

Six Additional Tasks for 2009/2010

The programme of ICOMOS activities for 2009 was presented at a meeting in the World Heritage Centre in Paris on 29 January 2009. After another meeting with representatives of UNESCO on 16 April 2009 in Munich the programme was supplemented in June by a contract with ICOMOS Germany of 400,000 dollars within the framework of phase III of the Japan Fund-in-Trust project “Safeguarding the Cultural Landscape and Archaeological Remains of the Bamiyan Valley, Afghanistan”. For the activity planning within the framework of Bamiyan Phase III not only the recommendations of the 7th Expert Working Group (see p. ##), largely already fulfilled during the ICOMOS campaign 2008, were relevant. Talks with the Afghan Ministry of Information and Culture (visit of Vice Minister Zia Afshar to Munich on 31 March 2009) were also very important.

In the following an abridged version of the planned activities, six additional tasks for the years 2009/2010, supplementing the above-described programme excellently:

Task 1: Stabilisation and conservation measures for the back wall of the Eastern Buddha niche

In the past years since 2004 when the back walls of the niches were secured with nets the work of the ICOMOS team, funded by the German Foreign Office, concentrated on salvaging the fragments from both Buddha niches. While due to the difficult outer circumstances it has not yet been possible to salvage all the fragments of the Western Buddha (work delayed because of finds of ammunition and bombs), work on the Eastern Buddha is already far advanced, following the recommendations of the 7th UNESCO/ICOMOS Expert Working Group: The completion of the missing upper part of the Messerschmitt scaffold in the Eastern Buddha niche will be the first step of this year's campaign (recommendations, point 2); the geological and rock-magnetic documentation and the 3D model of the niche are also far advanced (recommendations, points 4 and 5); the most important parts of the original plaster fragments in situ at the back wall were already conserved in 2008

The completely scaffolded Eastern Buddha niche



(recommendations, point 6); the partition walls of the caves at the base of the niche have been reconstructed in order to increase the overall stability (recommendations, point 8). The detailed conservation concept for the back wall of the Eastern Buddha niche (see p. 160) developed from the experiences made last year was already discussed at the meeting on 16 April and welcomed by all participants. It is of course important that the work of the restorers is thoroughly coordinated with the experts in charge of safeguarding the rock structures. In correspondence with the cooperation arranged in Munich between Claudio Margottini and the ICOMOS team, the experiences made during the UNESCO emergency activities in 2003/04 and 2006 (see report by Margottini, pp. 175 ff.), funded by the UNESCO Japan Funds-in-Trust, will be integrated into the practical on-site conservation work. In some areas of the back wall of the Eastern Buddha niche, especially the zone of the shoulders, in addition to the mechanical consolidation with glass-fibre dowels and stainless steel dowels a more extensive mechanical stabilisation with strong anchors is necessary, involving considerable costs for a team with appropriate equipment working on site.

Task 2: Safety and stabilisation measures for the path leading up and down the Eastern Buddha niche

Although public access was never allowed this has not kept visitors from using the only provisionally secured corridors and steps in the cliff on both sides of the niche. The very urgent measure concerns not only the paths and steps on the sides but also the safeguarding of the rather dangerous upper crossing and the safeguarding of the accesses to the caves beneath the back wall in connection with the partition walls and the reconstructed pillar on the right.

Task 3: Conservation and documentation of rock fragments of both Buddha statues and equipment for stabilisation and conservation measures

For the preservation of all fragments the 7th UNESCO/ICOMOS Expert Working Group (point 10) recommended “a reversible step-by step strategy reflecting the different locations and the mass of existing material” and as first steps “the completed identification of all fragments” and “the adequate semi-permanent storage of the documented material close to the Buddha niches”. In the meantime, all the cliff rocks from the Eastern Buddha and about two thirds of the cliff rocks of the Western Buddha that were broken off by the explosions have been salvaged in the last years and taken to provisional depots or protected with shelters. The stone demonstrates an extreme reaction to water. As soon as the stone blocks become wet (rain or snow) the sedimentary rock disintegrates into sand and all traces of the original surface treatment are lost. Besides, the stone blocks with traces of original treatments on their surfaces (drilling, dowel holes, recesses, etc.) are often so fragile and so traversed with cracks that they can hardly be moved.

There are various ways in which the numerous salvaged stone fragments can be classified:

- Using procedures for geological prospection the layers of the sedimentary rock on the rear wall of the Buddha's niche and on the individual fragments can be detected. The results of these measurements make an approximate assignment of the stone blocks possible regarding the height of their original location.
- After records have been made of all traces of workmanship on the surface, these observations can be compared with historic photographs before the destruction.
- The analysis of the particle size on appropriate samples allows determination of a sequence of sedimentary layers which can then be used to assign the stone to a particular position in terms of height.
- Finally, as soon as the individual fragments are available as 3-D scans a computer-aided classification of the fragments will be possible at least for some pieces. At the same time this procedure will enable a virtual return and positioning of the fragments on the 3-D model.
- It is also possible to gain further information on the original location of the stone fragments using the polychromy of the surfaces and the imprints or outlines of clay plaster that has not survived.

Because of the fragility of the stone fragments even simple lifting presents dangers. In order to safeguard them, stabilization of the fragments is necessary regardless of their future use. Application of a consolidant up to a maximum depth of 1 cm is feasible using classic methods of stone consolidation. In view of the size of the fragments such a "crust formation" will not lead to fulfilment of the project goals. At this time the only appropriate procedure appears to be total impregnation using appropriate methods; these include the two alternatives: use of a vacuum sack or placement in a vacuum chamber (on site). Several means of impregnation are available: acrylic resin impregnation, silica acid ester (KSE) impregnation. All the procedures have advantages and disadvantages that must be weighed; in some cases they are also compatible with one another.

Continuing and improving the documentation on the rock fragments of both Buddhas, which also needs to be seen in connection with Task 4 (shelter for Western Buddha fragments), is an important precondition for future decisions on how to treat these fragments. It will be discussed at the appropriate time by the Advisory Board (see points 10, 11 of the minutes of the 7th UNESCO/ICOMOS Expert Working Group) and decided upon by the representatives of the Afghan Government. For the conservation of the fragile material, which cannot be solved with the usual methods of stone conservation, so far there are only the above-mentioned alternatives that will be tested by the ICOMOS team in 2009/2010.

Task 4: Semi-permanent shelter for Western Buddha fragments

In view of the substantial progress of the last years in the salvaging of the fragments of the two giant Buddha sculptures, the minutes of the 7th UNESCO/ICOMOS working group demand a replacement of the already overcrowded provisional shelter buildings by

the construction of "semi-permanent" shelters for the protection of the material (point 3). Instead of a complex modern construction in combination with a kind of museum presentation of the Buddha fragments ICOMOS plans a solution in correspondence with the existing simple form, but more solid and functional. This will have the advantage that it does not interfere with the landscape and save money without anticipating future decisions about how to use the fragments. Apart from the costs a special factor speaks for a simple solution which can be carried out by local craftsmen: for conservation reasons the fragments already salvaged should be moved as little as possible, which means they should be kept at the site where they are now. Consequently, in view of the great amount of rock material the no longer sufficient shelter space of about 50 metres length will be stabilised under a new roof construction; then an additional new shelter should be erected. Individual and particularly big fragments will receive their own protective roofs near the Buddha niches. Through these constructions an enclosed courtyard will be created in front of the niche of the Western Buddha, consisting of the renewed shelters open towards the courtyard which could also be made accessible to visitors. The necessity to renovate and extend the existing shelters must also be seen in connection with the planned salvaging work in the Western Buddha niche meant to be completed in 2009.

Task 5: Permanent crane in the Eastern Buddha niche for maintenance/conservation access (planning)

A pre-condition for the installation of such a construction with trolley, engine and generator would be the dismantling of the Messerschmitt scaffold scheduled for the time after the consolidation and conservation of the back wall (according to present plans to be completed by end of October 2009). The scaffold could afterwards be used for future stabilisation work in the Western Buddha niche. As permanent crane such "hoisting equipment", a largely "invisible" construction at the top of the vault, could ensure that every part of the Eastern Buddha niche would be accessible for maintenance, control work etc by means of a movable cage. Such a "travelling trolley" would make the option of a future anastylosis possible, because the topographic conditions around the Eastern Buddha do not allow deployment of large equipment appropriate for moving heavy fragments. It is not yet possible to make a decision for such a construction, the advantage and costs of which have not yet been sufficiently tested.

Task 6: Kakrak Buddha niche and fragments stabilisation (concept and first steps for emergency measures)

Without in-depth examination the necessary funds for stabilisation measures at the Kakrak Buddha cannot even be roughly estimated. However, faced with the desperate situation of this monument difficult to access small funds could be used to at least make a start.

Munich, 6 May 2009, Michael Petzet