

# KAL BHAIKAV

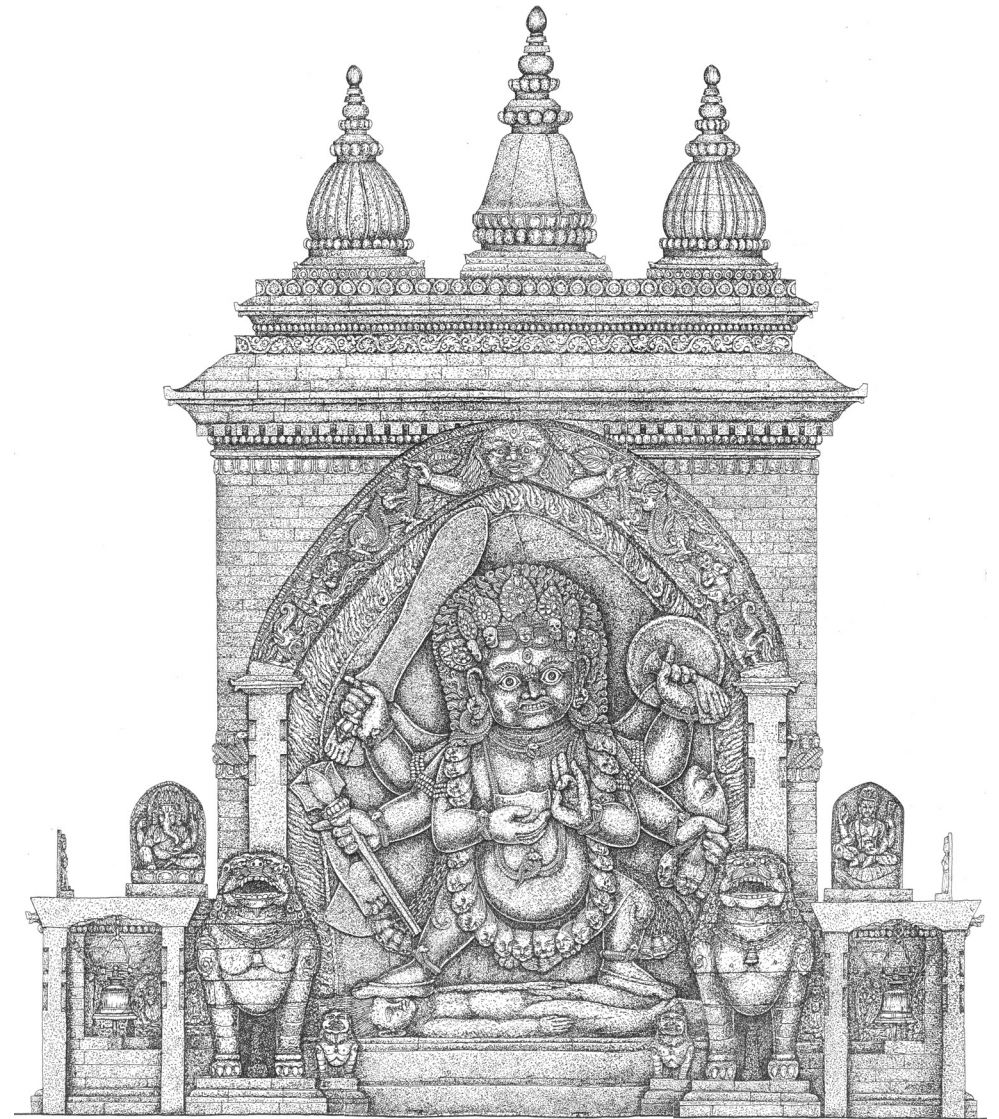
KATHMANDU DARBAR INITIATIVE

*A JOINT PROJECT OF*  
**HMG DEPARTMENT OF ARCHAEOLOGY,  
KATHMANDU METROPOLITAN CITY  
AND  
KATHMANDU VALLEY PRESERVATION TRUST**

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## FINAL REPORT

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**KATHMANDU VALLEY PRESERVATION TRUST**  
MAY 2005





The Kathmandu Valley Preservation Trust is proud to announce the successful completion of the restoration of the Kal Bhairav Shrine, one of the many projects of the “Kathmandu Darbar Initiative” on May 2005. On behalf of the Trust, we would like to thank all our generous supporters.

**With generous support from**

U.S. Ambassador’s Fund for Cultural Heritage Preservation, US Embassy, Kathmandu,  
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Mr. Jitendra Rajbhandari,  
and  
Siddharth Raj Pandey

**Implemented by**

Kathmandu Valley Preservation Trust (KVPT)

**In cooperation with**

His Majesty’s Government Department of Archaeology (DOA)  
and  
Kathmandu Metropolitan City (KMC)

**Conservation Architects**

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and  
Dr. Rohit Kumar Ranjitkar

**Documentation and Implementation Team**

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Rajan Shrestha, Sujata Shakya, Sushma Bajracharya, Bishnu Chulyadha and Dinesh Tamang.



### **Research**

Kathmandu Valley Preservation Trust's Technical Team.

### **Special Thanks to**

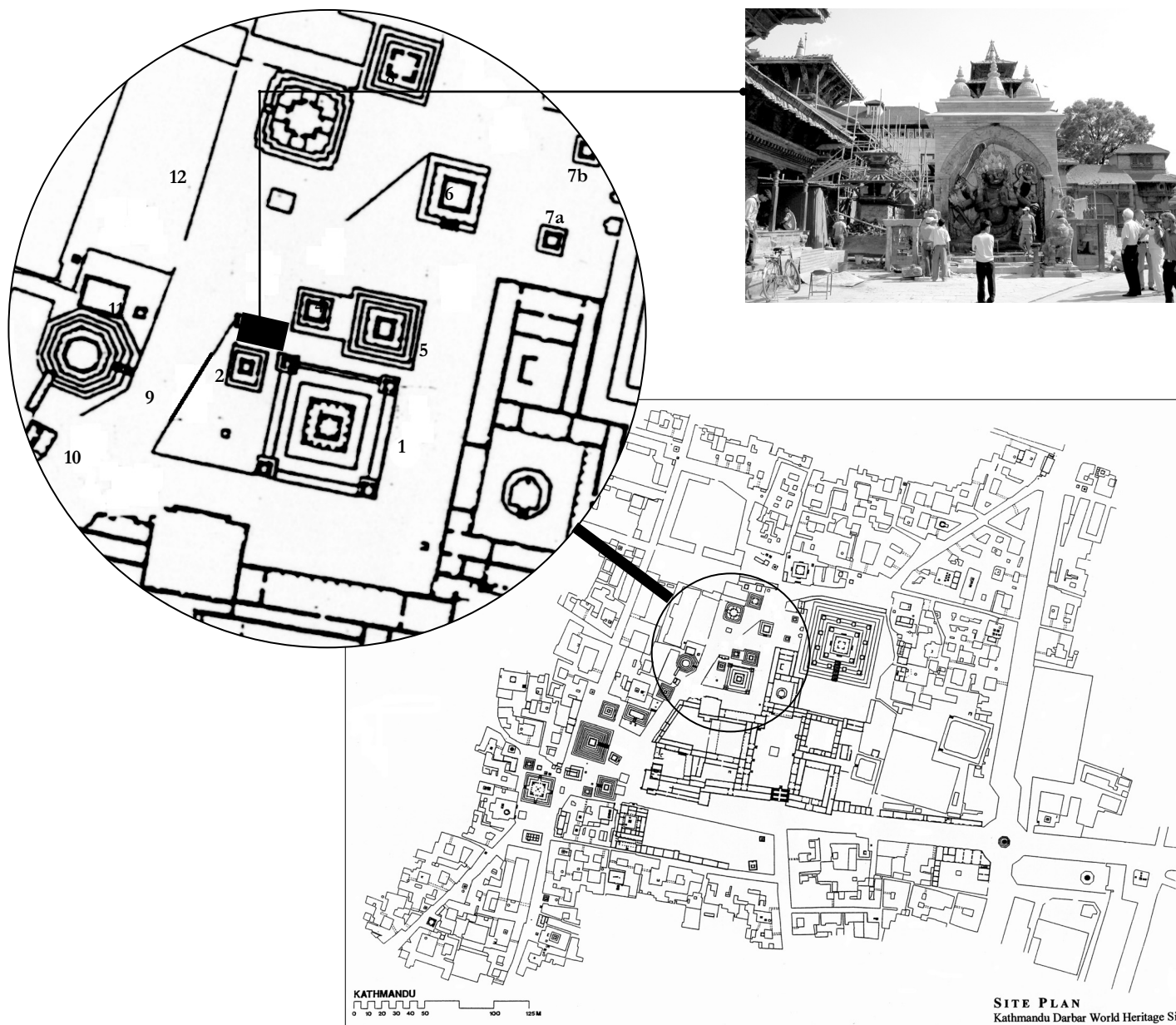
Mrs. Constance Colding Jones, American Center, Kathmandu,  
Gautam S.J.B. Rana, Director of Development, (KVPT)  
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Tej Ratna Tamrakar, Chief, Hanuman Dhoka Palace,  
Kiran Prasad Dhungel, Representative, Ministry of Culture, Tourism and Civil Aviation  
and  
Sattu Tara Bajracharya, Head Priest of Kal Bhairav Shrine.



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**Kathmandu Darbar Initiative****1. Jagannath Temple (1563)**

*Planning and research completed, 2001, restoration in progress, 2005*

**4. Indrapur Temple (1674)**

*Restoration completed, 2002*

**5. Narayan Temple (16th c.)**

*Restoration completed, 2003*

**3. Kal Bhairav**

*Research and documentation completed, 2003 and restoration completed, 2005.*

**6. Kageswar Mahadev Temple (1711)**

*Documentation Completed, restoration in progress*

**8. Maha Vishnu Temple (17th c.)**

*Restoration completed, 2002.*

**Target Projects****2. Laxmi Narayan Temple (17th c.)****7a. Mahadev Temple I (17th c.)**

*Documentation completed, 2002*

**7b. Mahadev Temple II (17th c.)**

*Documentation completed, 2002*

**9. Bansagopal Temple (1649)**

*Documentation completed, 2002*

**10. Saraswati Temple (16th c.)**

*Documentation completed, 2002*

**11. Drum House (19th c.)**

*Documentation complete, 2002*

**12. Lost Historical Palace Wing (19th c.)**

*A wing of the palace was lost in the 1934 earthquake and was never rebuilt.*

**left:** Site Plan showing all the focus temples in the Kathmandu Darbar World Heritage Site which are part of the Kathmandu Darbar Initiative.

**Top:** Kal Bhairav as a part of historic ensemble after the restoration. *Photo by: Badri Juwal, May 2005.*



*above:* A devotee worshipping the ferocious image of Kal Bhairav. The shrine is the one of the most frequented monuments in the valley.  
*Photo: Raju Roka, March 2001.*

## INTRODUCTION

After the successful completion of restoration of the **Indrapur** and **Narayan Temples** at Kathmandu Darbar Square, the prominent monolithic stone shrine of **Kal Bhairav** has been the prime focus of Kathmandu Valley Preservation Trust, since December 2003.

Standing imposingly at the center of the Royal Square of Kathmandu, the shrine of Kal Bhairav has evolved as a crucial part of the historic ensemble of the square over the period of time, since its consecration in 17th century. A very rare example of stone architecture, the image of Kal Bhairav represents God Shiva in his ferocious manifestation. Worshipped by both Hindu and Buddhist alike as seer of truth, the monument of Kal Bhairav has significant place in the religion and culture of the Valley. It is believed that in case someone lies before the monumental figure, he has to face terrible consequences. Kal Bhairav is considered as the protector of the Valley and is the most worshipped deity. Numerous votive offerings from the devotees adorn the structure.

The original configuration of the structure was lost completely under the several layers of continuous alterations done and well intentioned votive offerings of the devotees. However, first recorded major alteration made to the shrine was triggered by the devastating earthquake in 1934. The upper level including the cornice and the pinnacles were severely damaged. During the repair the former shape of the upper structure was completely changed.

Much of the shrine's historic fabric and details were already either lost or altered, when the Trust initiated the project in 2003. The proposal to restore the structure back to its historical state was successful only after winning the U.S. Ambassador's fund for Cultural Preservation, 2003.

## PROJECT FRAME WORK

Restoration of Kal Bhairav at Kathmandu Darbar Square, an UNESCO World Heritage Site, is a significant component of the Kathmandu Valley Preservation Trust's "Kathmandu Darbar Initiative (KDI)" project. It is the first campaign to be funded by the Nepali Corporate Houses rallying for the restoration of temples at the Royal Square. Under this banner, restoration of Indrapur and Narayan Temples have been completed in 2002 and 2003 respectively.



Kathmandu Valley Preservation Trust, with its track record of restoration of more than 2 dozens of monuments in Patan and Kathmandu since its establishment in 1990, was crucial catalyst to initiate such an ambitious project. The Trust as the only organisation in Nepal working for historic preservation undertook the responsibility to fundraise and implement the project.

The restoration of this outstanding historic shrine was undertaken in a project framework including both public outreach activities and critical training of local manpower in project management, public relations, preservation advocacy and the state of the art conservation technology. The implementation of the project was executed by the core staff of the Trust, in close association with Department of Archeology and Kathmandu Metropolitan City.

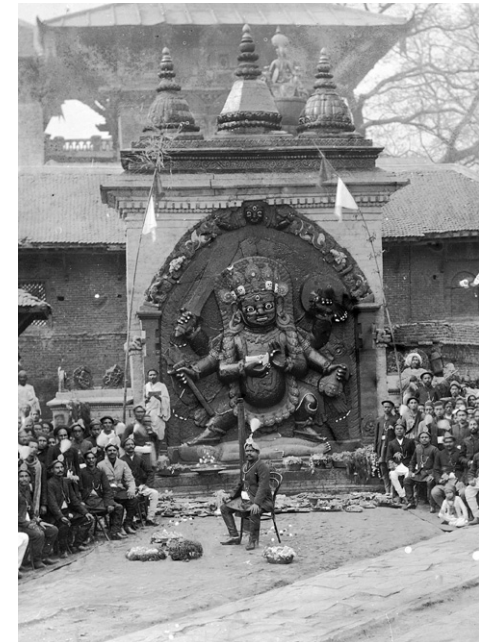
## HISTORICAL SIGNIFICANCE

This elaborate Bhairav shrine was dedicated by King Pratap as a part of the assemblage of monuments built during his golden reign of Kathmandu during the 17th century. Legend indicates that the principal image was discovered while excavating water conduct from Budha Nilkantha and was installed in the present location by the Pratap Malla. However, no evidence could be found to support this origin. But considering the prevailing legend as the basis of its origin, the history of the image may go further than Pratap Malla's time period as it was discovered during the king's reign, not commissioned by him.

This exceptional stone monument has become one of the landmarks of the Valley. The god Bhairav in his various manifestation is considered the main guardian of the Valley besides being closely associated with the eight Mother Goddesses.

Kal Bhairav is also tremendously popular as "Court Bhairav", thus has played an important social as well as religious role in the affairs of the country. He was the chief witness in front of whom the civil servants were sworn into office. Such is His impact in the society that when Kathmandu's former mayor returned to his post in early 2004, he along with his associates were sworn into their positions in front of the "Court Bhairav".

With repair and restoration of this shrine, not only has the local community gained its historical and religious monument but a vital piece of the Square's whole assemblage.

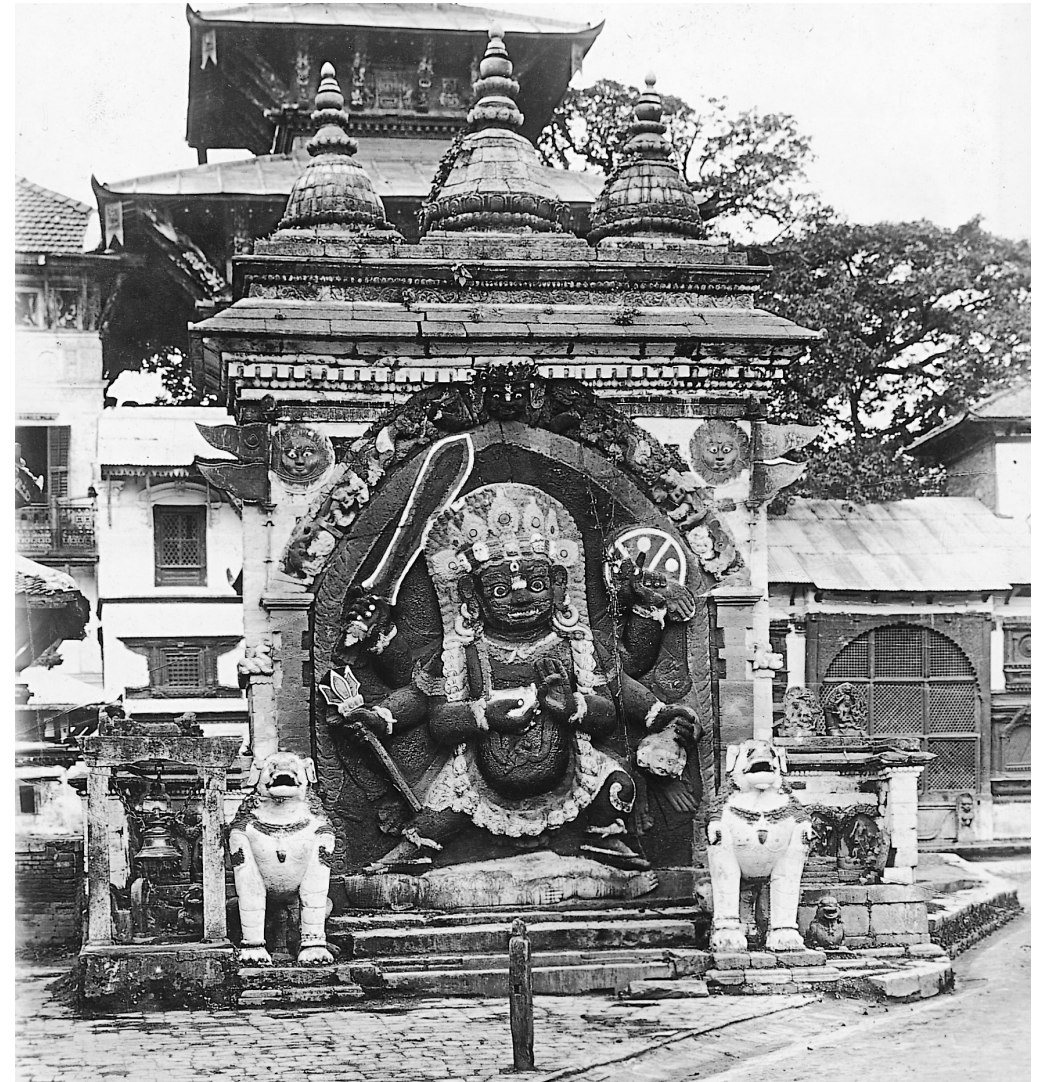


**above:** The government officials being sworn into their office in front of Kal Bhairav.

*Photo: courtesy Ganesh Photo Lab, Kathmandu, circa 1910*



**left:** This is one of the oldest photographic record of Kal Bhairav, taken by Dr. Kurt Boeck, circa 1890



**right:** Kal Bhairav in 1910, before the 1934 earthquake. The details such as the tympanum was found missing prior to the restoration, still existed during this period. This photograph served as the prime reference to deduce the form and intricate details of the lost but vital elements. *Photo courtesy: Manju Rana.*



**left:** The great earthquake of 1934 devastated almost all of the temple structures in the Kathmandu Darbar Square. The upper level of the shrine including the cornice and the pinnacles had collapsed. This was not restored according to the historic configuration during the repair done in 1936, thus completely altering the original configuration of the shrine. *Photo courtesy: Manju Rana.*



**right:** The photograph from early 1950's shows the changed configuration of the monument, most probably after the earth quake. *Photo courtesy: Bahadur Photo Lab.*





**left:** The roof structure with corrugated zinc sheets, supported by G.I. pipes was propped on top of the shrine. Photo courtesy: “Inventory of Kathmandu Valley: 1971”, published by UNESCO.



**right:** Kal Bhairav as it stood in December 2003, just before the commencement of restoration. The original form of the shrine was totally lost under the layers of votive offering donated to it. The marble clad concrete pillars supported the heavy metal roof above the shrine. Photo: Raju Roka, December 2003.



## CONSERVATION ISSUES AND STRATEGIES

The historic buildings in Kathmandu Valley presents a number of serious challenges regarding questions of historic material retention, authenticity and especially justification of replacement carving or fabric. Kal Bhairav is representation of these monuments as it was a palimpsest of layers including the earthquake rebuildings, votive offerings and incomplete historic details.

Much of its fabric dated from later repairs and rebuildings. However, the character and quality of these alterations varied considerably. The fabric of the shrine included the distinct layers. For example; the image is original, so are the terracotta images of the goddesses. But, the structure and fabric architectural frame of the shrine showed the greatest amount of alteration, some of which only became evident during the course of dismantling.

The historical photographs, Kurt Boeck's photo circa 1890, photograph from Ganesh Photo Lab of before and after the earthquake, (refer to previous chapter for these) provided us with nearly all of what we know about the evolution of this layer. Of great interest is the fact that these photographs, which span 1890 to 1934 document the same architectural facade with no changes! The shrine thus survived the earthquake without major damage. A subsequent rebuilding between 1936 and 1991 did however greatly simplified this facade, while also adding depth to the structure through the addition of new back wall. This was most likely done as structural reinforcement. The votive offering made in 1991, which is well documented, clad the entire architectural frame in marble tiles and added a concrete frame-supported roof to cover the shrine. This cladding concealed the changes to the shrine's architectural frame during our initial studies of the building.

In preliminary work descriptions, for example, we were concerned with how much damage would have been done to the underlying stone fabric by this addition of marble tiles laid in cement mortar. But, when we removed the cladding in fall 2004, expecting to find the colossal stone arch with sculptural figures and the flanking assembly of columns and entablature, but we found very-much reduced version of this 17th c. composition. (Refer to the photographs in page no.20)

We can hypothesize that this 20th century rebuilding was probably prompted by some major cracks in the building which had resulted from the Great Earthquake of 1934. A similar sequence of events took place at



the adjacent Jagannath Temple, which historical photographs show to have survived the earthquake, but whose masonry structure was nevertheless re-built just two years later in 1936. This is indisputable on account of the dated bricks of Juddha Shumsher, 1936.

### **Restoration design question- Conserve the 1936 and 1991 renovations?**

Having discovered that the 17th century structure was completely lost, we then began to study the 20th century structure to evaluate whether it was worthy of conservation and if so, then by which means.

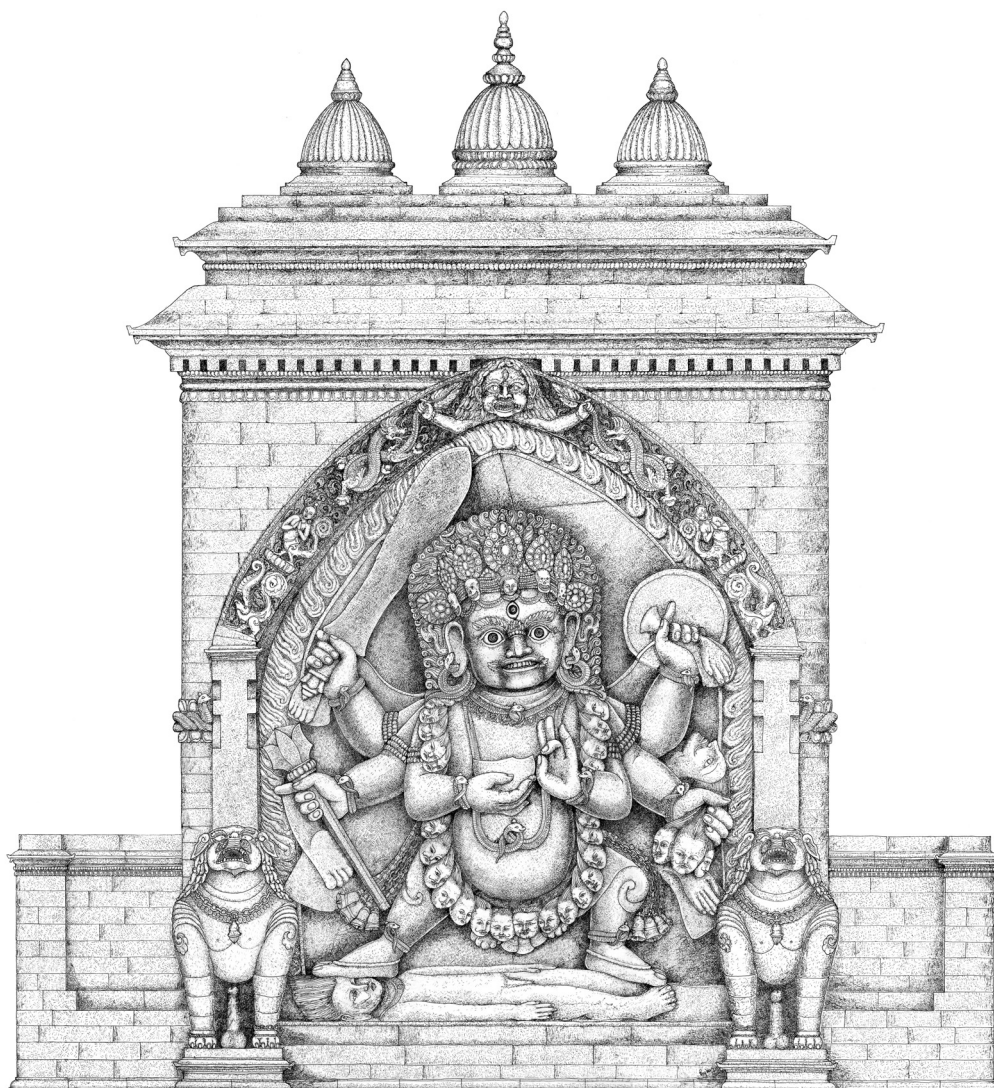
Where major rebuildings have intervened between the building's original construction and the most recent restorer, they were undertaken with intention and design, however inappropriate. The design quality of the 1971 repair done to the shrine (i.e. addition of roof structure) had to do with a building overseer rather than a traditional craftsman or artist without considering the prime image, thus, does not merit to be conserved.

Likewise, the 20th century structure failed to convince us of its restorability for following reasons:

- the rear wall, a veneer of stone blocks was structurally unstable. The stonework was of poor quality due to irregular sizes and crude dressing. The surfaces of more than 60% of these stones were damaged by cement mortar which was used to attach the marble cladding and cement slabs.
- the composition of orders framing the colossal image appeared to be an ad-hac, i.e. hasty building job from post-earthquake repair years with little formal sympathy with the fine focal image.
- the roof and pinnacle composition was similarly of poor quality, architecturally as well as designwise. There were no proper joints between the roof members and the stone work at the roof level. In this case there was no way to do waterproofing of the poorly laid stones.

Even this configuration was incomplete due to the 1936 repair, so in order to complete the roof pinnacle, we had to reinvent the design. We had the excellent documentation of the pre 1934 configuration, which we believed to be the original and base for the restoration.





**KAL BHAIRAV**  
KATHMANDU DARBAR INITIATIVE  
**HISTORIC PRINCIPAL ELEVATION**

*left:* This is a preliminary drawing of the monument prepared based on the old photographs. However, it did not include the positions of the images of the deities as well as the other artifacts added over the period of time. Thus, further refinement of the proposed restoration drawing was done, which is included in this report. *Drawing by: Rajan Shrestha, 2002.*



## **Documentation and revival of the original**

The first phase of the documentation was to record the existing condition prior to the restoration proposed, which is always significant part of the Trust's continuous documentation of historic structure. The details of the shrine were thoroughly documented in the form of digital photographs and ink drawings prepared by the technical team of the Trust with reference to the measurements taken at the site. 1:20 scaled comprehensive drawings of the existing floor plan, side elevations, back elevation and principal elevation were prepared.

Comparing the existing state of the structure with the series of photographs, provided ample evidence of its transition from a free standing monument to the enclosed diminutive. Next phase of the documentation was to propose drawings for the restoration. The structure had been subjected to considerable remodelling and changes since 1936, as already discussed in the previous section, we aimed at restoring the shrine to its original pre 1934 design. On the basis of the pre earthquake photographs, the proposed drawing were prepared in the 1:20 scale. All the drawings produced of the structure are included in the report for further reference.

Many of the historic details such as the tympanum and the pinnacles were lost; the situation became evident only after the removal of the recent layer of marble slabs and metal roof. 1:1 drawings of the tympanum and the pinnacles were prepared with relative exactitude based on the historic visual records. The drawings were used as reference to recreate these absent details.

## **Restoring the Kal Bhairav shrine**

Our approach to the problem involved analysis of the structure as a whole and depended on various larger considerations in the local context. We conducted a workshop with the entire KVPT technical team on site to explore the problem as the staff had differing views regarding its restoration. For example, some suggested to retain the 1936 layer as it deserved to be preserved for its historic value. However, the stones had deteriorated considerably and some of them required urgent replacement. Juxtaposition of the historic stone and new stone would be extremely jarring, thus, seemed rather harsh approach.

Moreover, the architectural frame from the 1936 repair lacked the richness in artistic value of the original. It seemed to be "incorrect" to leave it as it stood; restoring the original form of the structure was preferable and so was the recarving the lost elements.



Firstly because, the quality of the surviving stone fabric was not so important in comparison with the architectural frame. Secondly, the cluster of monuments at the entrance of the Hanuman Dhoka Royal Palace has been a “snapshot” of the country’s architectural heritage, with Kal Bhairav as a major focus of the square, since the advent of foreign visitors in 1951. Thus, restoring the ensemble image, which has become iconic, was complementary to the environmental quality of the historically and architecturally significant Square. However, the thickness of the principal wall which composed of core brick masonry was retained reusing some of the surviving stone blocks.

The study and documentation process to redesign this stone architecture from the photographs as well as the enormous number of excellent stone commissions was generated meant that the human factor weighted the argument in favor of recarving the lost carvings (i.e. pinnacles, cornice details and tympanum). Where we had vital components missing, like the elaborate tympanum above the focus image and the details of the stone pinnacles, we recarved them based on the historic photographs and documentation.

The trust has not just focused on the “visible” restoration of shrine but also the structural restoration, which has been a key component of all the KVPT projects. We introduced additional mesh of stainless steel members in between core brick masonry structure of the frame in order to tie the outer skin of stone blocks. This extra bracing of the stones would support and stabilize the structure in an event of a seismic movement.

The votive offerings of sculptures and polychroming the god seems to have been common for as long as we know. The shrine was adorned with these offerings such as the small images of the mother goddesses, the bells etc. Restoring this monument at the disposal of these offerings would have been as being disrespectful of the prevailing rituals and people’s sentiment. Considering this human factor as a significant aspect of the project, we incorporated these details into restoration of the Kal Bhairav shrine.

Thus, the model effort of the Trust to reinstate the significant part of the historic ensemble, incorporated various aspects of conservation methodology with integration of new technology and the traditional construction methods.





**above:** Student interns discussing different issues of restoration with the KVPT staff in the office. It was learning process for them. *Photo by: Badri Juwal, March 2005.*

**opposite page:** A news paper article about the restoration from the “Nepali Times” published in the March of 2003. This is among the several articles which covered the developments of the project.

## PUBLIC AWARENESS

Given the religious significance shrine in the everyday life of the locals, we decided not to put up a fence around while executing the restoration. This enabled the people to be a part of the project and perceive the whole process of restoration. The interaction with the populace was a learning experience also for the Trust, regarding the sensitivity of restoration of a monument of immense significance.

The restoration of the monument has preserved cultural heritage of the valley and has fuelled awareness among the local community. Since the restoration began in the December of 2003, the structure has become a key stopping point of many walking tours catering to the hundreds of tourists of the Kathmandu Darbar Square.

The progress of the project was followed by the media from the very beginning and several news paper articles were published about it, thus developed as a channel to generate awareness about historic preservation in the community.

## TRAINING

Providing personalized work and training for Nepalese as well as foreign students and local artisans has been a key component in every conservation project of the Trust, which was continued in this endeavor. Thus, this has given these young professional the opportunity to further develop their skills and sensitivity to historic preservation.

Two architecture students, Sujata Shakya and Sushma Bajracharya from Institute of engineering, Pulchowk completed their five months internship training program with KVPT on architectural heritage of the Valley. They were involved with documentation of the project and closely observed the developments of the project.



## CHRONOLOGY OF WORK

### December 2003

Initiation puja done in the presence of Mayor, KMC., Dec. 6, 2003  
Scaffolding put on  
Cement plaster taken off carefully

### January 2004

Later added cement blocks taken off  
Later added roof taken off  
Modern cement concrete pillar removed  
Later added brick wall dismantled  
Marble slate removed from the wall  
Iron bars and net removed  
Trash thrown and continuing

### February 2004

Axillary deities were carefully removed and stored  
Stone wall base and Bead (nagol) ordered and prepared  
Stone blocks for the wall searched  
Part of damaged east wall was dismantled to rebuild  
Foundation excavated for condition survey  
Trash thrown and continuing

### March 2004

Tympanum drawing made in 1:1 scale and mockup put on site to match the historic one  
Stone blocks ordered  
Preparation of lime mortar started and ongoing  
Later made lime surkhi pinnacle and cornice above the deity was dismantled  
Stone pillar ordered for tympanum base

Damaged historic back walls built with stone and brick was dismantled part by part  
Wall building initiated in east side  
Preparation of more stone blocks ongoing at workshop

### April 2004

Stone tympanum ordered to be carved  
Brick ordered and brought to the site for building inner wall  
Back wall building in stone ongoing  
Preparation of stone blocks on site also ongoing

### May - July 2004

Outer layer of principal facade stone walls removed to fit the stone tympanum and pillar  
Cornice for side walls were carved and installed  
Back wall building in stone ongoing  
Trench excavated for pillar and pillar base  
Serpent and lotus block being prepared and repaired

### August 2004

Stone pillar base and pillar installed  
Serpent and lotus block installed  
After draft carving of stone tympanum, the stone pieces were brought to the site for the mockup.  
Stone blocks being prepared and wall building ongoing



### **September 2004**

Draft carving of stone tympanum taken back to workshop for fine finishing  
Stone blocks being prepared and wall building ongoing

### **October 2004**

Stone blocks being prepared and wall building ongoing  
Newly carved tympanum brought to site after fine carving

### **November 2004**

Wall building completed to cornice level  
Installation of Tympanum initiated  
Carving of cornice detail started

### **December 2004**

Installation of tympanum completed  
Carving of cornice detail ongoing  
Building of lower cornice initiated  
East side big lion dismantled and foundation dug  
Foundation and platform built for east lion

### **January 2005**

Pinnacle making ordered as per the historic one  
Building of lower cornice completed  
Carving of cornice detail ongoing  
Small deities on east side wall installed

### **February 2005**

West side lion dismantled and foundation dug  
Building of upper cornice started  
Lost parts of lions being repaired and recarved

### **March 2005**

Building of upper cornice completed  
Foundation and platform built for west lion  
Small deities installed on west wall  
Pinnacles remade and brought to the site

### **April 2005**

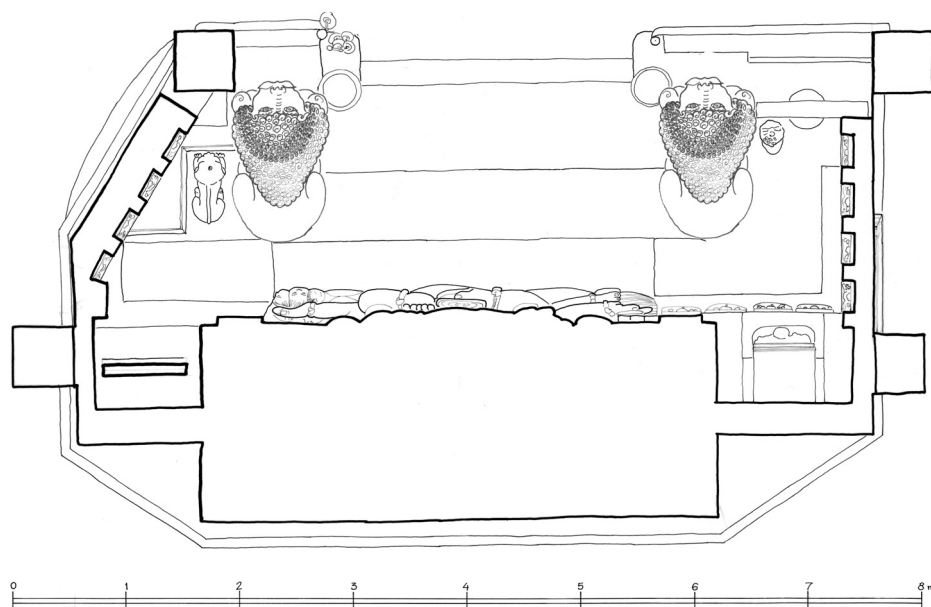
Historical pinnacle top made with brass repaired and gold polished  
Pinnacle base building started  
Pinnacle completely setup  
Lions reconstructed with repair  
Small deities installed beside main image

### **May 2005**

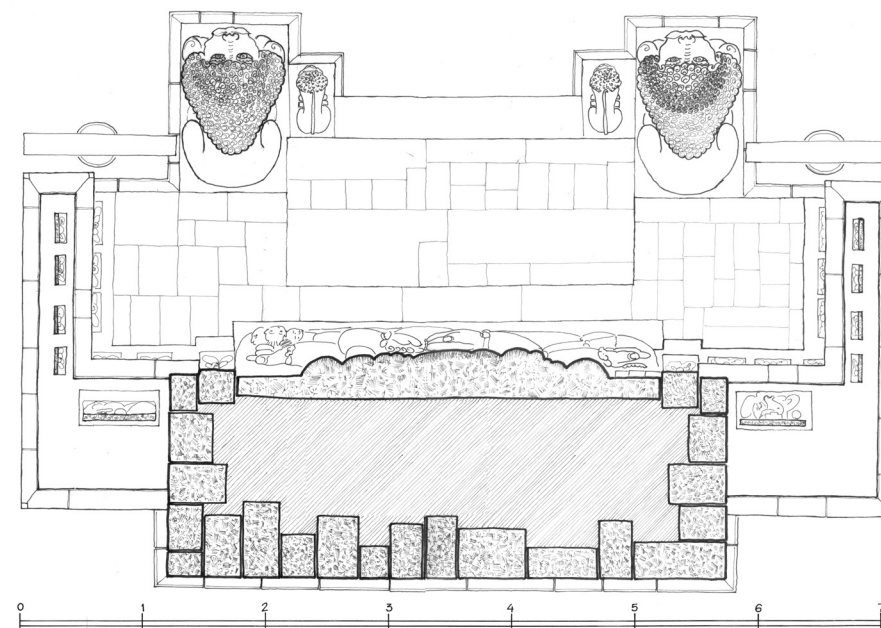
Pinnacle completed with fine finishing and gold polished top installed  
Platform extended in-between two lions and building completed  
Two side bells installed  
Whole Shrine completely cleaned with water and jute brush  
Scaffolding taken off  
Ground at the back of shrine lowered and with French drain  
Site clearance  
Completion Puja performed



## DOCUMENTATION OF EXISTING AND RESTORED CONDITIONS

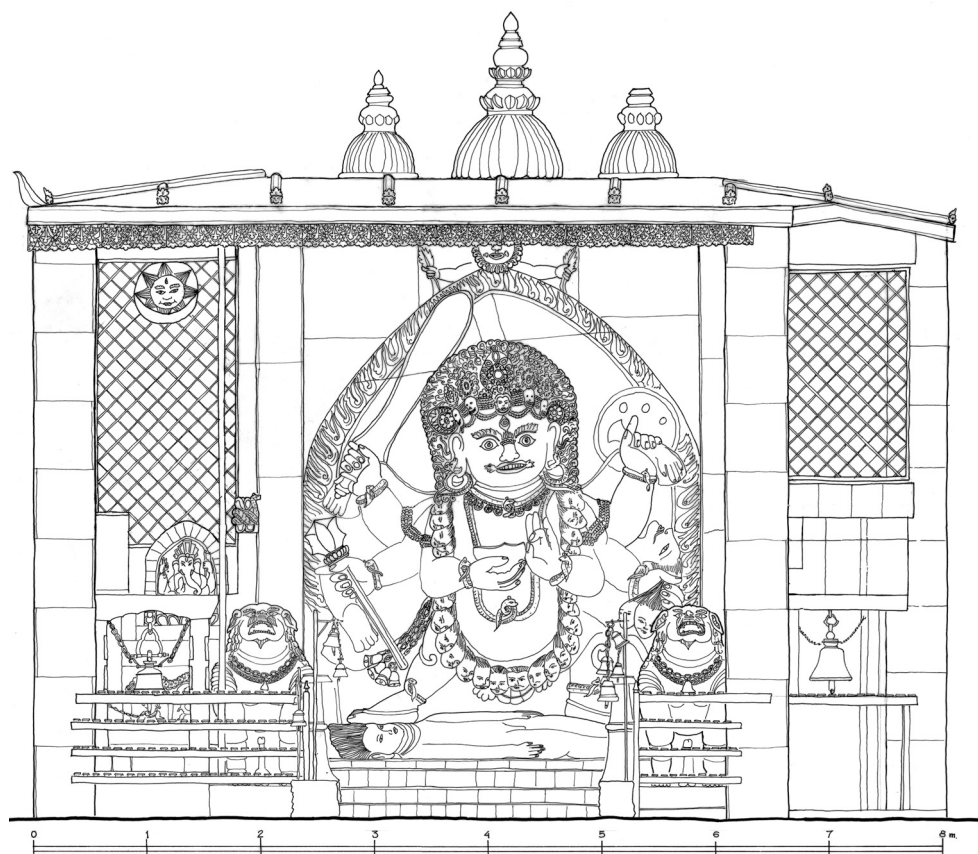


KAL BHAIRAV  
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PLAN:EXISTING CONDITION



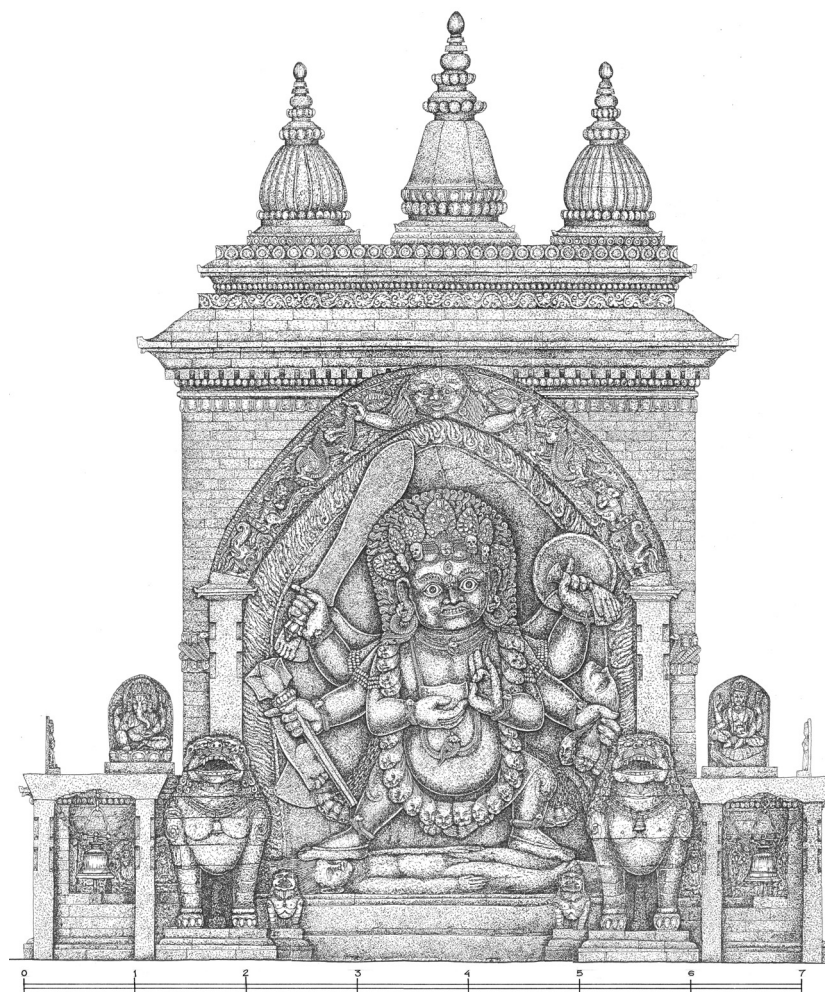
KAL BHAIRAV  
Kathmandu Darbar Initiative  
PLAN:RESTORED CONDITION





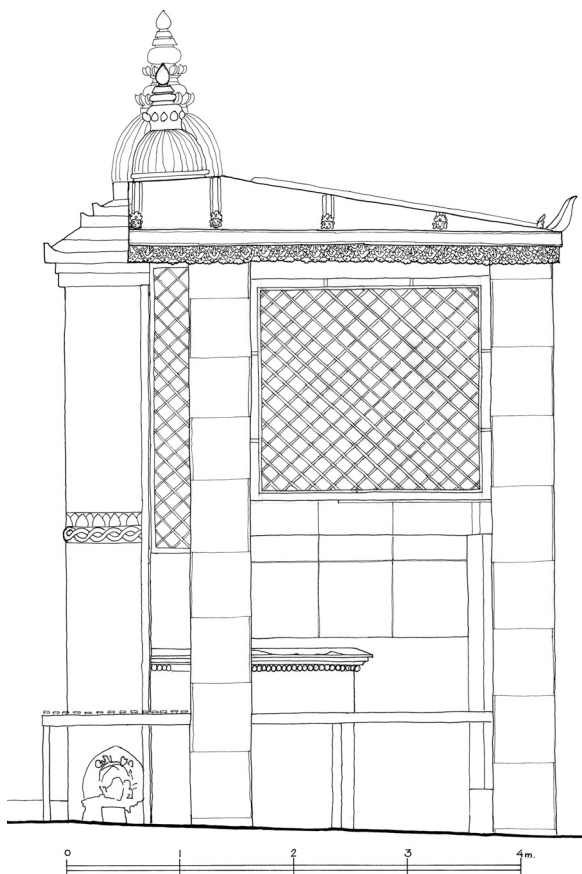
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Kathmandu Darbar Initiative

PRINCIPAL ELEVATION:EXISTING CONDITION



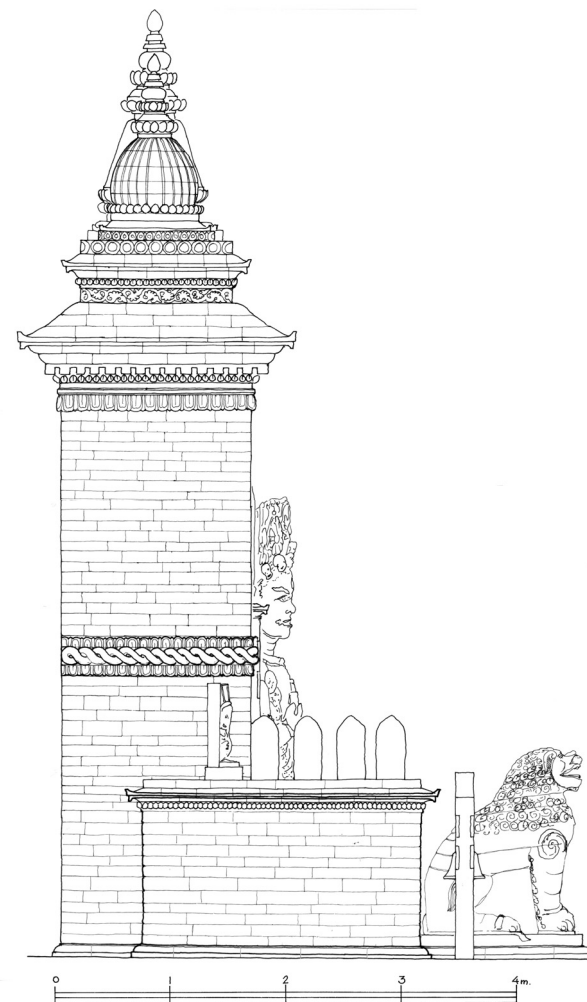
KAL BHAIRAV  
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PRINCIPAL ELEVATION:RESTORED CONDITION



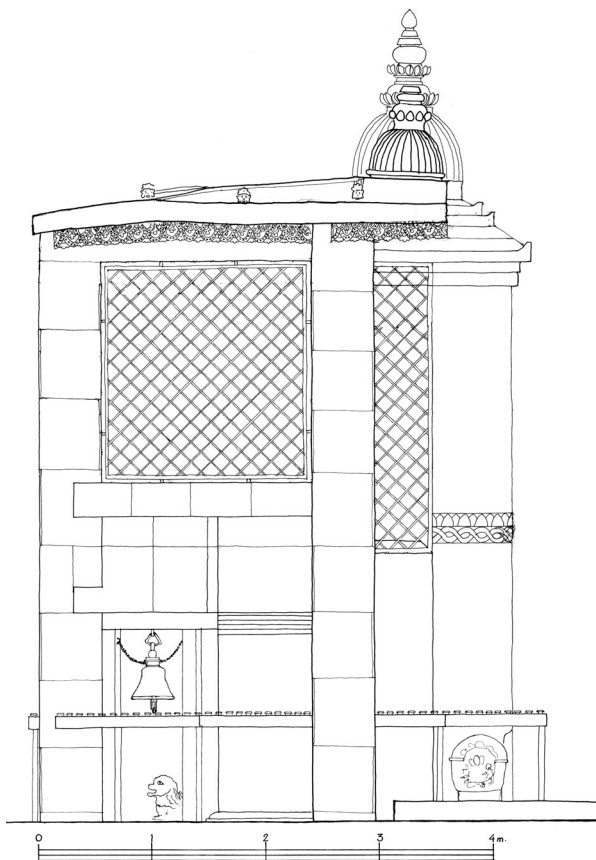
**KAL BHAIRAV**  
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EAST ELEVATION:EXISTING CONDITION



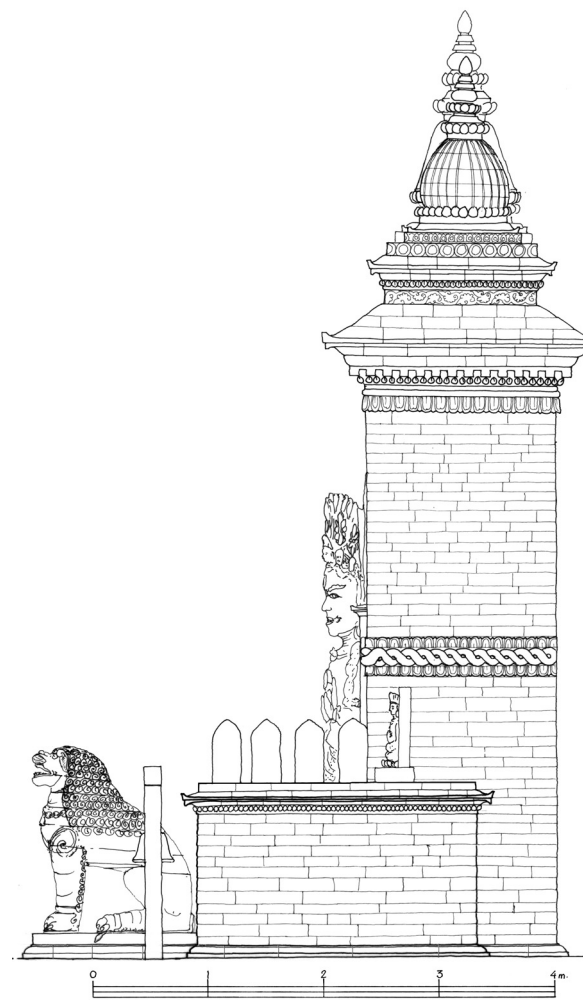
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EAST ELEVATION:RESTORED CONDITION



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WEST ELEVATION:EXISTING CONDITION

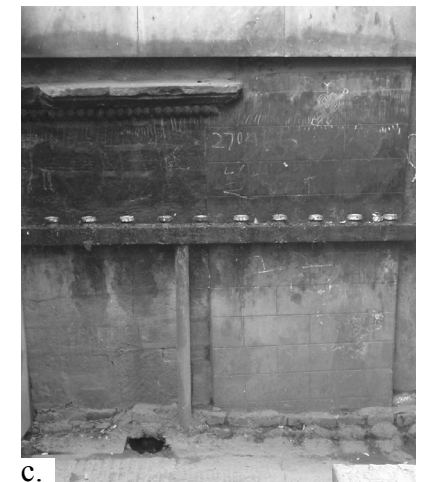
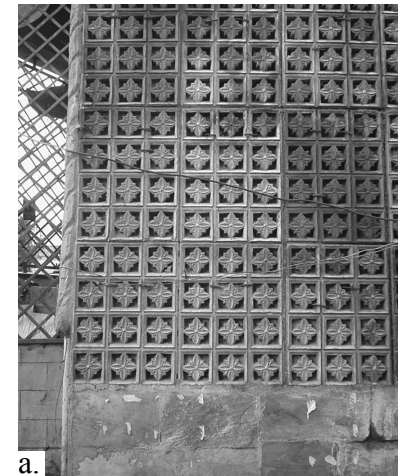


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WEST ELEVATION:RESTORED CONDITION

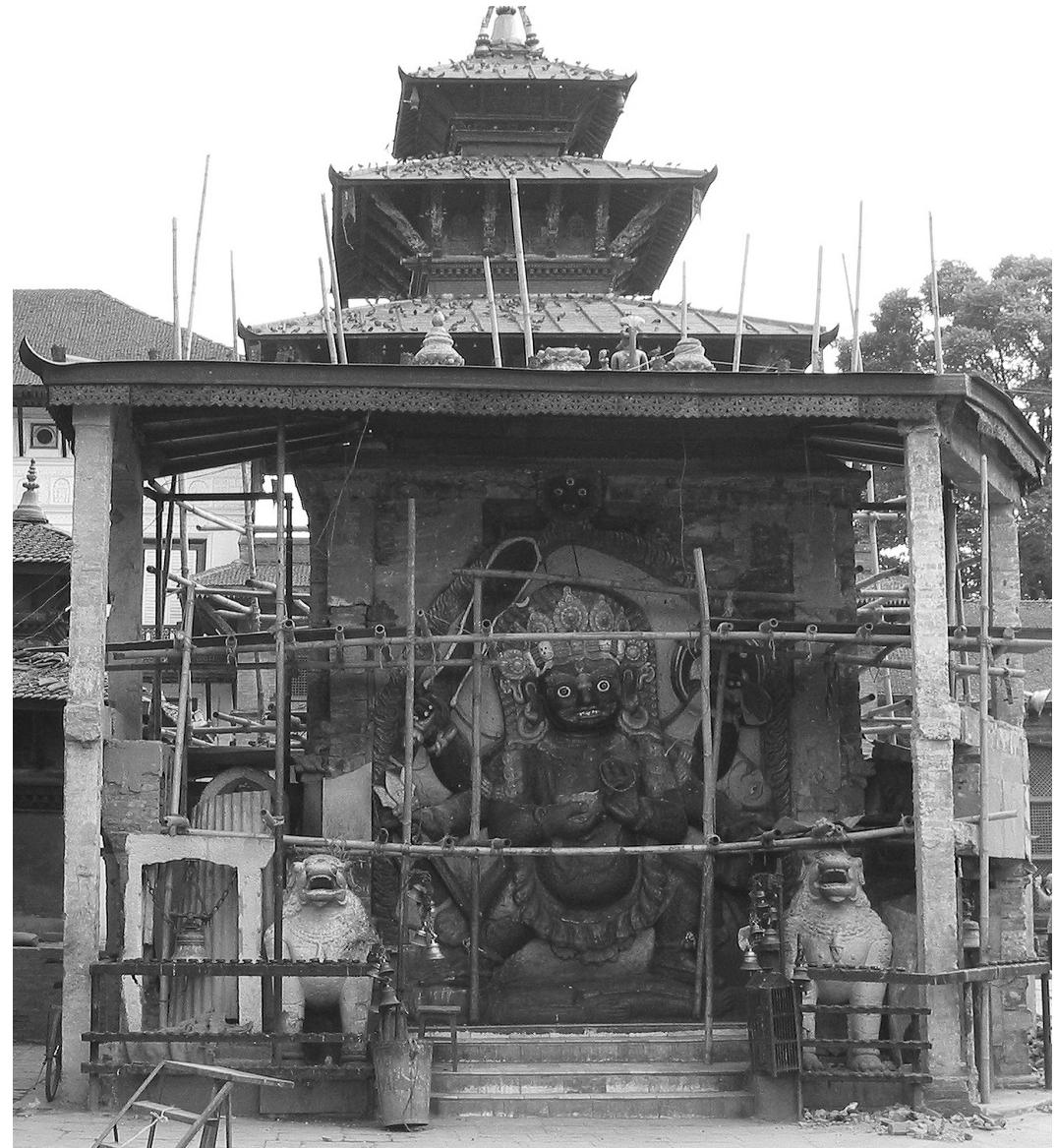


## STAGES OF RESTORATION



**left:** Kal Bhairav in December 2003, before the restoration project was initiated. Photo: Raju Roka, December 2003.

**above (clockwise direction):** **a.** The original fabric in the back facade was hidden below newly added layer of precast cement mesh. **b.** When we removed the marble slabs near the main image, a new layer of mosaic chips was revealed. This layer was probably added in 1970's. **c.** The height of the side walls were raised using brick masonry and marble slabs to accommodate images donated to the shrine by the devotees as votive offering. Note the original side wall with its cornice detail. **d.** The west facade with marble slabs. Photos: Raju Roka, December 2003.



**right:** Removal of marble slabs and other recent layers revealed the extent of damage done to the shrine which we had not anticipated before. Much of the original fabric was found in poor condition and important details such as the tympanum was totally lost. *Photo: Raju Roka, January 2004.*  
**above (clockwise direction):** **a.** Kal Bhairav under scaffolding. **b.** The back wall had tilted 4" from the plumb line and the stone work was damaged because of cement used to fix the marble slabs and pre-cast cement blocks. **c.** Side wall after marble slabs were taken off. The modern additions also included the cement pointing on the joints. The wall was patched with cement plaster in many locations. *Photos: Raju Roka, January 2004.*





*left:* Much reduced and simplified version of the original structure was exposed when modern layers were taken off the shrine. Most of its significant details were either incomplete (pinnacle), reversed, damaged (cornice details) or lost (tympanum and the pillars). During the restoration, these details were recarved on the basis of the historical photographic documentation. *Photo: Raju Roka, February 2004.*



a.



b.



c.

**right:** The principal image being stabilized after the back wall was dismantled. Photo: Raju Roka, August 2004.  
**above (clockwise direction):** a The core wall of the frame constituted of two layers of brick masonry. The outer layer, a new addition, was constructed as the structural reinforcement for the original layer. Photo: Badri Juwal, March 2004. b. The outer wall being reconstructed with stone blocks as the old stone wall had deteriorated completely. Some of the original stone blocks, which were in good condition, were reused. Photo: Badri Juwal, March 2004. c. The column base for the tympanum being installed in its position. Photo: Badri Juwal, August, 2004



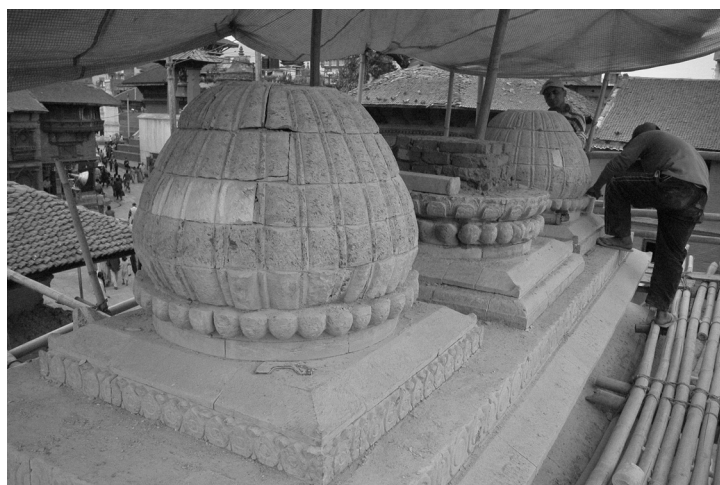


#### Recarving the lost tympanum

**above:** **a.** 1:1 scaled drawing of the tympanum was prepared with reference to the historic photographs. This full scale drawing was put up against the main image to check the proportions of the details and size of the tympanum. *Photo: Raju Roka, March 2004.* **b.** The drawing was further refined which was used as the basis for recarving the details of the tympanum. *Photo: Raju Roka, April 2004.* **c.** Completed tympanum being washed before installation. *Photo: Raju Roka, October 2004.*

**left:** Kal Bhairav during restoration. *Photo: Raju Roka, February 2005*





**above:** The stone blocks on the opposite facades were tied together with the help of stainless steel reinforcement which were drilled into these blocks. This not only stabilized individual pieces but also strengthened and reinforced the entire structure. Photo: Lumanti Joshi, March 2005.

**below:** Carved details of the pinnacles refined in the site and were installed using lime *surkhi* mortar. Stainless steel rods were also used for stabilizing the pinnacles. Photo: Lumanti Joshi, April 2005.

**right:** Restoration of the Kal Bhairav was completed in May of 2005. Photo: Badri Juwal, May 2005





**left:** The festive mood at Kathmandu Darbar Square during the inauguration of the Kal Bhairav Shrine on July 1st 2005.  
Photo: Sudhir Mahat, July 2005.

**right:** Newari bhaj being arranged in front of the shrine to be offered to the God . Photo: Sudhir Mahat, July 2005.





**above:** The American Ambassador to Nepal H.E. James F. Moriarty inaugurated the ceremony by performing a puja to Kal Bhairav. *Photo: Sudhir Mahat, July 2005.*

**right:** (from left to right) C.P. Tripathi, DOA, Mrs Constance Colding Jones, American Center, H.E. James F. Moriarty, the American Ambassador to Nepal, Mr. Jitendra Basnyat, Nepal Investment Bank, Mr. Gautam SJB Rana, KVPT, Mr. Sidhant Pandey, Ace Finance, Mr. Raju Roka, KVPT. (Standing below from left to right) Mr. Sattu Tara Bajracharya, the head priest of the shrine and Mr. Tej Ratna Tamrakar, Hanuman Dhoka Royal Palace. *Photo: Sudhir Mahat, July 2005.*



## PROJECT IMPLEMENTATION SCHEDULE

[illegible]

Kal Bhairav  
Kathmandu Dabar Initiative  
KVPT  
06.30.05

**Expenditure Summary**

| S.No. | Description            | Amount in USD    | Funding Provided by:                                 | Amount in USD    |
|-------|------------------------|------------------|------------------------------------------------------|------------------|
| 1     | Office Supplies        | 403.55           |                                                      |                  |
| 2     | Communication          | 462.55           |                                                      |                  |
| 3     | Local Conveyance       | 367.66           | US Ambassador's Fund For Cultural Preservation FY-03 | 22,392.00        |
| 4     | Reprographics          | 58.82            | Nepal Investment Bank                                | 4,930.00         |
| 5     | Photography            | 99.62            | German Development Service                           | 2,690.00         |
| 6     | Documentation          | -                | Mr. Prithivi Pande and Mrs. Pratima Pande            | 2,817.00         |
| 7     | Fundraising            | 792.06           | Mr. Jitendra Basnyat & Mr. Siddhanta R. Pandey       | 704.00           |
| 8     | Construction Materials | 24,911.30        | Mr Jietendra Rajbhandari                             | 352.00           |
| 9     | Timber                 | 89.55            | Mr. Deepak Man Sherchan                              | 1,409.00         |
| 10    | Tradesmen              | 11,108.90        | Mr. Bikram Krishna Shrestha                          | 704.00           |
| 11    | Implementation Team    | 2,028.41         | Mr. Niranjan Lal Shrestha                            | 352.00           |
| 12    | Local Consultants      | -                | Mr. Surya P. Shrestha                                | 352.00           |
| 13    | Meeting allowance      | 63.38            | Mr. Prem Lal Shrestha                                | 704.00           |
| 14    | Mischellaneous         | 1,828.04         | KVPT US                                              | 4,618.16         |
| 15    | Bank Charges           | 30.32            | Bank Interest                                        | 220.00           |
|       | <b>Total</b>           | <b>42,244.16</b> | <b>Total</b>                                         | <b>42,244.16</b> |



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# Kal Bhairab

Back to the Historic

Jul-05

## Comparative Analysis of Expenditure

|                                    |                                                                          | quantity | unit | rate \$ | Proposed<br>amount \$ | Expenditure<br>amount \$ | remarks |
|------------------------------------|--------------------------------------------------------------------------|----------|------|---------|-----------------------|--------------------------|---------|
|                                    | <b>Construction cost</b>                                                 |          |      |         |                       |                          |         |
| 1                                  | bamboo scaffolding                                                       | 100      | pcs  | 2.50    | 250.00                | 150.00                   |         |
| 2                                  | labors, strings for scaffolding                                          | 1        | l/s  | 300.00  | 300.00                | 300.00                   |         |
| 3                                  | dismantling of roof                                                      | 1        | l/s  | 265.00  | 265.00                | 265.00                   |         |
| 4                                  | removing carefully all modern marble and cement from historic stone wall | 1,870    | lab  | 2.40    | 4,488.00              | 4,100.00                 |         |
| 5                                  | cleaning of stone carefully                                              | 1        | l/s  | 650.00  | 650.00                | 500.00                   |         |
| 6                                  | excavation plinth / base in front of the main sculpture                  | 1        | l/s  | 500.00  | 500.00                | 675.00                   |         |
| 7                                  | relocation of oil lamps                                                  | 1        | l/s  | 250.00  | 250.00                | 300.00                   |         |
| 8                                  | roof reinstallation with light support                                   | 1        | l/s  | 450.00  | 450.00                | -                        |         |
| 9                                  | recovering of small stone lions (original lions) sunken on plinth        | 2        | nos  | 210.00  | 420.00                | 500.00                   |         |
| 10                                 | replacing of damaged stone carved sculptures                             | 12       | l/s  | 25.00   | 300.00                | 750.00                   |         |
| 11                                 | reallocating of stone sculptures to its original state and position      | 18       | l/s  | 250.00  | 4,500.00              | 4,000.00                 |         |
| 12                                 | replacement of damaged stone on wall                                     | 230      | s.ft | 12.00   | 2,760.00              | 13,531.00                |         |
| 13                                 | repairing of existing pinnacles                                          | 3        | nos  | 83.00   | 249.00                | 1,980.00                 |         |
| 14                                 | repairing and cleaning of large stone lions and bell                     | 3        | nos  | 60.00   | 180.00                | 565.00                   |         |
| 15                                 | repairing of stone cornice around the monument                           | 1        | l/s  | 900.00  | 900.00                | 6,335.00                 |         |
| 16                                 | Total cleaning and restoration of main sculpture                         | 1        | l/s  | 310.00  | 310.00                | 50.00                    |         |
| 17                                 | electrification / spot lights                                            | 12       | nos  | 75.00   | 900.00                | 500.00                   |         |
| 18                                 | drainage and pavement around the main monument                           | 1        | l/s  | 800.00  | 800.00                | 950.00                   |         |
| 19                                 | site clearance during construction period                                | 1        | l/s  | 465.00  | 465.00                | 700.00                   |         |
|                                    | <b>Additional work and materials</b>                                     |          |      |         |                       |                          |         |
| 20                                 | Stainless Steel for reinforcement                                        |          |      |         |                       | 1,078.00                 |         |
| 21                                 | Toran (tympanum Recarving)                                               |          |      |         |                       | 3,099.00                 |         |
| 22                                 | Timber                                                                   |          |      |         |                       | 90.00                    |         |
| 23                                 | Ma-apa (brick) and Surkhi (brick dust)                                   |          |      |         |                       | 1,130.00                 |         |
| 24                                 | Lime                                                                     |          |      |         |                       | 527.00                   |         |
| 25                                 | Tarpaulin                                                                |          |      |         |                       | 169.00                   |         |
| total \$                           |                                                                          |          |      |         | 18,937.00             |                          |         |
| 20% contingency                    |                                                                          |          |      |         | 3,787.40              |                          |         |
| <b>Grand total in U.S. Dollars</b> |                                                                          |          |      |         | <b>22,724.40</b>      | <b>42,244.00</b>         |         |