# Principles of the Conservation of Ancient Monuments with Special Reference To Nepal

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## INTRODUCTION

The present is but a link between the past and the future, and all human achievements are a sum total of what has happened in the past. The past, therefore, exerts itself forcefully and effectively upon what is to follow and it does so overtly as well as covertly and sometimes imperceptibly. Even when no conscious effort is made to record the past meticulously, it makes itself felt through some kind of ideological transmission, for it is said that ideas have wings. At the same time it is one of our irresistible instincts to preserve ourselves and transmit our achievements and our heritage and legacy to posterity. Sometimes it is done consciously, though most often it happens in spite of ourselves. But the ravages of time and nature and the susceptibility of the human mind to oblivion and innate lethargy often stand in the way. It is these that have to be consciously combatted. One of the earliest combattors of the order for the conservations of human heritage was king Nabonidus, the Chaldean king of Babylon, who ruled between 550 and 539 B. C. He opened up the

Temple of Shamash at Sippar in Iraq, and, to-his pleasant surprise, was able to discover by excavation the original inscription of Naramsin (circa 2291—2215 B C.); son of Sargon I of ancient Sumer, who had first built the temple. He carried out some extensive repairs to the temple and recorded the fact in an inscription that he got engraved on its wall. History is replete with instances of such public undertakings of constructions and repairs.

Nearer home, in India, it was Firez Shah Tughulq (1350-1387 A D.), who is known as the first great conservator of monuments. He has left ample descriptions of the works of repairs carried out by him on various ancient monuments in Delhi and around in the Tuzuki Firez Shahi and including the gift of a new lease of life and a face-lift at once. As an effective and common means of preservation of most structures he introduced the use of brick-in-line concrete to serve as an apron around the structures or for the paving of their floors. His rare feat of bringing in two inscribed pillars of Asoka from Meerut and Topra (near Ambala), respectively, forms another act of

-conservation, though, judged by our present standards, such an activity would look quaint and unorthodox, although deserving of qualified praise.

In Nepal the tradition of archaeological conservation goes back to the days of Asoka. The inscribed pillar at Lumbini records and preserves one of the most important events in the history of Nepal, helping in the identification of the hallowed spot of Buddha's birth. Likewise, the inscribed pillar at Nigalihawa (District Tau'ihawa) records the fact of his having enlarged the stupa of the previous Buddha Kanakamuni to twice its size in the fifteenth year of his coronation and of his himself having inspected the works and worshipped at the stupa so conserved in the twenty first year of his coronation.

Later history is picked with such instances. The work of renovation and repairs of temples or objects of worship naturally claimed most attention as these were held traditionally as acts of piety that had power to advance the donor or executor on the path of religious merit. Thought it would be tortuous as well as unnvessary to multiply instances, it may perhaps be proper to briefly indicate the principal stages of the periodical repairs and renovations carried out to the Pasupati temple at Kathmandu, being the most important monument in Nepal. Though in existence from times immemorial as tradition would have us believe, the earliest inscriptional reference to the predominant position of Lord Pauspati goes back to the time of Amsuvarman, late in the sixth century A. D. It is known to have been defiled and damaged by Sahmsuddin Illyas in A. D. 1349, but it was found intact again at the time of Jyotirmalia about the beginning of the fifteenth century, indicating that the temple was thoroughly renovated between A. D. 1412, a fact which is directly confirmed by the evidence of Gopalaraja Vamsavali which described the reinstallation of the newly made image and reconstruction of the temple in 1371 B. C. An inscription of Java Prakasha Malla of the year 549 N. S. (A. D. 1428) mentions some repairs that were carried out by him in the intervening period i. e. between A. D. 1412 and 1428.

A manuscript entitled Guhyasiddhi, dated Nepal Samvat 775, indicates that the temple had been completely renovated in A D. 1634. The woodwork of the temple is known to have been completely eaten away by termites over the intervening years, requiring a third reconstruction in A D. 1696 during the reign of Bhupalendra Malla.

The subsequent history of the repairs to the temple is somewhat obscure, though inscre iptions again come to our rescue to proclaim that ornamental silver foil or gold plated brass over the woodworks of the temple date from the times of king Rana Bahadur Shah and his son King Girvan Yuddha Bikram Shah, carly in the nineteenth century, and some as the gift of the then Prime Minister Gen. Bhimsen Thapa. Large-scale renovation of the temple was carried out within living memory by the late Prime Minister, Chandra Samsher Rana. in the beginning of the twentieth century. If in spite of such a volume of information on the most important religious-cum-historical monument of Nepal, it is not easy to trace the pristine form of the temple or the precise nature of the additions, alterations, or renovations that were carried out to it from time to time. The position is rather academically unsatisfying as it fills us with a sense of void historically, and presents to us many a lacuna that we are hard put to fill.

The story in respect of the other important monuments in Nepal is not very much dissimilar One of the important relics and landmarks of Kathmandu is the old bridge across the Bagmati, first built by General Bhimasen Thapa, and later repaired by Prime Minister Chandia Samsher Rana, as recorded in insciptions installed on either side of the approach from the Kathmandu end. The most recent solution of the problem presented to it by the growing numbers of its users by the construction of a substitute which has been recently thrown open to the public. But the fate of the other, which has served generations of men failhfully for over a century, may not be sealed, by its retention as a relic as well as a utilitarian foot-bridge for passers by.

One of the greatest disasters that overtook the ancient monuments, as well as modern structures for that matter, in Nepal was the great earthquake of A. D. 1934 (1990 V. S.) The extensive repairs that were carried out thereafter to several monuments in Nepal, particularly in and around the Kathmandu valley, have laudably served to preserve the ancient heritage of Nepal, but often without the essential traces of their ancestral form, leaving to posterity some relics of which the original forms were apparently rather different from what they presently serve to convey.

The Dharara which is a prominent landmark of Kathmanda of the olden days is a monument of and to Gen. Bhimasena Thapa, with romantic associations with Jung Bahadur Rana, has had to be repaired after the earthquake with suitable modifications that resulted perhaps in the reduction of its height. And the fact is still remembered by most middle-aged men of Kathmandu.

One may feel nostalgically for the more than a hundred year old platform or landmark in the Tundikhel called the Khariko-bot-Ko Chautaro, which has witnessed many an important event of history of the olden days, and which now lives only in memory.

Repetition of instances of repairs and renovation to monuments need not detain us any longer, and we are led directly to consider the principles and purpose of conservation which the world, by trial and error and through many vicissitudes of fortune, has come generally to adopt and cherish,

The basic principles of conservation are the same everywhere though the actual methods employed for conservation or the machinery entrusted with the work may vary from country to country. The types of monuments or the materials used in their construction or the general state of their preservation, depending upon the factors of actual length of life and climate, besides the innate durability of the relies themselves, also vary, and each situation requires a suitably specific treatment.

The purpose of the conservation of ancient and historical monuments is to preserve intact the national heritage of architecture and art and bequeath it in turn to posterity as far as possible and practicable, in its pristine form. In fairness to the forbears, it is also necessary to keep a detailed record of any changes that may be introduced in an ancient structure from time to time in the interest of its preservation.

# 2. The Procedure and Machinery of Conservation in Nepal

The procedure of conservation is to retain unmodified ancient architectural relics, with the help of technical knowledge of the architectural forms of the ancient days. An institution called Chhen-Bhadel, dating apparently from the times of the Mallas, had been carrying out repairs to ancient and public edifices in Nepal as its specific duty. It was part and parcel of the Durbar from times immemorial. But extent transferred to an organization called

the Valley Construction Committee (Upatvaka Nirman Samiti) which came into existence in V. S. 2019 (A. D. 1956-57) From this time on the works of the Samiti were alternately done by it or the Public Works Department, which continued virtually to be in charge of all repairs to ancient structures till almost 1966, when the Department of Archaeology, that had come into existence in 2009 V. S. (A. D. 1952-53), took up the first major repairs to any ancient monument, namely, Kathmandapa jointly with and under the entire financial support of the Guthi Samsthan until the passing of the Ancient Monuments Preservation Act (Prachin Smarak Samrakshan Ain of 2013) of A. D. 1956-57, and even after the coming into being of the Department of Archaeology, repairs to ancient monuments were carried out sporadically by other agencies under the orders of the Government but not necessarily on the established principles of archaeological conservation. The modification of the temple by valley construction committee (Upatyaka Nirman Samiti) at the centre of the Rani Pokhari at Kathmandu, originally attributed to Pratapa Malla towards the beginning of the seventeenth century, is a case in point. Though this task of preserving the ancient heritage of the Department of Archaeology ever since its inception, it was considerably handicapped for want of an adequate executive staff as well as finances in the initial stages. These difficulties have now been overcome to an extent and the situation has improved considerably ever since the considution of the Guthi-Jirnoddhar Tatha-Nirman Samiti in 1967, and its joining hands with the Department of Archaeology for the execution of the works entrusted to it. This organization functions under the chairmanship of the Director, Department of Archaeology and is admimistered by a Secretary. The Committee consists of five members, of whom two are non-officials It decides upon the work that

has to be taken up, and accordingly works are taken up from time to time. The preparation of estimates carried out by an Engineer in the employ of the Department of Archaeology, and the actual execution of the works is left to be carried out by project officers. The works are supervised by the Engineer of the Department whose services have been transferred to the Samiti, provisionally, and a few overseers on the engineering side and by the Secretary to the Committee on the overall policy and administrative sides. The lines on which the repairs are to be carried out are usually outlined by the Director who also periodically inspects the works in progress.

On the technical side the Samiti is alsoserved by a specialist on Art and Architecture, and a Photographer of its own. The Department of Archaeology periodically lends its. Draftsmen to the Samiti in emergencies. Thus the set-up of the machinery for the conservation of monuments devised jointly by the Department of Archaeology and the Guthi. Jirnoddhar-tatha-Nirman Samiti is ideally suited to the present conditions in Nepal where the Guthi Samsthan exercises a large measure of control over all the religious establishments. in Nepal, both organisationally and administratively, and repairs are considered as part of its normal duries. Increasingly intensified adpotion of the archaeological principles of conservation, detailed in the following lines, which has been the aim of preservational repairs that have been carried out already and have also been emphasised in its objectives in the currently initial stages will have firmly laid the foundations of proper conservationof ancient monuments in the country.

# 3. General Principles of Conservation of Ancient Monuments

As a matter of principle, it is absolutely essential that before the repairs to any accient:

monument is undertaken, a complete descriptive record of the existing condition of the monument and the measures of repairs proposed is prepared, and approved of by the proper authority. This is to ensure that the architectural character of the monument is retained intact. For this purpose, photographic records of the monuments in addition are also desirable. It may often be necessary to prepare scale drawings of the affected parts of any structure in the form of plans, elevations and section, either in full or in part. These measured drawings alone would enable the executors to carry out the repairs properly and correctly and compare, in the course of of checking and in the event of any necessity, the condition of the monuments before repairs with the condition after repairs. Sometimes photographs may be generally helpful. These records may help the higher authorities or even responsible members of the public who may find fault with the works of repairs to keep a check on the works and ensure the correctness and propriety of the repairs, if necessary by ordering rectification of mistakes, if any.

Apart from these aspects of the matter, the posterity would not be in a position to judge how far the pristine aspects and forms of the ancient structures have been retained and in what parts modifications or departures have been introduced, in the absence of records to this effect. Such information is also useful to the researcher.

#### 4. Preliminaries

(A) Records of the condition of monuments and conservation notes

In a land where proverbially there are more temples than houses, not to speak of various other categories of monuments, the problem

of merely making a list of such motuments isenormous. The work of preparing records indrawing or in photographs is equally large in volume. Examining the condition of the monuments and preparing detailed notes on their condition and the repairs required by them is also a time-consuming affair.

But a heginning must be made, sooner rather than later, to prepare such records, starting from the well-known monuments, and gradually extending to monuments of lesser importance.

It can easily be imagined that many monuments are aften in such an advanced stage of decay that one cannot wait for such records to be completed, but must rush first a d tothem and save them from total ruin.

(B) Optimum list and Classification of Monuments

No country on earth can perhaps find enough funds to deal effectively with all her ancient monuments. It becomes necessary, therefore, to classify the monuments according to their importance, evaluated on ite basis of style, historical association and architectural or other distincitive features.

At the same time an optimum list of monuments that the authorities may decide to keep in repair, in consideration of the limited nature of the pecuniary resources, which naturally restrict the strength of the concerned executive Establishment as well as the scope of work, must also be worked out.

## (C) Phased Repairs

The works of repairs too have to be phased over a period of time in an order of priority and are to be taken up according to the wor-

king capacity of the competent staff available for the supervision on of the works In work ng this out the capacity of the supervisory staff must be taken into consideration so that they may be able to establish effective control over the supervision and execution of the works planned and taken in hand.

# 5. Special Features of Nepalese Monuments And Some Suggestions

## (A) The Durbar Squares

- (i) General: The Durbar squares of Kath. mandu, Lalitpur and Bhaktpur are almost unique in their lay—out, grouping and spacing and are living symbols of the past telescoping itself into the present through the expanse of the centuries. They are also very pleasing and attractive as well as fairly ancient to deserve admiration and complete protection. In any scheme of repairs to these groups of monuments it must be ensured that their pristine character must be retained unaffected. Unfortunately they continue to this day to be the centre-spots of the respective cities, serving as a busy market place of street vendors. Regularly established shops are also on the premises at Kathmandu and Patan. Of these the square or associated area at Kathmandu is the largest and also the oldest.
- (ii Restriction of Vehicular traffic in the Durbar Squares: Generally, the areas must be closed to vehicular traffic as such traffic is difficult to control, in view of the congested nature of the area; and the passage of vehicles through the area makes it incongruous to take photographs of the ancient monuments with anachronistically modern transport of all description amidst them. The danger to the safety of the structures, through chances of accidental hitting of the monuments, cannot be over emphasized. The brick pavement of the area

is also ancient, and if not saved in time will be worn out by the flow of heavy traffic.

- (iii) New structures in the area not to be permitted: Secondly no new structures should be allowed to be built in the area, nor the facade of any old house in the area allowed to be modernized, as such a phenomenon will present a contrast that is bound to be glaringly anachronistic, apart from totally spoiling the environment;
- (iv) No Misuse of the Premises: The monuments individually including old Palaces as well as the entire area should be kept free from use as business, squatting by vagiants, wanderers or pilgrims or visitors from distant villages. The walls of the structures should also not be used to paste advertisements or stick bills of any kind. Suitable punitive measures should also be taken against offenders.
- (v) Fence around the monuments: Some kind of wooden fences may also be elected around the areas suitably to prevent interlopers from encroching upon the monument and the areas
- (vi) Pulling down non-historical structures: Some unimportant structures of no historical or architectural importance or merit may also be pulled down to improve the view of the squares and the structures around and within them.
  - (B) Dismantling and Removal of old structures to require prior Approval of the Department

It is often seen that for the improvement to an area some old structures are required to be pulled down. In that process it may often result in the destruction of some essential parts of the older environments which form a

comprehensive complex. As a case in point, of cleaning the covered surfaces must of necthe example of the entrance gateway to the Bodhnatha Stupa on the way to Gokarna can be cited with a nostalgic feeling of pain. Before any authority decides to pull down any old structure, even if not apparently of any antiquarian interest, it would be proper if the prior approval of the Department of Archaeology is obtained.

#### (C) Mural Paintings

- (i) General Description: Some monuments are enriched with mural paintings depicting historical, mythological and religious scenes. From the most superficial examination it can be stated that they are mostly tempera painttings. In many instances the murals are likely to be obscured by films of dust, soot, oil and vermilion, etc. Often again the carrier surface is a mud plaster on the inner walls of temples or monasteries, etc. The life of the painting depends of course on the condition of the painted surface itself but its life may depend on the security of the plaster itself. Being of tempera technique the paintings as well as the carrier bases may be affected by moisture or leakage of rainfall through the roof tricking down over the walls.
- (ii) Preservation of Paintings: The preservation of such delicate surfaces requires the greatest care and technical knowledge and skill. One of the primary requirements in the treatment of paintings is to ascertain the nature of chemicals employed originally. This would require analysis of the pigments in the laboratory and the chemicals to be employed for removing the soot and other foreign bodies obscuring the painted film and strengthening and fixing the painted surfaces have to be determined on the basis of the results of the experiments and analyses in a well-equipped daboratory. In consequence the actual process

essity be very cautious and slow.

- (ii) Delicate Problems: There are such things as the nature of the adhesion of the painted film to the plastered surface to be considerd in the matter of evolving the actual process of the work. Gaps, air pockets, blisters in painted film or detachments have to be determined accurately, with delicate instruments before the strategy of any chemical treatment is planned.
- (iii) Prior Need of an Inventory of Murals in Nepal: As a prerequiste to the solution of the problem of murals in Nepal, a complete inventory of the paintings may be made before a report on their condition and the remedies can be prepared, not to speak of the actual undertaking of such works Some of the monasteries, wherever they occur, are excellent repositories of excellent specimens of paintings which are on their way to speedy disappearance or deterioration. Very often information about the existence of such works of art of inestimable academic as well as artistic interest and value trickles down hesitantly from diverse sources. Such information should not merely be compiled, but followed up by actual examination on the spot as to contents condition. Photographic records must also be prepared at the same time.

#### (D) Woodworks

The woodworks of Nepal occupy a distinctive place in her architectural scheme. While they are expressive of a highwater-mark of technical as well as artistic excellence, they sufter from quick disintegration. In view of the perishable nature of the wooden medium a question arises if damaged parts of wood work, particularly separately attached parts like hands of carved figures, shou'd be replaced by newly carved pieces. A similar question also arises. as to the wholesale replacement of carved brackets or tunals in the event of such pieces having lost their features or being worn out.

Though strictly on principle, such replacements, being new works, must be discouraged and eschewed, in the interest of legical fullness of the structures as well as artistic beauty. Such replacements may be permitted in all suitable cases. Such renovation has been permissively done on the western side of the Bhimsena temple, at the northern end of the Durbar Square in Lalitpur.

#### (E) Vessels nailed to temples

The temples of Nepal have often assemblages of large numbers of assortments of metallic vessels nailed to the upper walls on the exterior. They are of course a relic of a traditional custom, but as this practice does not augment the beauty of the temples, but on the contrary detracts from it, it would be proper to discourage, and if possible even probibit, the practice. The already existing vessels may well be taken off, and made over to the Nepal (National) Museum for exhibition and storage of traditional vessels of the recent past. The duplicate specimens could serve as exchange potential for obtaining suitable museum objects from other parts of the world in exchange.

# 6. Principal Conservation Works Carried out in Nepal in Recent Years.

# (A) The Difficulties

Notwithstanding the hampering and lingering difficulties impending the processes of the conservation of ancient monuments in Nepal, it must be recorded that considerable progress has been made in the preservation of the cultural wealth of Nepal in recent years. Owing often to the advanced stage of decay in some cases, requiring urgent treatment, and other reasons it has not been possible always to follow the principle of making complete records of the monuments to show the condition before repairs. It is to be hoped, however, the persisting difficulties will be overcome before long.

Owing again to the peculiar nature of the monuments in Nepal, a major component of which has a basically wooden framework, which by its very nature is extremely difficult to preserve for long, total renovation has to be attempted more often than would be justified elsewhere.

Some chemical work for the cleaning and preservation of mural paintings has indeed been attempted limitedly, but the volume of work in the field of chemical preservation lying ahead is stupendous which only a much larger technical establishment with adequate training and experience and substantial financial backing alone can account for

# (B) Resume of Important Works Achieved So far

The stage is now set for the consideration of the principal works of repairs carried out during the last two years in Nepal.

#### (i) Structural Repairs

(a) Kasthamandapa:— The important temple enshrining Gorakhanatha with a record of reconstruction was one of the first menuments to receive extensive repairs in 1966. The principalitiems of work carried out comprise the demolition of the accretionary modern structures that had been built into its facade all round, thus revealing the original features,

the water-tightening of the roofs, and replacement of worn out wood works in the rafters, beams and purlins of the sloping roof, including the ornamental parts.

(b) The two Siva temples of Baneswar:—
These two stone temples which are identical
in shape and size, being of the late Malla or
early Shah period, with ogee-curved sikhara,
were with proper numbering in a serial order
of the courses and individual stones, and
restored to their pristine forms.

#### (b) Lalitpur

- (i) Kumbheswara Temple:— This temple with five successive roofs in the pagoda, built on a single plinth, came in next for extensive repairs comprising mainly the replacement of plain modern rafters and purlins under the roofs, and rendering the roofs leak-proof.
- (ii) Bhimasena Temple: This temple is built in Nepal Samwat 802 (A. D. 1611) was rid of the accretionary modern structure housing a shop on the southern side, and as a result the original facade was fully exposed, and at the same time a series of labeld scenes from the Mahabharata carved in miniature on wood was brought to light below the tunals on the southern side. On the western side again the residential house of the priest of which the temple had dovetailed into the temple at the first floor level and had completely defaced and obscured the facade, was pulled down and the facade reclaimed, and a wide open space for circumambulation introduced on the west. As a novel experiment, the worn out and missing tunals on the ground floor of the western side were replaced with fully carved brackets, on the pattern of the carving on the other sides, with a brief inscription unobtrusively introduced on the sides to indicate the renovation.

(iii) Krishna Temple near Sun Dhara:—This temple built entirely of bricks in the sixhara style, and dating from about the sixteenth century was overgrown with vegetation and into brickwork had been disrupted and dislodged. It was a novel experiment to carry out repairs to a temple of this type to render the roof water-tight, after the removal of all overgrown vegetation, and the resetting of dislodged bricks, including ornamental courses which presented the major difficuly. In the course of the repairs it was observed that at last fiften different varieties of crnamental bricks of varying sizes have been employed by its builders in the construction.

# (iii) Matsyendranath Temple

The temple came in for replacement of worn out rafters, beams and purlins in the roofs and the introduction of brass sheets for the foofs in place of the original roof of tiles, in keeping with the existing sheets in the lower roof that had been introduced earlier.

# (C) Bhaktapur

Bhimasena Temple: The temple has received a face-lift, which consists of restoration of the vertical lines of the main shrine, water-tightening of the roofs and replacement of worn-out woodworks.

#### (D) Kirtipur

Bagh Bhairava Temple.— The temple dating back from the century had been over-hundred with the years-old accumulation of debris storeds haphazardly in the different storeys, and the rafters of the roofs having given way had rendered them leaky, and the wooden pillars supporting the caves on the ground floors on the exterior had gone out of plumb. The wooden screens on the facades of different storeys had been variously damaged. All these defects have been removed, and the important temple

is now in a much better condition than it was before the repairs had been attempted. At the same time steps have been taken to protect the extensive remains of mural paintings on the outer walls of the temple of the ground floor, which are best preserved on the southern side, from further damage.

#### (E) Chobhar

Ganesa Temple:—The picturesquely situated temple of Ganesa (Jala Vinayaka) immediately outside the gorge through which the Bagmati gushes out of the valley of Kathmandu has received extensive repairs in the form of reconstruction of the damaged roofs, including watertightening and the resettling of the carved wodden tunals (brackets) which had had to be taken off earlier owing to the portending danger which the damaged roof had posed.

## (F) Budha Nilakantha

Anantasayana Vishnu:- The monolithic and recumbent image of Vishnu, dating from the seventh century A. D., has been lying in an enclosed pool of water creating the impressing of floating upon the waters. The waters in the pool are received through inlets from the streams that flow down the surrounding hills, and the excess water seeps out through outlets fixed in the sloping brick walls of the enclosed pool. The accumulated silt has been cleared from the enclosure. To prevent the subsidence of the nearly 18 ft. long image, which has been found supported on three trainsversely laid blocks of stone thus belying the traditionally sacrosanct belief in its being a swayambhu on self-emanating image, the pavement on which the stones rest has been strengthened by brick work. The sides of the rectangular enclosed pool found held together by a compact brick-work have been further secured

is now in a much better condition than it was and rendered water-tight. The inlets and outbefore the repairs had been attempted. At the lets of water that had been clogged with silt name time steps have been taken to protect have been cleared.

#### (G) Khokana

Rudrayani Temple:- This temple is situated between Nokhu and Bungmati and not far from Kathmandu which was extensively repaired after the disastrous earthquake of A. D. 1934 (1990 V. S.) had again fallen into disrepair, and have received some essential repairs that would give it a new lease of life. It has not, however, been considered proper or safe to remove the iron clumps and stays that had been introduced in the course of the earlier repairs.

# (H) Lori Kundan in the Tarai

Siva Temple:- The remains of the brick built Siva temple revealed by the archaeologiogical excavation of 1961-62 on the prindipal mound at Lorikudan, near Taulihawa, in Lumbini Anchal, have been only partially exposed. The brick-work temple, wherein extensive use of ornamental bricks has been made, is dated to the eighth century by carbon-14 analysis. As a good deal of excavation work remains yet to be done on the site, the partial conservation work that has been completed by the Department of Archaeology on these forceless relics of the early medieval period comprises the strengthening of the compound walls, with a facade of ornamental bricks, on the northern and north eastern sides, respectively.

#### (ii) Chemical Conservation

(a) The Murals in the Palace of Bhupatindra Malla at Bhaktapur:— The murals in the palace forming part of the Museum of Paintings which had been obscured by soot grace and dust and had been differently damaged by leakage of rain water through the roof, were cleaned and secured by chemical treatment during 1965-66, by a joint team of H. M. G. (Department of Archaeology) and the technical team from the Chemical Branch of the Archaeological Survey of India

#### (b) Kathmandu

(i) Kumari Ghar; - The obscured murals on the northern wing of the Kumari Ghar were dimitedly taken up by the technical team described above for chemical treatment and the work extended later by the Nepalese chemists employed for the purpose after they had gained their basic experience of such work in the course of their collaboration with the Indian team at Bhaktapur. As a result, a large number of excellently painted scenes including a life-size portrait of Prakasha Malla, in full regalia and battle array, were brought to light. Arrangments to save them from further damage have been made by encasing them in glass panels to serve at once as a barrier against any extraneous contacts, and as a transparent screen enabling visions to see the paintings without let or hindrance.

(ii) Hanuman Dhoka; - Similar work has been done by the Department of Archaeology in the old palace of Hanuman Dhoka with interesting results, and the works are still in progress.

# 7. Conclusion

It would be clear to see that Nepal has taken seriously and enthusiastically to the proper conservation of her national heritage. That she has been able to do so comparatively recently is easily understandable. She is keen to do her best in spite of the rather compelling limitations that linger for the present. It is to be hoped that the initial difficulties and consequential deficiences will soon be overcome, and Nepal will before long be in line with the rest of the world in point of technical adequacy and the quality of work in the fields of conservation of her ancient monuments as in any other.