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**THE HOLY MONUMENT ANNUNZIATA  
IN CAVA DE' TIRRENI (SA)  
HISTORICAL ANALYSIS OF THE BUILDING FOR A PROPOSAL  
OF A RELIGIOUS HOUSE OF HOSPITALITY**

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**Abstract** *In this paper it is presented a research for the enhancement, the reuse and the architectural recovery of the holy monument Annunziata, located in Cava de Tirreni (SA).*

*The Annunziata resort is one of the oldest farmhouses: it's located on the south-eastern slope of Mount Castello and it's a destination for tourists and pilgrims from all over Italy who visit the "Little Lourdes", that is a faithful reproduction of the famous French cave.*

*The large architectural complex, dating to 1506, is characterized by multiple layering, alterations and extensions and it includes the church of the Annunziata with its pertaining premises, the sacristy, the bell tower, the baroque St. Andrea's chapel and the imposing structure of the former monastery with various venues, the cloister, the oratory, the pertaining spaces open. Due to its architectural value and the amplitude of its built-up volumes, it has an important urban role in the context.*

*Starting from a thorough historical analysis of the monument and analyzing the technological and constructive systems used, it is expected to intervene by first defining a restoration project aimed at enhancing in particular the interior environments, the structural elements and finishes of the church and its pertaining premises, in full respect of the constraints of the Superintendence for the Cultural Heritage and Activities of the Campania Region, to which the building organization is subject.*

*A second intervention is then aimed at the retraining and reuse of the former monastery, including the cloister, the oratory, the perpetual areas and the open spaces, attributing the building to a new destination, that is compatible with both the typological features originated and the capacity of the structural elements, in full respect of architectural constraints.*

## 1. URBAN SETTING

The monumental complex of St. Annunziata is situated in a central position in the homonymous village of Cava de 'Tirreni, in the province of Salerno. The area is served by the Naples-Salerno railway line, by the highway A3 Naples/Reggio-Calabria, by the highway 18 Tirrena Inferiore and by main road Umberto I.



The complex object of study requires first-level settlement and environmental rehabilitation, being included in the settlements of historical-artistic interest, bound by the Territorial Urban Plan of the Sorrento-Amalfi area.

Particularly, the parish church of the St. Annunziata is subject to restoration and absolute constraint: the intervention must tend to restore the original values, with the maintenance of a destination that is the same or similar to the original one.

Any modification must be made only with methods and with the precautions of the scientific restoration, for which no increase in volume is allowed for any reason and it is prescribed the elimination of all the additions and additions of elements extraneous to the building structure, which is from its organic stratification in an age prior to 1900.

The former monastery, on the other hand, is subject to restoration and conservative restoration: the conservation of the external elements as a whole (walls and roofs) and of the typological, structural, construction technologies and materials are prescribed.

The absolute protection of the existing facades is prescribed with all the precautions for their conservation and elimination of any extraneous elements present.

In addition to the structural system (vertical bearing members), all distribution, constructional and decorative elements must be conserved and consolidated (position of vertical and horizontal connections, collective spaces such as hallways, courtyards, arcades, staircases, as well as vaults, ceilings, stone jambs, ancient floors etc.

It's possible to modify the internal distribution system only for the purpose of providing all the necessary services.

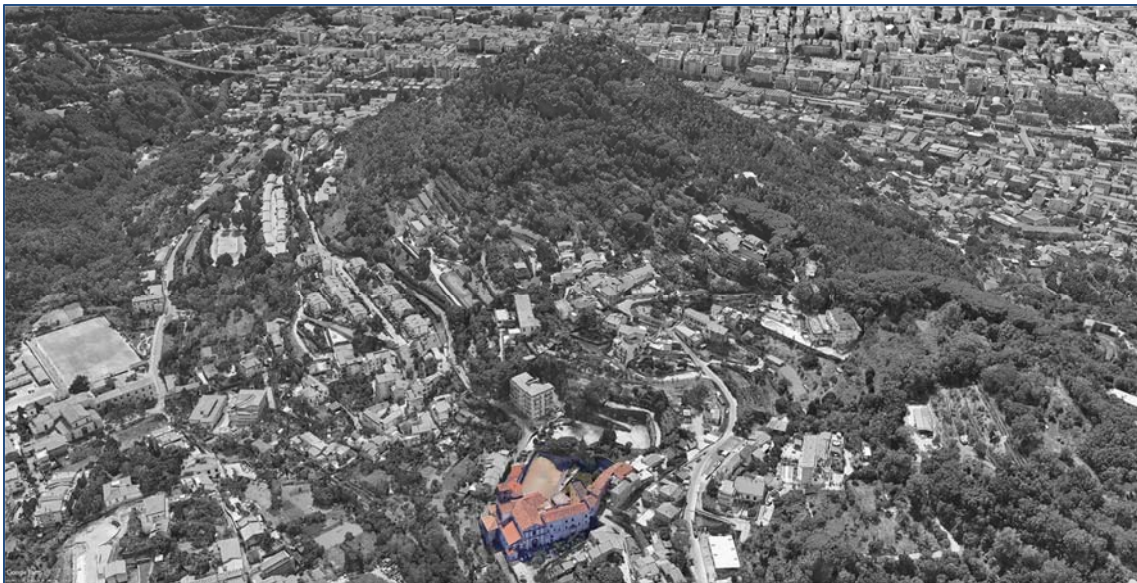
In this sense it's allowed, where necessary, the installation of the sanitary facilities and

kitchens (also in unified blocks) equipped with air conditioning, ventilation and forced ventilation.

The achievable works are:

- demolition without reconstruction of the superficies;
- replacement of crumbling or unstable horizontal structures (floors, roofs, architraves) with the exclusion of demolition of vaults and without changes to vertical dimensions;
- demolition or construction of internal non-load-bearing partitions;
- consolidation of the building structure and rehabilitation of the unit;
- repair of architectural elements such as pallets, frames and plinths;
- construction of toilets and technical and water installations;
- reconstruction or restoration of plasters;
- the opening of open skylights or small windows that do not emerge from the existing roof. The measurement of the horizontal projection of these openings must not exceed a total of 1/10 of the surface of habitable attics and each opening must not exceed, in horizontal projection, the surface of 1.40 square meters;
- arrangement of parks and gardens.

The recovery plan "Districts St. Pietro - Annunziata – St. Lorenzo" intends to preserve the residential use destination and, at the same time, to revitalize the fractional centers with the inclusion of new activities such as tourism, extra-hotel and bed & breakfast.



## 2. HISTORICAL SETTING

The church of the St. Annunziata is one of the oldest farmhouses, located on the south-eastern slope of Mount Castello, on which is located the Castle of St. Adiutore, one of the oldest fortifications (Lombard period) to date around 787, for others between 9th-10th century.

The most famous representation of the city is provided to us by Pacichelli: in the middle of the image of Monte Castello, one of the elements still characterizing the territory of Cava. Pacichelli reports the particular construction distribution of Cava, with the location of the main street, major buildings, churches, convents and farmhouses.



In the adjacent lot there is the Little Lourdes, a place of recollection and prayer, created by a vocationist priest of the St. Annunziata in 1974.

In the context there is also the ancient church of St. Pietro a Siepi, to be dated around 1040-1169, from which together with the Annunziata depends the name of the village.

The church of the St. Annunziata was founded in 1506 when the ancient parish of Santa Maria a Toro became inadequate for the increased population of the territory.

It had originally three naves of large proportions and a valuable portal in carved stone.

From the beginning, the left aisle was occupied by the Oratory of the Confraternity of Sant'Andrea, which is still there today, while the right one, assigned at the beginning of the seventeenth century to the Convent of the Poor Clares, was given to an oratory.

In 1540 there was the closure of the former side aisles and the subsequent construction of the transept, the apse and the bell tower. In 1592 a convent of nuns was built.

### 3. THE CHURCH

The church, dating back to 1506, is in masonry of yellow tuff and traditional mortar.

The interior presents, in the single nave, a lateral partition of three round arches, of which the central one is larger and has an altar in polychrome marble. The arches are decorated and molded by frames, pilasters and composite capitals, which emphasize the inclusion of the altars, according to the principles of Renaissance architecture, with subsequent baroque transformations.



Superiorly, the internal roofing of the building is defined, for the aisle and the transept, with flat surfaces and two-pitched roofs, with supporting structure consisting of wooden frames and Palladian trusses covered with traditional terracotta tiles from Marseilles; the apse is instead covered by a central dome.

Outside, the facades have a traditional plaster based on sand and lime with white quartz paint. The main north-east front is punctuated by pilasters with a smooth trunk and stringcourses, characterized by the alternating strips and inverted gorges, and is crowned by a molded pediment: these elements are painted in gray. The façade also has a beautiful pipernoid portal. It has the classic trilithic shape: the upper bezel is considerably elongated and the jambs are decorated with festoons of flowers and fruit, cherub heads, candelabras and grotesques.



With reference to the Technical Standard UNI 11182/2006, developed to replace the Normal 1/88, under the competence of the Technical Commission UNI of Cultural Heritage, various forms of alteration of natural and artificial stone materials have been identified, the distribution of which has been reported on the graphic relief and photographically documented.

The parish church of the St. Annunziata is subject to restoration and absolute constraint. The planned interventions must therefore aim at restoring the original values and any modification must be made only with methods and with the precautions of the scientific restoration.

First of all, we chose to intervene with additions to the plasters, made with mortars similar to those of the preserved plasters, with the exception of the base areas, affected by rising damp, for which dehumidifying plasters are permissible.

In particular, this intervention is divided into the following phases:

- removal of damaged parts of plaster: using an electric scraper, after protection of windows and other components that could be damaged; the scrape operation is completed manually in the delicate points, such as the frames of the frames;
- restoring the mortar joints and washing the wall surface;
- rough coat: proceed to the execution of the coarse rendering with lime putty mortar;
- vertical filling bands: they must be made with a thickness of about 1.5 cm; then the filling is carried out between the strips, suitably flattened with the use of a wooden slat resting on the sides;
- plaster: the plaster based on lime putty is applied using a wet steel trowel, in at least two coats, with a thickness of at least 3 mm;
- painting: once dried, the mineral finishing plaster is applied, composed of already colored lime putty, applied in two coats, fresh on fresh, using a sponge float.

Another intervention that has become necessary is the restoration of rising damp, which causes the so-called rising edge. The phases in which it is divided are:

- execution along the perimeter of a series of masonry perforations made at about 40 cm from the ground level (the holes have a diameter of 22 mm, interaxis of 12 cm and inclination of 30°);
- injection into the holes of silicone resin made up of oligomers and functional polymers, diluted in solvents based on isoparaffin;
- demolition of the plaster up to a height of 1.50 m from the ground level;
- brush application of the calcium for salts primer on the surface to be plastered;

- waterproofing of a perimetral band between the ground level up to about 5 cm beyond the line of holes previously made with waterproof mortar, applied to the still fresh primer;
- completion of the plaster using mortar based on cement-free hydrated lime, reinforced with synthetic fibers and added with additives for the development of macropores.

A final planned intervention is the restoration of the string courses, the latter being affected by the phenomenon of detachment. The main phases are as follows:

- protection of the fixtures and of all the delicate components located in the intervention area; scraping of degraded and subject to detachment parts by using a chisel;
- application of the  $\varnothing 8$  2x2 cm galvanized steel mesh, especially at points where the grouting exceeds the 4 cm thickness;
- spatula application of the new layer of stucco based on slaked lime and long cured lime;
- after the drying of the new stucco layer proceeds to the finishing of the same with the use of fine sandpaper;
- after drying, the surfaces are painted with the application of a mineral finishing plaster in plaster, composed of already colored putty, applied in two coats fresh on fresh using a sponge float.

### 3.1 THE CONGREGA OF ST. ANDREA

The oratory has a longitudinal plan, with a single nave divided into three bays. The presbytery is located in the innermost part of the last bay. The roofs are vaulted and there are pillars with doric capitals, leaning against the side walls and supporting the covering vaults. The intrados of the vaults are decorated with elaborate frames, which form geometric designs and partitions in quadrants, and with large frescoes.



Also in this case, with reference to the Technical Standard UNI 11182/2006, different forms of alteration of natural and artificial stone materials have been identified, the distribution of which has been reported on the graphic survey and graphically documented.

The main pathologies found are:

- efflorescence, mostly on the frescoes, caused by the chemical-mineralogical composition of the materials, water infiltrations and crystallization of the soluble salts;
- erosion, which occurred on the floor, due to infiltration of water, poor compactness of the surface layer and atmospheric pollution.

In addition, there have been disruptions, such as minor injuries due to separation between the generating arcs, on the arches that mark the three bays.

To cope with the phenomenon of efflorescence degradation, previously mentioned, which mainly affects the frescoes inside the chapel, as well as those adorning the portals of the main facade, it was decided to intervene through the pictorial restoration of the frescoes. This intervention is carried out proceeding as follows:

- preliminary safety operations: if the painting presents parts at risk of falling, it will be necessary to intervene through the protective coating and / or pre-consolidation, to ensure the safety of the surface;
- cleaning: aims to remove from the surface of the product the foreign substances, pathogenic and generating further degradation, such as surface deposits, stains, chromatic



alterations, without however affecting the original material, but rather respecting the patina of time;

- consolidation: re-establishment of the cohesion of the paint film by applying a consolidating product, with low-concentration emulsion acrylic resins applied by brush with japanese paper and subsequent spatula pressure;
- grouting: the surface is stabilized and consolidated, and the gaps, defects and cracks are grouted and the portions of fallen plaster are remade, with the aim of restoring structural continuity and making the surface more stable and legible. the operation must be carried out with materials compatible with the original constructive materials in the wall painting;
- pictorial reintegration: the aim is to restore an adequate reading of the work through the chromatic connection, where there are gaps or abrasions of the pictorial film.

A second intervention is the conservative restoration of the floor, of precious and fine workmanship, through the following phases:

- cleaning: with water and soft brush;
- antialnitro treatment: to remove any traces or incrustations to be carried out with a soft sponge;
- protective treatment: with liquid wax and finally with protective varnish using a specific impregnating product for porous surfaces.

Finally it is necessary to put in place the reinforcement and consolidation of arches by chains, to restore the continuity of the arches that mark the three bays, slightly damaged. We proceed as follows:

- drilling the masonry using a drill;
- insertion into the hole of a polymer sheath in which the bar is to be inserted successively, so that it is not directly in contact with the wall;
- filling the interstices between the sheath and the tie rod by injecting resins;
- arrangement of the tie rods, provided with threaded ends;
- laying down the retaining pins, preparing a layer of regularization and distribution of the loads in cement mortar;
- pretensioning of the tie rod by using hydraulic jacks. disassembling the jack and cutting the threaded bar. the remaining length must allow the unwinding for a future tensioning of the chain.

#### 4. THE EX MONASTERY

The current building, dating back to 1592, keeps intact some of the original architectural structures, despite having inevitably undergone numerous recovery interventions over time.

At present, the building has several rooms, distributed over five levels.



The ground floor, with entrance hall, includes a room used in recent times to the oratory and the cloister, open on one side and surrounded by two L-shaped corridors, covered with cross vaults in tuff walls, resting on pillars also masonry tufa, painted yellow, with coating on the basement in stone slabs. The court has recently been paved with prefabricated slabs of molded concrete.

A masonry staircase leads to the mezzanine floor: it is a single room, covered by cross vaults.

The distribution of the rooms on the first floor basically follows the plan of the ground floor: we find the L-shaped corridor covered with cross vaults, which serves the various rooms, once used for the most part as rooms for the upper mothers. These rooms are covered by vaults. The floors are made of grit tiles, which have different ornamental motifs. In the corridor there is a series of arched windows on the façade.

On the first floor there is also a refectory and a small chapel.

The second floor consists of the main body, which housed the dormitories, through which you access a terrace, a refectory, where we find the wooden floor, with beams on which rest the flashboards, completed with mortar and paving, always in grit tiles and false ceilings with wooden structure; moreover, there is a second body rotated with respect to the previous one by about a 45-degree angle and placed at a height of about 10 m, where the laundry, the ironing and the kitchen were located. These rooms give onto another large terrace.

## 5. THE PROJECT

According to the Regional Law of 24 November 2001, n. 17, "Discipline of non-hotel accommodation facilities", are defined religious hospitality houses as accommodation facilities owned by ecclesiastical bodies and characterized by religious purposes, which offer paid accommodation to anyone who requests it, respecting the religious nature of hospitality itself and with acceptance of the consequent rules of behavior and limitations of service.

The buildings used for religious houses of hospitality must comply with the current building and sanitary regulations.



Compatibly with the architectural structure of the building, we have chosen the new functions that the various environments should have.

On the ground floor in the rooms that give onto the entrance hall the reception room and the bathrooms have been respectively arranged.

We chose to use the large hall, currently used as an oratory, as a refectory, maintaining both functions, as well as the internal courtyard serves as a space for sharing and possibly additional dining room.

The block, which closes the cloister on the west wash, with a rectangular plan, is used as a kitchen, with an external catering service, and a changing room and bathroom for the attendants.

It was decided to maintain a small outdoor area to accommodate the facilities and a ramp that gives access to the elevator shaft, with dimensions of about 1.50 x 1.35 meters.

The mezzanine floor houses a TV room with a break corner.

On the first floor the project includes the addition of a corridor that connects to the existing one, of distribution to the first bedrooms, precisely eight double rooms, each equipped with a private bathroom. In the corridor, we find the chapel and a small archive.

Similarly, the second floor includes eight double rooms, one for disabled people and one quadruple room; two relaxation rooms and the two pre-existing terraces, which become aggregation spaces, furnished with benches and tables in teak wood.

Finally, the third floor houses five double rooms, including two for the disabled, a single and a triple room, for a total of fifty beds.

Among the interventions chosen compatibly with the urban plans in force there is the demolition without reconstruction of the superfetations, in particular of bodies considered detached from the original architectural structure.

Functional adaptation interventions are planned for the removal of architectural barriers, such as ramp construction, with a slope of less than 8% and the addition of the lift.

It is necessary the consolidation of some floors, crumbling or unstable, which have a double warping with wooden planks: type made with a series of main beams placed at 2-4 m interaxis, secondary beams of smaller size placed above and orthogonally to the main ones and a wooden plank. The resulting instabilities are bending deformations, to which secondary phenomena are associated, such as the separation of the floors from the walls.

The selected intervention is structured as follows:

- consolidation of the elements of the supporting and secondary frame;
- rehabilitation and protection of the wooden elements inserted in the masonry (anti-mold and anti-marking treatments, ventilation of the compartment that houses the beam head);
- increase in the number of elements of secondary structure, in order to improve the distribution of loads and the static behavior of the entire floor;
- stiffening by improving connections through riveting and ligatures;
- stiffening by means of the light overlapping technique of planks with crossed warping;
- injections of cement mortar in the walls at the points of support of the elements of the main frame.

Moreover, internal non-load-bearing partitions have been demolished and built, as well as the opening of some rooms with metal profiles, in order to make the internal distribution of the rooms as suitable as possible.

We will proceed to the construction of toilets and technical and water systems, trying to optimize the integration between these and the existing structure, placing the pipes in the existing voids between the intrados of the vaults and the floors, or between the wooden beams and false ceilings.

It is also useful to open skylights in the open or in small windows that do not emerge from the existing roof. The measurement of the horizontal projection of these openings must not exceed a total of a tenth of the surface of habitable attics and each opening must not exceed, in horizontal projection, the surface of 1.40 square meters.

To guarantee the thermal and acoustic insulation of the building, an intervention on the pitched roof is foreseen, that is the application of insulating panels in uncoated rock wool of medium density, having the following characteristics:

- guarantee on water resistance by means of the sealing element;
- control of the heat flow through the presence of an insulating layer;
- control of interstitial condensation formation by ventilation and / or by adding a vapor diffusion control layer.

Another essential intervention is certainly the reconstruction or resumption of plaster and paintwork, which must be performed with traditional techniques and using natural materials with lime paints in soft earth tones.

It is obligatory to restore and conserve the existing wooden frames, if they belong to the original and historicized image of the façade; if they are not recoverable they must be replaced with similar fixtures by size, type, finish, material and color. This intervention is divided into the phases described below:

- paint stripping: chemical removal procedure using paint strippers authorized according to current regulations. the important advantage is of course to eliminate almost all the layering created over many years of maintenance and to affect only superficially the structural consistency of the doors and windows;
- sanding: procedure, first mechanical and then manual, coarse-grained paper up to obtaining the living wood;
- drying: hot of the window in order to obtain 12\14-degree angle of intrinsic humidity of the wood so as to prepare the doors and windows so treated to the subsequent processing. the excessive presence of humidity prevents correct sanding and grouting and also makes the different wood grains in relief;

- control and carpentry works: control and restoration of any damaged or damaged parts. first of all it is necessary to eliminate how much of the support can no longer be maintained, clean the underlying structures and check for any traces of humidity. after the necessary drying, the damaged parts are replaced by suitable pieces in wood essence, using specific vinyl glues to withstand the strong structural stresses of the wood and also those typical of outdoor exposure. before putting under pressure under 'press', the possible presence of nails or restraining screws made of wood or steel should always be assessed to avoid any rust formation which would cause the wood to rot again over time;
- grouting and sanding: initial with medium-grained paper to remove paint removal residuals, previous paint residues but above all the surface part of the substrate to be restored. the area in question is the part that has undergone the structural erosion over the years resulting from constant exposure to atmospheric agents, resulting weakened and not suitable for the new paint treatment. in this way, the effect of mirroring the surface is also obtained, which is more regular to the advantage of the final aesthetic result;
- smoothing: final with fine-grained paper to eliminate further residues, preparing the frame for the new painting and finishing edges and skewings present in the frame of the frame. the finishing work is completed with further lighter stuccos and escaped the previous operation and the installation of resin in the heads against water infiltration.

As far as outdoor flooring is concerned, as the use of floors made of prefabricated concrete elements is forbidden, replacements and additions to terracotta floors, typical of the local tradition, and teak for one of the terraces are envisaged. It was also decided to preserve the internal floors in grit tiles, which have different ornamental motifs, providing for the conservative restoration of such surfaces.

Finally, the garden is planned, with a soccer field (5x10 meters) with synthetic grass and a system of garden ramps, stairs and steps necessary to overcome the difference in height of about 4.50 meters.

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