

The activities of ICOMOS in the field of conservation of mud-brick (adobe) monuments were initiated around 1970 by the late lamented Piero Gazzola (President of ICOMOS at the time).

Professor Gazzola, confronted with the dramatic conditions of buildings and archaeological sites inspected in all regions of the world, came to the conclusion that the sparse preservation efforts by archaeologists and scientists would have greater success if an exchange of ideas and experiences could take place at an international level.

An international effort could be started by arousing the general interest through the circulation of questionnaires and by organizing symposia where information from all active parties could be collected, a fruitful exchange could take place and its results distributed by the publication of proceedings and recommendations.

Professor Gazzola was able to secure the cooperation of one of the few research and field projects active in the late sixties (1968-1971) which was coordinated by Professor G. Gullini (Institute of Archaeology, Turin), with the participation of IRPA-Brussels (R. Sneyers and G. Bultinck), ICCROM (G. Torraca), the Institute of Mineralogy of Turin (G. Chiari) and the Iraqi-Italian Institute of Baghdad.

In that context Questionnaire N°1 was prepared and distributed in 1971 to the ICOMOS National Committees. The questionnaire was meant to identify the areas where conservation problems existed and the peculiar character of such problems in each region of the world.

The First Symposium on the Conservation of Mud-Brick Monuments was organized by the Iranian Committee of ICOMOS and was held in Yazd (25th to 30th November, 1971); it offered the first occasion to compare conservation practices which were developing at the time in several countries (Iran, Iraq, USA). The proceedings were published, with some delay, in 1976 (they are available at the central ICOMOS office, 75 rue du Temple, 75003 Paris).

The wish to encourage a deeper study of mud-brick structures stimulated the international experts who cooperated with Professor Gazzola and ICOMOS to draft Questionnaire N°2. The second questionnaire was actually a scheme for the examination of a single mud-brick structure, as a preliminary for any conservation treatment.

Questionnaire N°2 should have been completed after the actual examination of a real case, but it required considerable scientific support for the execution of analyses and tests. These technical difficulties caused a sharp reduction in the number of answers which were received when the questionnaire was distributed in 1974 (nine answers in all); the material collected was, however, of technical interest and encouraged the organizers to pursue this line of work, which aimed at a better definition of the properties of mud-brick (adobe) as a building material and a more accurate study of the structures together with their environment.

Also the Second Symposium on the Conservation of Mud-Brick Monuments was organized by the Iranian Committee of ICOMOS and took place again in Yazd (6th to 10th March, 1976). Increased participation of experts and an extensive programme of technical visits allowed an exchange of information of high interest; this was reflected in the resolutions that constitute the most complete statement available to date of preservation problems and conservation policies.

Unfortunately, the proceedings were not published prior to the recent political changes in Iran and now, perhaps, they will not be published at all.

The Second Symposium recommended that the elaboration of the Questionnaire be continued with the aim to produce a document to be used as a guideline for the study of monumental structures and archaeological remains.

Questionnaire N°3 was prepared by ICCROM and then discussed in detail at a Regional Meeting on Adobe Preservation convened in Santa Fe (New Mexico, USA) by the United States ICOMOS Committee (3rd to 7th October, 1977). The large participation of laboratory experts allowed a further expansion of the questionnaire (Revision 2, November 1977), which finally became an elaborate model for the complete investigation of mud-brick (adobe) material in built structures. The document was widely distributed at the end of 1977, but it was not thought that answers would actually be forthcoming because of the difficulty involved in setting up the required laboratory tests.

The main purpose of Questionnaire N°3 was to stimulate testing of the materials and standardization of testing procedures.

The Santa Fe Recommendations underlined also the importance of research and listed problem areas where new data were needed. Current, but faulty, practices in conservation of buildings were explicitly mentioned and condemned (with particular reference to the use of cement plaster over ancient adobe structures). Finally, a recommendation was issued to encourage standardization of testing procedures through the action of an international committee.

Important testing experiments were carried out before and after the Santa Fe meeting (1976 - 1978) at the request of the National Park Service by the National Bureau of Standards (J. Clifton and others) and the results were published. (See Information Sheet N°1 issued by ICCROM.)

On the eve of the Ankara Symposium (28th September to 4th October, 1980) several problems appear to be incumbent, but for some of them a satisfactory solution is not yet in sight.

1) The long range efficiency of partial protection methods (including chemical treatment, capping, coating etc.) is questioned on the basis of recent experience. The cost of such processes is high and they do not provide long range reliable protection unless a maintenance routine is established.

2) Archaeologists and scientists appear now to favour either total protection systems (complete shelters or re-burial) or efficient maintenance routines where practicable.

3) Shelters which are open on the sides do intercept rain (and so they stop the most damaging deterioration factor), but they allow a slow process of crust formation (and successive detachment) which is probably due to humidity/temperature cycles and may be intolerable in the long run (particularly for painted and sculpted surfaces).

4) Scientists keep asking for more testing, but conservators note that testing of unbaked earth materials is time consuming and expensive, while, on the other side, it is not clear what data are really relevant for the establishment of a conservation programme. In view of the fast deterioration rates of the material, it may well happen that when the laboratory tests on a recently excavated structure are completed, the structure in question may already be severely damaged.

5) There is general agreement on the fact that ancient cities and towns built in unbaked earth must be protected against increasing local pressure towards modern concrete technology. It is, however, imperative that conditions for a reasonable quality of life be created inside houses built by the traditional technique.

A substantial progress towards the solution of such problems cannot be expected from a single international symposium. A real improvement in knowledge and technology may arise only from direct experience acquired through research and field work on a large enough scale. The international cooperation may prepare some conditions for such works, but their actual realization can take place only through national organizations entrusted with conservation tasks.

The organization of pilot projects in several regions was one of the recommendations of the 2nd Symposium in Yazd, but only two pilot projects were actually carried out between 1976 and 1980 (Chan-Chan, Peru and Tumacacori, USA); one of them is not active at this moment.

The second decade of the international effort for mud-brick (adobe) conservation does not begin under the best auspices, as further progress requires projects involving great expenditures and sponsorship from national (or international) agencies provided with sufficient spending power. New sponsors are not appearing and some of those active in the first decade withdrew (we hope only temporarily) from the picture. Furthermore, the loss of such an imaginative and brilliant personality as that of Piero Gazzola (who died in September 1979) deprives us of a driving force greatly needed in the present circumstances.

However, it is in such difficult situations that international organizations should prove their usefulness by persisting in their weak but continuous action, until new force is offered by national agencies for the support of basic research and exemplary conservation projects.

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