

The Reconstruction of the Eight-Cornered Pavilion (Cyasilin Mandap) on Darbar Square in Bhaktapur-Nepal

-Niels Gutschow and Gotz Hagmuller

Occasion and Background

In 1969 an unconventional gift was conceived for the then crown prince and present king of Nepal on the occasion of his marriage, namely, financing the restoration of a Hindu priestly house (Pujarimath), which was notable for its superb wood carving but, following scanty repairs in the thirties, had been allowed to deteriorate. Heinrich Seemann, at the time the first secretary of the German Embassy in Kathmandu, had had the idea of choosing an alternative to the customary Meissner service. At the beginning one hundred thousand marks were turned over, and with the Department of Archaeology (the body overseeing the care of national monuments) contributing a third of the total cost from its own budget the restoration was carried out from August 1971 to May 1972 by four architects from Darmstadt. Encouraged by the feasibility of such a project and by the positive echo among

the Nepalese public, the Federal Ministry for Economic Cooperation in 1973 initiated a pilot study, on the basis of which an integrated urban renewal project was begun in 1974, which was financed upto 1986, with shifting areas of focus, by the German Technical Cooperation (GTZ). For many years the project office was located in Pujarimath, and it was here finally, in July 1987, with chancellor Helmut Kohl in attendance, that the first construction stage of a museum for Nepalese wood-carving handicraft was opened-an undertaking agreed to in 1972. This first visit by a German chancellor to Nepal was again the occasion for an official gift, and again the proposal came from Heinrich Seemann, now the deputy chief of protocol in the Foreign Office, to continue the already traditionally rich German support for preserving monuments in Nepal.

When in May 1987, eight weeks before the chancellor's announced visit, we received

the request to designate a suitable restoration project, an intensive search began among the numerous architectural monuments in need of restoration in the Kathmandu Valley.

Various proposals were rejected, in part due to ill-defined property rights lurking in the background or because the scope of the project proved to be too large for the given framework. In addition, the idea was that the 'object' be in keeping with the occasion or perhaps even possess symbolic value, and be manageable, moreover, within reasonable bounds both of space and time. In the end, a wish we had long cherished led to the suggestion to restore to Bhaktapur— which we both had made our second home— one of its most remarkable structures, and thus at the same time to fill the gap that a devastating earthquake in 1934 left in the city's urbanistic centre, in Darbar Square, where, since the end of the 17th century, an octagonal pavilion had stood at the very focal point of the most significant view onto the former 'royal square'; in accordance with its design form, it was known under the name Cyasilin Mandap.

The earthquake had virtually demolished the city. Not only were hundreds of houses completely destroyed and thousands damaged, but all temples on the square were also damaged; as were large portions of the old palace; which is today still called the palace of the 99 courtyards by the inhabitants of the city, even if there were never more than around 20 of them. After the earthquake numerous temples were restored to various degrees; Bhairava Temple on the neighbouring square was even rebuilt in its original size after its destruction, housing, as it did, the city's most important deity. Darbar Square, however, underwent a painful

reduction in the number of its buildings. After all, the shrines, most of which were associated with the dynasty of the Mallas, who ruled upto 1769, had long been robbed of their patrons. The Ranas, who were felt to be the representatives of a foreign rule, acted accordingly: Four temples were left standing as one-storeyed makeshift buildings, and four other buildings were completely done away with. Cyasilin Mandap collapsed a long nine hours after the earthquake and in the end was cleared away. Old men who as children played in the open upper storey of the arcade-like structure report that the people felt this to be a barbaric act. And they also report of a snake that slid out from under the ruins to attack the governor. There was a quite certain sense that this governor had caused the earthquake by having a heavy stone slab lifted off of a tabooed cave. At the very moment he did so gasses rose up, the earth moved and the city was destroyed. The removal of the debris brought not only widened and unaccustomed squares into existence. In front of the governor's residence which was built around 1870 in the Anglo-Indian style by refashioning an old wing of the palace, a parade ground was created for the garrison, and to serve at the same time as a parking place for a lone auto. For this purpose a 35-metre-long building with an arcade on the ground floor, damaged only in the area of its roof, had to be set back twelve metres. The only thing left to bring Cyasilin Mandap back to mind was a knee-high, octagonal platform on which a tall stone inscription has been preserved with poems about the six seasons composed by king Jitamitra together with his prime minister and trusted counsellor around 1680. In

addition, Brahmin priests responsible for the temples of the square knew that individual parts of the building had been recovered from the debris and used elsewhere. Finally, the governor's former chauffeur was able to report that the 32 roof struts with depictions of Krishna were transported to Kathmandu for reuse in building the arch at the entrance to the newly created main traffic route (New Road Gate).

Arguments for a Reconstruction: Spatial Setting

Darbar Square appeared desolate to us. The clearing brought to the square's layout following the earthquake had removed the feeling of narrowness and interconnectiveness customary in the context of Newar urban space and created a completely new spatial impression. The large city squares of Bhaktapur, Kathmandu and Patan had never been market and meeting places, but served rather as sites where city and court ritual could be performed, and provided the setting for continued donations of temples, shrines and other public buildings, one such being a mandap with an open pillared hall on the ground floor. Having in the course of time become increasingly 'packed tight', these squares are full of variety, gradation and transitional space, their charming vistas impressing us perhaps because they manage to do without clear focal points, reference points and axes. Such exploitation of the squares' space dispenses with all monumentality and endows the city's ritual stage with a many-layered depth, so that no 'overview' is had from any one point. Given that squares, therefore aim at producing a feeling more of narrowness than breadth, Cyasilin Mandap has been missing since 1934

at the decisive location where, in front of the palace the city's main processional path narrows to 4.40 metres, with the eaves of the palace and mandap roofs defining the path from above.

Use

Cyasilin Mandap's original function was not that of a temple but rather a covered platform with an open pillared hall on the ground floor - a type of construction that in Sanskrit is called 'mandapa'. This pillared hall served to provide lodging and a meeting place for groups of people who came to deliberate, be they ministers of the king, Brahmins whose quarter was at the southern edge of the square or the headmen of the various quarters-exact sources have not been found. We do not know even the year of the building's construction, and can merely assume that it was built by King Jitmitra Malla, who during his long reign at the end of the 17th century (1663-1687) made a decisive mark on the square by way of numerous new buildings. It is conceivable moreover, that the pavilion's balcony-like upper storey, opened on all sides, functioned as an observation platform for the court to view the passing processions during the city's numerous rituals.

Even though a small shrine with an Umamahesvara figure was located in the upper storey, it was not a sanctuary but open to the general public. For this reason the structure's name, 'octagonal mandap', is descriptive without, however, being suggestive of a shrine or any other function. Before the earthquake the local tax office of the Rana rulers was quartered in the building; in the 19th century these same rulers had separate stairs built on the east side in order to provide access to the upper storey from without.

The public nature of the mandap and the accessibility of the upper storey seemed to us to have extraordinarily enriched the square, especially in view of the fact that the seventeen remaining temples of the square served cult purposes of the rulers and today play a very small role in the religious life of the city; they may be called functional ruins, as their actual frame of reference, the Malla dynasty, went out of existence in 1769.

Historical Fragments and Documentary Events

From information supplied by the public fragments of pillars, consoles, capitals and pedestals were found that had been recovered from the rubble of Cyasilin Mandap in 1934 and used as timber in a grove outside the city for constructing one-storied arcades, obviously to the carving on them. To meet these new needs the capitals were shortened and the lintels sawed into pieces.

In addition, historical photos made by the French traveller-scholar Gustave Le Bon¹ in 1885, others made by Percy Brown² in 1905, and still others made by the Tibetan scholar Giuseppe Tucci and the court photographer Ganesh Chitrakar during the twenties provided rich visual material on the basis of which it seemed possible to design the upper storey. To these were added engravings and water colours made from drawings and notes

of the Schlagintweit brothers, the British doctor Henry Ambrose Oldfield and Daniel Wright during the middle of the 19th century, the darbar squares of the Kathmandu valley having repeatedly been accorded respectful treatment in the travel literature of the 19th century.

Memory

In 1886 Gustave Le Bon's photos were made into engravings, which even today are rarely ever left out of books about Nepal on account of their historical plasticity. These engravings have had a far-reaching influence on our present-day conception of what impression the square formerly made, nor were they the least among the factors inciting us to undo the loss of Cyasilin Mandap by reconstructing it.

The historical accounts influenced the outside world's conception of the square. In Bhaktapur itself the still standing platform recalled the one-time structure, and older members of the population who saw the building with their own eyes were able to provide much information about the inside space. A water colour by a local artist was even found, dating to 1945 (that is, years after the earthquake), in which Cyasilin Mandap is correctly placed in a view of the square.

As far as the recovery of lost pieces of architecture is concerned, it is above all the

1) Gustave Le Bon, *Le Tour du Monde: Voyage au Nepal*, Paris 1886, pp. 225-272. Plates on pages 261 and 265.

The photographs the engravings are based on were later published:

Gustave Le Bon, *Le Monuments de l'Inde*, vol. II, Paris 1893, pp. 221-246, pls. 370, 372 and 377 (detail photo: Details d'un temple possédant des colonnes en pierre et en bois).

Both parts have appeared in reprint:

Itineraria Asiatica, vol. I, White Orchid Press, Bangkok 1981.

2) Percy Brown, *Picturesque Nepal*, London 1960.

statements of Brahmins still responsible for the surviving temples that are clear and helpful, and extremely so. They deplore the removal of the temples as having been a barbaric act of the Ranas and view their restoration as a necessary act of reconciliation. Finally, the square's diversity reflects the willingness on the part of the kings, their former lords, to practise donations.

The Reconstruction: Making Decisions in the Design Stage between Original, Copy and Invention

Approaching the Outward Appearance

As no documents or even design drawings of the historical building exist, the most important aids in the attempt to make as true a replica as possible were surviving historical photos, above all three plate exposures made by Gustave Le Bon in the spring of 1885. Actually it was Le Bon's view of the square from the west with the mandap prominently featured in the middle—often published as an engraving—and a detailed shot of the intermediate zone above the ground floor that in particular provided a basis for a reconstruction design. The complete measurements, proportions and exact location were determined with the help of perspective reduction from the western view. For comparison a modern photo taken from the same position, with a 15-metre-high surveyor's pole placed where the vertical axis originally stood, served as the design's projection plane from which the most important measurements could be read. This first reconstruction design was compared, adjusted and refined by means of a photo analysis.

In the end, however, it was the recovered original components of the building that made

an exact reconstruction possible, and so ensured proper proportions. The reuse of the pillars and beams crushed by the teeth of time ensures the edifice's authentic character in the eyes of the passerby, for in fact eight of twelve pillars, thirty percent of the lintel and six of sixteen capitals have been preserved. Even the location could be pinpointed, since when the excavation pit was dug on the south side the vertical masonry of the platform was exposed.

Nevertheless, in spite of much evidence to the contrary, the building that has now been completed is basically a copy based largely on a 'creative design', as the outer appearance deviates clearly from the historical model in several details.

A relief frieze with inlays of ivory, encircling the building at the height of the window sills, was dedicated to narrative elements from the Krishna legend. The single detail photo of that zone presents only a shadow rendering of the scenes. In dealing with the restoration of such iconographical details we conceded the limits of reconstruction effort and thus decided in favour of decorative panels. On the other hand, the two lions flanking the entrance in the direction of the palace, which are seen on a water colour of the middle of the 19th century, but are missing thirty years later, were redesigned and cast by means of the normal *cire perdue* technique: a sufficient number of lions existed from the early 18th century to make such an attempt at analogy seem justified. An outside flight of stairs evidently attached in the 19th century, to the detriment of the eastern facade, was excluded from the reconstruction, and in its place the means of entry into the upper storey through the pillared hall was restored. To be sure, there was no longer any indication

of how the original stairs were laid. The roof struts consist of uncrafted square timber, as we purposely refrained from copying the struts that have been preserved and reused in Kathmandu. In the long run the original building components may be expected to be recovered. It should be mentioned that strong criticism came from the public regarding this point. Any attempt to do without decoration and iconographical detail is categorically rejected and taken as a confession of helplessness and tightfistedness.

The Inside of the Building and Its Support Structure:

Invention, Analogy or Falsification ?

For all that the outer appearance of the building is historically documented, so little do the surviving photos reveal concerning the original interior; the enclosed space of the upper storey, the form and location of the stairs, and the support structure. Given this lack of documentary evidence, many design decisions could be taken only on the basis of analogy with similar buildings or building components. The architectonic vocabulary that achieved full flowering in the first half of the 18th century, during the Late Malla Period, a time characterized by few norms and an astounding variety of forms, offered enough visual material for our purposes. Of aid in reconstructing the roof framework with its curiously bent rafters was a comparison with the strikingly similar and likewise octagonal Bhaktapur Tower, as it is called, in the Hanuman Dhoka Palace in Kathmandu. Prithivi Narayan Shah (who conquered the Valley in 1769 and founded a new dynasty of kings, the one still in power) had craftsmen from Bhaktapur build this tower approximately 100 years after the mandap's construction, possibly in imitation of the

latter's distinct shape, as tradition would have it. The whole interior of the building was designed by us in the formal language of that period and thus is 'pure invention'; the benches along the 24 window openings, the benches around the head of the stairwell, and the area of the stairwell. For the unschooled eye, this hypothetical reconstruction harbours a danger. In the course of time and with increasing signs of wear, one could come to take it for the original, and this also applies to what has been added to the ground floor, as we consciously refrained from marking, let alone emphasizing the joints where old meets new.

This danger, which is often cited as 'historical falsification' when reconstructions are being opposed, has been countered by a single but essential design decision, which was made in disregard of historical conformance. The support structure—originally a wooden-framed construction with four central pillars extending into the upper storey—was realized in the form of a modern and partially visible steel framework.

With wood, therefore, we went about copying (ground floor) or imagining what the original may have been like (upper floor, interior). In the case of the support structure, however, we sought confrontation. Anyone who from afar might take the mandap to be a historical building will recognize from close-up, and even more so when he enters the pillared hall, that it is a building of the technical-industrial period. A closer inspection reveals it to be in fact a mixture of a steel-girded structure with a prepositioned facade of individually prefabricated parts formed by hand from wood and terra cotta.

The Steel Frame as a Tribute of the Modern Age

Le Bon describes as 'stone columns' the four massive columns one can make out on his photos inside the pillared hall, but it may be assumed that – as in all other mandaps in Nepal – they are columns of wood masoned with a plastered coat of bricks. This probably occurred around the middle of the 19th century, presumably in order to provide structural strength after the wooden columns showed signs of damage.

Lacking information on the original building techniques and structure, though aware of their failure in the earthquake of 1934, we decided in favour of an alternative but earthquake-resistant solution. We gave preference over a concrete construction to a steel one, because the latter allows for smaller cross-sectional dimensions, that is, individually narrower sections, and because the visible joining and bolting together of the latter better evokes the character of a wooden-pillared structure than is the case with concrete.

During the design stage the generous offer on the part of earthquake specialist Walther Mann (Technical University Darmstadt) to perform the statical calculations and to advise in matters of constructive planning proved beneficial. There thus came about, in creative cooperation between him as engineer and us as architects, a reconstruction design that took into account statical requirements of this earthquake zone and that addressed the task's formal challenges with an attitude which combined a respect for the historical building with the self-confidence of a modern, technical solution.

Under the two-stepped platform of

traditional open masonry consisting in part of profiled bricks is hidden a massive reinforced-concrete foundation, which sits atop undisturbed earth three metres under the ground level of the square – on the bottom of a step-well that stood there up to the time the mandap was built. Set into four quivers of this foundation, the central steel columns rise in three joined sequences each up to beneath the roof of the tower's apex. On the ground floor, for statical reasons, each of these four columns has a covering of reinforced concrete, which again outwardly displays the classical profiles seen on the historical photos. Statical requirements accommodated our intention not to seek an analogy, but to reproduce the later, historically documented form.

Between the upper, profiled end of this covering and the layer of ceiling beams above is situated an approximately 60-centimetre-wide horizontal zone having the outward appearance of a multifariously stepped cornice of shaped brick above the lintel, and producing the impression of being a narrow transitional storey. The four steel pillars are exposed to view inside this zone, as are the four cross beams of diagonally braced double profiles statically joining the core with the facade. Thus the steel frame is completely visible in this transitional zone, which is open to view only after one steps onto the platform, that is, at very close range.

The steel is also visible in the upper storey, at least in part. The wooden roof beams here likewise rest on undisguised double profiles of steel, which depend, however, from the steel trusses in the roof, whereas the four steel pillars are partially supplemented by wood in the four open angles of their cruciform cross section, so that only the

vertical edges of the steel remain visible. This wooden filling, while giving the impression of being a complete pillar, with its cross section narrowing from a square into an octagon, so that the steel profiles are deprived of their aggressive sharpness and material coldness, have clearly been bolted into place, that is, applied. Not having any load to support, they disappear above into thin air. An interval of clearly empty space provides an intentionally wide gap where normally a capital would transfer the weight of the lintel onto the pillar. It is only the supporting steel core that reaches up all the way, without touching the depending roof construction.

The Pleasure in Decorating and the Dilemma of Dogmas

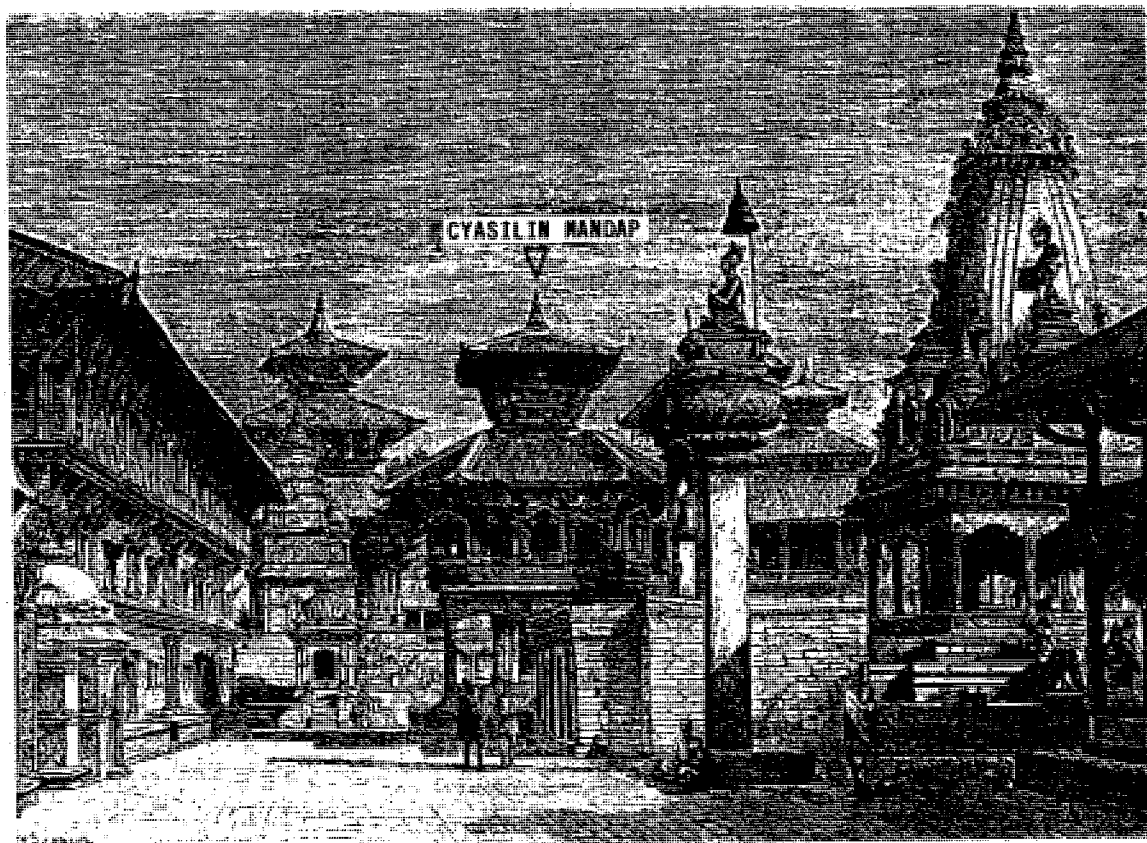
Irrespective of the fact that these steel elements speak a language that is as functional technical and undecorative as that of the wood constructions inside comparable historical buildings in Nepal, this unconcealed and even conscious exhibition of the modern material encountered opposition and a lack of understanding on the part of our Nepalese partners. The local supervisor along with the wood-carvers and carpenters – the best in the country – could only with difficulty be restrained, given the pleasure they took in improvising and decorating, from overlaying and covering the entire building with carved 'crochet patterns'. We pointed out to no avail numerous buildings on which ornamentally crafted eaves boards contrast to great effect with smooth surfaces along the base plates.

But, with what arguments after all can the pleasure in decorating and the eagerness to copy be refuted except with the old dogmas of modernism like 'ornament and crime'? Or with the Venice Charter which, in cases

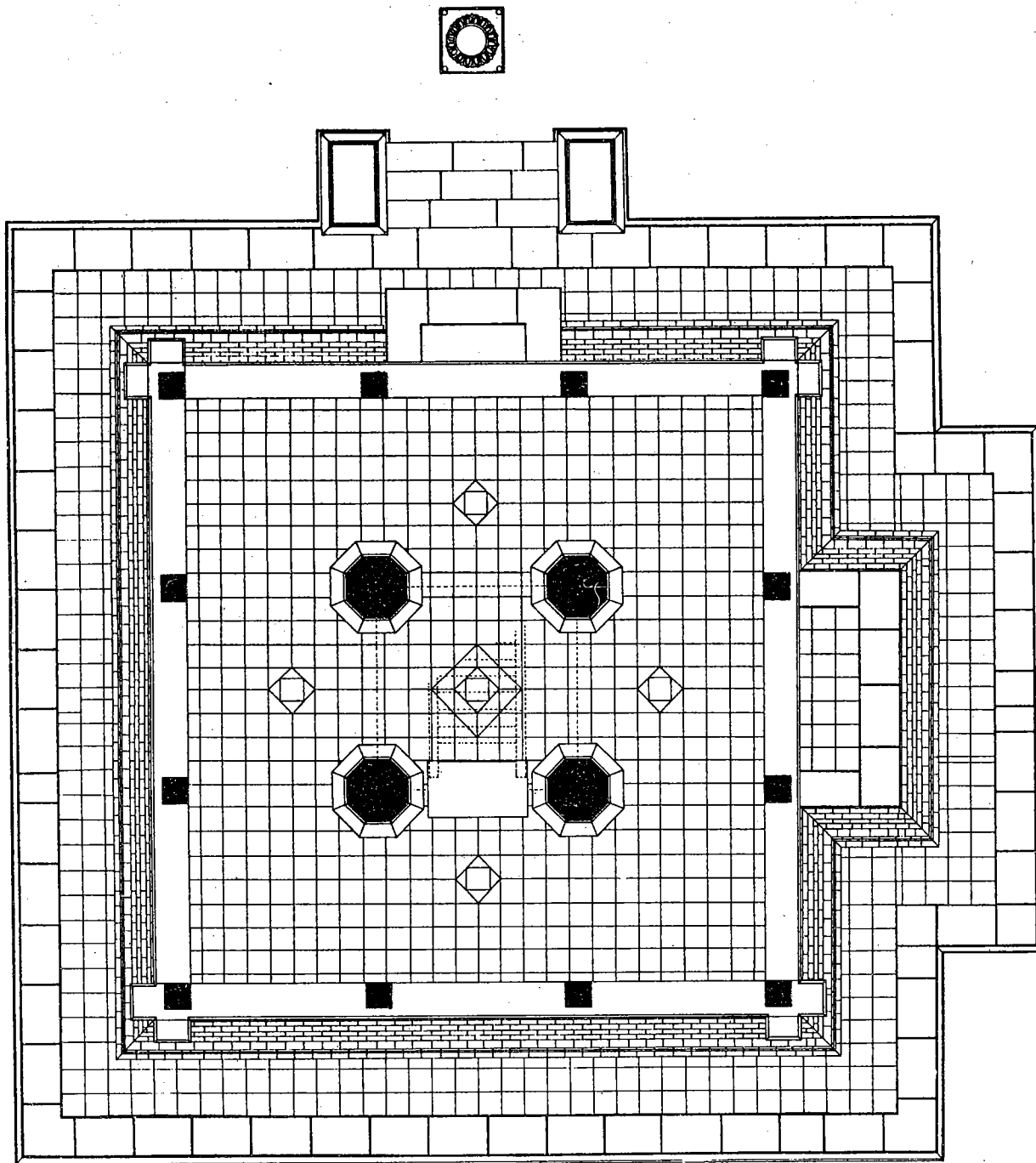
where historical buildings are added on to, makes a 'contemporary stamp' mandatory on everything that is not authentic, rejecting a priori any reconstruction? We, the inheritors of Adolf Loos's tradition who have finally allowed ourselves to enjoy adornment and take pleasure in ornamentation, and who no longer find eclectic historicism stigmatic have great difficulty today with such arguments.

At many points we purposely gave in to the pleasure on the part of our Nepalese partners and also our own in ornamentation in order to get around the 'contemporary stamp'. For such a stamp to have been used in fashioning the missing structural elements of the ground floor would have incited all partners against us. The artisans wanted without fail to show what they could do and regarded any reduction as proof of spiritual indigence, and material indigence as well. Thus in the end they wrung from us our consent to give narrative form to a mounted pair, possibly a king and queen, which is featured above the capitals and lintel, covering over the primary bearing structure. Not having to hark back to historical prototypes, the artisans felt at liberty to make a sevenfold variation on the theme. The mandap has now been standing since October 1990 on the Darbar Square of Bhaktapur, at the focal point that had been empty for 56 years, like a setting without its jewel; it is the culmination of the square's urbanistic design as a work of art. It once again is standing in the way and blocking all far views into an empty distance. It may be a monument that recalls an architectonic work of art from the 17th century, but at the same time it is a building of the present.

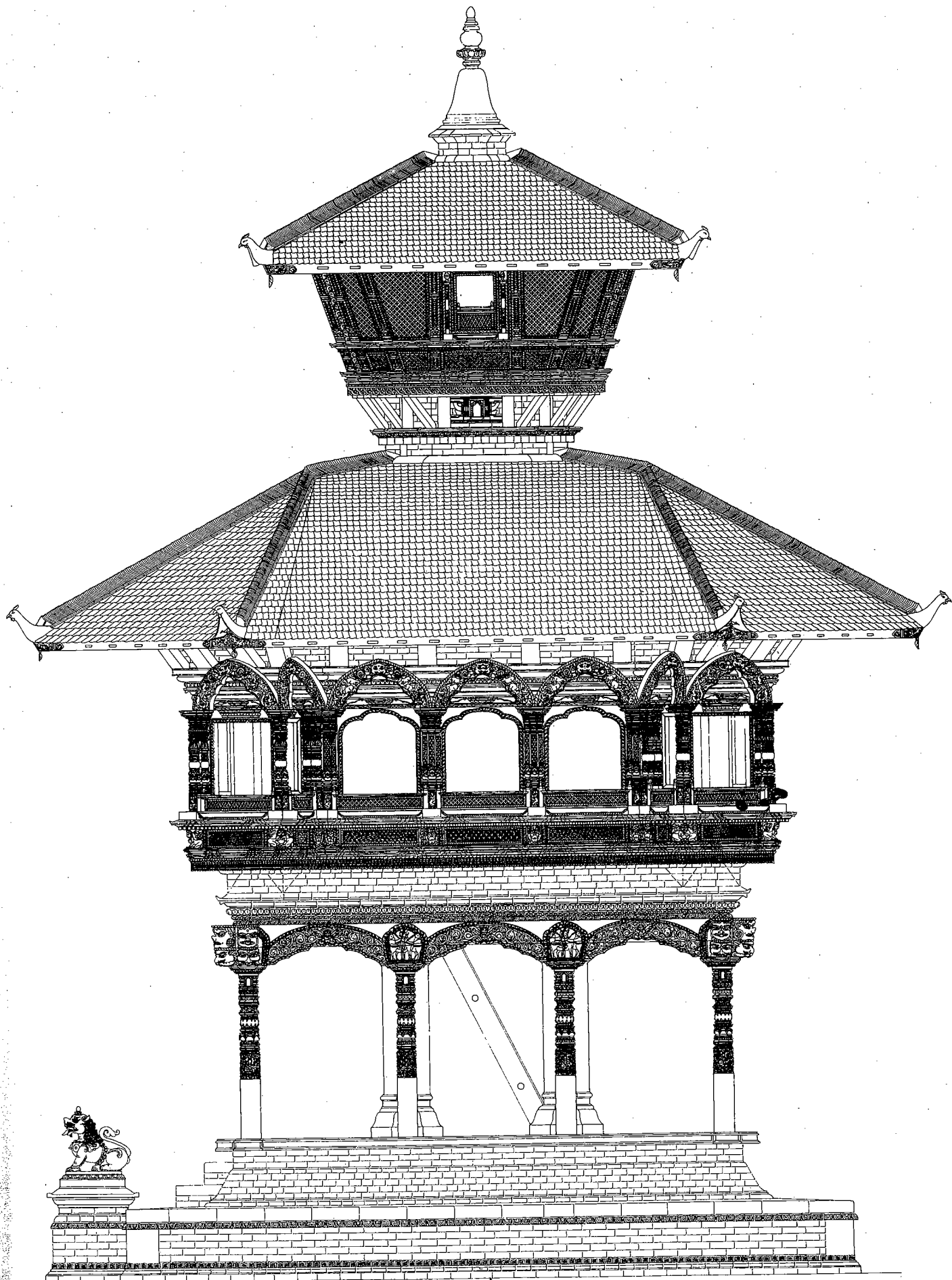
In view of the country's present-day poverty, such a reconstruction may be felt to



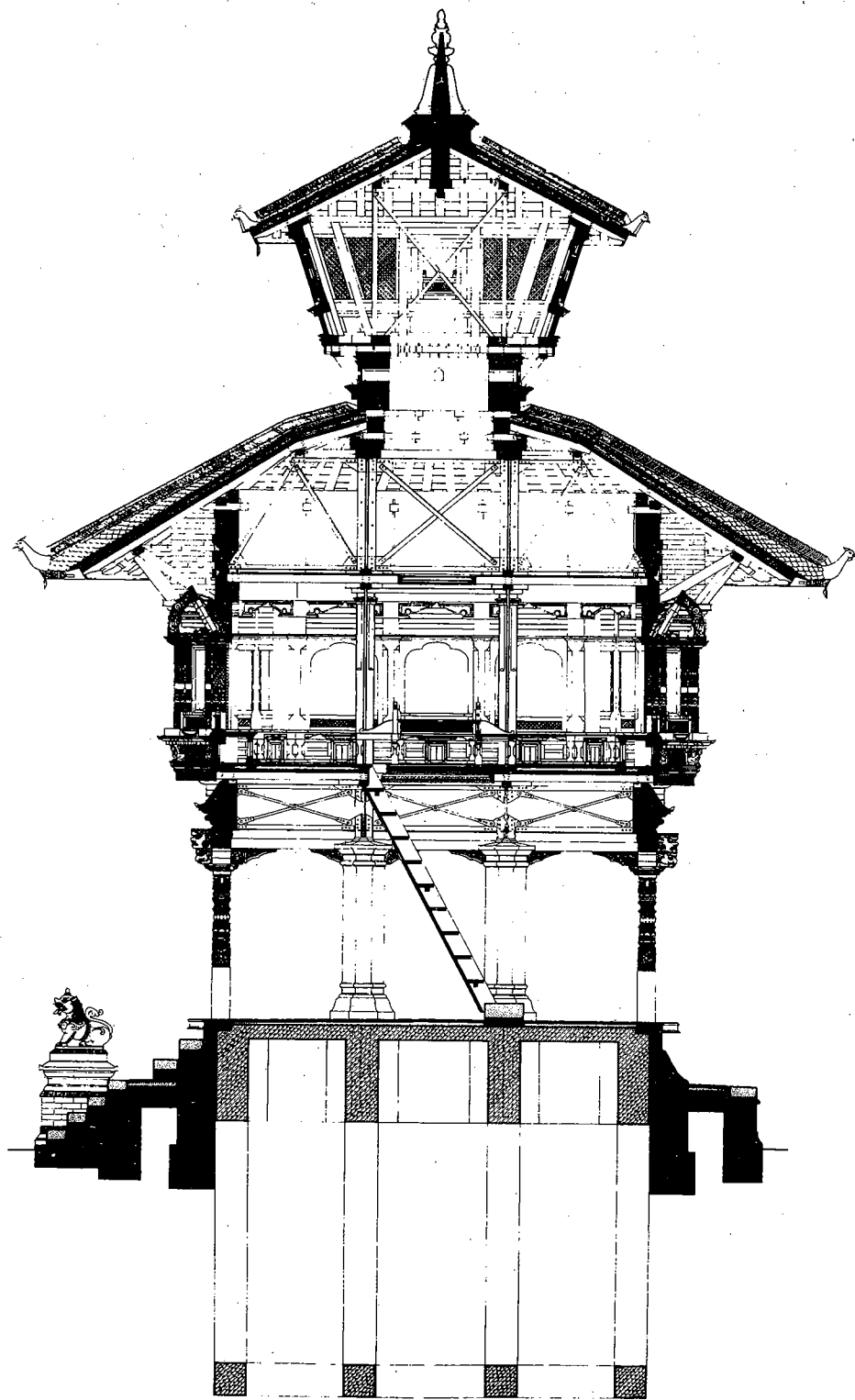
Bhaktapur: View across the Darbār Square Towards East. Etching after a photograph by Gustave Le Bon, 1885



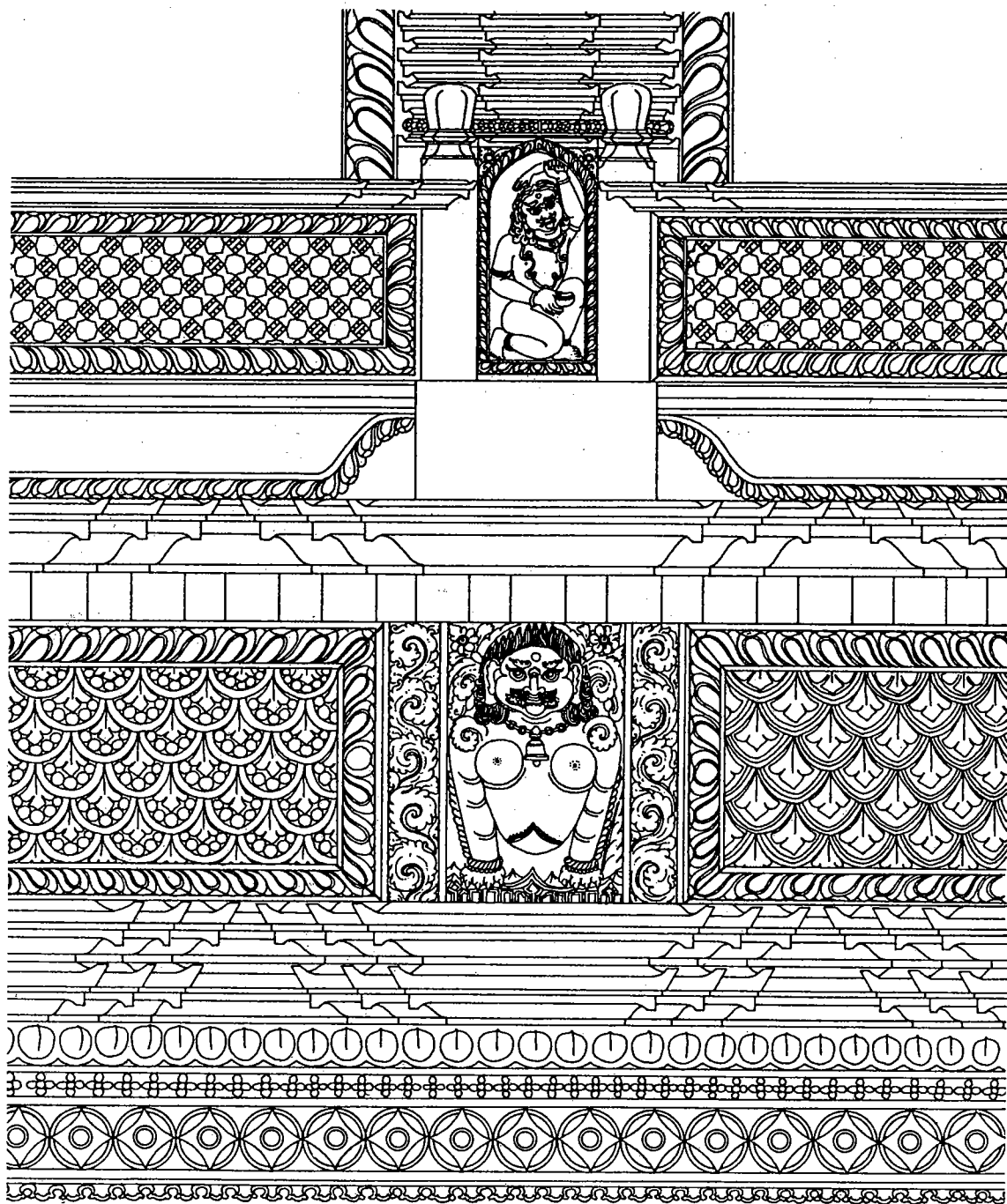
Bhaktapur: Reconstruction of the Cyasilin Mnadap, Ground Floor Plan Scale 1:50



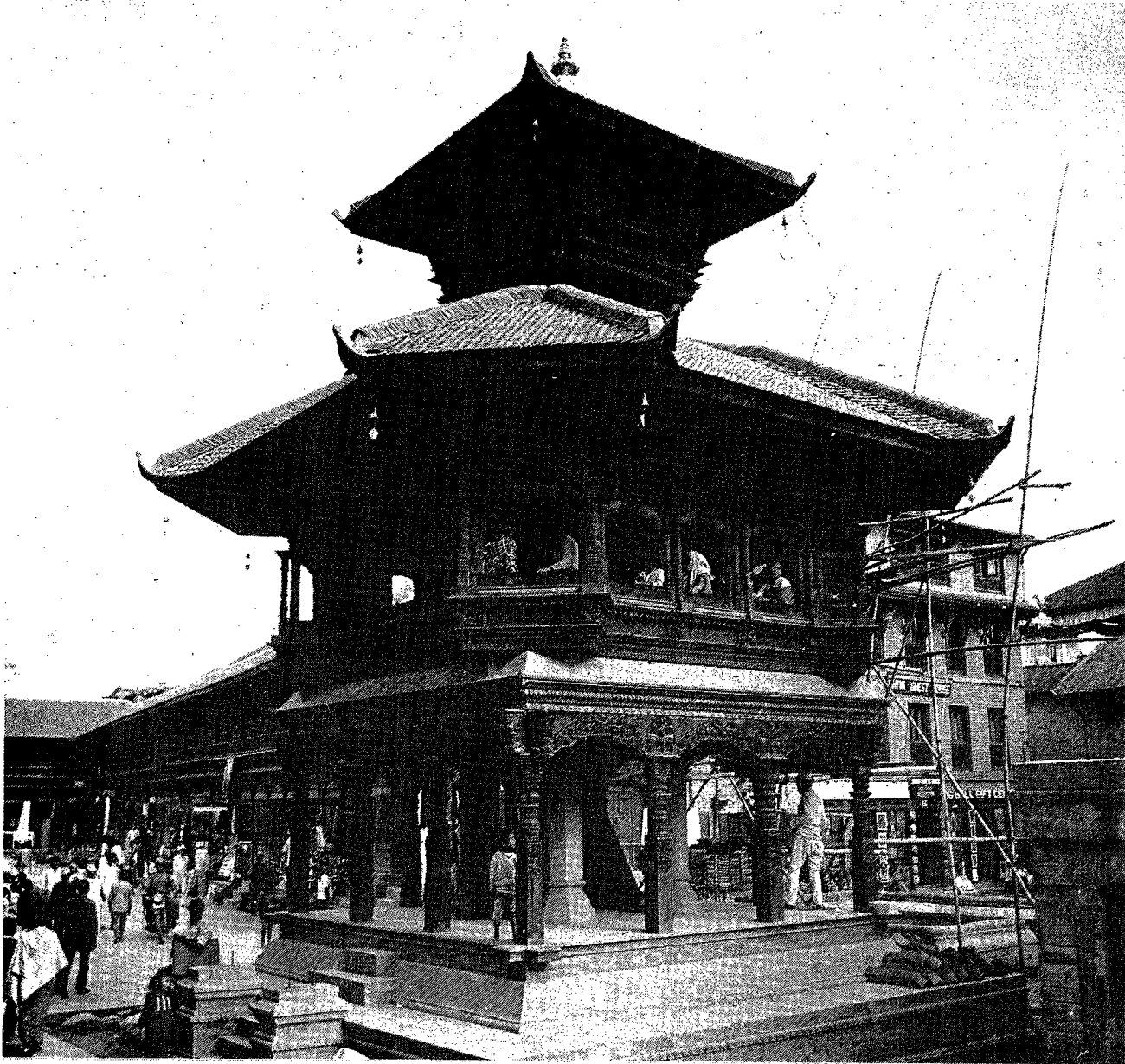
Bhaktapur: Reconstruction of the Cyasilin Mandap, Elevation Scale 1:50



Bhaktapur: Reconstruction of the Cyasilin Mandap, Section Scale 1:75



Cyasilin Mandap : Detail of the upper storey between the eaves board and the window sill



Bhaktapur: The reconstructed Cyasilin Mandap, Sept. 1990

be a luxury. Confronted with Nepal's wealth as an act of prostration to mankind's
of historical architecture, however, we take historical inheritance.
this gift, from a country that is today richer,

(Bhaktapur, January-1991)

Bhaktapur: An attempt to reconstruct the layout of the square around the palace (Darbar)

1. Cyasilin Mandap, reconstructed in 1989/90; 2. The original location of the arcade that is now set back; 3. Harishankara/Krishna Temple- three-storeyed pagoda, unrestored; 4. Puresvara Temple- two-storeyed pagoda, unrestored; 5. Tilmadhva Narayana Temple two-storeyed pagoda, unrestored; 6. Palace area which has not be restored; 7. Silumahadeva Temple, whose sikhara tower was replaced by a gable roof; 8. Jagannath Temple- three-storeyed pagoda, whose shrine is covered by a gable roof; 9. Badrinath Temple, whose sikhara tower was replaced by a gable over the ground floor.