

Knowledge and conservation of Mediterranean spontaneous architecture: some of the villages of the northern Tyrrhenian coast of Calabria

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Abstract

The paper proposes a reading of the rural architectures of the northern Tyrrhenian coast of Calabria, where structures linked to the agricultural activities and residential buildings coexist side by side. Knowledge about local constructive culture and the conservation of rural emergencies allows to highlight variations of base principles of Mediterranean architecture, in which specific typologies are created spontaneously as a solution to constructive problems and in which anthropic and geomorphologic values are entwined creating deep relationships with the environment and the identity of local communities. The paper analyses the residential types that, through the variety of architectural responses, reveal a sensitivity that can be reconnected to an attitude common to the entire geographical area, related to the place, to its morphological and environmental characters, produced by plans based on rational and geometric principles. All this finds validation in a landscape designed by almost spontaneous buildings that are placed in a scattered but rational way among the territory. Therefore, the paper proposes the understanding of rural architectures, nowadays often abandoned, that can give birth to actions of recovery and to the conservation of ancient knowledge.

Keywords: Knowledge; Mediterranean; rural architecture; identity.

1. Introduction

The essay focuses on some of the most noteworthy instances of rural architecture in the northern part of Calabria, exactly on the Tyrrhenian coastal area. This geographical space is distinct for its strong landscape value, whilst still poorly investigated. This scenery is punctuated by a series of mountain villages currently depopulated and risking abandonment. In their built fabric, these hamlets show the signs of a building knowhow that derives from a rural matrix common to the entire Mediterranean area.

Through a methodological process of understanding, historical-critical readings and different analytical procedures have been carried out to recognize the identity characters (formal, typological, materic-constructive) of these villages.

The aim of this paper is to analyze the different types of housing that testify a building sensitivity common throughout the entire area, despite the diversity of architectural outcomes. Owing to the consciousness of the morphological and environmental characters of these places, we can highlight the rational and geometrical principles on which these structures were built.

2. Territory and historic settlement

This paper analyses the rural building types of the northern Tyrrhenian area of Calabria, a territory enclosed between the sea and the Apennine mountain chain, known by the toponym of *Riviera dei Cedri*.

This territory includes the municipalities of Scalea, San Nicola Arcella, Santa Domenica Talao, Santa Maria del Cedro, Orsomarso, Grisolia, Maierà, Diamante, Buonvicino, Belvedere Marittimo, Sangineto, Bonifati and Cetraro and is at the same time manifold and homogeneous. Many are the shared elements and exceptions that can be traced in these very ancient settlements. Topographic and orographic features of these hamlets have been influenced by their role of economic connection between the mountains the valley, due to their barycentric position in this territory.



Fig. 1. Map of northern Tyrrhenian area of Calabria. Study area (Source: Bilotta, 2022).

The geographical position and the relevant presence of the sea, has made this area the setting of commercial exchanges, but also of raids and invasions. The indigenous culture, influenced by different foreign ones, together with the need of protection and livelihood of the locals, has pro-

duced a vast and diversified built environment that is however adherent to the Mediterranean architecture types. The simplicity of the shapes, pure volumes and poor decoration are the unmistakable invariants of this cultural area. This results in a fabric made of base buildings that might appear spontaneous and random, while actually answering to the specific needs of a geographical region and its inhabitants.

Rural, agricultural, and spontaneous architecture are always the result of local resources, both in terms of labour and materials. According to the environmental, social and cultural conditions of an area, this architecture becomes flexible, evolving and adapting itself to the context. In most of Southern Italy's historical centres, rural and base architectures are the product of the layering of signs and languages that are deeply linked to the morphological, climatic and environmental features of a place, from which constant and variable elements derive. The ensemble of the traces and the evolution of this landscape and architecture define the identity of these locations, reflecting the needs of its populations and becoming the image of a specific way of living¹. Consciousness about this heritage allows to preserve knowledge, memories and ancient know-hows that are the consequence of the relationship between nature and built environment, between human and anthropized space².

In the examined area, the layout of the built environment is complex and deeply linked to the morphology of the landscape, made of mountains, a hilly intermediate area and narrow coastal plains. In this orographic scenery, settlements are arranged harmoniously from upstream to downstream. The historical centres are several and placed on ridges, plateaus and steep mountainsides. This means that although they might seem close in planimetric terms, the con-

¹ Mario Brunati, *Architettura senza architetti*, in «Casabella», n.297, settembre 1965, p. 90.

² Lucio Gambi, *Una geografia per la storia*, Torino, Einaudi editore, 1973.

nection between them might be quite difficult because of the harsh landscape³. Usually, these settlements stand a few kilometres from the coastline, following the slope and occupying coastal areas, promontories, hillsides, and the hinterland. Along with the natural morphology of the landscape, the foundation sites of these settlements were defined according to defensive purposes, also resulting in an intricate system of defensive constructions. Built since the 12th century and thriving during the 15th and 16th centuries, towers and castles are mostly erected on prominent places together with monastic complexes and villages, from which the first forms of settlements historically stemmed.

The shape of buildings and streets in these historic centres is related to the orography as well. The village, in which the matrix and implant routes can be easily identified, is made of curvy streets that follow the natural elements on which they stand. This model should be intended not only as an adaptation to the territory, but also as a voluntary act of not imposing the presence of man in the natural context.



Fig. 2. Historic settlement. San Nicola Arcella and Belvedere Marittimo (Source: Bilotta, 2016).

³ Rosario Chimirri, *Architettura popolare in Calabria: tradizione ed innovazione*, in Saverio Mecca (a cura di), *Architectural Heritage and Sustainable Development of Small and Medium Cities in South Mediterranean Regions*, Pisa, ETS edizioni, 2004, pp. 408-422.

The medieval villages are characterized by a mainly pyramidal structure in which defensive buildings, boundary walls, castles, towers and city gates are always placed on one of the vertices. Beside these relevant elements, minor constructions are widespread and show basic characters, repeating themselves along the narrow alleys, interrupted by small widenings that become the centre of the social life of the hamlet.

Invariant elements that Mediterranean settlements derive from Oriental culture are the sudden changes of directions and frequent angulations of the streets, the consequent angulation and rounded angles of buildings, streets covered by buttresses, arches, external stairways, bayonet streets, and abrupt widenings.

Very few are the erudite exceptions that can be identified in these systems. These urban agglomerations are grown and matured by a continuous sum of housing units, typologically retracing the typical characters of the villages of Southern Italy, mainly inhabited by farmers and shaped as rural, agricultural or artisan settlements. The buildings derive their organisation from their functional purpose, which commonly is a mix of residential and productive, therefore lacking of geometrical schemes and precision.

The most common type is the terraced house, characterized by a limited surface and usually developed on two levels, in which the ground floor is used as a workshop, a storage or an animal shelter, and the upper floor is the actual house. The attic sometimes features the wood-oven for baking, but more commonly, it becomes a storage space. The blocks of houses are compact and usually all four sides are built; therefore the units are unified in a single line, sharing the side walls while the other two sides overlook the street or private courtyards. Variations of this type are obtained by connecting horizontally two units and others by building against rock walls.

2.1. Example of rural village

Santa Domenica di Talao is one of the most representative villages of the northern Tyrrhenian area of Calabria because of its location between the coastline and the Pollino National Park. Calabria is a Region made of the unceasing succession of mountains and coasts, between two seas (Tyrrhenian and Jonio). Santa Domenica di Talao is placed in the North-West, a unique setting where the landscape of the Pollino Massif meets that of the Riviera dei Cedri. This small settlement stands on the side of the karstic mountain of Serra la Limpida, in the lowest part of the course of River Lao.



Fig. 3. Continuous curtain. Scalea (Source: Source: Bilotta, 2016).

The urban and architectonic history of this rural village is deeply linked to that of Scalea, not only for of their proximity, but also because it once was part of the possessions of the Spinelli, princes of Scalea, along with San Nicola Arcella. The historic core of the village was built in the 17th century, when the Spinelli family wanted to extend and reorganise their land, exploiting this area traditionally used for grazing.

According to Lamboglia «Giovanni Andrea La Greca from Mormanno and a certain “Sergio” from Lauria, a “sharecropper of ox and cows”, during the winter would have brought their herds towards the Lao valley to avoid the rigid cold of Mormanno»⁴.

⁴ Saverio Napolitano, *La formazione di un borgo nuovo nella Calabria moderna: il caso di Santa Domenica Talao* in « Archivio storico per la Calabria e la Lucania », 2005, p. 155.

Later on, the prince assigned to La Greca some houses to settle in that territory and start populating the area, with a timid action of urbanization.

As it commonly happens in the mountain centres castled around the fortress or religious buildings, the settlement will be built near the Mother Church dedicated to Saint Giuseppe.

The structure of the historic centre is typical of the villages built on slopes, with a spontaneous development that mainly follows the different height leaps with streets partly made of stairs and with suggestive buttresses, similar to those found in the nearby Scalea.



Fig. 4. Rural village. Scalea (Source: Bilotta, 2016).

Albeit it was born as a rural settlement devoted to agriculture and pastoralism, Santa Domenica has enriched its built fabric through time. Along with the two storey terraced houses, slope houses sometimes erected against rock walls and *profferlo* (external staircase), many *case palaziate* (the Campagna, Perrone, Schiffino, La Greca palazzos) were added. This type features a limited architectural lexicon, characterized by finely moulded stone portals on the main facade. Similarly to the modest peasant houses, noble dwellings comply with the rural vocabulary as well, especially in the fact that the ground floor mainly hosted utility spaces such as stables, cellars, furnaces for baking, rooms devoted to dairy production, etc.

The building material used for these structures was local stone in different shapes and dimensions, mixed with river pebbles and interspersed with beddings of bricks. The roofs were com-

monly made by a wooden structure and a cladding made of roof tiles. In the lowest part of the historic centre, there still is a sequence of rural houses with essential features, made of a single room, storages for the farming tools, and shelters for the animals.



Fig. 5. Profferlo house. Santa Maria del Cedro (Source: Bilotta, 2016).

It is easy to understand that the settlements scattered in the rural landscape, full of vegetation and overlooking the sea, often crossed by small watercourses, is one of the identity features of this area. Until the 17th century, along with the aforementioned cedar tree, this area was richly cultivated with *cannamelo* (i.e. sugar cane), cotton and mulberry, mostly used to nourish silkworms. Thus, many were the factories for the processing of these products. In spite of these crops and related activities, agriculture was severely hampered both by feudal tyranny⁵ and by the geographical conformation of the land, which often meant that cultivated plots were far from inhabited centres. This resulted in numerous residential and productive buildings scattered among the countryside, reflecting different ways and places of living and following precise architectural and technical rules. Their simple compositions and peculiar solutions were determined by environmental and natural factors typical of sustainable buildings.

⁵ For example, on this territory there could not be any olive-presses other than those of the area's lords.



Fig. 6. Streets stepped. Santa Domenica di Talao (Source: Bilotta, 2016).

These architectures are spread across this territory in a jagged and apparently disordered way, but they define a permanent relationship between character and background, between natural and artificial, in which built elements and natural landscape give birth to a system that is structured, balanced and deeply adapted to the territory.



Fig. 7. Rural settlement. Belvedere Marittimo (Source: Bilotta, 2016).

These spaces, both built and unbuilt, urban and rural, are characterized by the use of specific materials and building techniques, but also by physical, functional and visual relations typical of a rational architecture that links form and function, developed as the expression of living needs⁶. The area is characterised by the presence

⁶ Giuseppe Pagano, Guarniero Daniel, *Architettura rurale italiana*, in «Quaderni della Triennale», Milano, U. Hoepli, 1936.

of small settlements and isolated scattered houses, which in both cases refer to the composition and development of rural houses, namely dwellings that reflect adherence and functionality to the productive type. They mirror the essentiality and uncertainty of a living space.



Fig. 8. Rural house with oven. Santa Maria del Cedro (Source: Bilotta, 2016).

Generally, the buildings are very simple, lacking in decoration and featuring few small openings. Beside rare moulded stringcourses, vertical bands and frames around the openings, there is not a modularity in the definition of the spaces. When present, balconies are very narrow.

2.2. Examples of rural architectures

Regarding the prototypes of the rural houses in the surrounding districts, studies have shown that they are mainly made of two floors and built in masonry (Belvedere), stone and mortar (Bonifati), stone and sand (Majerà), and stone and lime (Sanginetto). The most common rural stone buildings used quite regular and medium sized material retrieved in the surroundings. These constructions have a quadrangular shaped plan with sides long 4-5 meters. Usually built facing towards north-west and with the entry placed on the shortest side. Roofs, covered in roof tiles, are slope and have the eaves line orthogonal to the entry side. A window is usually placed above the entry door and all openings have wooden jambs.

There also are architectures made of stone and clay (in particular in the area between Bonifati and Cetraro), in which stones were hewn as

much as possible to make them easily tessellate, and were lined up alternating layers of horizontal and transversal stones. External plaster, when present, was made of clay of mortar or with *rapillo* crushed into dust⁷.



Fig. 9. Isolated dwelling. Santa Maria del Cedro (Source: Bilotta, 2016).

A peculiar declination of the type can be found in Cetraro, in the locality called Sant'Angelo. Here, in an ancient village inhabited by farmers since the Turkish raids in the 16th century, the built fabric is compact and homogeneous, made mainly of two storey rural houses with an external stairway.

The dispersed isolated dwellings appear to be shaped according to their temporary use as day-time houses⁸. The typical base organism was used as a shelter during transhumance. Small sized, elementary buildings made of just one room. They generally were rectangular and built with irregular dry-laid stones, had roofs made of boards of poor wood, on which rocks were placed to contrast the action of the harsh wind. These rural buildings can be found throughout

⁷ Rapillo is a stone taken from ditches and tunnels similar to calcium carbonate and used as construction method in all of Southern Italy. Rossella Agostino, Francesca Lugli (a cura di), *Esempi di architettura rurale nella Calabria tirrenico settentrionale*, Reggio Calabria, Soprintendenza per i Beni Archeologici della Calabria, 2005.

⁸ The isolated types scattered in the territory out of the urban centres are already recorded in the Catasto Onciario: for example, as concerns Bonifati, we read of many possessions placed out of the centre, made of hamlets and lands farmed with olive, mulberry and fruit trees. Archivio di Stato di Cosenza (A.S.Cs) *Catasto Onciario di Bonifati*, 1753.

Calabria and in general among the entire Mediterranean area, where transhumance has been one of the most ancient forms of rural economy⁹. Examples of these simple constructions can be seen in Scalea, in the locality called Petrosa, where a settlement dated back to the 7th-6th century BC has been found on a hilltop. It is made of shelters built in perishable materials, reinforced on the basis with unrefined stones and walls and roofs are plastered with mud, usually mixed with rocks, reeds or breccia. Moreover, in Santa Maria del Cedro there is a small built area with buildings made of limestone and breccia.



Fig. 10. Shelter for transhumance (Source: Magarini, 2021).

The base types of isolated rural dwellings usually consist of one floor and two rooms, one used to cook and rest, the other used as a storage for tools or a shelter for the animals. Frequently, the combination of different functions and the small rooms could have led to conditions of insalubrity¹⁰. These constructions often have a square plan and are built in lime or clay.

The main element of the house is the hearth: long three palms and covered at the top¹¹, it was the main element of the room in which they lived. Around Diamante there are many examples of simple architectures. Lacking of esthet-

ical vestments, they were built in dry-stone with pieces chosen carefully to line-up precisely and reduce gaps, eventually filled with chips of stones. The most regular ashlars were used near openings, finished with wooden jambs, or in the corners to improve the connection between walls. Floors were made of beaten earth.

Over time, in changed conditions and needs, buildings devoted to agriculture, artisan and productive activities became more specific, giving rise to more complex types of dwellings. Beside the residential and rural types described above, there are several other buildings scattered through this territory, often in isolated areas and mostly away from urban centres. These buildings, because of the functions they accommodate, can be defined specialized, built on the need to have structures devoted to production and processing local goods.

An example can be seen in the farms made of different rustic buildings, functionally connected although not adjoined, devoted to the processing of agricultural products, to store goods, shelter animals and host seasonal workers. In the area of the Northern Tyrrhenian Coast of Calabria it is easiest to find farms that stand out for their compositional regularity, such as the structure located in Tortora known as “giardino di Julia” (Julia’s garden). This kind of buildings recall the rare model of the farmstead, like the property of the Leporini family in Diamante. In the same area, the groups of farmhouses are widespread. Significant is the one in the Fontanelle district in Belvedere, which shows a tower from the 17th century included in one of the buildings and a rural church, other feature quite common in the farming landscape.

Mills and olive presses are some of the productive buildings that can be easily found by streams in the outskirts of the villages. These structures commonly stood where the water could be channelled to obtain the power to move the mechanisms. The canal system, generally consisting of arched structures made of stone and lime, can be seen nowadays in the

⁹ Piero Bevilacqua, *La transumanza in Calabria*, in «Mélanges de l’Ecole française de Rome Moyen-Age Temp-modernes», n.2, tome 100, 1988, pp. 857-869

¹⁰ Ottavio Cavalcanti, *Architettura spontanea nella fascia tirrenica cosentina*, in «Calabria Sconosciuta», n. 11-12, 1980, pp. 61-64.

¹¹ Umberto Caldora, *Statistica Murattiana nel Regno di Napoli: le relazioni sulla Calabria*, Messina, Facoltà di lettere, Istituto di Geografia, 1960.

remains of curved aqueducts or in the ruins of some factory. The sizes of these constructions can vary widely: the mills, mostly with horizontal wheels, can reach 20 square meters, while the olive presses are usually three times bigger, although consisting of just one floor. The materials used for the masonry and vaults are stone and lime; wood was used for the roof, windows and doors; clay was used for roof tiles and occasionally for the flooring in the mills.

Findings of the remains of olive press buildings can be seen in the area around Scalea and Bonifati. By contrast, in the territory of Cetraro there are many examples of farmhouses with mills, olive presses and other storage rooms outbuildings, as reported already in the second half of the 18th century in an illustration of the Fella Feud¹².

3. Conclusions

The diversified architectural landscape that has been examined, describing the considered macro area, is today strongly deteriorated and in some cases abandoned. This condition should rise questions about the need to preserve and reuse these assets rich of traces, knowledge and identity.

The understanding of local building culture and the safeguarding of rural landmarks allows to highlight the variations on the basic principles of Mediterranean architecture. Principles based on specific typologies generated spontaneously as a solution to the building problem and in which anthropic and geomorphological values are interwoven, establishing strong links with the environment and the identity of local communities. Thus, the building characters suggest the direct and reciprocal relationship between construction and environment, responding to fundamental and recurring questions: climate, locally available and economically accessible materials, and the morphology of the territory.

¹² As already mentioned, olive presses could be incorporated in the ground floor of the dwellings, as seen in *Palazzo Giunti* in Sangineto, or in *Palazzo del Trono* in Cetraro, which is currently used as a museum.

The bioclimatic nature of these buildings is obvious in the form, but also in the materials and the technological procedures adopted. All this highlights a deep adherence to the principles of energetic sustainability, central in the modern debate about architecture.

Therefore, it is necessary to rediscover the meaning and the values that can trigger recovery actions in these villages and buildings, in order to safeguard an identity heritage made of stones and men, of an architecture that shapes the territory and is shaped by it, and is expression of sustainability and Mediterranean-ness.

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