The restoration of the Domus of the Mithraeum of the Painted Walls: a methodological approach

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1. Historical and archaeological data

The Domus of the Mithraeum of the Painted Walls is situated in Ostia (building III I, 6), on Via della Foce, at the point where the latter crosses the Decumanus Maximus, in front of the sacred complex dedicated to Hercules, whose cult is linked to the presence of this important road junction. The Domus is a rare example of aristocratic architecture at Ostia, generally dated to the second half of the 2nd century BC. During the reign of Marcus Aurelius or Commodus, the northern room and part of the peristyle were transformed into a mithraeum. The Domus contains large portions of refined masonry in opus incertum and palimpsest walls, where stratified masonry structures of different periods can be found (1st century BC - 2nd century AD).

The site was excavated towards the end of the 1930s when, under the proposal of the then Minister of National Education, Giuseppe Bottai, Benito Mussolini decided to include the excavations of Ostia among the sites for the Universal Exhibition, which was to have taken place in Rome in 1942, but never happened because of the war.

The ISCR restoration project started in 2010 was inspired by the principle of minimal intervention to improve the legibility of the structures and to better understand their consistency.

The restoration work was preceded by the analysis of the masonry, laser scanner documentation and the study of archival documents. In particular, the data acquired in the 1939 excavations, the 1950-51

excavation reports by Italo Gismondi, and the publications of Giovanni Becatti, have been correlated with the modern stratigraphic analysis of the surfaces that had emerged and have all been re-examined from a critical viewpoint.

At the end of this initial phase of revision of the documents and of former studies, it is possible to observe that the first evidence of the Domus, generally dated to the 2nd century BC due to the presence of opus incertum, could be moved to the end of the 2nd century BC or even to the second half of the 1st century BC.

The masonry structures of the 2nd century BC rather than the first version of a Domus, could instead be interpreted as the remains of a building, probably with infrastructure functions, linked to the presence of the sacred area of the Temple of Hercules in front of it.

The function of this building may have been enlarged or replaced, always during the course of the I century BC by the construction of the so-called Market (III I, 7), and our building may have undergone the first transformations in those years until it took on the aspect a traditional domus in the Roman-Hellenistic tradition divided internally into specialized rooms and colonnaded peristyles during the 1st century AD. It is evident that only new excavations would be able to support or reject these hypotheses.



Fig.1 - A view of the Domus of the Mithraeum of the Painted Wall

The archival documentation and the analysis of the wall structures has also made it possible to reconstruct all the phases of the numerous restoration works that involved the Domus during 1939-40, 1947, 1959, 1961, 1966 and 1989-90. This revision work was most useful for a critical appraisal of the history of restoration works carried out at Ostia Antica.

2. The methodological approach

A foolproof way of approaching the restoration of ancient ruins still remains problematic, as operational procedures for the conservation of ancient masonry are difficult to standardise and still vary considerably.

Cesare Brandi in the chapter of Teoria [Brandi, 1977, 29-37] dedicated to restoration "secondo l'istanza della storicità" identifies the problem of the conservation of ruins as the "limite estremo" which, lacking "una sua implicita vitalità", draws its only significance from the past. For the ruin to show itself for exactly what it is, that is, an old piece of "residuo" architecture, intervention should be limited to "la salvaguardia dello status quo", to "quel primario grado di restauro", which virtually implies "mera conservazione". With regard to the subject of ruins in Brandi's Teoria, Giovanni Urbani [Urbani, 1988, 59-65] almost thirty years later, considers a technical illusion to preserve ancient architectural remains by acting directly on them. He believes that a degradation process depending on natural factors rather than on "fare umano… incapace di controllare i propri effetti" would be "infinitamente meno caotico e grave".

The restoration of the Domus of the Mithraeum of the Painted Walls attempts to follow the conservation methodology indicated by Cesare Brandi's Teoria, in order to at least avoid the pitfalls resulting from "fare umano condotto alla cieca" hinted at by Giovanni Urbani, through a thorough technical study.

The utmost attention has been devoted to technical procedures, and recognized and tested technologies and products - improved during a pilot restoration project - have been utilized, in order to achieve both minimal intervention, as indicated by Brandi, and maximum reversibility.



Fig.2 - A detail of the stratigraphic study on the masonry palinsest of the wall in opus incertum positioned along the west side; a detail of the laser scanner model of the Domus

3. The restoration works

The restoration works which ended in June 2013, consolidated and strengthened the ancient walls and improved their resistance to atmospheric agents through the use of protective masonry capping. The decision to limit reintegration work to the minimum, made it possible to identify the ancient phases of the palimpsest walls, as well as the numerous former and mostly preserved restoration interventions.

The series of operations planned for the restoration of the walls in the Domus of the Mithraeum of the Painted Walls is not unlike those dedicated to other types of cultural properties, in particular to stone monuments, high quality intonaco surfaces and wall paintings. They comprise operations of cleaning, micro-consolidation, filling, and the re-establishment of adhesion and cohesion, which are carried out as matter of routine; reintegration of losses and re-establishment of stability depending on the nature of the damage, but nothing different to what we are accustomed to doing for other types of heritage properties.

In planning intervention (given that oversimplification may not take into account the complexity of the innumerable variations connected to the work carried out in an archaeological site of such an intricate nature as Ostia) we propose the following sequence of operations: assessment of the conservation condition; emergency conservation work to secure endangered elements; micro-consolidation of disintegrated mortars, brickwork or stone; injection of consolidating liquid mortars; filling of cracks and detached areas; and the reestablishment of levels for rainwater drainage.

The departure is always the same: analysis of the damage and study of its extent and distribution: in this specific case observations were made on the lack of stability of the mortars and of other elements comprising the masonry structures, and on the presence of invasive plants and biological patinas. A closer look, centimetre by centimetre, provides a rapid breakdown of the object to be restored into its various elements - constituent materials. The interpretation of the concrete data necessary for planning (quantifying) the operations stems from the knowledge of the initial qualities of the materials considered, either ancient or deriving from restoration, and consequently from the perception of the levels of damage.

Graphic documentation was obtained in which the diverse forms of alteration have been summarized and made immediately evident. What becomes clearly apparent is the serious level of the problem of fragmented wall capping, much of which is covered with ivy; also serious but localized is the loss of the brickwork lining and consequent exposure of the internal masonry nucleus, which corresponds to the phenomenon of disintegration of the mortars. Where masonry structures of different periods have been built up against each other, there are cracks and detached parts; unevenly distributed disintegration of the brickwork is also evident, and so on. Through the assessment of its particular

Fig.3 - Views of west side before restoration works



A view of west side after restoration works 552



Fig.4 - Plants constitute one of the main conservative problems: restoration treatment include their gradual cutting and removal without causing further damage while this operation is carried out. In some points remains of stems incorporated in the wall structure were maintained for static reasons; East side wall detail before and after restoration works

conservation condition, a specific restoration plan has been devised.

From the point of view of treatments, clearly one does not envisage standard operations but procedures decided on case by case, point by point, based on knowledge, experience and sensitivity. It is the latter qualities that have enabled communication with the specialists on architectural, archaeological and historical subjects to refer to the delicate nature of the "ruin".

Works have been carried out that promote respect for authenticity: through the use of non-invasive restoration methods and materials with qualities compatible with the original ones, not competitive with them but, though efficacious,



Fig.5 - A view of east side before and after restoration works; a view after restoration works

destined to function as "materials of sacrifice" to the re-presentation of the causes of alteration - they consist of hydraulic mortars made up of lime, pozzolana and cocciopesto, of varying grain sizes and fluidity adapted for filling and reintegration; also by completing sequences of operations controlled according to specific needs, from the devitalisation and progressive elimination of plants to the removal of totally pulverized portions of mortar, the regeneration of those that are recoverable, the re-laying of loose and detached bricks, and the re-establishment of lines of wall capping. The job of the micro-consolidation of the mortars lacking in cohesion is the only operation that has seen the use of a different product like ethyl silicate.



Fig.6 - South side wall after restoration works; remains of a wall at the end of restoration works; remains of south side wall at the end of restoration works

4. Conclusions

Every action has been carried out without ever concealing what is in existence, and without altering the information destined for subsequent specialized research into the complicated historical events and restorations.

This methodological approach of extreme care and respect has proved to be much more necessary in the presence of fragile and delicate elements such as the archaeological walls; neither exaggerated nor inadequate nor burdensome, the commitment of the experts has found expression in a new moment of care towards cultural properties of inestimable value, until now often treated as objects of no value.