

REQUALIFICATION OF THE HISTORICAL FABRIC OF ALBEROBELLO*

EMMA SABATELLI
POLITECHNIC UNIVERSITY OF BARI

ANTONELLA ROMA
POLITECHNIC UNIVERSITY OF BARI

MARIA PIA TRIDENTE
POLITECHNIC UNIVERSITY OF BARI

MATTEO IEVA
POLITECHNIC UNIVERSITY OF BARI

ABSTRACT

** This paper was the winner of the Prix de Istanbul, best AACCP 2021 paper, awarded by Özyeğin University.*

The topic which is here introduced is the result of a study carried out within the Thesis Laboratory promoted by the Dicar Department of Politecnico di Bari. It deals with the formation and recovery/ requalification of a part of the historical town of Alberobello. The study of the phases that have determined the current arrangement of the city was conducted through the survey at different scales: the settlement-urban one, the aggregative one and finally the building one referred to the type of trullo. It represents the “concept of home” consolidated over time and it has generated numerous variants that return a significant patrimony of cases that have been arranged in a general synoptic framework, as a proof of the synchronic and diachronic changes that have occurred over time. In general, it can be seen that the masonry has sometimes undergone interventions that have altered the original configuration, and, in some cases, the elementary units have been demolished and replaced by modern buildings in contrast with the context, even altering the structure of the settlement system.

The research has particularly covered the neighborhood surrounding the Basilica of SS. Medici. An area that, despite

Communication: Emma Sabatelli E-mail: sabatelli.em@gmail.com
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the importance documented by archival sources, did not fall within the UNESCO perimeter of 1996, exclusively reserved for the Rione Monti and Aia Piccola. This lack of attention, concomitantly with the absence of an instrument of protection, has made possible numerous transformations, thus preventing the legibility of its characters, that often appear to be completely compromised. The recovery of this heritage can be guaranteed by an adequate policy, based on a detailed plan that includes interventions aimed at the valorization, conservation and requalification of the historical areas constituted by aggregative systems defined by the monad of the trullo.

To this end, the laboratory activities have been focusing on the reconstruction of the settlement process and on the examination of the architectural types which are present in the area under study, and that have been useful to outline a series of guidelines for the recovery of the neighborhood and its building. The didactic experimentation has also focused on an entire front of buildings where a building of a recent construction can be seen: having replaced the previous basic units, it appears to be inconsistent with the organic unit of previous fabric. The hypotheses of intervention include, as it is usual in the recovery of the historical heritage, restoration and conservative rehabilitation, but also renovation of the buildings which are in contrast with the whole to be protected. The latter category was applied to the recent building and, as per legislation, the initiation of a procedure for the delocalization of volumes has been arranged, making use of instrument of urban compensation.

Introduction

The intervention on the historical heritage, and in particular on that complex system of buildings constituted by the trulli, is a very topical issue especially if you think about the difficulty of achieving a standard of living corresponding to today's requirements of habitability - not always possible in rapport to the constitutive constraints of these elementary buildings-, together with the problem of their transformation that does not produce an alteration of their distinctive features.

The trulli of Alberobello, as it is known, represent a unique testimony both for what they express in the constructive tradition of the culture settled in the geographical area of Valle d'Itria, both for the relevant peculiarity of the settlement system. The problem that arises at the time of the reuse or transformation of this important historical building is the congruence of the interventions that must update the organism without altering the essence of the type and its peculiar characters.

And yet it has been, over time, affected by phenomenon of degradation and transformation that has modified it, in some cases radically, since the end of the nineteenth century. In order to stop this process, in 1930 was issued a decree law that recognized the Rione Monti, Rione Aia Piccola and several other isolated artifacts: “monumental and scenic area of trulli”. The affixing of the constraint caused a contradictory acceleration of degradation, caused mainly by lack of maintenance. Such dispositions determined, moreover, a series of phenomenons of building abuses that are found above all in the modification of the inner asset in order to improve the hygienic-sanitary installations, sometimes nonexistent. Consequently, after the application of the monumental constraint, due to the lack of an adequate plan for the recovery and restoration of the trulli, in the few cases in which it intervened there was a radical transformation of the consolidated image of the building organism.

It should be added, moreover, that the tourist flows that affected the city since the '60s aggravated the situation, causing a change in the intended use. To limit the effects, an immediate intervention to safeguard the historical patrimony became necessary, and this only came about in 1979 with a law of the Apulia Region which established as the first urgent intervention the safeguarding of the trulli of Alberobello, by now the object of attention and a problem of collective interest. Followed a set of acts, from the '70s, distractedly oriented to protect only the heritage of the trulli of Monti and Aia Piccola districts, neglecting the other portions of urban aggregates connoted by made with the same type of building. This led

Fig 1. Aerial photo of the study area considered



to a growing alteration of the historical building not protected through the replacement of entire portions of the fabric consists of trulli or the radical transformation of existing ones.

The issue was finally addressed with the General Town Plan of 1980 which suggested the preparation of Recovery Plans.

Only in 1996 the UNESCO organization approved the inscription of the trulli of Alberobello in the World Heritage List, identifying as areas of excellence the site Rione Monti and Aia Piccola, as well as some isolated artifacts.

The candidacy of the Trulli of Alberobello as World Heritage Site did not indicate a Buffer Zone to circumscribe the entire area affected by the trulli. It is therefore not a coincidence that the exclusion of entire portions of the “Centro Storico Ambientale” has seen, over time, heavily transformed, in some cases irreversibly, settlements of great interest.

The study conducted as part of the Thesis Laboratory, tries to extend the research to remedy this inattention by proposing an accurate analysis of all areas of trulli, also experimenting with new techniques for the recovery and redevelopment of this historical fabric.

Methodology of analysis and techniques of intervention on the historical heritage

The starting point of the analysis was the urban survey as a cognitive tool with which we tried to fully investigate the type with its specific characters.

The case study taken in examination is the area surrounding the church of Saints Cosma and Damiano. (Fig. 1).

Following the preliminary research of the sources and of the

Fig 2. Graphic elaboration of ground floors



historical cartography, followed by the assembly of the catastral plans (Fig. 2), it has been set the following work of urban survey directed to give back the facades of the buildings and to investigate the type in a direct way.

In particular, these survey operations were carried out according to two phases: a campaign of measurements with relative drawing of eidotypes; one of photogrammetric recognition in order to arrive at the graphic restitution of the urban fronts of the aggregates analyzed (Fig. 3). Once this initial result had been achieved, correlating the survey-assembly of the plans and proceeding with the comparative study of the parts of the fabric previously studied (see the contributions published in the proceedings of the ISUFItaly 2020 conference, reported in the bibliography), an attempt was made to construct the evolutionary process of the trullo type, proceeding to classify the architectural elements constituting the building organism. This critical operation has been fundamental for the elaboration of guidelines aimed at the recovery and valorization of the examined buildings and of the surrounding fabrics of the church of Saints Cosma and Damiano.

The research conducted has allowed, in fact, to reconstruct the phenomenon of synchronic variation of the type and to outline the main diachronic mutations of the trulli in the “Centro Storico Ambientale”. The deepening on the system of variants has also highlighted the numerous processes of transformation operated since the nineteenth century, until the incongruous building replacements that have altered the typological unity of some parts of the fabric.

For this reason, the operation of urban recovery on which

Fig 3. Graphic elaboration of urban fronts



the didactic experience has been concentrated reflects also on those areas characterized by recent and contrasting buildings inserted in the monumental bounded context and experiments a method that tries to give back the compromised image of the urban front proposing the restoration of the built characters. The objective of the research was to outline the main categories of intervention necessary to recover - as far as possible - the historical-typological character of the area, being this a concrete testimony of the evolution of types and aggregative existing systems.

These categories of intervention are consistent with the Recovery Plans prepared within the General Town Plan, in particular for the area of the “Centro Storico Ambientale” affected by a Recovery Plan of Renovation and Restructuring in which there are combined interventions of conservative restoration and restructuring with demolition and reconstruction.





To this end, the proposed recovery project tends to identify: the buildings to be subjected to conservative restoration, the buildings to be subjected to building renovation and any buildings for which demolition is planned (Fig. 4).

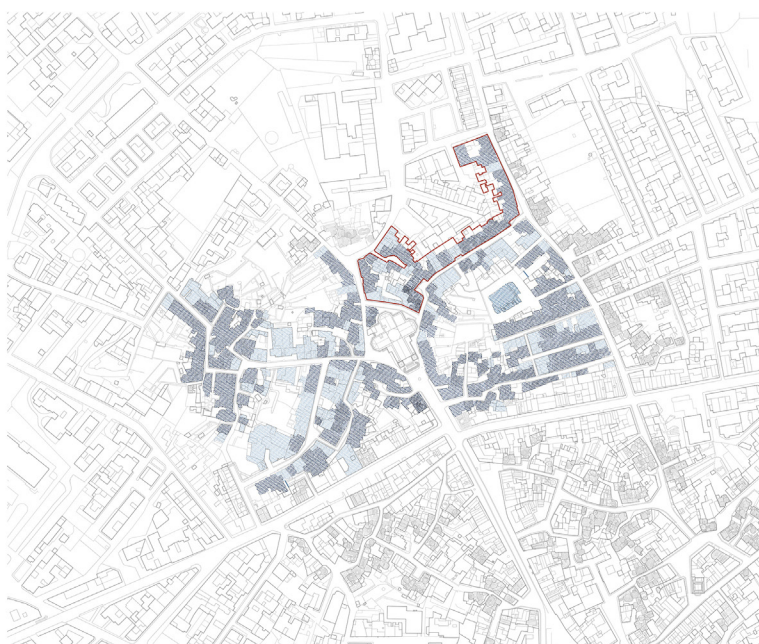
In general, for the trulli are planned interventions of ordinary maintenance, extraordinary maintenance and conservative restoration, instead, for the buildings of recent realization inserted in the historical context, interventions of building renovation are allowed.

To proceed to the definition of the type of intervention, have been studied the elements constituting the type and cataloged highlighting the most significant constructive ingredients: roofing, openings, fixtures and iron elements;

Fig 4. Plan identifying the main categories of intervention

CATEGORIE D'INTERVENTO

-  Interventi di risanamento conservativo
-  Interventi di ristrutturazione edilizia
-  Interventi di demolizione e delocalizzazione
-  Isolato campione



outlining for each of them, operations congruent with the specific linguistic-architectural, material and aesthetic.

For example: as far as the superficial finishing is concerned, it has been foreseen the protection of the stone surface with a whitewashed finish based on milk of lime, traditionally present in the organisms realized in load-bearing masonry that are part of the vast cultural sphere of the plastic-mural tradition, typical of the Mediterranean area.

In the sample block, the techniques mentioned above have been fully experimented in order to correct the incongruous interventions that have altered the integrity of the historical artifacts; such as, for example, the insertion of ceramic coatings and cement plasters (Fig. 5; Fig. 6).

Concerning the roofs, it should be noted that the characteristic element is the system composed of limestone slabs, the so-called “chiancarelle” of elongated shape arranged without the aid of any binder, arranged in rows overlapping with outward slope to facilitate the flow of rainwater, with the conclusion at the top characterized by a special segment - the pinnacle - which performs the function of closing the conical profile, not giving up to express symbolic content.

Characteristic are also the chimneys, rectangular in shape in stone, painted in lime milk and almost always placed along the perimeter of the central room, in correspondence of the hearth. The actions of protection of the roofs were essentially aimed at ensuring the constant maintenance, in order to

Fig 5. Existing urban front detail



Fig 6. Graphic restitution of the proposed intervention in the building organism



avoid problems of instability and irreversible degradation. It was therefore planned to perform the proper cleaning of the roof coverings and the elimination of any infesting agents, suggesting the periodic verification of the stability of the *chiancarelle* to ensure the integrity, stability and impermeability of the structure.

For the openings, instead, actions aimed at preserving their constituent elements have been arranged, recommending the use of original materials and traditional working techniques. The original wooden fixtures, many of which have been replaced over time with unsuitable materials, including anticorodal and pvc, have been classified and guidelines have been suggested for their restoration according to the indicated models. In particular, the specific one is to be identified in a door with one or more leaves, made of varnished wood, with upper part in glass and possible hinged shutter, with lower part in blind panel.

Windows are also made of the same material and in colors similar to the exterior frames, with or without shutters behind. The same finish is allowed for the replacement of metal shutters and gates, subject to successive interventions.



Fig 7. Existing detail of window frames used for trulli



Fig 8. Graphic representation of the proposed replacement of windows and doors

Also incongruous are shutters and blinds to be replaced with a system of wooden shutters (Fig. 7; Fig. 8).

To corrupt the legibility of the unitary facades of the trulli appear the network services. To this end, it was necessary to provide for the burial of the same in all those cases where it is possible to hide them from view. Alternatively, it has been experimented a rearrangement by moving them to the end of the facade or hiding them along the eaves channels, treated with the same color finish of the facades (Fig. 9; Fig. 10).

Within the operation of reorganization and burying of underground services, it has been planned the elimination of sections where there is a bituminous paving in favor of one made of limestone paving stones, extended also to those paths recognized for the peculiarities of territorial paths (Fig. 11). The reorganization of incongruous elements also concerns the niches of housing of the counters that must be properly concealed by an element that does not involve an excessive impact and that does not pose as an alteration of the characteristics of the building type (Fig. 12).

In the context of urban restoration, a final consideration concerned recently constructed buildings (Fig. 13), for which the guidelines developed for historical buildings are considered valid, in addition, of course, to interventions of building renovation.

For these buildings it is considered necessary to make changes to the facades, so that the character of the Apulian construction is respected and materials of quality, shape and color similar to

Fig 9. Existing detail representing the problem of networked services



Fig 10. Graphic rendering of the proposed intervention aimed at concealing the network services located on the façade



those of the buildings with greater historical value are used. Moreover, in addition to a uniform treatment of the wall face, with the elimination of the present coatings, as previously mentioned, it is considered essential the replacement of the frames using appropriate types closer to traditional frames. Also for the iron elements, sometimes extraneous to the context, it is recommended the use of simpler systems, assuming a simpler conformation in the wake of the tradition of the basic building units (Fig. 14).

In the operations of valorization of the “Centro Storico Ambientale” in which buildings in contrast with those of historical-cultural interest appear, the building renovation has been admitted.

In particular, the deepening of the study area near the church of Saints Cosma and Damiano has revealed the presence of a recent building, built in 2010, in strong contrast with the existing, at the end of an alley where the presence of trulli is predominant (Fig. 15). The acquisition to the public patrimony and the demolition of the manufactured article, constituted by an isolated condominium disposed on three levels, has appeared as the more coherent solution for the respect of the characters of the surrounding constructed.



Fig 11. Identification of the area for which it is proposed to remove the existing bituminous sections

Fig 12. Road section



Fig 13. Graphic restitution representing an example of a recently constructed building



Fig 14. Graphic restitution of the building renovation carried out on the new building

The subtracted volume has been relocated using the instrument of urban compensation. Its elimination has therefore allowed to recover the consolidated image of the existing aggregate, although lacking a portion that, from documents, originally appeared to be identical to the contiguous fabric. This has led to reflect on the theme of areas such as this entrusted to public use and then to its function that must be able to accommodate a use similar to those of the areas within the blocks present in many parts of the consolidated fabric, often intended for urban gardens.

Conclusions

The research here exposed, undoubtedly partial and therefore in need of further specific insights, achieves the aim of outlining a possible method of study of the historical heritage, in this case made complex by the nature of building types and their aggregation, defining a hypothesis of recovery of the existing that uses - on the one hand - the scientific methods and strategies of the discipline of restoration - on the other hand - the congruent update in a perspective that reads every single building organism both in its peculiar qualities and in its relationship of participation to the process of transformation of the city as a living organism able to renew itself constantly. Taking care not to dilapidate the precious identity that UNESCO has properly recognized.

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Fig 15. Representation of the newly constructed building for which demolition and relocation is proposed



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