RESEARCH NOTE

SELECTING THE MOST APPROPRIATE MEANS
OF CONSERVING THE 55-WINDOW PALACE

Yogesh Raj, Hrday K. Hada
and Rajan Vaidya

Background
The 55-window palace is the principal monument at Bhaktapur Durbar
Monument Conservation Zone, one of the five Monument Zones in the
Kathmandu Valley, a World Heritage Site. This U-shaped, 3-storey building
is believed to be built by King Bhupatindra Malla (N.S.826-842). The name
'55-window palace' is, however of recent origin, given by the western
visitors of 17th, 18th and 19th century Nepal.
This palace suffered a huge damage during the Great Earthquake of 1934
A.D. Almost whole of the second floor along with the 55-window assembly
had turned into a heap of rubble. An emergency reconstruction that followed
after the earthquake took no regard to the original size and shape of the
palace. Those involved in reconstruction at that time did not even bother to
realign the tilted southern wall back to the plumb line and certainly changed
the positions of the 55-window assembly. Subsequent 'conservation'
measures taken during the last fifty years, in the form of removals, additions
and replacements caused more damage to the building than conservation.
Those were quick and piece-meal recipes prescribed for the immediate
problem at sight. The building had also to bear unsuitable occupancies and
the vibration caused by the traffic in the vicinity. The earthquake in 1989
might have caused further deterioration in the stability and strength of the
palace.
When in 1993, the first conservation proposal was drawn and submitted
to the Department of Archeology, the debate over the proposed use of non-
traditional construction materials such as pre-stressed concrete slabs ensued.
Since then, at least three more conservation proposals have been put
forward. By 1997, the debate has already shifted from the suitability of
certain construction materials to the conservation policy guidelines in

Copyright © 1999 CNAS/TU
general. The issues are now the degree of permissible intervention, the prioritizing of preventive, corrective and consolidating measures, safety of the wall painting murals in the first floor and use of the indigenous resources. A national seminar on resolving these policy issues is scheduled on March 11-12, 2000 in Bhaktapur.

Introduction

The scope of this paper is limited. Realizing that the crux of the debate over the conservation of the 55-window palace in Bhaktapur is that of selecting an appropriate technology and its implementation procedure, this paper attempts to set the most appropriate means for any cultural heritage conservation.

Part One of the paper lists several of the criteria for selecting the most appropriate conservation technology. When applied to a few known proposals concerning 55-window palace conservation, these criteria may indicate the direction in which to moderate some of the existing shortcomings in the proposals.

Part Two of the paper gives the most appropriate conservation implementation scheme. The emphasis on implementation procedures needs not to be overstated. The context is again the 55-window palace, but the scheme may always be generalized to cover the whole of the Newar cultural heritage.

Part One

After going through the various related Acts of the HMG/N, Operational Guidelines for the Implementation of the World Heritage Convention of UNESCO, guidelines set up by Department of Archeology (DOA), the International Charter for the Conservation and Restoration of Monuments and Sites, The Charter of Venice, current practices followed by the various municipalities/VDCs/Guthi Office etc., the criteria for selecting the most appropriate technology in cultural heritage conservation are found to be

Adequacy
Reversibility
Sustainability

Criteria 1 Adequacy

Is a given (or suggested) technology adequate in fulfilling the conservation requirements/needs of the concerned people?
a. Principle of the Minimum Intervention
   Does it protect the historical authenticity\(^1\) of the heritage?
   Does it prevent the heritage against further deterioration\(^2\)?
   Does it justify its choice rationally\(^3\)?

b. Principle of Contextualization\(^4\)
   Does it preserve the context?
   Does it address the post-conservation contextualization?
   Is it more than visual conservation\(^5\)?

c. Principle of the Conservation of the Capacity
   Is it a local/indigenous/traditional\(^6\) technology?
   Does it involve local resources?
   Does it incorporate the local conservation practices?

Criteria 2 REVERSIBILITY

a. Is a given (or suggested) technology reversible\(^7\)?

b. If it is not, does it present the extent and consequence of the irreversibility?

Criteria 3 SUSTAINIBILITY

a. Is it compatible with the existing (or reconstructed\(^8\)) technical know-
   how of the people?

b. If it is not, is it easy to adopt?

c. Does it include post-intervention strategy\(^9\) of conservation?

Applying the above mentioned criteria to a few competing technical
(technological policy) proposals concerning the 55-window palace\(^10\), we see
that

1. The debate over the suitable conservation technology has up to now
   been fruitful,

2. The proposals put forward by the Nepalese experts are more
   appropriate\(^11\) and

3. The issues of contextualization, local conservation practices and
   post intervention strategy have not been addressed adequately so
   far.(Table 1)
Part Two

Adopting the most appropriate implementation scheme (Chart 1) for a cultural heritage conservation work may approach the issues that remained unapprised so far. The characteristic features of this scheme are

**BOTTOM-UP**

**LOCAL**

**TRANSPARENT**

**ACCOUNTABLE**

The various components in the implementation scheme shall have the following constitution and responsibilities:

APEX BODY for conservation

There shall be one APEX BODY for each culturally homogenous area. It may consist of nayo, nvaku s from every traditional cultural/ritual groups, as well as representatives from a number of related organizations. It shall prioritize conservation works after establishing priority guidelines.

It shall manage conservation fund after preparing funding guidelines.

It shall have a capacity building unit.

It shall be supported by a group of professionals.

PROFESSIONAL Group

It shall consist of a conservationist, cultural historians, technologists (structural, architectural and material science experts) and a finance controller.

It shall prepare detailed policy, technical and financial proposals to be negotiated with DOA, UNESCO and other institutions.

It shall monitor the implemented projects.

CAPACITY BUILDING Unit

It shall establish an information bank (with research associates, library and workshops).

It shall network existing traditional cultural/ritual groups, especially related to some cultural heritage of the area (in the degree of association to inheritance, concern and management) and to relevant technical expertise.

It shall find out what these groups lack.
It shall channelise conservation funds and professional support to improve the conservation capacity of the groups.

**CONSERVATION FUND**
- It shall accumulate all the revenues, donations and reserves coming from other institutions.
- It shall distribute equitably the funds in accordance with the guidelines set up by the APEX BODY.

**IMPLEMENTATION Committees**
- It shall consist of the people in immediate association to a particular heritage, a technical-in-charge, a financial assistant, local social leaders and mobilisers.
- It shall implement the actual conservation work as per the agreed standards.

**Role of DOA, Municipalities/VDCs**
- DOA shall monitor/evaluate the conservation work chiefly from policy perspectives.
- Municipalities/VDCs shall monitor/evaluate the work from community perspectives.

**Role of INDEPENDENT COMMISION**
- It shall consist of NGOs, PVOs representatives chosen as according to a degree of consistent concern shown.
- It shall monitor/evaluate the role and function of each of the components of the implementation scheme.

**Conclusion**
The criteria developed in the Part One of the paper tells us the direction in which we may now focus our attention for the most appropriate conservation of 55-window palace. The implementation scheme based on Bottom Up, Local, Transparent and Accountable features is devised in Part Two to meet the need to address the incompleteness of the proposals put forward so far.
Table 1

Applying the criteria to a few of the competing proposals of 55-windows palace conservation

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Adequacy</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A. Minimum intervention</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Historical Authenticity preserved</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Further deterioration prevented</td>
<td>√</td>
<td>√</td>
<td>√</td>
<td>√</td>
<td>√</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Justify its need rationally</td>
<td>√</td>
<td>√</td>
<td>√</td>
<td>√</td>
<td>√</td>
<td></td>
<td></td>
</tr>
<tr>
<td>B. Contextualization</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Context is preserved</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Post intervention contextualization</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>√</td>
</tr>
<tr>
<td>More than visual conservation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>?</td>
</tr>
<tr>
<td>C. Conservation of capacity</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Local technology</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Local resources</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Local conservation practices</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Reversibility</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reversible</td>
<td>?</td>
<td>?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Extent and consequences known</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>√</td>
</tr>
<tr>
<td>3. Sustainability</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Compatible</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Easy to adopt</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Post-intervention strategy</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Affordable and manageable</td>
<td>√</td>
<td>√</td>
<td>√</td>
<td>√</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Chart 1

The most appropriate conservation scheme

All tradition cultural/ritual groups

APEX BODY
for conservation

CAPACITY BUILDING Unit

PROFESSIONAL Group

CONSERVATION Fund

IMPLEMENTATION Committees

Notes

1. The Operational Guidelines for the Implementation of the World Heritage Convention, UNESCO (or OGIWHC) lists 'a significant loss in historical authenticity' as an ascertained danger to the properties listed in the World Heritage List. But what exactly constitutes historical authenticity is not clear. Modifying the original structure does influence the future interpretation on the historicity of the heritage, but what about the substitution of construction materials with the different ones, or even with the similar but newer ones?

2. Conservation is not reconstruction. The definition given by Sir Bernard Feilden is worth mentioning here: Conservation is the action taken to prevent decay (Feilden, 1982:3). In other words, conservation is not generally about corrective measures but about preventative measures. What has happened is a part of the history of the property. What may happen should be the central concern of any conservation work. Only at the extreme situations when all other possibilities to maintain it in quasi-static state are exhausted, or when there is an intolerable intervention in its integrity that a reconstruction (only of a part) may be allowed.
3. Article 10 of the Charter of Venice stresses this point with regard to a choice of non-conventional technology to be used in conservation.

4. The point of departure from the present conservation requirement needs not to be overstated here. The contextualization is very important requirement in the case of 'culturally live' heritage. A culturally live heritage may be defined as the heritage, which is a node of the current cultural fabric of the people concerned. The approach to conservation of a property of purely historical nature should be essentially different than that of a historical property still having some cultural function.

5. Visual conservation is an approach to conservation that gives sole emphasis in similarity in appearance before and after the intervention. According to this viewpoint, a monument must look same. While visibility is an important consideration in assessing the effect of any intervention, it needs not to be the only one. We argue that any attempt in reducing the integrity of a monument to its visible dimension has many unwarranted consequences.

6. The use of these terms implies that the assumption that a particular heritage located in a place is a product of the culture and civilization of the people living in and around the place need not to be always valid. We, however wish to make it clear that any conservation technology needs to relate a heritage to either the technology practiced during the historical era of which the heritage is a relic or to technology of the people who inherits the heritage.

7. The requirement of reversibility becomes important from a realization that (1) our knowledge of the past, and consequently of all historical knowledge is fragmentary (and hence the technological intervention that we propose may not be the best of all possible interventions), and (2) we should not in any way prejudice possible future interventions. What constitute the precise definition of a reversible technology may, however be debatable. But a reversible intervention is the one which, when and if redone, would leave the minimum scars, as it were, on the heritage.

8. It is important to link any conservation technology either to the knowledge of the historical period of which the heritage is a relic, or to the knowledge of the people who inherits it. The former is qualitatively better. But in the case of Newar cultural heritage, we are fortunate enough to have (1) a few surviving craftsmen with a more or less uncorrupted knowledge of their traditional technologies, and (2) a few thousand manuals, drawing books and related manuscripts that could shed light on many missing elements preserved with the practitioners.
Any conservation technology selected for a Newar cultural heritage must have a proven basis.

9. Here the emphasis is on the maintenance strategy to be adopted. Regular and preventive maintenance is undoubtedly, the most effective. A conservation technology should be lending to future maintenance works. In fact, such long-term strategies have to be clearly spelled out in any proposal for conservation.

10. There may be doubts over the applicability of the above mentioned criteria to any of the proposals put forward, the reason being that those are not conservation proposals as such. We do agree that, however, we would also like to add that such 'non-applicability' is the consequence of the incompleteness of the proposals and not of the invalidity of the criteria themselves!

11. Some may view this as a prejudice, but as far as these proposals are concerned, Nepalese professionals seem to respect the local tradition of conservation more than others do. They tend to prioritize restoration over strengthening. The latter is granted the central importance by the others. If this difference in approach to conservation has anything to do with a different degree of cultural sensitivity of the professionals, it may be an interesting digression.

12. The only excuse that has been devised for the present top down approach is that there is a lack of awareness about the importance of conservation among the people. This excuse can be dismissed without a second thought. It is not lack of awareness but that of resources which turn the concerned people apathetic towards the conservation. Mere survival at present relinquishes their need for the conserved past.

13. A local and bottom-up approach puts the bottom most unit of the current conservation hierarchy at the center. At the bottom most layer lies a cultural property owner or a cultural unit (a guthi, a sangha etc.) or a loose group of ritually connected individuals. The bottom-upping involves (1) allowing their priority to influence the course of conservation, (2) building their capacity to look after their heritage indefinitely and (3) reactivating them as agents (and other institutions as facilitators) of the conservation works.

14. Some may like to believe that the current practices of letting the general public know what an institution wishes to do, is an act of transparency. In fact, it is not. In the context of any conservation work, the definition of transparency may be rephrased as a state of a system in which a holder guarantees non-discriminate, quick and unrestricted access to any information concerning proposals, implementation
procedures, financial dealings and evaluation mechanisms as and when a seeker requires.

15. The assessment of the various proposals is based on their features cited in the correspondence with Dr. Hideo Noguchi, in Maskey et al and in personal communication with Er Kastee.

References

“Ancient Monument Conservation Act”, 2013 VS, 5th Amendment 2051 VS. (In Nepali.)

“Operational Guidelines”, DOA 2048 VS, 1st Amendment 2051-VS. (In Nepali.)


“Convention Concerning the Protection of the World Cultural and Natural Heritage”, UNESCO, 1972 AD.


“A Letter by Dr. Hideo Noguchi to SUTHAN”, June 10, 1996.


“Sixth Information Bulletin on the 55-window Palace”, SUTHAN, Bhadra 20, 2053 VS.


"Engineering Proposal (Structural Design)", Walther Mann, June 1996.

Postscript:
The "National Seminar on Conservation of the 55-Window Palace" held on March 11-13, 2000 in Bhaktapur adopted the following resolutions apart from others

*The conservation policy guidelines will be:*

- **Minimum Intervention,**
- **In situ restoration,**
- **Maintenance to its original shape, size and design,**
- **Maximum use of the original construction material and**
- **Indigenous technology and workmanship.**
- **The post conservation use of the palace shall be culturally permissible one.**

These resolutions are sufficiently discrete in resolving some of the long-standing debates over the selection of appropriate technology and construction materials. This is certainly a remarkable outcome. But the seminar in general fell short to address a few important issues pointed in the paper. For example, no proposal addressed the need for making conservation an autonomous affair of the concerned group of people associated closely to a particular heritage. An effort in this direction would have resulted in the bottom upping of the whole conservation implementation mechanism, and that would have been an important step forward.