and in which universities and researchers play a central role both from a technical point of view and in the advancement of theoretical reflection. The article is structured in four parts: it starts with a framework on inner areas as a place of fragility and opportunity, it moves on to the laboratory dimension that is triggered in the relationship with institutions, such as the university. It concludes with a reflection on the rooting dimension that the laboratory engenders in a territory.

Keywords: Laboratory, Inner Areas, Communities, Rooting research experiences

# Introduction

"Laboratory" is a word derived from the Latin "labor", carrying with it the meaning of effort: associating the term laboratory with the concept of inner areas thus becomes more appropriate than ever. This contribution concludes the special issue of Infolio 40 dedicated to the Inner Areas, born during the conference promoted by Professors Filippo Schilleci and Emanuela Garofalo held in July 2022 at the Department of Architecture of the University of Palermo. This text is an attempt made to grasp what has been brought by the contributions, the cross-references, the shared bibliographies and the reflections that emerged during the two days of study. In particular, this text takes a transversal look at the contributions proposed which, despite belonging to different disciplines of the spatial design, concur in defining common strategies and renewing increasingly important theoretical-cultural trends in the approach to territories and communities, so-called, internal. The text is structured in four main parts. The first focuses, on the one hand, on the critical dimension of being (at) the margin, and, on the other, on the opportunities brought and generated by inner communities and territories, such as to determine

self-managed design. Following this framing and look through the abandonments and reconquests (as the subtitle of the monolithic «Riabitare l'Italia» states) [De Rossi, 2018], the text continues with a reflection on the importance of university research as a laboratory. Indeed, the encounter with communities and their territory is an increasingly important situated exercise to make the transition from the study of functions to the understanding of territorial uses, to the comprehension of practices as an independent apparatus to be intercepted and through which to operate. The topic of the laboratory thus becomes the common thread running through the various themes proposed by the contributions, building a dense network of cross-references between the several disciplines of the project: architecture, restoration, history of architecture, technologies and planning. The third part consists of an analysis of two key concept common to the contributions collected in this issue: sustainability and co-production. In conclusion, the text offers an insight into the laboratory attitude as a rooting research practice for universities, also referring to the practice of walking through territories as a particular possibility of temporarily "inhabiting" them.

their possibilities of self-definition and, in some terms,

Postface

# Inner areas. Places of/on the margin, places of opportunities

As Sargolini and Pierantoni observe in their reflections on the term "inner areas", in order to understand the origin of this definition, it is necessary to confront research strands that attempt to frame processes of marginalisation, territorial (and cultural) isolation, heritage degradation (in its most complex and broadest conception) and, finally, that attempt to define processes of sustainable local development [Sargolini, Pierantoni, 2022].

# Abandonments

The marginality referred to in this context is not exclusively related to the geographical context, but rather to the deficit of citizenship rights, i.e. of all those services (socio-health, for schooling and related to mobility) that determine the habitability of a territory. This new conception, well expressed within the contributions in this issue, refers back to the concept of inner area developed by the national policy called "National Strategy for Inner Areas" (SNAI), settled ten years ago by Fabrizio Barca, when he was Minister for Territorial Cohesion, in Italy. Numbers, datas and some implications are already presented in the preface of this special issue by Lombardo, not only in the Italian context, but at the international level: information necessary to highlight how the exercise of citizenship is more complex in the areas addressed, but also how possibilities often arise from place-based experimentation policies.

The territories, since the implementation of SNAI are, rightly, understood with respect to their fragilities, but in the proposed contributions they become subjects that implement a process of "shifting of gaze" and consequently of meaning [Montanari, 2020]: they begin to be observed and to observe themselves as an opportunity and not as a mere problem to be solved. It is possible, therefore, to identify a processuality in the researches on the topic. Initially, it was necessary to recognise and read criticalities. This started to occur when the margins began to "collapse" on the poles, unfortunately, not always figuratively speaking: the case of landslides in the Liguria region dictated by overbuilding and land abandonment is sadly well known. Moreover, the interest towards inner areas started when confidence in the city life style began to waver (a sentiment even more evident during the recent pandemic period). In this context, the external territory once again became central, despite the fact that the complexities on communities living the margins had been making themselves felt for decades, leading to depopulation, impoverishment and a crisis of

services, of political representation and, so, of identity. What were we missing while courting the city and metropolitanity? A very rich historical and architectural heritage (a list of it is impossible to be written; in this issue, an insight is given by Millàn, Campisi, Lo Piccolo, Germanà, Mei and Marsala and Garofalo and Antista); an artistic heritage at times silenced to invigorate the great urban exhibitions [Montanari & Trione, 2017] [Fig.1]; a vast landscape heritage that was legitimised to be exploited (even impoverishing it) as much as possible. In particular, in this latter sense the risk is still valid, especially in relation to the renewable energy industry (particularly predatory in southern Italy) and the increasingly extractive tourism industry.

Thinking of inner areas as a reservoir for urban needs, such as, for example, the fever of tourism,



Fig. 1. Madonna del Parto (1455). Fresco by Piero della Francesca, preserved in Monterchi (AR) one of the municipalities in central Italy belonging to the "intermediate inner areas" that can be reached by crossing the Cerfone Valley. It attracts around 30,000 visitors every year to the small municipality (of 1,742 inhabitants).

transforms the fragile local productive economies into an increasingly single-sector direction (that of tourism, precisely), making them even more dependent on urban dynamics and trends. With regard to this tourist inclination, I propose the famous and complex case of Civita of Bagnoregio, the so-called "dying city", which, in its dying process makes merchandise and a spectacle of itself [Attili, 2020], attracting hundreds of thousands of tourists from all over the world every year<sup>1</sup>. This shows a certain purely aesthetic and "instagrammable" fetishism in dealing with the loss/death of almost completely uninhabited villages. For this reason, the following consideration advanced by sociologist Filippo Barbera during an interview is even more meaningful: Inhabiting is a complex function and it means making biographical investments, of meaning for oneself and one's children [...] linked to everyday inhabitance. Inhabiting is something that requires effort. [...] Moreover, the sad aspect of which we must take note is that not everything can be inhabited again: in the idea of village there is also death. Villages die! Depopulation has reached such levels that we will have to consider the idea that not everything can and will be saved<sup>2</sup>.

Based on this awareness of the fragility of inner areas and their endangered richness and starting from the provocations brought by Rem Koolhaas in his text «Preservation is overtaking us» [Koolhaas, 2014], it is essential to take note of the fact that it is necessary to go beyond the idea of inner areas as «mere patrimonial deposits to be preserved and enhanced» [De Rossi, 2018: 6]. This attitude, turning into projects, policies and plans, cannot be limited to being defensive [Gambino, 1997]. Inner areas, as identified by complex indicators that are constantly being updated, are such for structural reasons. Consequently, narratives, planning and management that propose and iterate a disenchanted vision of the effort that these territories embody can only be harmful: it is necessary to go against a postcard landscapeism, reductive with respect to both the complexities and the vitality of these places, as highlighted in Sbacchi's text in this collection. Reconquests

Most of the contributions reported here highlight a phenomenon affecting many inner areas: the



Fig. 2. This photograph shows the road sign pointing towards Civita, a district of the municipality of Bagnoregio (VT) in the Tuscia region. The writing under the name of the locality specifies 'the dying city' due to its particular erosion problems. The locality has 11 inhabitants and attracted one million visitors in 2019. As of today, it is on the proposed list to become a UNESCO World Heritage Site.

understanding of them not as a problem or criticality, but as a space with positive potential. These are revitalisation and regeneration projects with new entrepreneurships that play a key role in rethinking the places themselves, generating the break that distinguishes geographical marginality from socialeconomic marginality.

Some practices and experiments are:

- community cooperatives in the Apennines of Emilia, with a great effort to pool collective goods, creating micro-economy initiatives at a local level that are very important for a process of reterritorialisation;
- creation of micro-entrepreneurship (as highlighted by the contribution of Bosch, in Spain);
- energy communities, for example the Sustainable Energy Action Plan of the Municipality of Sasso di Castalda, in Basilicata;
- experiences of culture-based innovation (as highlighted by the contribution of Prescia, in Sicily);
- resettlement phenomena in the Alps.

«[...] Without excessive reliance on self-organising processes alone» [Lanzani, 2020, 127], these are some of the examples that open up the second part of the text, where the agency of territories to transform themselves is highlighted, reacting with great effort to the complexities: interesting reflections to observe in a laboratory and experimental sense by research.

# Research, experimentation and the conference as a laboratory on/with inner areas

[...] even this planning effervescence, which, against all expectations, animates many inner areas today, can be exhausted in a flash if it does not find adequate support and if it does not become the key to launching a new cycle of territorial policies, marked by a different philosophy, of which these experiences represent an experiment, or at least a premonition [Sacco, 2018, 541].

Starting from this lucid observation by Sacco who warns again to have a disenchanted gaze that understands the narrative and transformative power of practices, we understand how the university plays a central role. Indeed, with its leading position dictated by the privilege of being at the forefront of research, the university proposes increasingly place-based studies, determining innovative forms of interaction between communities and places. Furthermore, the reflections put forward by the researches have a collective and genuinely political impact, an example is given in Lo Piccolo's contribution: the repercussions on the territory are concrete and not always in line with the expectations or goals set by organizations and institutions. In other words, if the proposed projects and analyses are disciplinarily anchored, they inevitably have an important influence on the space and life of local communities. The most pursued methodology within the special issue includes the use of case studies. This approach is read through the theoretical structuring that Crosta makes in his volume «Pratiche. Il territorio "è l'uso che se ne fa"» [2010]. In one of his essays, Crosta tackles the issue of decision-making, which in the disciplines under consideration pertains to the project dimension in the broadest sense, highlighting the "interactive dimension of action", and states:

The actual unfolding of this [action] brings into play "unintended consequences": by interacting with each other, actors exchange unintended effects, influencing each other even without having the intention to do so. Now, these consequences, which are often important, can only be dealt with in the course of the interaction, when they manifest themselves, and are not, therefore, to be anticipated in the actors' decisions; not because they are unforeseeable, but because it is only during the action — and because of the interaction — that they manifest [Crosta, 2010, 113].

In this way, it becomes clear how some of the researches reported in this issue were strongly influenced by the situated study of the experience described. Through case studies adopted as narrative, analytical or project expedient and through the observation, improvement or implementation of the self-determining capacities of inner areas, the university has power to promote resonance among rooted dynamics. Moreover, Crosta's proposed quote describes the distinction between functions, uses and practices. Functions are a macro-category describing prevailing uses in a given space. Uses are a category that allows for a deeper understanding of the territory, observing more closely how spaces are routinely experienced and transformed, without, however, reaching the symbolic level of use itself. As Germanà affirms in her contribution in this issue: «referring in an abstract way to the persistence of the heritage is not enough for the rebirth of inner areas and generates unsustainable uses in various ways». Finally, practices, which are the deeper category and which «refer to and are inscribed in a system of social, cultural and symbolic relations» [Cellamare, 2021, 300]. In this context, the concept of the "laboratory" as an experience of "effort" becomes more vivid. Theoretical and practical research often shows how important territorialisation processes take place in inner areas, which, as such, are specific and not re-applicable. However, it is in the coming together of analyses, visions, theories, practices and experiments that the complexity necessary for innovation is generated. The importance of the conference as a time for synthesising and sharing research is therefore part of the various laboratories already triggered in the relationship with communities (be it physical, or just on a study level).

# Through common factors

Following the underlining of the importance of the strong and difficult relationship that the scholar has maintained in most of the researches presented in this issue, we want to observe two key concepts that attempt to hold together several topics addressed by the contributions. These topics have a very wide meaning and a long-standing multidisciplinary scientific literature, namely "sustainability" and "co-production". Through these two key words, this text goes over the most relevant aspects according to the statement proposed: laboratory as a space (material and immaterial) of effort.

# Sustainability

The concept of sustainability, which appeared in more abstract terms during the 19th century, among others in the contributions of Alexander Von Humboldt, became an object of great global interest in a first moment starting from the text «The limits to growth» [Meadows & Club of Rome, 1972], and in an even more concrete way starting from the Earth Summit, in 1992. Two centuries, fifty and thirty years have passed respectively since these fundamental moments in relation to the concept of sustainability. To date, the concept is understood beyond its tripartite division into economic, environmental and social dimensions, with respect to which a moment of synthesis and intersection must be found. Sustainability, today, has a multidimensional value linked to materiality (resources and their management), immateriality (society and its actions) components that break through the barrier of the present time. The diagram shown here [Fig. 3] displays how the economy, society and the environment do not intersect, but are part of a system of subsets in which the landscape is the major one. A dynamic and therefore variable landscape in visions, uses and interpretations The concept of "caring use" advanced in Germana's contribution moves in this direction. The landscape projects proposed in the contribution by Mei and Marsala relate to the theme of scarcity and intend the landscape as the favorite place for the circularity of the island's economy (system, in some ways, closed). The attention paid to traditional construction and selfconstruction in Bosch's text brings the third university mission closer to the real construction of sustainability. Similarly, the search for an integrated project in the contributions of Millan (from an architectural point of view) and Prescia (from a restoration point of view). Finally, two specific nuances of sustainability can be observed in the contributions of Lo Piccolo and Vinci: in the first, the friction that is generated in the attempt to hold together performative tools with local tools that are still of a conformative nature; in the second, attention is paid to sustainability in the relationship between the parties, in particular between cities and rural areas.

# Co-production

Ostrom, in her essay titled «Crossing the great divide: Coproduction, synergy, and development» [1996], concludes by stating «No market can survive without extensive public goods provided by governmental agencies. No government can be efficient and equitable without considerable input from citizens. Synergetic outcomes can be fostered to a much greater extent than our academic barriers have let us contemplate». Technical skills are a fundamental component for development: it is necessary to put the realities of the internal areas in a position to be able to design. The technical preparation and the possibility of developing projects therefore belongs to the logic of competences, advanced in Campisi's text through the definition of a new technical figure, the Building Rehabilitation Expert (BRE). This logic of competences is contextualized

by Bosch's text, according to which the goal is not to expropriate the creative and planning capacity of the inhabitants, but to put the latter into a system with degrees of complexity (economic, technological and environmental) always greater thanks to the synergies referred to by Ostrom.

In the same essay, Ostrom states that «coproduction is not, of course, universally advantageous. Nor, is it a process that will occur spontaneously simply because substantial benefits could be achieved» [ivi]. In the research by Garofalo and Antista it is highlighted how often the community has an apparently hidden awareness of heritage. In fact, the resources produced by the local associations and the micro-management actions have allowed not only access to places and documents, but to be able to imagine fruition paths based on management systems that are in some way already rooted. This is why, there is a great attention that Prescia's contribution places on awareness, necessary so that the concept of "monument", extended to the urban or landscape environment, is truly integrated into local policies and planning.

Finally, with regard to the theme of co-production, two other approaches are interesting. The first, shown in Vinci's text, consists in the role played by the Local Action Groups defined as "cognitive infrastructures": as an attempt at a place-based approach to local development. The second relates to the contribution proposed by Martì, which offers an overview of information collection systems through geolocated data

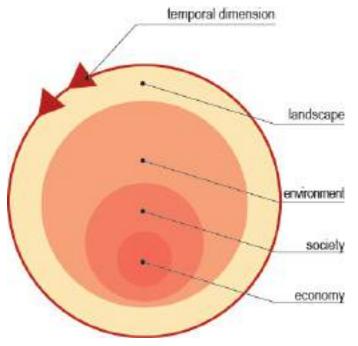


Fig. 3. This image proposes a development of the sustainability scheme presented in Butera [2021]. The sustainability of the economic system is such within that of the social system and, in turn, the environmental system. In this proposal, the sustainability of the landscape is the whole that encompasses all the others, in a dynamic and continuously updated definition.

from social networks. Previously, in this contribution, I used the neologism "instagrammable": the possibility of being able to collect datas from a large slice of the population such as the one that uses social networks can undoubtedly be a really interesting possibility for local communities to generate new strategies of promotion or of protection against phenomena, such as gentrification or touristification.

# Conclusions: laboratories as a rooting act

The studies and proposals of scientific research are grafted onto a broader cultural transformation with multiple forms: on the one hand, a general and generic trend of interest in inner areas and village lifestyles; on the other, a cultural transformation that showcases the embodied spaces of opportunity. Inner areas begin to be looked at and to look at themselves as the places where it is possible and, in some cases, convenient to develop new life and professional projects (as described in the conclusion of Bosch's contribution). Despite the fact that the studies belong to different disciplines (although always in the field of space design), some points appear clear and shared in the proposed experiences. All the contributions do not act through pre-packaged recipes to be administered to "patients in need": the attitude (in most cases, brought to light through case studies or field applications) is more "laboured". In fact, in the place-based dimension that is often proposed, the need to deal with specificities and particular values is highlighted: this allows a sort of rooting of the researcher in a territory, which is not only analyzed as a motionless body, but as a co-producer in the progress of the research itself.

Two other factors arise. Firstly, the dynamism of inner areas is captured, far removed from the bulimic urban conception. These small transformations have the potential to become part of a more complex system of sustainability, which intercepts particular values in a broader and hopefully cyclical time frame. Secondly, the demiurgic attitude of the "omniscient planner/ designer" is increasingly muted in a complexification of its role, i.e. as an actor part of a transformative process in which the project must be only a small part of the chain of changes, characterised by slowness, that are triggered in inner areas. The laboratory is therefore a privileged dimension for understanding and experimenting, taking many forms, like a working space for communities and researchers, a (theorical) field of investigation, a network to be analysed or a medium, a posture. Regarding this last meaning, I would like to propose a concluding reflection: to intercept the ripples of territories and communities, often not comprehensible just by maps, datas and books, a privileged posture is that of the researcher who walks<sup>3</sup>. In fact, the slow temporariness to which the walking method obliges allows the researcher's attentive and seeking gaze to reveal clearer nuances, relationships, forms and dynamics in the sensory sphere, transforming the act of walking into an instrument. One more tool to add to the toolbox to tackle the complex laboratory that the inner areas have opened up for us.

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# Notes

1. In this link it is explained a strategy to "spread" thewealth produced by Bagnoregio small historic centre's international fame over the territory of Civita https://civitadibagnoregio.cloud/ticket-a-civita/ (last access on 30.01.2023).

2. The quotation consists of the translation (by the author) of excerpts of an interview made with Filippo Barbera, titled "Vendere case a 1 euro è inutile?" (Is selling houses for 1 euro useless?). It is available (in Italian) at the following link https://spreaker.page.link/Gos4h31tWtV56N9K6 (last access on 30.01.2023).

3. The Department of Architecture is part of the interuniversity network of the Laboratorio del Cammino. It is a network in which professors, researchers and students walk as a practice, as understood by Crosta [2010], to achieve the "awareness" referred to by many of the contributions collected in this special issue in the reciprocal influence that is generated during the encounter between designing subjects: some because of their discipline (architects, designers, planners), others while the construction (of meaning) of their own territory.

# References

Attili G. (2020). *Civita: Senza aggettivi e senza altre specificazioni*, Quodlibet, Macerata.

Butera F. (2021). Affrontare la complessità: Per governare la transizione ecologica, Edizioni Ambiente, Milano.

Cellamare C. (2021). "Pratiche dell'abitare e appropriazione dello spazio", in Pizzo B., Pozzi G., Scandurra G. (eds), *Mappe e sentieri. Un'introduzione agli studi urbani critici*, editpress, Firenze, pp. 295–302. Crosta P. (2010). *Pratiche. II territorio "è l'uso che se ne fa*", FrancoAngeli, Milano.

De Rossi A. (2018). *Riabitare l'Italia: Le aree interne tra abbandoni e riconquiste*, Donzelli Editore, Roma.

Gambino R. (1997). *Conservare innovare: Paesaggio, ambiente, territorio*, UTET libreria, Torino.

Koolhaas R. (2014). *Preservation is overtaking us*, GSAPP Books, New York. https://www.arch.columbia.

edu/books/reader/6-preservation-is-overtaking-us Lanzani A. (2020). "Fragilità territoriali", in Cersosimo

D., Donzelli C. (eds.), *Manifesto per riabitare l'Italia*, Donzelli Editore, Roma. pp. 121–127.

Meadows D. H., Club of Rome (eds., 1972). *The Limits to growth: A report for the Club of Rome's project on the predicament of mankind*. Universe Books, Segrate. Montanari T. (2020). "Elogio dello Scarto: dall'Italia al margine la «mossa del cavallo»", in Cersosimo D., Donzelli C. (eds.). *Manifesto per riabitare l'Italia*.

Donzelli Editore, Roma, pp. 13-20.

Montanari T., Trione V. (eds., 2017). Contro le mostre. Einaudi Editore, Torino.

Ostrom E. (1996). "Crossing the great divide: Coproduction, synergy, and development", *World Development*, 24, 6, pp.1073–1087. https://doi. org/10.1016/0305-750X(96)00023-X

Sacco P. L. (2018). "Il vuoto al centro. L'innovazione sociale a base culturale", in De Rossi A. (ed.) *Riabitare l'Italia: Le aree interne tra abbandoni e riconquiste*, Donzelli Editore, Roma, pp. 537–550.

Sargolini M., Pierantoni I. (2022). "Aree interne", *Urbanistica Informazioni*, 305, p.117.







#### DOTTORATO DI RICERCA IN ARCHITETTURA, ARTI E PIANIFICAZIONE DIPARTIMENTO DI ARCHITETTURA DI PALERMO

# RIVISTA DEL DOTTORATO IN ARCHITETTURA, ARTI E PIANIFICAZIONE DELL'UNIVERSITA DEGLI STUDI DI PALERMO – DIPARTIMENTO DI ARCHITETTURA

IN QUESTO NUMERO:

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