

## Recommendations for Preventive Conservation in Heritage Preservation

The following recommendations for preventive conservation in heritage preservation are intended to serve as a stimulus for owners, administrators and users of World Heritage sites in Germany. They are based on the results of the Hildesheim Conference and on the contributions from the authors in this publication (for quotes and direct references the contributor's name is indicated in parentheses). Apart from several points concerning the special problems of World Cultural Heritage, these recommendations can also be helpful for the sustainable handling of cultural monuments in general.

### Legal Authority and Preventive Conservation

Adverse effects, damage and losses to cultural monuments and ensembles can be prevented or minimized through legislation and its correct application. In Germany these legal instruments for preventive conservation are presently endangered by the following factors:

- deregulation in the building laws and the withdrawal of the state in the fields of planning and construction, with a concomitant weakening of the laws,
- greater incorporation of heritage conservation offices in the administrative hierarchy and the accompanying loss of independence for these expert authorities,
- privatization of tasks that were previously public functions, resulting in a dependence on investor projects [B. Ringbeck].

A strong legal foundation that is anchored in the citizens' consciousness makes preventive conservation possible. "Culture and its protection must be given constitutional status, as animal protection and nature protection have" [B. Ringbeck].

### Financial Support of Preventive Conservation

Preventive conservation is the best and most economical method to preserve cultural monuments properly for the future. Preventive work and long-term maintenance must therefore be eligible for financial support. State, communal and ecclesiastical offices as well as other distributors of subsidies should allocate financial support above all for prevention and not just for comprehensive restorations.

### Preventive Conservation and Applications for World Heritage Status

As a preventive measure, potential threats to cultural monuments, ensembles and cultural landscapes for which World Heritage listing is desired should already be identified and specified in the preliminary stage of the application. In addition to general references to such threats, the establishment of an ap-

propriate buffer zone is imperative for preventive conservation with regard to spatial and town planning. The buffer zone protects the surroundings of a World Heritage site by reinforcing the necessity for increased caution and vigilance regarding further architectural development. The establishment of visual axes has a similar function for World Heritage sites; construction limitations (for example, building height regulations) can apply along these axes, which may extend beyond the borders of the buffer zone.

An important instrument of prevention is the Management Plan, which is absolutely necessary for listed World Heritage sites and is already required as part of the application materials. As many specific findings regarding the appropriate handling of a World Heritage site as possible should be included in the Management Plan – from references to existing or anticipated land use, development and urban design plans to recommendations or regulations for maintenance plans. If new information becomes available, the Management Plan can be supplemented later as necessary [see B. Ringbeck, *Managementpläne für Welterbestätten*, published by the German UNESCO Commission in 2007].

### Research and Preventive Conservation

Advancements in preventive conservation are made possible by basic research and by practice-oriented interdisciplinary projects. Both of these areas should be given greater support and should be expanded through interdisciplinary cooperation among heritage conservation offices, universities, research institutes and other public and private agencies. Research into the causes of damage and the development and application of appropriate methods and techniques of preventive conservation are based on long-term observations and long-term measures. Research projects in preventive conservation therefore need a suitable time frame in order to produce practice-relevant results.

### Education and Preventive Conservation

The special importance of preventive conservation in heritage conservation as well as in the field of museums, collections and archives should also be taken into account in teaching and research at the university level. This applies to courses of study in heritage conservation, conservation and restoration as well as to all other courses that are involved in a broad sense with heritage conservation and the preservation of artistic and cultural property.

Principles, methods and techniques for preventive conservation should also be taught to an appropriate extent during the training of heritage conservation craftsmen.

## **Town Planning, Land Use and Development Planning and Preventive Conservation**

The designation of a World Heritage site and its buffer zone has no immediate legal effect. Rather, the World Heritage Convention (*Convention on the Protection of the World Natural and Cultural Heritage* from 1972) and the Operational Guidelines issued by UNESCO require the protection of World Heritage sites to come from national legislation. This also applies to the buffer zones. The national instruments for this purpose are:

- legal definitions in the field of heritage conservation, as individually listed buildings and/or as ensembles or preservation areas in accordance with the laws of the relevant state,
- legal definitions in the field of nature protection in accordance with the relevant national and international laws and guidelines,
- legal determinations regarding landscape protection,
- instruments of land use and development planning, in particular zoning and building development plans,
- urban rehabilitation planning, development plans, traffic planning, etc.

These legal possibilities can offer a high degree of preventive protection and visual integrity to the existing building stock, in particular regarding ensembles and cultural landscapes, and can allow appropriate development at the same time. However, for their effectiveness it is essential

- that they follow the aim of making the protection and maintenance of the historic and natural assets of a World Heritage site possible, and
- that they include sufficiently precise definitions (for instance designation of the number of stories allowed in development plans, depiction of cellars on cadastral maps, identification of known or suspected archaeological sites, etc.).

It must be pointed out that such plans should not be an end in themselves, but rather are to be put to use for the purpose of heritage conservation. The mere “participation” of advisory boards for nature and heritage protection or for urban rehabilitation does not bring about preventive protection!

### **Documentation and Monitoring, Data Banks**

Preventive conservation is based on comprehensive knowledge of a cultural monument and its surroundings. Systematic interdisciplinary investigations are necessary for evaluation of the state of preservation and potential causes of damage. Aspects of the humanities and natural sciences as well as general social aspects must be given just as much consideration as technical factors or aesthetic perspectives. An appropriate assessment of the surviving historic fabric requires knowledge and understanding of the history of its creation, use and restoration.

Investigation campaigns should give purpose-aimed answers to the multi-layered preservation problems of a cultural monument and should not create quantities of data that are unmanageable and hardly usable in practice. Time and costs can be reduced by limiting investigations to what is truly necessary, by timely networking and by critical scrutiny of very different types of information concerning a monument. Long-term observations (monitoring) and continuous maintenance measures (maintenance contracts) can be financed using such savings.

Documentation of the as-is condition and damages and the development of work plans should both be coordinated from the

beginning with the preparation of a sustainable maintenance and upkeep plan.

Successful monitoring of a cultural monument, its fittings and its surroundings requires a well-trained interdisciplinary team and should be conceived as a long-term program. “Monitoring instead of intervening” calls for a precise record of the state of preservation, fed into efficient data banks on the basis of a digital survey of the monument. An independent body of experts is recommended in order to follow the work and to evaluate the quality of the monitoring.

All the data concerning a monument, from preparatory investigations and archival research to monitoring, can be stored in a user-friendly data bank and be made accessible to the experts in the field. For heritage conservation practice, data banks that are based on the individual monument or monument ensemble and that link all the available data are advisable.

### **Revitalization and Continued Development of Traditional Means of Upkeep and Maintenance, Maintenance Contracts**

The tradition of appropriate building maintenance and continuous upkeep with proven means and methods guarantees the long-term preservation of the historic building stock. The example of the institutionalized cathedral workshop proves that well-trained, experienced workers and a continuity of personnel in the care of a monument are a guarantee for quality [B. Schock-Werner]. This tradition should be continued at a high level of craftsmanship and should be developed further in accordance with the newest knowledge in the conservation sciences.

The traditional principle of “repair instead of total replacement” is more relevant today than ever; it preserves material authenticity and saves costs. Appropriate, sustainable care makes it possible to maintain a building and its architectural surfaces in a manner which not only meets the demands repairs using identical materials but also allows repeated treatments according to historic findings and using historical techniques [Th. Danzl]. The supervision of craftsman’s repairs by conservators has proven its worth and is one of the standards of heritage conservation today.

The organization of maintenance and upkeep by a “maintenance planning” project group makes efficient use of classification and data bank systems possible [Th. Danzl]. In keeping with preventive conservation goals, monitoring and maintenance contracts should also be drawn up for well-preserved monuments, in order to avoid damages and losses from the beginning.

Every conservation/restoration project should conclude with a follow-up concept in the form of a maintenance contract, which should be calculated into the financial plan.

Political rethinking is necessary here: long-term measures and long-term maintenance should take the place of short-term “success programs” [D. Gutscher].

### **Preservation Strategies and Management Plans**

The scientifically based interpretation of all data relevant to a monument serves as the basis for the preparation of sustainable preservation strategies and Management Plans. The data makes it possible to produce a professional report regularly, as required by the World Heritage Convention, and to carry out effective

Preventive Monitoring, as a necessary supplement to Reactive Monitoring.

In terms of preventive conservation, the primary task of the documentation of the condition of a World Heritage site is not only to depict damages but also to enable timely identification of potential sources of damage.

As an important part of a preservation plan, a maintenance plan must be developed and put into action in order to remove or at least reduce any potential sources of damage. Development of an appropriate maintenance plan for certain categories of monuments (i. e. industrial monuments) can have provided a model for heritage conservation in general [N. Mendgen].

The World Heritage Compatibility Check from UNESCO's Operational Guidelines should be supplemented with a World Heritage Preventive Check, as an essential parameter of the Management Plan [W. Lipp].

### **Archaeology and Preventive Conservation**

Archaeological excavations are aimed in general at the exposure of older layers, and the concomitant loss of more recent layers is accepted. "Preventive archaeology" [D. Gutschler] rejects unnecessary excavations; archaeological remains are protected and marked in the ground but are not exposed or reconstructed. The concept of "preventive archaeology" also includes continuous monitoring of archaeological zones and appropriate protective structures for archaeological sites.

### **Continuity of Use and Change of Use**

Continuity of use is in general the best prerequisite for continuous building maintenance and appropriate care. Awareness of the necessity of preventive measures is strongest in this situation. If a change of use is unavoidable, the risks and chances for the monument must be weighed in a preliminary stage and strategies for minimizing the risks of loss must be developed. Precise knowledge of the object and involvement of specialists with the necessary expertise and experience are essential.

### **Sensitizing the Public for the Concerns of Preventive Conservation**

Preservation of our cultural heritage for later generations, sustainable conservation and economic handling of financial resources are only possible in connection with comprehensive preventive measures. These can involve limitations in the use of cultural monuments; the reasons for these limitations should be explained to the public. Interested citizens should be sensitized for these concerns and should become actively involved in prophylactic measures [D. Gutschler uses the term "pro-active"]. The inclusion of representatives of a great variety of social groups in considerations and decisions regarding preventive conservation simultaneously requires that the role of the experts and the importance of exchange among experts be acknowledged [D. Gutschler].

### **Tourism and Cultural Use**

Appropriate tourism-oriented and cultural uses of cultural monuments encourage identification with one's own history and promote an understanding of heritage conservation concerns. On the other hand, the use of monuments for rapid consumption by tourists and as a profit-making stage for events results in damages and losses that cannot be recouped even through extensive repair measures.

Within the parameters of preventive conservation, damages resulting from overly intensive use can be avoided in the forefront, and attractive alternatives can be worked out for tourism and cultural use. Careful, economical concepts can be developed through adaptation to the individual circumstances of a monument and to existing systems and structures [K. von Krosigk, P. Seibert]. Sensitive treatment of monuments, historic old towns and cultural landscapes is also a prerequisite for long-term retention of tourism as an economic factor.

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