

TRAINING AS AN ESSENTIAL PART OF RISK PREPAREDNESS

The ICOMOS *Guidelines on Education and Training in the Conservation of Monuments, Ensembles and Sites*, prepared by CIF (Committee International Formation) and adopted by the Colombo General Assembly in 1993, emphasise that:

Conservation of cultural heritage is now recognised as resting within the general field of environmental and cultural development. Sustainable management strategies for change, which respect cultural heritage, require the integration of conservation attitudes with contemporary economic and social goals including tourism.

Furthermore, the object of conservation is seen in prolonging the life of cultural heritage and, if possible, in clarifying the associated artistic and historical messages without the loss of authenticity and meaning. The Guidelines also highlight the importance of including disaster preparedness in conservation training programmes.

Training in disaster preparedness and in methods of mitigating damage to cultural property, by strengthening and improving fire prevention and other security measures, should be included in courses. (Art. 9)

Improving Awareness

The importance of *awareness raising and training* has been further emphasised in other documents related more specifically to risk preparedness. The Canadian summit, held at Quebec in 1996, stressed the links between heritage protection and clear identification of heritage values in the built environment. The Kobe–Tokyo meeting on risk preparedness (January 1997) listed several *target groups* whose sensitivity should be increased in terms of the benefits and requirements of risk preparedness for cultural heritage: heritage specialists, site managers, policy and programme administrators, politicians, property owners, occupants and users, military personnel, volunteers, media and the public in general. The declaration further stressed the need to integrate appropriate training within existing educational systems, institutional frameworks and relief efforts, to continue preparing and diffusing practical guidelines and training packages. After the earthquake that struck central Italy in 1997, the final declaration of the ICOMOS seminar in Assisi (February 1998) again specified that risk assessment and emergency response require people with adequate training, and that the target groups particularly include site managers and those who are responsible for the care of properties. (These documents are appended to: Stovel 1998.)

Hazards

There are obviously many types of *hazards* that can affect heritage sites and properties. Prof. G. De Angelis used to distinguish between natural and human-caused problems, dividing the effects into sudden and prolonged. The prolonged actions can generally be kept under control through regular maintenance programmes and timely repair. Sudden disasters include those caused by earth-

quakes, tidal waves, landslides, volcanic eruptions, cyclones, floods, avalanches, and fires. In addition, there are damages caused by armed conflicts, wars, or terrorist attacks. In sudden actions, such as these, the problem is often that they tend to come as a surprise, and it is only too human to forget the previous event. Nevertheless, even sudden actions can be mitigated through appropriate *preventive management strategies*. Bernard Feilden has always stressed the importance of routine *inspections*, undertaken even more often during the year, and in the case of emergencies, after heavy rains, winds, or disasters. There should be a more thorough inspection and report every five years, as recommended for public buildings in Great Britain. The findings of the inspections should be assigned *priorities* in accordance to their urgency: immediate action, urgent problems, necessary, desirable, keep watch, and future liabilities (Feilden 1998: 31). The necessary actions should then be integrated into *annual work plans*.

'Between Two Earthquakes'

According to a recent study in India and Nepal, the inhabitants of Bakhtapur and Punjab, which suffered from serious earthquakes, have generally tended to return to their old houses, repairing and adjusting the ruined structures with hardly any effort toward structural improvement to attempt to mitigate the next seismic action. Even in Italy, for example, in the case of the earthquake of Umbria and Marche in 1997, much of the damage was due to *lack of preparedness*. This could have arisen from a combination of poor structural condition due to *lack of maintenance, poor technical planning and execution* of anti-seismic measures (legally prescribed), and *lack of appropriate site control* – itself partly due to a limited understanding of the behaviour of existing structures. Furthermore, there were problems caused by the *lack of preparedness* in providing the population of endangered sites with temporary accommodation; this brought additional suffering to families, as well as wounding the surrounding landscape, where large areas were flattened and covered with concrete to provide a foundation for temporary shelters and infrastructures.

It is not by chance that Sir Bernard Feilden named his small guideline dealing with preparedness in relation to earthquakes *Between Two Earthquakes* (Feilden 1987). An important part of disaster preparedness is in *learning from previous events*, as well as improving and anticipating actions for the future. Preparedness should, however, go even further and be proactive. In this regard, the Italian Istituto Centrale del Restauro has provided an innovative model with the *Risk Map of Cultural Heritage* at the national level. The map identifies areas of concentration of heritage resources, as well as the various types of hazards – from air pollution to floods, landslides and earthquakes – and presents the different layers of information using GIS (ICR 2000). It is worth noting that Dr. Hans Foramitti introduced similar ideas into training within the International Architectural Conservation Course (ARC) of ICCROM in the 1970s. In addition to training the relevant personnel responsible for heritage resources, Foramitti emphasised the importance of defining *alternative access routes* to all critical places. He stressed the importance of indicating all hazards of a particular site on the relevant *inventory cards* as a basis for preventive action.

Towards Integrated Management

Herb Stovel, in his *Management Manual* (1998), notes that there is often certain reluctance in accepting the impact of hazards on cultural heritage and to act accordingly. It is obvious that any training will only become feasible if it is *motivated and accepted* psychologically and politically as an integrated part of management. Stovel stresses the need to strengthen collaborative working habits and a more serious and professional attitude to preparedness by all those who work in the heritage field. There is need to integrate all the related fields in the preparedness plans, including built heritage, collections, and the environment. We can articulate our actions in relation to disasters in three main phases: 1) *preparedness*, 2) *response*, and 3) *recovery*. It would be logical that *the main emphasis in training* should be given in the phase of preparedness. Here the aim should be in mitigating risks, integrating relevant hazards in management and routine maintenance strategies, as well as preparing the necessary response plans.

During or immediately after a disaster, actions must be undertaken according to plans involving properly trained teams of people. Nevertheless, in the phase of recovery, there is again the possibility to introduce training addressing particular target groups. At the same time, of course, *the recovery phase should be seen as a new preparedness phase*, i.e. 'between two earthquakes'. For example, in the event of the Montenegro earthquake in 1979, the heritage authorities were able to mobilise teams for the assessment of heritage properties in the destroyed sites, using clearly articulated criteria and categories that facilitated the programming of subsequent reinforcement, reconstruction and rehabilitation. Unfortunately, the engineering criteria had been developed in relation to new constructions, and did not fully recognise the value and special character of historic structures, thus causing unnecessarily heavy interventions and even further destruction. In the same context, ICCROM with the help of UNESCO also organised technical advisory missions and training seminars addressing conservation professionals as well as the authorities responsible for the definition of engineering criteria.

Advance research in the behaviour of historic structures, and the *integration of sympathetic building and planning norms into the legal framework* are obviously fundamental conditions for a reasonable success in such recovery efforts. Another aspect is the need for *involved persons and institutions to be properly prepared* for their tasks. Following the Montenegro earthquake, an international planning commission undertook the responsibility of co-ordinating recovery efforts, which lasted several years, and included the development of planning criteria to be implemented in future constructions. In many countries, there have since been serious efforts to improve the understanding of the behaviour of historic structures. It is important that the results of such research be made available and that these be integrated into training programmes in all relevant fields. Special attention should be given to structural issues, and particularly to those institutions responsible for testing and confirming the relevant standards and criteria of intervention. The failure to reach a positive result in the safeguard of historic resources can depend on the lack of understanding and appreciation of the significance of a site by the team, but often it also depends on the lack of appropriate legal norms and standards to sustain conservation-oriented recovery, rather than opting for clearing the ground for new constructions. Therefore, training is required for specialist teams as well as for administrators to sensitise legislators in their tasks.

Being Prepared

Training in risk preparedness in heritage resource management fundamentally means thinking and acting in advance. General guidelines exist for the preparation of action plans, in terms of types and methodologies of actions. It is important that such training also includes consideration of temporary interventions, because these can be harmful or hinder later actions if not done properly. However, preparedness also means clearly understanding the significance and character of each site, an issue that must necessarily be based on prior research and surveys of the sites concerned. Such issues will need to be integrated into conservation policies, general master plans, relevant management programmes, and maintenance strategies, so as to identify the tasks, responsibilities, and financial and human resources. It is also essential to establish close collaboration between the different institutions responsible for disaster preparedness and risk mitigation; these particularly include those working with the community, such as the Red Cross and other voluntary organisations, so as to better co-ordinate relevant tasks and duties. Such collaboration should be subject to organised workshops or seminars.

The purpose of training in relation to risk preparedness is to prepare persons and institutions so as to be able to strike at key issues at strategic moments, foreseen in the strategic planning process. Training should not only focus on technical aspects – special attention should be given to understanding the significance of the heritage resource. It is on this foundation that action plans should be prepared. The forms of training can vary. Teams responsible for site management and routine maintenance are important target groups. These people and institutions will be in the best position to act when required. At a more general level, however, mitigating risks is essential in order to inform the site management of hazards, but also to take necessary precautions to take preventive action in a larger context: for example, to avoid landslides, to prevent flooding, to take necessary precautions to prevent fire, as well as to provide information about effective means of consolidating structures in seismic zones. The issue is about attitudes based on understanding, as well as about the skills and know-how to be capable of acting. It is here that international collaboration, such as the platform provided by the Blue Shield programme, can be useful and necessary. In any case, training must not remain an isolated phenomenon, but it should be clearly integrated into the whole process of preventing damage to heritage and society.

References

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