

## ENVIRONMENTAL PREVENTIVE CONSERVATION

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*Primum non nocere.* This ancient warning has for centuries applied to the medical treatment of humans, and only recently has it been transferred to the treatment of cultural property. It lies at the basis of a new trend in our discipline, applied experimentally in the 1980s, and defined at the beginning of the 1990s. The methodological principles of preventative conservation derive from the bad experiences of the past and are formulated with hope for the future. On the one hand we see great and irreversible changes in the substance of cultural property caused by conservators (the doctors proved more dangerous than the disease), on the other hand we believe that future conservators will possess more advanced diagnostic methods and techniques and new materials of known properties.

These two factors have gradually led conservation towards the philosophy of preventive conservation: not to touch the substance of a work of art, or - if it is absolutely necessary - to restrict this interference to the acceptable minimum and create for the object or collection the optimum microclimate and a systematic diagnostic control of their state of preservation and in this manner halt or at least considerably delay the process of deterioration. This is an approach which is the closest to the ideals of the Venice Charter, which encourages the preservation of historical monuments "in the full richness of their authenticity". It is also a reflection of the ethics of the conservator. This goes beyond the operations bringing out the aesthetic values of ancient works of art, and regards of importance only the "natural aesthetics", being the result of the historical process, the "natural authenticity" of monuments, untouched by the conservator.

Such a possibility exists in museums, archives and libraries in which works of art, archives and incunabula are stored, though requires costly investments in different storage conditions for individual groups of objects and diagnostic apparatus. It is more difficult to apply in the case of private collections (and those for example in the interiors of churches). It is also so difficult in the case of architectural monuments and their complexes that in general the problem is not even raised.

Preventive conservation is of course nothing new. While not being known by name, it has long been applied more or less unconsciously in conservation practice. The advance of the past two decades has been the attempt to define its principles, which probably still requires further discussion and its - and this is unchallenged - advance to the forefront of the methodology of conservation. ICCROM has had a prime role in the conducting of general studies in this field.

It led to the III International colloquium of l'Association des Restaurateurs d'Art et d'Archeologie de formation Universitaire "Preventive Conservation/la conservation preventive", organised in Paris in October 1992 by ICCROM, The Sorbonne and ICC. The materials of this conference, published in a thick dual-language publication has become the basis of our knowledge in this field.

The current theoretical discussions about preventative conservation concern almost entirely works of art (individually or in collections in museums). Only sporadically is the context of some of these in archaeological ruins and sites recalled, and considering the need for their protection against atmospheric effects and interference with their structure. There is also a lack of theoretical studies considering the application of the principles of preventive conservation to the conservation of architectural monuments, urban complexes and also the cultural landscape. Is it possible to apply the principles of preventive conservation on the macroscale to these too, and if so, in what form?

If we wish today to take a step forward and propose an integrated strategy of preventative conservation, we have to define the possibilities of its application at all scales.

Let us examine the situation with respect to the built heritage from the point of view of the three basic principles of preventive conservation:

- A. Not to interfere with the substance of the monument,
  - B. Providing the optimum climate/microclimate for its continued existence,
  - C. Ensuring continual monitoring of its state of preservation.
- Ad. A.

The situation differs in the case of two categories of architectural monuments:

- those fulfilling a double role (functional and cultural)
- those only fulfilling a cultural role.

The functional role of architecture often changes in its life, since it must serve a use. As functional architecture it must therefore be in a good technical state and serve the needs of the epoch. Its modification and modernisation are unavoidable though must be the result of a wise compromise and restricted to a bare minimum, the exceeding of which creates a threat to the authenticity of the building or architectural complex. In the last two decades, a great danger has appeared, the modification of historic buildings or complexes to serve the needs of mass "cultural" tourism.

Instead of showing tourists monuments preserved in their authentic state, we falsify them by presenting a fabricated and deformed picture. We create Disneylands from historical centres. This is a trend which is difficult to oppose because behind it stands the interests of international and local tourism industries, supported for financial reasons and for nationalist-political ends by state governments.

This tendency is equally strong in the case of historic buildings and groups of buildings which fulfil a cultural role. Historic buildings and archaeological sites undergo partial or full reconstruction, often based on pure fantasy, which are then exhibited to tourists as historical truth. Those same economic and historical forces support and encourage the process of the destruction of the authenticity of archaeological ruins.

Ad B.

While our interference with the historical fabric of monuments, either the aggressive adaptation to modern functional needs, or their beautification in order for the needs of the tourist industry lead to the degradation of their authenticity, they are also threatened by another great danger: the pollution of the environment. The historical centres of towns, surrounded by new suburbs are drowning in a sea of smog. Urbanisation has swallowed up originally isolated archaeological complexes. Industry, located near towns and their monuments, pollutes the air and water, including rainwater.

Ad C.

The continual monitoring of the technical state of the buildings and their complexes is exceptional. Instead of systematic maintenance of buildings in a state of good repair, by the immediate repair of damage as it occurs, it is usually the case that nothing is looked after on a day-to-day basis, which leads to a devastation of a structure or the rise of a threat, and only then is a fundamental repair programme embarked upon, which generally gives rise to threats to their authenticity. The historical maxim of Georg Dehio: "*konservieren, nicht restaurieren!*" is still an unrealised desideratum. The situation is especially tragic in the case of abandoned or ownerless structures which due to the lack of a user and resources are slowly falling into ruin.

Although the application of the philosophy of preventive conservation in museums depends to a great degree on the staff of those museums and the conservation services, the attempt to apply them to the architectural and urban scale requires the co-operation of many entities and institutions, political, economic, cultural and scientific. This need results from the character of the intervention which it is necessary to undertake in order to fulfil the three primary desiderata of preventive conservation:

Ad A.

In the case of architectural monuments and their complexes which fulfil a functional and cultural role, the restriction of intervention to the absolute minimum requires us to

concentrate on structural conservation, to maintaining the status quo: the day-to-day maintenance of the structure in good repair. The fulfilling of this ideal will involve an important difference in approach from those required by works of art in museum collections. The degree of intervention by museum conservators is inversely proportional to the correctness of the environmental conditions. In the conservation of architecture and architectural complexes, these conditions will never be optimal, and the environment will have a permanent destructive effect on the monument, thus the process of minimal conservation will of necessity be a permanent one. This is the "absolute minimum" for the preservation of the monument in unchanged form. In the case of the introduction of changes intended to modernise the monument or adapt it to a new use, this "absolute minimum" must be defined as a result of the conducting of diagnostic investigations of the monument. These must combine historical, archaeological and technical investigations (defined by different names in the European terminology - German: *die historische Bauforschung*, French: *l'archéologie du monument historique*). Only on this basis can one define the permitted scope of the modernisation and adaptation of the building without disturbing its historical values. These will be the result of a compromise, different in each case, between the principles of conservation and the needs of the user. If the changes carried out disturb the historical substance or alter the spatial arrangement of the building, they must be scientifically-documented. Here we enter the domain of "conservation by documentation" the saving of the scientific record of the original state of the monument before it is changed for future generations of investigators.

In the case of monuments or their groups which fulfil only a cultural role, the "absolute minimum" must be restricted entirely to maintaining the status quo – protection against the destructive effects of atmospheric factors with the elimination of all manner of reconstruction. In the case of archaeological remains, this will mean the restriction of all archaeological investigations (since only unexplored sites maintain their "full authenticity"), and the restriction of the exposition of excavated remains (since backfilling the site has proven to be the best way of preserving uncovered relics).

Ad B

We cannot create a specific microclimate/microenvironment for architectural monuments and their groups, which are exposed to the macroenvironment. The degree of the contamination and toxicity of the latter has basic importance for the preservation of monuments of architecture. Each – even if minimal – decrease in the pollution of the environment in which the monument or group of monuments finds itself will be a partial fulfilment of the requirements of preventive conservation. Such operations as the restriction of vehicular traffic in historical town centres are a step towards the realisation of these aims.

Ad C.

The establishment of monitoring requires the fulfilment of two conditions:

- each monument must have its owner or user, who feels responsible for it and continually observes and systematically corrects all changes detrimental to the state of preservation of the structure.
- there exists an efficiently-operating local conservation service, working with the owner of historic monuments, and carrying out systematic inspections of their condition and giving concrete and reasonable directions to their owners.

If we carefully examine the application of these three rules of preventive conservation to architectural monuments and their complexes we observe that they are the same as those which ecologists postulate for the protection of the natural heritage: minimal intervention, restriction of the pollution of the environment, and continual monitoring of the condition of the natural resources.

As a result of this there are a number of fundamental suggestions for our considerations:

The strategy of preventive conservation of cultural property at all scales (and not only on the microscale of the museum) must be amalgamated with the ecological programme for the protection of the environment.

It cannot be only a conservation programme, because then it would be condemned to isolation.

It must be based on the close co-operation of the monuments protection services with the services responsible for the protection of the natural environment and based on the scientific principles of the disciplines it represents.

It must have the character of a political programme, in which international organisations, national and local governments should all be involved.

It must become ENVIRONMENTAL PREVENTIVE CONSERVATION

The above suggestions and proposals are formulated in the conviction that the philosophy of preventative conservation

is currently the most important cognitive and pragmatic trend in the protection of the cultural heritage, and it seems likely that it will continue to fulfil this role in the twenty-first century. It must however leave the confines of the museum and become universally-applicable. This should be the aim of the Preventative Conservation Strategy.

Only recently has the Council of Europe in the collaboration with ICCROM demonstrated a serious interest towards the preventive conservation of heritage. It shows in aiming at formulating of principles of the European strategy of preventive conservation and recommendation of its application through the member-States. On the 21-22 September 2000 the Conference in Helsinki-Vantaa was held; the delegations of 23 countries were present, discussing the principles of such strategy. The Conference however was dominated by the museologists, perceiving preventive conservation as pertaining solely to museal and archive collections. The proceedings of the Conference (“Towards the European Strategy of Preventive Conservation”) do not contain conclusions regarding theory of preventive conservation. Proceedings contain however important practical and organizational conclusions. This was expressed in the proposed definition of preventive conservation as **“multidisciplinary management aiming at limiting of losses in cultural heritage in order to enable its duration for the public benefit”**.

Philosophy of preventive conservation becomes the most important way of thinking and acting in protection of cultural heritage, having great perspectives of proliferation in the 21<sup>st</sup> century. However, originating from the experience of museums, it has to encompass the whole heritage. This is the task of ICOMOS.

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