

## **Conservation of Archaeological Mosaics: the State of the Problem in the Light of a Recent International Course**

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We feel that the experience of the training course<sup>i</sup> described here could be of general interest, for it provided the means and the occasion to examine various points:

- the state of conservation of archaeological mosaics in situ;
- the reasons for a situation that appears extremely serious in our view, and possible conditions for improving it;
- the relationship between specialized aspects, such as interventions on the mosaic per se, and management and conservation on the scale of the entire site;
- professional training of directors and personnel responsible for the sites themselves;
- the disparity of technical approach and theoretical foundation behind many proposed interventions.

On the basis of this general evaluation, the course was organized in order to permit the participants:

- to set up a plan for the recovery of mosaics lifted in the past and stored in museums or elsewhere;
- to establish a program for the protection of an entire area of mosaics during excavation, as well as temporary protection as the mosaics are brought to light;
- to establish a long-term program for the management of an archaeological site with mosaics (conservation, restoration, maintenance) to ensure its preservation as a whole.

The target group selected included:

- directors of excavations;
- site inspectors;
- architects in charge of archaeological sites;
- archaeologists in charge of archaeological sites;

As we were focusing primarily on the Mediterranean area, where the problem of mosaics assumes vast proportions, the professionals indicated above represent staff in charge of the archaeological management as well as the conservation problems of the site.

There were two reasons for this choice: we attempted to have an impact where such individuals act directly in the management of the patrimony in their institutional roles, and where, to date, there have been obvious gaps in their training, because most of the programs and initiatives carried out so far have been addressed to restorers.

The topics the program touched upon were connected to a working hypothesis, dear to the course coordinators, that we found to be confirmed by the development and the outcome of the work. Indeed, it seems to us that the critical point of the situation revolves around the following arguments:

- the enormous impact of the "people" factor on the state of conservation and thus on the possibility of changing it for the better: misguided interventions, lack of maintenance, lack of protection from the principal climatic factors, tourist abuse and/or theft and vandalism, inadequacy or lack of surveillance and security systems -- all these represent the principal causes of deterioration and devastation;
- the consequent need for conservation and restoration interventions to function on an adequate scale and to relate to the use and traffic on the site.

Thus we must stress the need to abandon the traditional approach, whether methodological or technical, which is linked to the examination of a particular case or a specialized intervention technique -- completely divorced from any consideration of the conditions of the context and the situations in which these solutions will be implemented<sup>ii</sup>.

The need to take a different viewpoint can be confirmed not only in the ineffectiveness of the partial solutions and measures adopted (as witnessed by the state of the heritage) but also in an examination of the current literature.

More than any other element, a fact that describes the real distance between the mosaic heritage -- use and conservation -- and those writing about mosaics is the astounding vacuity of the majority of the texts. From a preliminary selection of the extant literature (400 articles in various languages were examined) only 60% can be said to convey information that might prove useful to the reader, in some positive or negative way. For instance, only 14% of the texts specify the dimensions of the mosaic under consideration -- and this is only one example of a type of approach that has little to do with the object itself.

Going into some of the themes discussed in the literature in more detail, one's unease increases as one finds a significant gap between what the texts describe and their correspondence with reality: for example, among the causes of deterioration listed, we find that lack of maintenance, agriculture, man (theft and vandalism), and inadequate interventions are treated respectively in 2, 2 11, and 22 articles out of 400; the others speak of deterioration in the abstract or else focus on extremely special cases.

In the description of interventions, a marked preference for lifting emerges (70 %) at the cost of consolidation in situ (30 %), and there is a decided disinterest -- or perhaps ignorance -- with regard to more explicitly soft types of intervention, such as reburial (8 cases), maintenance (3 cases) or simple documentation alone (9 cases)<sup>iii</sup>.

In general, however, there is a notable tendency to publish reports on unique interventions, based on extraordinary premises with sophisticated or costly techniques, which could not be extended to or even approach the everyday exigencies of ordinary conservation.

An interesting basis for comparison was also supplied by a questionnaire sent to the participants before the course began. This was meant to collect data that would be useful in clarifying the state of affairs of the mosaic heritage in their areas of competence. Interesting information was obtained, and was sometimes quite different from the general picture derived from bibliographical analysis -- again witnessing to the scanty correspondence between reality and topics discussed in the literature. For example, we found that 60% of the known mosaic patrimony has not been detached or lifted, whereas of the remaining 40%, only about 18% has returned on site. Of the remainder, only 22% was reapplied on a support, whereas in the other 78%, cases of deterioration are to be traced to improper storage conditions after detachment.

The questionnaire also supplied information about management, which was useful for studying the actual situation in which these functionaries work. For example, we noted a total lack of correspondence between the extent of heritage to be managed, the number of visitors, and the human and financial resources available: an average of 48% of the staff employed on the various sites were guards with various functions as against only 5% of conservation personnel.

Finally, to draw a limited, but up-to-date picture of some specific themes, we asked questions regarding a particular time period: the 1988 financial year. Regarding financial resources, for example, responses showed that those in charge of the site obtained 7% of what they needed. Among the work involving mosaics, some 55% was for detachment and of this only 50% of the works were remounted on panels and that, again, not one cubic meter returned in situ.

The picture of the situation as seen through the reports of the participants enabled us to collect the first, basic data and to assess the type of approach with which the individuals faced the issue. The points of contact among the diverse situations described, involving different geographical areas (England, France, Spain, Tunisia, Israel, Italy), were numerous and confirmed our original hypothesis, i.e. the utility of a more comprehensive examination of the problem before going into technical details.

It thus seemed proper that the course topics, which focused on the ethics of interventions, deterioration of materials, techniques of intervention, protection and management, should be treated with an emphasis on the dynamic way they interact. In presenting the deterioration of materials and pointing out the number of agents

of human origin, we preferred an analysis of the overall picture, entrusted to specialists with an integrated and global vision of the various factors of degradation, rather than the classical breakdown into chemical, biological and physical factors.

Another example worthy of note is the relationship between the state of conservation of the ruins and site management. As the Mediterranean area did not provide much in the way of exemplary cases, we resorted to a parallel with the management of a nature park<sup>iv</sup>. Although it seemed a bit forced, the example turned out to be illuminating and pertinent, and furnished useful connections to possibly viable solutions to the management of an archaeological site.

In line with these premises, the review of case studies was a veritable moment of truth. The diversity of theoretical approaches, almost never explicitly stated, that were at the basis of the various technical solutions adopted; the difference between the procedures and materials used; the lack of technical details on the various steps of the operations (despite the pseudo-technical approach); the lack of quantitative and descriptive data on the context -- all these emerged loud and clear.

The result was a fragmentary and contradictory panorama of particular solutions that often are not applicable in other contexts. Specifically, we could identify two lines of approach that can be conventionally defined as soft and hard: the use of traditional techniques and materials as opposed to the generalized use of synthetic products; intervention on site and environmental modification as opposed to removal from the context and reattachment to new supports; examples of expensive, risky techniques suitable for the occasional extraordinary exploit but not appropriate by extension to the reality and the scale of actual contexts and the most serious and widespread situations.

One knotty problem was architectural protection from the elements; while such protection was seen as essential, people were reluctant to employ this solution because of the poor design quality of existing examples. Equally clear was the slight or totally absent consideration of the rapport between restoration works and compatible use -- the generalized practice of intervention on the ruins without facing and resolving the cause of decay. This is exemplified by the cases in which, given clear damage caused by foot traffic, the restoration intervention tackled all the problems and all the expenses except for the foot traffic itself. Or, yet again, the lack of a clear distinction between interventions outdoors, on artifacts in situ, and objects kept in museums or other protected environments.

In this sense, the approach to the problem of treatment of lacunae can be considered to be emblematic of the contradictions that arise when technical needs and restrictions are not considered together with philological aspects and aesthetic presentation.

The separation of the various professional spheres that work together in conservation was found once again to have a negative effect. In many cases, when technicians develop projects of a proper scale and content, they often encounter insurmountable obstacles in the conflict between technical and political requirements; the latter often impose conditions that negatively affect the possibility of planning, and on the modular nature and continuity of the interventions.

On the other hand, an attitude that creates a head-on collision between conservation and use was found to be dangerous and utopian, and the need to find a proper equilibrium between these two requirements became apparent: the problem can be resolved through precise technical and managerial solutions.

The following comment struck us as reflecting the general reaction; and we offer it here as a summary of the overall evaluation: "less lecturers; less spectacular technologies; more simple and guaranteed intervention examples which can be useful in our everyday realities"<sup>v</sup>.

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<sup>i</sup> The 1th International Course for the Safeguard of Archaeological Mosaics was held in Rome, 19 September - 13 October 1990, was organized by ICCROM and ICR. Coordinators were A.Melucco, G.de Guichen, R.Nardi; Assistents were R.Colombi, E.Bonasera.

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<sup>ii</sup> G.de Guichen, in *Mosaics n.4*, Conservation of mosaics in situ, Soria 1987, in a special communication says: ".. and we are here not to give an Oscar for the most extraordinary intervention of restoration but for working on conservation of mosaics in situ..." This seems to be, until nowadays, the best synthesis of the problem.

<sup>iii</sup> For a deeper analysis of the specialized literature see also the paper presented in this meeting by R.Nardi, "Critical review of the specialized literature".

<sup>iv</sup> Franco Tassi, Director of The National Park of Abruzzo, Italy.

<sup>v</sup>From the evaluation form distributed to participants at the end of the course.