

The pagoda of Nyatapola Mandir, Bhaktapur

THE NEPALESE PAGODA ORIGINS AND STYLE

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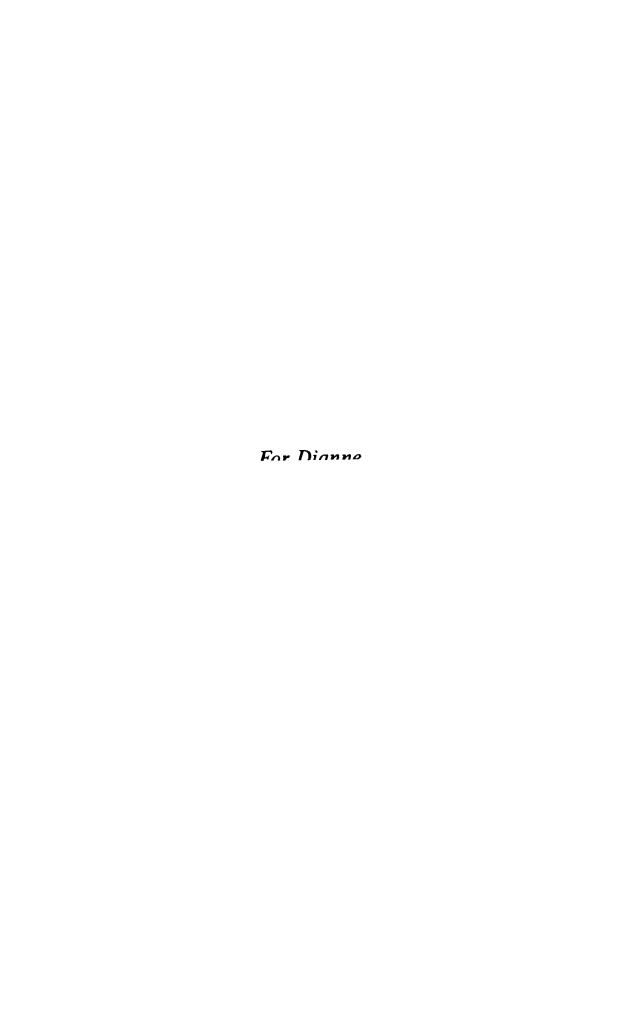
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"Our architecture is not a replaceable part from General Motors."

-Y. G. Krishnamurti

Preface

The arts of Nepal and the Himalaya, especially architecture, have been of great interest to scholars and investigators for decades. Yet, surprisingly, little has been published on the subject. The question of the origins of the pagoda temple, that strangely ethereal building that recalls Kipling's wild dreams and Kathmandu, has been "answered" through comparison to so-called prototypes in China, India, even Japan, but never satisfactorily. This study attempts to deal with that question and with themes that link widely separated visual traditions as parts of an artistic tradition that is unique to the Himalaya. It searches for the essence as well as the image of sacred architecture in the mountain region.

Himalayan studies are advancing today, as new journals appear in East and West, as Nepal develops a major research center at Tribhuvan University, as museums expand in major mountain towns, as local scholars continue to translate inscriptional and other records, and as foreign graduate students head for the hills in growing numbers. However, the formal study of art history remains a neglected method by which to approach the enormous task of unravelling the Himalayan past. One wonders whether the vast accumulation of carefully recorded material that marked the research of l'Ecole Française d'Extreme-Orient in Southeast Asia, for example, could ever be matched in Nepal. Perhaps there is not even time for such meticulous scholarship within a culture that is, at least in Kathmandu Valley, in a state of convulsive change. Distant, industrialized societies are pounding on the Himalaya's once carefully guarded doors, bringing sameness alongwith material progress, and the doors increasingly yield.

The relatively unstudied state of Himalayan art leaves it open to examination from every direction, and encourages the exercise of new theoretical methods that may enliven and expand the discipline of art history. Research is urgently needed as the physical evidence of past ages is carted off for sale abroad or smothered by multiplying hotels and office buildings that steadily encroach upon grounds that were once sacred, once royal, once Himalayan.

The following pages are meant to record the sacred architectural monuments to be found in the Himalaya, especially the pagodas of Nepal, and to show their relationship to domestic buildings while defining their significance within the context of geography, society, and art. The aid and inspiration of Dr Mary S. Slusser, so much more than a guru, has been invaluable to this project.

Others to whom I am indebted are many, but, above all, I am grateful for the great help and patience of my wife, Dianne.

University of Colorado, USA 15 December 1978 RONALD M. BERNIER

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Frontispiece: The pagoda of Nyatapola Mandir, Bhaktapur

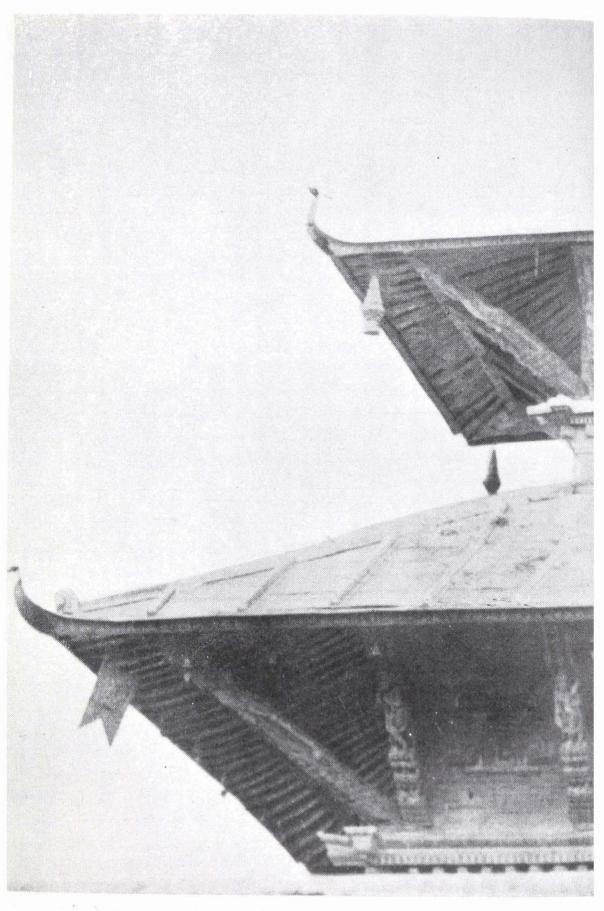
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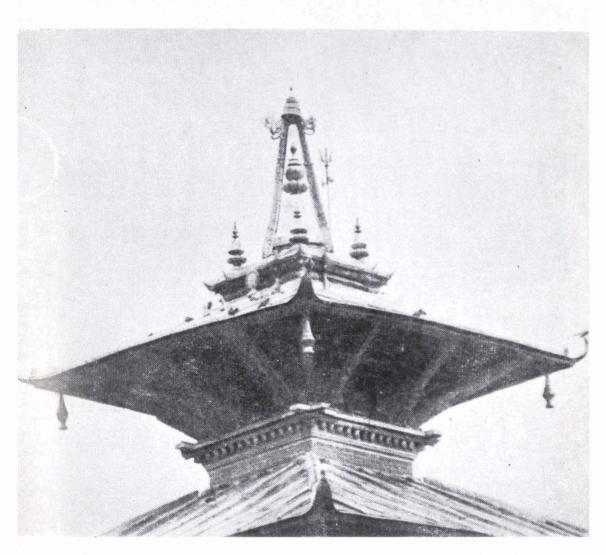
Courtyard of Kumāri temple, Kathmandu



From the paved surface of the sheltered courtyard...



To support the overhanging roofs...



Upon which rests the gilded pinnacle...



To crown the pagoda of Nepal.

Introduction

The Himalayan landscape can seem a mystical region. Clouds drift through the branches of towering cyprus, pine, and cedar and the cool breeze carries the scent of smoldering deodar wood. The mountain peaks tower without weight above huddled villages as memory images that deserve the superlatives applied to them ... highest, grandest, most holy. The visitor looks to the feet of Kanchenjunga, Nanda Devi, Makalu, Ama Dablam, and Everest for the green forests and terraced fields where history and art developed in the Himalaya.

Political definitions are complex as the borders of five countries—Nepal, Bhutan, Tibet, Bangladesh and India—undulate across more than 1,500 miles of mountainous terrain from Assam in the east to Kashmir and the Punjab in the west. This rugged and richly varied region is made one by the cultural patterns set by the forms, meanings, and methods of art. Wedged between India and Tibet, the artistic products of the mountains have been too often termed derivative. Like provincial cousins, the physically remote hill areas have been quite neglected by art historians, except for those parts of northwestern India that are now famous for schools of miniature painting. And one hundred years of inattention are sometimes compounded in effect as political sensitivities close borders and bar researchers.

If barriers to investigation are troublesome, they are also part of the Himalayan mystique: that quality of the unknown and unknowable that lured Alexandra David-Neel to Tibet and kept George Roerich on his "trails to inmost Asia." Today the magnetized and innocent foreigner is drawn to pilgrimage at Rishikesh or to trekking in Solo Khumbu, where his experience is perhaps no less exotic than that of his 19th century predecessors. The hidden pass to earthly paradise and the black narcissus still await discovery in the imagination of the west.

A survey of Himalayan temple design is presented here as one route of discovery in a still shrouded part of the world. The author's experience, and the wealth of monuments to be found there, place Nepal and Kathmandu Valley at the center of this volume as the most appropriate for the study of Himalayan civilization, but Nepal should not be considered alone. Each historic kingdom and princely state from Sikkim to Gorkha to Kangra has nurtured its own local gods, great heroes, and special art forms that reflect times when even the tiniest principality could remain quite aloof in its mountain fastness. The author's view is broad yet necessarily selective, especially with regard to monuments outside of Kathmandu Valley, and, as with the mountains themselves, something always remains clouded, undiscovered. If a sense of romance intrudes upon the compilation and interpretation of facts and photographs that follow, it is most welcome.

1

Temple, House, Palace, and Land

A. The Setting

Kathmandu Valley is an extraordinary place. For the modern traveller by air no less than for the first westerners to complete the arduous journey on foot and by elephant from India through the malaria-ridden Terai region into Nepal, the first sight of Kathmandu Valley surprises and intrigues. The broad, mostly flat valley that measures only 24 kilometers from east to west and 19 kilometers north to south turns from brilliant green to gold as the seasons change. It is ribboned by the Bagmati River and its tributaries the Visnumati, Manohara, Dhobi, Nakhu, and Hanumante. At its edges rise mountain walls like Sheopuri Lekh and Phulchoki, to the north and south, and beyond them are the Mahābhārata and connecting ranges of the Middle Himalaya.

The valley of Kathmandu is physically so unexpected within the nearly unrelieved mountain mass that makes up most of Nepal's 136,307 square kilometers that it appears oasis-like in terms both geographical and cultural. Only the valley of Pokhara and relatively few other open areas provide pause in the jutting landscape, and it is clear from the air or from land that Nepal has always been a barrier, never a highway. There have been few cracks in this wall between the plains of India and the great plateau of Tibet.

Nepalese civilization developed in many unique ways under the feudal protection of Hindu and Buddhist kings and the country was purposely restricted from the entrance of foreigners until the mid-20th century. There were brief periods of invasion from north and south, and there was a short war with the British in the 19th century, but these are mere moments in Nepalese history. The nobility travelled to Europe and brought some fashionable changes back to Kathmandu, but even as lace parasols came to shade tika-spotted foreheads and new palaces groaned under the weight of Victorian and Italian frosting, like revenge upon the European taste for Chinoiserie, the character of life and art remained profoundly Nepalese. It is still so today, and the center to which all things Nepalese gravitate is Kathmandu Valley.

The climate is mild and snow does not fall in the valley, with elevation less than 5,000 feet, but near-freezing temperatures seem very cold in houses wherein fire is used almost exclusively for cooking. A short monsoon rain is expected every summer, but it is the progression of multiple crops rather than sharp change of seasons that marks the passage of time and succession of events in the crowded festival calendar of religious holidays.

The fields of Kathmandu Valley are a continuing source of wealth, providing a firm economic foundation for the kingdoms and political dynasties that have grown up upon them. The extreme climatic fluctuations that periodically push other parts of the Indian sub-continent to the edge of famine do not threaten Kathmandu Valley and the present cycle of two or more crops yearly was almost certainly a feature of earliest agriculture High-grade rice and wheat in new fast-growing varieties color the valley floor and the terraced hillsides emerald to golden to brown as the seasons pass, while everywhere in the valley new strains of corn, green vegetables, even grapes are being introduced. Between plantings the earth itself is cut into blocks, dried, and baked into fine bricks. The weather is never so cold or so hot that work in the fields must stop. The shortage of arable land that exists in the country as a whole, with only 0.19 hectares of arable land available per capita and with three-quarters of the arable land located in the southern Terai region where less than one-third of the population resides, does not threaten the valley itself.

An estimated 515,000 people live in Kathmandu Valley. This population is knotted together in tiny compact clusters that are the scattered villages of the valley—villages with a population density of more than 2,000 persons per square kilometer—and in a few major towns. In the larger towns of Kathmandu, Patan, and Bhaktapur, a crushing together of extended families in multifamily dwellings to a density as high as 74,000 people per squarkilometer ranks those settlements among the most densely populated on earth.

Kirtipur, once an independent kingdom like the three large cities, differs from them in being located on a high ridge that rul

in a north south direction about two miles southwest of Kathmandu on one of the traditionally important trade routes to India. It is one of several villages that occupy hills within the valley which were chosen as settings for fortified medieval towns and, more often, as the visually dominating sites for major temples. More than the slopes of the mountains that border the valley, these raised outcrops of land are valued not only for the security that they offer man but for the honor that their heights give to the houses of the gods. The town of Chobar is located atop a hill near Kirtipur and the temples of Cangu Narayana, Santaneśvara Mahadeva shrine, Bisankhu Nārāyana, and the great stūpa of Svayambhūnātha all rest on hilltops. These are among the temples and towns that have been best preserved through the ages, for their situation on rocky outcrops has saved them from the destruction through earthquake that has been suffered in settlements that rest upon younger sediments of this alluvial valley. Kathmandu Valley was most recently struck by earthquakes in 1833 and on January 15, 1934. In the latter disaster 3,400 valley inhabitants perished, as great destruction was spread through northern Bihar, Bengal, and Nepal.

The jolts of the 1934 earthquake were of the strength of isoseismals VI to X in northern India and Nepal, with the worst damage recorded at the Indian towns of Monghyr and Musaffarpur and in Kathmandu Valley. While the Mercalli scale attributes the occurrence of landslides generally to scale X only, in Nepal they occur in the VIII to X range because of the steep slopes and fairly unstable rock formations of the land. Patan and Kathmandu bore shocks of isoseismal IX, the force of which is generally described as "disastrous, with complete or nearly complete ruin of some houses and serious cracks in many others, so as to render them uninhabitable; a few lives lost in different parts of populous places."2 The towns of Bhaktapur, Harisiddhi, Khokana, and Bungamati bore even greater shocks of isoseismal X in an east-northeast/west-southwest path across the valley floor. Here the effect was "very disastrous, with ruin of many buildings and great loss of life, cracks in the ground, land-slips from mountains, etc."3 Bhaktapur suffered a 70% collapse of its houses and the other three towns were totally destroyed, facts that must be kept in mind as the architecture of these settlements is studied and as generalizations about the antiquity and original appearance of the towns are made. Clearly, the areas of past and potential collapse that rest upon soft,

unconsolidated fluviatile and lacustrine sediments in the southeastern part of the valley are, as experts employed by the Geological Survey of India reported in 1934, less safe for habitation and industrial development than are other sites such as the Deopatan-Bodhinatha-Gokarna area that are based upon older and harder pre-Tertiary rocks. Sites such as the latter group were deemed safest by the investigators for the development of industry and the laying down of heavy machinery. Fortunately for the current study, temple and palace structures are superior to houses in their building materials and certain construction methods, and therefore they did not suffer as much destruction as did other buildings except in areas of maximum seismic shock. But they are equally prey to the greatest and most frequent calamity: fire.

Kathmandu Valley is covered with cultivated fields and terraces that stretch up to and ascend the green slopes of the encompassing mountains, with the valley floor marked by raised ridges and hills crowned with towns and temples. The several narrow rivers are, as in any land touched by the religions of South Asia, lifelines of man's spiritual as well as physical well-being. The holy Bagmati is the Ganges of Nepal, believed to be connected to the Indian river underground. It is sacred not only where it flows beside the burning and bathing ghats of Pasupatinatha, one of the world's major Hindu shrines, but throughout its length from its birthplace in the high Himalaya through the dramatic Chobar gorge and out of valley to the plains of India. The temple is bound to both land and water in Nepal, and the development of riverine shrines is even more complex that that of temples on hilltops. Of these temple groupings along the Bagmati and its tributaries, those of Pasupatinātha and Pachali are the largest and best known, but there are also important riverside temples along Kathmandu's Hanumante River, at Tripuresvara on the way to Patan from Kathmandu, at Gokarna, at Hanumat Ghat in Bhaktapur, and at the ghats below Patan. The flow of the rivers and streams has determined the location and orientation of the temples, but the devotees of the shrines have modified, enlarged, and sometimes completely remolded the river banks to better suit their devotional purposes as they build burning and bathing ghats as well as walkways and platforms of brick and stone along the water's edge. A prime example is the riverine complex of Gokarna Mahādeva.

A third determining factor in the placement of temples and villages has been the occurrence of groves of trees which, through

time, have come to be held sacred. Although Nepal is today forested only in two broad bands—a northern belt covering the southern flank of the main Himalayan range and a southern belt covering the northern part of the Terai region—it was once entirely covered with forests. The valley itself abounded in groves and a few of these, because of their sanctity, have been spared the axe. The forest, as the chosen retreat and home of certain Hindu and Buddhist gods, naturally became the setting for shrines and temples. It is one of the most aesthetically sympathetic settings for the Nepalese pagoda, for the temple reveals its treasures of carving relief and painting more slowly and more dramatically in the shadowed forest atmosphere than in the noonday glare of the village square. One approaches the forest through quiet, somewhat mysterious surroundings, and the cool, dark walk that leads to the sacred building, as at Vajra Vārāhī in Chapagaon, is an effective prelude to the ritual of devotion that is carried out there.

Probing further the divine attributes of nature, the Nepalese have placed the edifices of the gods not only in the forest but in the earth itself, and cave temples, although little-known and never as artistically developed as their counterparts in India, do exist in Nepal. There is a sense of the powerful, perhaps even the primeval. that lurks in the dark recesses of the earth, and the Nepalese have exploited rather than dispelled this quality of mystery by building cave shrines like those of Gorakhnātha in Pharping, Bisankhu Nārāyana beyond Thaibo, and Mai at Sundarijal. All of these temples are located on slopes high above the valley floor, but the strength and power of the earth is as effectively present in excavated shrines of small size in fields and city streets. Their floors are at a level one or two feet deeper than the ground level and these holy spots, whether covered by temple structure or open to the sky, display images or uncut stones that represent gods or demons within the matrix of the living earth.

Temples are found on hilltops, at the riverside, in forest, and within natural caves to which structural additions are usually made, but they are most numerous and in most complex relationship with their setting within the precincts of village and town. In such settings their location is less determined by geographical than social factors and the subject of their interrelationship with domestic architecture and their religious function within Nepalese society is a complex one, but it must be noted that the temple located in a populated area is not a thing apart. The temple stands

on the street, in the bazaar, inside the private garden. The everyday comings and goings of the local people surround it. Their schooling, their celebrations, their farming, their relaxing, their devotions, even their laundering and bartering—all are pursued around or even within the temple precincts. The temple is as much a part of life in Nepal as the supermarket in American life; more. People sleep beneath the temple eaves, light fires on its porch, hang their clothes on its rafters, store their grain in its inner shrine, tie their goats to it, dry their onions on it . . . in short, they live with it. And it is the general populace who recognize the picturesque or, more commonly, the miraculous attributes of a landscape that determine the place of a temple in it; it is they who preserve and pass on to us the important and often fascinating legends that help to explain in the following pages the intricate interdependence that exists between the temple and the land.

B. Town and Village

The profuse number of temples with towering, often gilded roofs that are only now being dwarfed by the rude concrete structures thrown up by modern man have always given the towns of Kathmandu Valley a remarkable appearance. Looking toward Kathmandu city upon his first entry into the valley in the mid-19th century, Francis Egerton wrote:

It is indeed from a distance that the temple-dominated cities are best seen, for within them crowding is so intense and streets so narrow that it is often impossible to view the temple structures in their entirety, except as they occupy the more open city squares of Patan, Bhaktapur, and Kathmandu, or their own large courtyards. It is difficult, for example, to view the shrines of Harisiddhi or Mahālakṣmī in Khokana together with the buildings attached to them because the small villages within which they stand are so compact.

The reasons for the crowding together of Nepalese urban communities are many. The closely packed town is more easily

defended than the scattered distribution of houses that is the usual settlement pattern among the Tamang and other non-Newar tribal groups, and the clustering of houses formed a compact plan very practical for villages or towns that were to be entirely walled in, as were the Newar settlements of Kathmandu, Patan, Bhaktapur, and Kirtipur. Socially, the compacted living quarters are an extension of the Newar communal residence pattern of extended families, and a clear geographic division of residence based upon caste and occupation has been followed in the larger towns for centuries, only now becoming somewhat eroded in Kathmandu. The typical town plan of Kathmandu Valley is the Newar plan, with more dispersed settlement patterns having been introduced by non-Newars from the hills, mainly since the Gorkha conquest. The Parbate or mountain peoples who follow scattered patterns of residence are less integrated socially and of looser caste division than the Newars and they have settled mainly on the mountain slopes that surround the valley.

C. The Newar house and palace

Population growth in the Newār settlement occurs vertically, and there is little room for horizontal expansion of settlements. Houses are built with adjoining walls and their courtyards, whether located inside of four-sided domestic complexes or attached as walled-in gardens at the sides or backs of the houses, are small; they are often crowded with plants and animals; they are usually dirty. It is an unfortunate fact that these private courtyards are often little more than latrines, so that even the home cannot be a refuge from the stench of streets lined with open sewers. The village, although it differs very little in living pattern from the town or city, does at least offer some "breathing space," since fields and open land are in closer proximity to it than to the city. Whatever its location, the house is structurally related to the temple.

The preservation of arable land, more than village defense or family solidarity, has been the prime concern of the Newārs as they have developed and maintained their complex town plan, although the classical architectural treatises of India are not unknown in Nepal. The retention of maximum arable land is essential to the Nepalese economy. As one flies over the valley of Kathmandu, the dozens of small agricultural villages appear as knots upon a green or yellow quilt. Very little space is wasted in this most inward-looking of town plans, although the design of the individual

settlement must always be affected by the nature of the local terrain and the availability of water. The streets of the towns are usually straight, enclosing rectangles as they intersect, and they are usually paved with bricks and stones. The houses along the sides of the streets are fairly uniform in height, most being three or four storeys high, and if the supportive walls of the buildings along a street are not joined together the enclosures of their courtyards or compounds, at least, do meet. When a new house is built to incorporate the end wall of a neighboring building, an easement is granted to the builder of the new structure, since avoiding the consumption of additional land for an extra wall is considered beneficial to the entire community. The owner of the first building may demolish his dwelling at any time, however, without consulting the new resident.

Those groups of buildings that enclose courtyards are more easily noted from the air than they are from the ground. They may be domestic or part of Newar monastery compounds known as bahāls or bahīls. Hundreds of these monastery complexes containing living, devotional, and educational spaces were built during the period of Newar Buddhist pre-eminence in the culture and society of Kathmandu Valley, with those that still stand built mainly in the Malla period of the 13th through 18th centuries A.D., but their importance and financial well-being greatly diminished after the invasion of the Hindu Gorkhās in 1768. Now most of these former monasteries shelter no monks or priests and most of the buildings have been given over to domestic occupation, although the main shrine room of each complex is usually preserved as a functioning temple in its place directly opposite the courtyard entrance to the monastery. Chusya Bahāl and Musya Bahāl in Kathmandu are good examples of these monastic compounds that have traditionally created their own environments as truly worlds apart, shuttered from the noise of the streets. Yet today the inhabitants of the enclosures are many and the moments of monastic quiet are few as domestic activities obscure the sacred. The secular has always pressed closely upon the divine in Nepal and before temple architecture can be examined further, domestic building traditions of the Newars must be considered, for Newar house construction patterns are inseparable from the traditions of temple art. And the monastery is a house.

The Newar house is substantial in construction and aesthetically pleasing in design. It differs in several important respects from other dwellings in the Himalayan region. Coloristically, the Newar structures are warm and inviting, being contrasted in their red-orange, brown, or yellow-ochre tones by surrounding greenery and by the multi-colored foodstuffs that hang in storage beneath their roofs. The reddish tones of baked bricks and the red-brown color of unbaked bricks blend with the earth tones of the mud or, occasionally, lime mortar that binds the bricks together, and the visual and tactile texture of the walls is pleasing. The mortar itself may be spread all over the walls by the individual home-owner. however, just as mud plaster is used to coat the interior walls. While probably protecting the bricks from the elements, this practice spoils the warm color of the walls unless they are painted, as frequently done by non-Newars, with natural pigments in broad bands of red ochre, white, and yellow. With the rising and setting of the sun, the earthy tones of the walls are deepened to livid red and orange. Red tile roofs are part of the total color scheme, and it is fortunate that corrugated metal roofing, so very wrong for these buildings in color, weight, and mass, is still rarely used within Kathmandu Valley and almost never used outside. Thatch roofing, while a common feature of Parbate farm settlements, is applied only rarely and to minor buildings by the Newārs. The shape of the hipped roof is usually symmetrical, but it may vary widely as gabled extensions and even small pagoda-like towers are added to it at will and as it is extended along with additions to the house.

The Newār house is very heavy, even massive as the volume of its walls, which are always at least $1\frac{1}{4}$ feet thick and often much thicker, is considered. This massiveness, together with the heavy foundation of the building, is supposed to make it earthquake resistant, but the weakness of unbaked brick and mud mortar works against the hoped-for stability. The overhanging roofs, which are supported by steeply sloping struts or a combination of sloping struts and horizontal beams, provide shade and protect the house from the weather. In order to drain rain away from the building, the roofs are pitched at an angle of about 30-40°, although in some recently constructed houses the slope has been reduced to about 20° so that maximum storage space may be included under the roof. Since snow does not fall in Kathmandu Valley, there is no problem, as would exist at higher elevations, of it collecting on the shallower roof pitch.

The construction of the roof begins with the beams and roof rafters. These are covered with a layer of narrow wood planks upon

which mud is spread as a base for baked tiles. With the interlocking tiles as a final layer, the roof as a whole is extremely heavy, necessitating a method of construction that utilizes three parallel bearing walls along the length of the building, the center one as "backbone" of the house and the others as its front and back walls The shorter walls at the ends of the rectangular structure are load-bearing as well, but they may be less massive than the walls following the length of the building. A large, collapsing house atop a hill above Sankhu clearly reveals this inner structure that is the skeleton of palaces as well as houses, including the palaces of Kathmandu and Nawakot. In both of these last impressive structures the suitability of the constructional method for erecting very high towers of wood and brick has been exploited, the finished buildings seeming to "hang" on their central bearing walls. The Malla palace in Kathmandu stands nine storeys high, unvarying in the width of its tower. The tremendous weight of the four-roofed building is supported by three bearing walls, two of which are viewable from the exterior while the third bisects the building through its center. The central wall contains a ladder-stairway that connects the levels of the tower, and all three of the solid walls are replaced at the four balconied storeys below the roofs by multiple columns. That these wooden replacements were feared too weak to take the place of the solid bearing walls is suggested by the addition between them of brick fill at the lower three levels of the tower. Even when applied to a palace tower, the method of construction employing three major bearing walls is quite different from the four-cornered, telescoping structural system of the classic pagoda temple. But in other ways the palace and temple are alike.

The house of the Newārs is a fairly simple rectangular building, usually three or four storeys tall, with low ceilings and steep, narrow stairways between levels. The interior is rather dark since the back wall and often one or both side walls of the building have no openings. The house may be expanded horizontally or vertically in a number of ways, but variation is limited by adherence to the town plan of dwellings attached to each other in rows facing the streets. Courtyards are off the street and entered through low doorways or "tunnels" that pierce the front sides of the buildings at street level. In large settlements, houses are built back to back with only narrow, dark alleys between them. In such a crowded situation the roof overhangs provide too much shade and each building serves to cut off light and freely circulating air from

its neighbors, resulting in a most unhealthy environment for all inhabitants. Minor buildings are sometimes detached from the main structures, but they are not numerous, mainly being used for storage or servant quarters. One-storey houses are very rare, and only families of very limited means make do even with two-storey dwellings. The joining together of the buildings, their height, and their lack of a verandah or *pindhi* at the front are the main factors differentiating Newār houses from those of the Parbate farm dwellers. In a sense, all Newār houses are urban, since they are not attached to the fields, which lie outside of the village proper.

The lower floor of the Newar house is used for storing farm implements, wood, and manure, and for keeping livestock. It also frequently holds a shop that is open to the street in front of the house. This feature of the Newar dwelling, an essential one among a people remarkably devoted to trade, does not conform to the general plan of a structure that has only minimal openings in its lower levels. Therefore, additional beams and posts of considerable strength must be added to the basic structure to allow for the broad opening necessary to contain the Newar shop. A number of wooden doors close off the shop from the street at night. The columns and their capitals between the doors are often carved in great detail with decorative designs that are found on temple façades as well. The main entrance to a house or to its courtyard, if it has one, is closed by a double door that is locked at the threshold with a large and ungainly kind of padlock. In the two panels of this door are often carved or painted the Hindu/Buddhist "allseeing eyes" that are common symbols of protection and auspiciousness on both houses and temples. The lintel of the door is low and there is usually pasted upon it an image of a holy nāga snake, renewed each year at the time of the Naga Panchami festival. This festival honors and placates all snakes, but especially the nagas that dwell in streams and beneath the ground as sacred spirits throughout the valley. Like that of the staring eyes, the snake image offers protection. Inside the door, a stairway leads to the upper storeys of the house. Beside it is often kept a kuti or rice pounding apparatus, and household articles are sometimes stored in this dark area as well. Food is not kept in the lower storey, however. The central bearing wall divides the house into two halves, called hals, at all levels, and there is an opening in this wall at the ground level that leads to an area where cattle are kept and manure collected

Next to the stairway on the second level of the house is the sleeping and sitting room, called the nal, of the owner. This room varies in size according to that of the house as a whole and the width of the stairway that leads to it, but it is usually quite spacious with several wood-screened balconies to provide light and ventilation. The furniture of the house is placed here, "displayed" in a sense, for furniture is indicative of wealth. The most important item of furniture is the dowry chest of the bride which is used as a storage chest for dishes, clothes, and other items. Padded mattresses and mats are spread on the floor which is itself covered with rugs, at least in prosperous homes, and there are cushions for guests to sit on. Small children will sleep with their parents in this room and, if a house and its resident family are large, there may be two rooms of this type on the second level, separated by the stairway. Various interconnections beside that of the central stairway exist if the house is extended to enclose a courtyard.

The sleeping rooms at the second level of the building are not always used for entertaining guests, for large houses typically have an open room for this purpose at their third floor level. The floor of this room is usually covered with straw mats, and light enters it through wide windows that open onto the street or courtyard below. The central wall may be replaced here by a row of load-bearing posts that follow the same central or bisecting path through the middle of the house. The room is the main gathering place for the family, a pleasant, open enclosure. Pipes for smoking are stored here, as well as hand looms, spinning wheels, and other items associated with hand crafts. Rice may be stored in the room in bhakaris, containers made of tightly woven mats that are rolled and stood up as cylinders.

The third floor of the Newār house, or the fourth floor if there is one, is, at least in part, off limits to the impure. No one other than a family member is allowed into the food preparation area, for it is the part of the house most subject to pollution by persons of unclean caste or incorrect behavior. There are a great many rules reflective of the total caste system which govern the handling, cooking, serving, and eating of rice as well as other foods, and everyone who enters the kitchen is bound by them. A gabled window extension built into the sloping roof may provide light and ventilation to the uppermost level of the house, while a small hole in the roof with a terra cotta cover allows smoke to escape from the kitchen while keeping rain out. Also on the top level of most

houses, although it may be located elsewhere, is the family shrine. The deity worshipped here varies with individual families, but the room itself is generally small and dark. It is the center for a great many religious observances in the home, sometimes in conjunction with visits to temples outside.

The Newar house may hold a great number of rooms and the palaces of Nepal are an extension of its plan. Domestic architecture in general is characterized as being multi-storeyed with few openings at the lower levels and usually none at the back. As already described, access to the upper floors is obtained by means of steep stairways that pass upward through the narrow hallways between rooms. The rooms themselves are low-ceilinged but not cramped. Upper levels are better lighted than those below. Door frames and window frames on the street and courtyard sides of the house are decorated with wood carvings both decorative and symbolic. Columns are carved as well, whether on store fronts or around courtyards. The struts supporting the roofs of domestic buildings are usually undecorated, although they may be curvilinear in outline as a suggestion of the elaborately decorated supports that underlie the roofs of temples. Carvings of window, door, and column will be further discussed together with temple design, but it is important to note that there is a direct continuum between domestic and temple architecture in materials used, certain structural methods, and kinds of decoration. Important temples in Kathmandu Valley that are essentially domestic buildings in their overall plan include Kasthamandapa and Sighah Satal in Kathmandu, Dattatraya in Bhaktapur, and Siddhi Ganeśa in Naka Desa. Among such shrines are many that follow central bearing wall plan, but some domestic structures of four-corner plan analogous to the typical pagoda do exist. They are very rare and, like a 16-pillared pavilion on the road to Balaju from Kathmandu, they are minor structures. A ruined "resthouse" in Srikandapur near Banepa with its telescoping, double wall construction exactly corresponding to that of pagoda design may in fact be a decayed temple.

The Newār houses themselves are of great variety while adhering in their materials and construction methods to the outline given. To the basic structure have often been added decorative details, many of which reveal the European inspiration which prevailed during the Rana period. These include arched windows, Classical columns and cornices, hanging balconies, elaborate metal

railings, and plaster mouldings. Irregular plans in the structures themselves, such as of buildings five-sided rather than rectangular, are infrequent and result from irregularities in the sites. More common as an "irregularity" is the inclusion of a spacious porch in the Newār house design, probably as a direct borrowing from non-Newār domestic plans. Another common addition to the basic Newār house is a small pagoda tower that is attached at the center of the roof, presumably to mark the location of a family or clan shrine within the building. These have the same form as the small towers that are frequently built atop monastery roofs, directly above the main shrine room.

The finest decorative detail of the Newār house and the element of its design that relates most specifically to temple traditions is its fine wood carving. While carving in wood will be dealt with specifically elsewhere, the writings of Egerton may be recalled at this point as he speaks of the fame of this element of Nepalese architecture:

The houses here, as well as the temples, are remarkable for the quantity of beautiful carving in wood which decorates the exterior. It is generally in a grotesque and not always very decent style; but the lattice-work of the windows is often very beautiful, and some of the patterns, in a kind of arabesque, are in very good taste.⁵

D. Palaces beyond the valley

As much an integral part of the natural setting and more complex in plan than either the pagoda temple or the standard Newār dwelling, the Nepalese palace or darbār is a building of great variety and of much interest. The palaces of Kathmandu Valley are Malla constructions, as in Patan and Bhaktapur, or Malla buildings modified by the Gorkhāli conquerors, as in Kathmandu. Each of these buildings has suffered severe earthquake damage and each has been scarred in some manner by such modern accretions as telephone wires and electric poles, fluorescent lighting, and additive decorations of western origin. In a more pristine state in terms of their original appearance are four former palace buildings located in two towns outside of Kathmandu Valley. These compound structures, which reveal important modifications of Newārī themes in domestic design, include the original palace of Gorkhā and the second palace of Nawakot as they represent two different approaches to royal architecture. The first palace of Nawakot and the later palace in Gorkhā are less unique but illustrative of general themes of palace design.

It is not incorrect to refer to the palaces of Gorkhā and Nawakot as "Newār" buildings, despite the fact that both were commissioned in areas of non-Newār tribal domination for use by non-Newār patrons. Newār traders and artisans had had regular contact with the Gorkhāli settlements of Gorkhā and Nawakot long before the time of the erection of the palaces in those towns, and it is not surprising that Pṛthvī Nārāyaṇa Śāh, like other rulers before him, called upon Newārī architects and craftsmen to build his palaces. Then, as now, the Newārs were regarded as superior artists and builders and the influence of Newār architectural traditions is nowhere stronger than in the palaces that these people built for the men who were to become their masters.

The palaces of both Gorkhā and Nawakot command breathtaking views of the surrounding hill country from mountain-top sites that are themselves highly defendable watchtowers. They are not very old buildings, both dating from the reign of Prthvi Nārāyana Sāh before his invasion of Kathmandu Valley and unification of the realm in 1768/69,7 and the dwellings and temples that are clustered around them do not show evidence of great antiquity, although a long but ruined inscription in Gupta characters has been found in the Goraksa cave near Gorkhā. The size of the palaces is surpassed by that of the royal edifices in Kathmandu Valley, and both of the buildings to be discussed had begun to decay badly before renovation was recently begun by the Department of Archaeology of His Majesty's Government, yet these monuments remain among the most important in the country. This is because the two palaces, and to some extent the roughly contemporary buildings that are associated with them, are very unusual in the clarity with which they present two basic but very different themes of Nepalese architectural design: the horizontally-oriented townhouse and the tower of vertical thrust. Taken together with the other palaces in the towns—the simple rectangle of the early Nawakot darbar and the later palace in Gorkha with its completely enclosed courtyard—the provincial structures of the two cities capture Newar architectural style in both its purest and most complex expressions. The horizontal plan is reflected in the monastery and the vertical plan in the freestanding pagoda.

The three-winged dwelling house of U-shape, or *trisālā* plan, was known in India in Vedic times. Its courtyard may be as private as any if a wall is added to the open side, like that of the resthouse

that is situated at the base of the final ascent to the palace of Gorkhā. When left completely open on one side in the proper triśālā pattern, the courtyard offers an easily accessible yet sheltered setting for a shrine, as in the Gorkha palace itself. Neither of the three-winged structures with courtyards at Gorkhā is very high, the resthouse having two storeys and the palace three, and their lowness helps to emphasize the horizontal thrust of most of their exterior elements. These include the horizontals of the roof lines, the extended sills and lintels of the window frames, and especially the long string courses of wood that are imbedded in the brick walls all around the structures. These latter borders are remarkable because of the carving that has been lavished upon what are essentially minor elements in the overall design, and because their function is much more visual than structural. They relieve the flat expanse of brick wall with an almost electric line of intricate movement. The string course is sometimes carved into the sacred likeness of an encompassing snake, the naga, as on this building, with an undulating form that strongly contrasts the linear nature of the wooden border as a whole. The horizontal extensions at the top and bottom of the window frames occur at the same levels along the length of each storey and all around the buildings, and this, too, creates a strong and continuous horizontal element in their design. As in the free-standing pagoda, the roof edge is an important horizontal element in the design of the Gorkhā structures, an element that becomes dominant in the town house or low palace because more area is taken up by their roofs and because they have neither the great height nor the multiplication of roofs in decreasing size that visually lighten the classic pagoda temple.

The northern wing of the Gorkhā palace compound is covered by a single roof of considerable mass and overhang which makes it both heavier and more protective than the average domestic roof. One's attention is drawn to the roof level, moreover, by the presence just below the tiled roof of a substantial wooden balcony that forms a gallery around the third storey of the extended northern wing. This balcony follows the three "front" sides of the wing, but not the back of the palace, which is plain except for its string courses and three rows of windows that are carved in different styles. The balcony is of domestic type with vertical walls and enough room inside it for a person to walk its length. It is, therefore, quite different from the storage balconies with sloping walls that are found beneath the lower roofs of pagoda temples like

Kumbheśvara Mahādeva in Patan; nor is it primarily a viewing place for looking down upon the passing scene below, like the overhanging balconies of Kathmandu's high palace. Like those balconies, however, it is screened with wooden lattices and carved with figures. This balcony is more solid than most, with closely set floor beams and sturdy strut supports, but its actual function remains unclear. Such a gallery is not found on the southern wing of the palace, which has only a fragment of a former balcony remaining below the upper of its two roofs, suggesting that major reconstruction may have replaced a once fully-balconied upper storey. The northern gallery is echoed by a smaller construction mounted in the center section of the courtyard walls. The balcony here is attached to the second storey and is of the more usual slanting wall type, meeting the brick walls around it without separate struts or overhang. It is more a screened window than a balcony. The use of the areas behind this and other balconies attached to the palace could not be determined by the investigator since the building, as a protected monument under the authority of the Archaeology Department, is not open for inspection.

It is not the central or western wing of the palace courtyard that is most important, in spite of the beauty of its carved window frames and the arched double colonnade that graces its porch, for at the left the southern wing of the palace contains a major shrine. This sacred room which is totally integrated into the palace proper is not opened to foreigners, but its exterior speaks of its dedication to Gorakhnātha and other gods of the men of war who marched with Prthvī Nārāyana Sāh to conquer the Himalaya from Sikkim to the edge of Kashmir. Red military flags wave from poles mounted beside the bolted door of the shrine, and all along the walls of the courtyard are hung photographs of Gurkha soldiers in uniform. Gorakhnātha is revered in Gorkhā as patron saint of the fighting men, another temple devoted to him being the famous Kasthamandapa or "House of Wood" in Kathmandu. It is he who is said to appear on the battlefield wherever Gorkhālis fight. The name of the town is derived from that of this all-powerful deity whose shrine is the area's most important.

The darbar of Gorkha is different from all other Nepalese palaces in being based on several levels. This is largely due to irregularities in the terrain of the narrow hilltop site, irregularities that offered the architects a challenging opportunity to handle space in a new way. Surely the same planners who had covered

with stone the entire eastern slope of the upper mountain, making it into a monumental terrace, could have levelled the site of the palace had they wished to. Quite unique in the history of Newārī architecture, there exists in the design of the Gorkha palace a progressive spatial order wherein the viewer passes along the length of the building, experiencing the push and pull of its mass and spaces and the rise and fall of its levels from without, rather than as an active penetrator of successive closed units like those that occur as series of interconnected courtyards within the palaces of Kathmandu Valley. Visual impact does not result in Gorkhā from the verticality of high palace towers like those of Patan and Kathmandu, but from the lifting up of the palace as a whole to the natural heights of its hill and, within the compound itself, to the situation of the main building at the site's highest point. From the southern and lowest end of the palace compound and a building that is now used as a guardhouse, one obtains a view of the palace from the end of an approaching "processional" stairway. The northern approach to the palace is more dramatic still, as a long stairway winds up the mountainside from the town far below, swinging around the terrace of the eastern slope, skirting the resthouse that stands at the base of the final hillock, then shooting upward without pause to the outer court of the darbar. Here the stairway meets the open air shrine of a stone linga as symbol of Siva and male procreation mounted upon its female counterpart, the yoni. As symbols greatly revered by the Gorkhālis, they are fitting attendants to the Hindu environment that is the Gorkhā palace compound.

It is not possible for the visitor to obtain an overall view of the palace from its northern or southern ends, or indeed from any point on the hilltop. The plan of the palace compound is not regular, for domestic buildings, guardhouses, a pavilion, and various storage buildings have been added to the surrounding courts and at the sides of the main U-shaped structure. A clearer impression of the basic building in terms of its plan is obtained as the viewer turns his back upon the palace and looks down from its northern court onto the resthouse of *trisālā* plan that stands at the foot of the main stairway. On a larger scale, the second and more recently built palace of Gorkhā, built in the town proper some time after the conquest of Kathmandu Valley, repeats the exterior plan of the older building except that its inner courtyard is completely enclosed. The structure is now filled with government offices, but

like the palace on the hill it is covered with the best of Nepalese woodcarving.

In total contrast to the horizontally oriented darbar of Gorkha, with its semi-enclosed courtyard and its irregular situation at several levels along its hilltop ridge, the main palace of Nawakot is a powerful vertical statement. It is a simple, even stark tower of six storeys that rises abruptly from atop a steep ridge above the town of Trisuli. All of the horizontal elements that are part of the Gorkhā palace—balcony, string course, extended window frame, roof edge—are present as part of the Nawakot palace as well, but they are overpowered by the essentially unbroken vertical of the single width tower of five storeys that is capped by a balconied shrine. Far surpassing in height the older and more rectangular palace of Nawakot that stands some distance away on its own hillock within the town, this structure was built by Prthvī Nārāyana Sah after he conquered Nawakot. He was to settle there while planning his invasion of Kathmandu Valley. His own contributions to palace design were undoubtedly significant and he was not bound by Newar injunctions that a dwelling could not be taller than a temple.

The tower of Nawakot, like the older palace in that town and both palaces in Gorkhā, employs the structural techniques of domestic architecture on a grand scale. It is supported by triple bearing walls, with the center wall bisecting the building along its length. It is obvious that this center wall bears tremendous weight, for cracks have formed in the floor of the sixth level, the roof of which is supported by wooden columns rather than a solid wall, to follow the outline of the bearing wall below. This shows the sagging of the heavy floor where it is not directly supported by the bearing walls.

At the center of the open room in which columns replace the central bearing wall in three parallel rows, two more rows of columns have been added, presumably to directly underlie the pagoda-shaped shrine or viewing tower that caps the building at its center. Besides that which covers this uppermost construction, the Nawakot palace has two roofs. One of these covers the extended balcony that is mounted as a gallery around the front and sides of the fourth storey and one covers the tower itself. The balcony is like that of the Gorkhā darbār, with vertical screens and ample walking space. Its presence and decoration within the tower design is the main departure from austerity in the surprisingly plain form of the

palace; it was evidently not planned for defensive use, for the back and most exposed side of the building has no balcony. The last battle of the Tibeto-Nepalese war of 1792-93 was fought here, however.

Despite its simplicity, the Nawakot palace building does possess, more than any other darbār in Nepal, a "facade." There is but a single entrance to this edifice, not a string of courtyards each with its own door. Yet this entrance, above which are five rows of windows of different sizes and carved in different styles, is strangely undecorated. Compared to all other palaces of Nepal in terms of style, the Nawakot tower is the most severe.

The strong verticality of the Nawakot darbar is contrasted by the rectangular shapes and typical residential plan of two associated buildings that stand just across from the palace building and within its compound. As royal dwellings, they are models of the Newar house enlarged and lengthened, but their design includes some aspects as well of the Parbate house of large size. A nearby temple of Bhairava is of standard two-roofed pagoda design, but a resthouse with open porch that is located just south of the palace presents a structural emphasis upon the horizontal that is rarely equalled in Nepalese architecture. It is the emphasis upon horizontal elements, common in most kinds of Nepalese architecture other than the free-standing pagoda and strongly represented in all other royal complexes in the country, that is most violently contradicted in the design of the Nawakot palace. Together, all of the palaces present the extreme development of domestic architecture in terms of structure and style, leading to a kind of "superhouse" that is, except for its comparative lack of decoration, the equal of the best in sacred architecture

NOTES

- 1. The geography of Nepal is best treated by Pradyumna P. Karan, Nepal—A Cultural and Physical Geography, Lexington, Kentucky, 1960, and His Majesty's Government of Nepal, The Physical Development Plan for the Kathmandu Valley, Kathmandu, 1969.
- 2. S.B. Auden and A.M.N. Ghosh, "Preliminary Account of the Earthquake of the 15th January, 1934. in Bihar and Nepal," Records of the Geological Survey of India, LXVIII, Part 2. p. 185. See also Brahma Samser Jang Bahadur, Nepalko Mahabhukamp (1990 sāl) [The Great Nepalese Earthquake of 1934], Kathmandu. 1935.

- 3. Ibid., p. 185.
- 4. Francis Egerton, Journal of a Winter's Tour in India: with a Visit to the Court of Nepaul, London, 1852, p. 188.
 - 5. Ibid., p. 189.
- 6. Nawakot lies some 17 miles west of Kathmandu between the Tadi and Trisuli rivers, separated from Kathmandu Valley by rugged terrain. Gorkhā is located more than forty miles west of the country's capital and at a considerably lower elevation.
- 7. Pṛthvī Nārāyaṇa Śāh directed the invasion of Kathmandu Valley from the Palace of Nawakot. By 1803 nearly all of the present kingdom had been taken over by the Gorkhās. The borders of the realm were then pushed to the Kashmir border to take in the districts of Kumaon and Garhwal, the Simla hill states, and, for a brief time, Kangra Valley. Before the conquest of Kathmandu, Pṛthvī Nārāyana Śāh pushed his forces into Sikkim and Tibet, where an army of Tibetans and Chinese drove back the Nepalese invaders (W. Brook Northey, The Gurkhas—Their Manner, Customs and Country, London, 1928, p. xviii).

2

The Building and The People

The Valley of Kathmandu is the setting for the greatest cultural development in the Himalaya, rivalled only by that of Kashmir. The valley has contained within its borders the flowering of many dynasties, and its art has flourished with the growth of Nepalese civilization and the political division of the valley into separate and independent kingdoms. The Malla period of the 13th through 18th centuries witnessed an elaborate development of Nepalese architecture, with the flowering of temple and palace design. Its creators were and are the Newārs.

A. Patterns of life

The Newārī town does not fit exactly any of the ideal patterns of organization that are defined in the classical architectural treatises of India, as it is too condensed and too different from Indian patterns in the kinds and uses of its buildings. Yet it does have regular features that differentiate it from the comparatively loose groupings of scattered houses that are the Parbate villages of the hills. There is usually a pātī or public resting place at each approach to the village, at least one daha or tank for washing clothes and utensils as well as for bathing, and one or more public wells. A grid plan is never followed, but the settlement is regularly arranged according to the directions of its thoroughfares, its geographical location, and the presence of farmland. It is divided into many tols or khels as blocks and defined neighborhoods, so that the resident of village or town locates and refers to his house in terms of its tol rather than its street address. Temples dedicated to the same deity and having the same name are differentiated according to their tol location as well.

A large $p\bar{a}t\bar{i}$ is frequently a prominent feature of a *tol*, like the park bandstand of middle America, but the resthouse or platform of a famous temple, like that of Matsyendranātha in Kathmandu, may be more frequented than a public $p\bar{a}t\bar{i}$ as the setting for

concerts, religious readings, and other activities. The structure of the $p\bar{a}t\bar{i}$, a platform raised a few feet above the ground, open on all sides or partially walled, and covered by a roof supported by walls or poles, is essentially secular even when the $p\bar{a}t\bar{i}$ is located within a temple courtyard. Religious images are sometimes placed in niches in its walls. Images being ritually carried through the streets at festival time are placed instead in separate constructions of wood that are either temporary or stationary, platforms that support and protect the images in scattered spots within each settlement for a few days and nights of each year. An annual display of Bhairava masks is presented in this way during the festival of Indra Jatra in Kathmandu.

The appearance during Indra Jatra of Indra images, which receive multitudes of floral offerings from atop their small wooden platforms called machams, defines the sacred geography of the city. The locations of the shrines and the movement through the streets of the people who worship at them reveal traditional schemes of religious orientation, sacred landscapes that become apparent within the tangled cityscape only at the time of major religious observances or with priestly guidance. The city or town is then criss-crossed with the moving lines of processions that follow centuries-old routes from temple to temple, "entering" and "leaving" the main cities of the valley through gateways that no longer exist—the openings in medieval city walls that have long since fallen away. Circumambulation as movement of devotion is more than the ritual encircling of individual monuments, it is the passage around entire towns—even the pious journeying around the sacred valley as a whole. This is an extension of the rite of circumambulation at the temple site, called pradaksina, as described in the Satapatha Brāhmana. The path itself is the mangala vīthī, the "way of auspiciousness" of ancient India. Temples of both major and minor importance are linked to each other by paths that are still defined and followed by guides who lead pilgrims through the Nepalese towns, and it is sometimes only in the lists of these men that the location and names of traditional holy sites remain recorded in full, even after the disappearance of some of their number.

Beside the organization of Newārī towns according to the placement of sacred sites and pilgrimage routes, geography based upon caste defines human settlement in Kathmandu Valley. In Nepal as in India, living patterns are determined by caste. An area

in southwestern Kathmandu, for example, is "unclean" in comparison to certain other parts of the city because it is occupied by butchers. Prominent temples that are visited by worshippers belonging to all segments of society are located within the area, however, and the caste organization of towns is generally of little importance to the scheme of temple and palace placement. Caste geography is far less relative to sacred architecture than is the ritual pattern of devotion that makes of each settlement a living map of traditional belief. These paths are not boundaries within the town; they are lifelines. They remain while the divisions of settlements according to caste are disintegrating to some degree, especially as land owners erect new houses for investment purposes or for their own use in areas that were formerly considered undesirable.

B. The sacred birth of a house

Hideous concrete or cemented buildings, cold and damp as well as totally wrong aesthetically within the earth-tone milieu of brick houses with tile roofs that surrounds them, are sprouting like diseased mushrooms all over Kathmandu Valley. Fortunately, they are still a minority among buildings. Of much greater significance and still the locus of domestic life is the Newār house of brick. Its structure and use have already been discussed, but still to be mentioned are the religious rituals that accompany its construction. These rites parallel ceremonies that are involved in the erection of temples and they reveal the personal involvement of the Newār with his architecture in philosophical as well as physical terms. These rituals are many and they are clearly defined.

The Newar house is "born" into the spiritual and mundane world as its construction proceeds. The family that owns the dwelling, together with the different groups of workmen, each with its own nayake or leader, is involved in the performance of rituals that attend each stage of building the house. These observances begin before a single brick is laid.

After a site is selected it is offered worship, and a goat is sacrificed at the scene upon an auspicious day. The earth will be wounded by the process of construction and, therefore, it must be propitiated, along with the spirits that dwell below the ground, so that the indignity inflicted by men will be forgiven. On a later day of auspiciousness the first foundation stone is put down, along with the offering of a duck's egg, a coconut, a yard of cloth, and five betel nuts. From this point onward the procedures of worship are

directed by the head of dakarmis or house builders, rather than a priest. He places five brass vessels and a silver tortoise inside the foundation area, according to the investigations of Gopal Singh Nepali, and places five bricks over the pots. The spirits who haunt the site are then given offerings of various vegetable products in a rite called bawpee. These are scattered over the four corners of the foundation from an earthen pot. Construction may then begin.

During kharu pūjā the door is worshipped. This occurs after the ground floor has been completed, involving the sacrifice of a goat and the worship of the sikarmis, carpenters, by their nayake. Specific parts of the goat's head are then eaten by the builders, the carpenters, and the house owner, with the parts of the head being distributed according to the occupation or status of the participants.

As each floor of the house is completed, another ceremony, the neena $p\bar{u}j\bar{a}$, is carried out. This rite honors the pillars that support each ceiling (tham), the beams (neena), and the floor (dalin). The rite of $p\bar{u}j\bar{a}$ or worship again involves the killing of a goat.

The thaima pūjā is among the most important ceremonies that attend house construction, for it marks the completion of the roof structure, at which time the house is said to be "born." Salt, seeds called imu, and ginger are added to the usual offerings at this time, just as in the Macha-bu-benk-gu or birth purification ceremony for children. Through this rite the new-born building is purified and blessed at the time of its coming into the world.

The Newārī house is structurally complete as its roof tiles are put down. This action requires the attendance at a final ceremony of the married daughters and children of the house owner's family as well as the *fukee* or blood relatives on the male side of the family. Tho(n) or rice beer, bārā or fritter cakes, and other ritual foods are part of a large feast that is given at this time, and new saris are tied to the house by the married daughters to mark the occasion of its completion. After the feast is over, a turban is presented to the father of the household and a blouse is given to the mother by each married daughter. The saris are given to the dakarmi and sikarmi craftsmen. Turbans are presented to the dakarmi nayake, the sikarmi nayake, and to each iyami (worker).

When the house is ready for occupation the nine grahas—the fierce god Bhairava and the Aṣṭa Māṭṛka or eight divine mothers—must be placated. This is done through the ritual of bau-biye-gu, during which nine earthen dishes containing symbols of

the deities are worshipped and then placed at the nine crossroads of the locality. A major feast is then given for relatives and workers. It is followed once again by the Sika-bu ceremony of goat eating.

With the exception of those aspects particularly concerned with family solidarity, these rituals are required as well during the building of a temple. Even the pinnacle of the temple, its crown that sets it apart from all secular structures, is ritually installed as a symbol upon the domestic building after its roof has been tiled. The pinnacle is temporarily present in the form of a tiny parasol made of wood and cloth or paper that is set up on the newly covered roof, making of the secular structure a house of both gods and men. Whether temporary or permanent, the pinnacle is the finishing touch in the design of structures both sacred and secular; it calls down divine blessings upon them.

C. The Newar as craftsman

The Newārs, speakers of Newārī language, are the racial product of the mixture of immigrants who came to Nepal from the north and south to populate the fertile valley of Kathmandu and its surrounding regions. Their specific origin is not clear, as the term Newar has come to designate a number of former ethnic groups that now make up a homogeneous community numbering more than 400,000. Their coming to the valley long predates the entrance of 1096 A.D. that is attributed to them in the vamsavalī translated by Daniel Wright, and the associated story that they came to Nepal under the leadership of Nanya Devi, rājā from the central Deccan, cannot be true. The Newars are set apart linguistically from speakers of the Pāharī languages, those tongues "belonging to the mountains" and spoken in the sub-Himalayan hills from Bhadrawak north of the Panjab to eastern Nepal and Sikkim. The Pāharī language family, which includes Nepālī, the lingua franca of Nepal, is met at the west by other Indo-Aryan languages connected with Kashmīrī and Western Panjabi, at the south by Indo-Aryan languages of the Panjab and Gangetic plain-Panjabī, Western Hindī, Eastern Hindī, and Bihārī—and at the north and east by the various Tibeto-Burman languages of the Himalaya.2 It is to the latter group that Newārī belongs. The Newārs are linked very definitely to their northern neighbors in this and other ways, as well as to the south, and their language is of more literary significance than is Nepālī.

The Newars are probably closely linked to the aboriginal

inhabitants of Nepal, while the Gorkhas and other speakers of Nepālī or Gorkhālī are linked through linguistic evidence to southern regions including Rajputana, which the Gorkhas traditionally consider their original home. The Gorkhas are latecomers to the country in comparison to the Newars, perhaps having entered Nepal as the Muslim invasions of India forced them to seek refuge in the northern hills. Population movements on a large scale by the Newars, on the other hand, are recorded in neither fact nor fiction. In comparatively recent times the Newars have travelled considerably as tradesmen, and their presence in centers of trade and learning has been recorded in India and Tibet for centuries. Long after A-ni-ko, their influence upon the northern arts remained very strong. When they returned home, they brought with them not only goods and gold but the religious influences that inspired the greatest accomplishments of Nepalese art. The art of Nepal is the art of the Newārs. To be dealt with at length in the following pages is the Nepalese temple in all of its many forms and its many varieties of surface ornament as the most prominent example of that art.

Never numerically dominant in the country as a whole, although the main towns of Kathmandu Valley are heavily populated by them, the Newārī people have always been important to Nepalese arts. To the people of the hills, Kathmandu Valley remains "Nepal" and the Newārs among its prominent citizens. The Newārs have been subject since 1768 to the political control of the Gorkhās. Since the mid-19th century they have been subject as well to the domination of the family aristocracy of the Ranas, especially as they held the hereditary post of Prime Minister until 1950. Importers of European styles in art and architecture, the Rana family traces its origins to Indian nobility.

The Newars are separated from the ruling classes and from the other tribes of the valley by their life style as well as their language and origins. Their settlements have always been of an urban nature, whether forming village or town, with Kathmandu, Patan, and Bhaktapur counting their populations as mainly Newār. Large numbers of Newārs also populate the valley towns of Kirtipur, Panga, Thimi, Sankhu, Thankot, Tokha, Pharping, and Nagarkot. In fewer numbers they are found in most large towns outside of Kathmandu Valley, as well as in the Darjeeling area, Sikkim, Bhutan, and in Lhasa. In the 18th century, Gorkhā expansion extended the borders of Nepal so that they reached the Indian

territory of Kangra in the west and included Sikkim in the east, but these territories were given up as a condition of the treaty of Sagauli which was signed in 1814, putting an end to the Anglo-Nepalese war.

The Newārs must be an important part of any study of Nepalese art, even though their reputation as fine artists may be somewhat tarnished today as more and more Newārs of higher caste leave their traditional vocations in workshops for more "modern" occupations. There has been some slippage in the quality of hand crafts, but wood carving and metal craft, at least, are living arts. By contrast, early traditions of wall painting and manuscript illumination are now lost. The impact of Newārī architecture remains very strong, and because their creations in temple building are so closely related to domestic patterns, Newārī design must be considered in terms both sacred and secular.

The craft depends upon its creator and the Nepalese craftsman satisfies in a general way the requirements of the silpin as defined in the Vāstu Sastra or Sthāpatyaśastra-veda, the traditional science of architecture subordinated to the Veda. His profession is divided into four classes, all of which belong to the Chitrakara caste of professional artists in Nepal. To the foremost of these classes belongs the sthapati, architect, as master of what stands and is lasting. Among other categories recognized in Nepal and India are the sūtragrāhin as disciple or son of the sthapati, the taksaka who cuts off and carves or models large pieces and detail in wood or clay, and the vardhakin who puts together and paints that which is made by the takṣaka. The skilled workman practices his trade in the anonymity of caste; the value of his personal "expression" is not considered by himself or by others. His art answers the demands of religion and philosophy; he is directed by priests. He creates not the representation of a thing but the thing itself, thus revealing form but not inventing it. The artist must have no ego. He receives his reward as he performs the sacred rites of artistic creation, for he transforms himself as well as his materials. He becomes clay in his own hands and in the hands of the gods. Form, ritual performance, and transformation are therefore inseparable aspects of his art, as revealed in the sensitive interpretations of the role of the artist by Stella Kramrisch and Mulk Raj Anand.³ No monuments in Nepal bear the signatures of their creators and. except that family workshops are known by their location and by the kind of art created by them, the artists are anonymous. The continued creation and restoration of temples and images are in their hands.

Nepalese artists are traditionally without fame as individuals with the notable exception of the 13th century architect and bronze craftsman, A-ni-ko. That this artist should have had great effect upon both of these arts in Tibet and China is to be expected, for the art of temple building in Nepal is not architecture but architecture/sculpture. Two other artists are of important individual identity, not for what they exported from Nepalese art but for what they brought to it. These are the Bengali brothers Dhiman and Bitopala who gave rise to a new school of bronze art in India during the 9th century and the reign of the Pāla king, Devapāla. They continued the techniques of cire perdue casting that are first recorded in the Madhuchehhisthavidhanam, the sixty-eighth chapter of the Mānasāra Śilpasāstra which dates from Gupta times, but with new approaches to the human form and style in general that were echoed in Nepal from the 10th century onward.

A guide for craftsmen employed in building, the Mānasāra is one of thirty-two Silpasāstras that were first revealed by Viśvakarmā, Lord of the Arts and Architect of the Gods. He has always been the patron deity of craftsmen in Nepal, and the façade of his temple in Patan is completely covered over with the metal repoussé for which his charges are famous. It is the only temple in Nepal that is decorated to such a degree with metal. Viśvakarmā is honored as well by the fine work of silpin, and nearly all of the craftsman's endeavor is directed toward pleasing his gods as well as his patrons. As Ananda K. Coomaraswamy notes, there is no "pandering to the individual fancy" of either buyer or creator in this art, and the sacred arts of southern Asia continue from the time of their beginning "in the inspiration of traditional and dogmatic religion and under the direct supervision of religious authority."5 The guiding light for the artist is the highest of craftsmen, Viśvakarmā, who is referred to in the Mahābhārata as "Master of a thousand handicrafts, carpenter of the gods and builder of their places divine, fashioner of every jewel, first of craftsmen, by whose art men live, and whom, a great and deathless god, they continually worship."6

Although the art of Nepal developed after the pattern of Indian accomplishments in many respects, especially in painting and sculpture, and although Nepalese philosophy of art is deeply rooted in classical Indian sources, indigenous impulses and foreign

influences other than Indian are also part of the development of Nepalese art. None of the major routes of east-west trade in southern and central Asia passed through the mountainous kingdom, but movements related to both commerce and religion did cross the country between north and south from very early times. The southern quarter of Nepal, the Terai, is a geographic extension of the Indian plain so that intercourse with that country was constant, and several passes through the Himalayan range connect Nepal to Tibet. The lowest of these is open throughout the year. Nepal has never been the "sequestered kingdom" of its reputation abroad, but it has grown in its own way.

NOTES

- 1. Max Müller, ed., Julius Eggerling, tr., The Śatapatha-Brāhmaṇa, The Sacred Books of the East, Vol. XII, Oxford, 1882, p. 425.
- 2. George Abraham Grierson, ed., Linguistic Survey of India, Vol. IX, Indo-Aryan Family, Part IV, Specimens of the Pahārī Languages and Gujurī, Calcutta, 1916, p. 1.
- 3. Stella Kramrisch, The Art of India, London, 1954 and Mulk Raj Anand, The Hindu View of Art, Bombay, 1957.
- 4. The main source treating the life of the artist is that of M. Ishida, "On the Biography of A-ni-ko," Moko Gakuho, Vol. II (1941), pp. 244-60. The White Dagoba (stūpa) of the Miaoying Monastery in Peking has been attributed to him, but with a date of 1348 A.D., in Chinese Buddhist Association, ed., Buddhists in New China, Peking, 1956, p. 18.
 - 5. Anand K. Coomaraswamy, Viśvakarmā, London, 1914, p. 7.
- 6. Ibid., p. 2. The earliest literary reference to Viśvakarmā occurs in the Rg Veda as he is invoked as Creator of the Universe (X.6 and 13-14) while Vastospati, a deity associated with Indra, is mentioned as the god who presides over building sites (D.N. Shukla, Vastu-śastra, Vol, I, p. 68).

Brick, Stone, and Wood—The Exterior Form

Clustered together to punctuate the city skyline with a series of glittering metal pinnacles and roof peaks of orange-red tiles, rising high above surrounding domestic buildings to dominate them within the village, hidden in the recesses of alley or courtyard, or standing alone in field and forest, Nepalese pagoda temples illustrate a remarkable homogeneity of style so that thousands of temples created through hundreds of years may be examined as variations upon a single artistic theme. The free-standing pagoda, and even its relative that is attached to other buildings, is basically a simple architectural form. Its silhouette is clean, uncluttered, and its design reveals a strong vertical emphasis with the structure usually taller than it is wide. This verticality is contrasted by the horizontal thrust of the overhanging roof edges, and the interplay of tower versus roof gives the temple an outline that is remarkably, even sublimely well-balanced. The roofs take on a visual emphasis almost unknown in western architecture but at the same time the roofs are less massive and less exploited as decorative fields than in much Southeast Asian architecture and in Far Eastern palace and temple traditions. Rather than their mass, it is their multiplication that makes the roofs of the pagodas so remarkable as they are raised in decreasing size to heights of two, three, four, five, and previously even greater numbers of storeys. The Nepalese pagoda has a more dynamic, moving silhouette than its Chinese or Japanese counterpart because of this sharp reduction of ascending roof sizes and because the great overhangs of the roofs allow for the penetration of much empty space between each pair of roofs and up to the comparatively narrow temple core. The outline of the pagoda form is staccato and active despite the balance that exists between overall vertical and horizontal thrusts. The only parallel to this silhouette in world art is in the structurally less substantial but proportionally taller Meru pagoda monuments in Bali. Both forms are earthbound arrows pointing toward the sky.

Because of its dynamic silhouette that invites the interpenetra. tion of other forms as well as space, the Nepalese pagoda is striking when seen in groups within village or town. The interplay of roof forms as the overhang of one temple projects into the open space between two roofs of another temple is ever changing as one moves through the streets and around the structures. Subtle design differences present pleasant variations upon firmly entrenched themes from which only edifices of foreign inspiration—the stone and brick sikharas of Indian origin—radically depart. The skyline of Bhaktapur is punctuated by roofs low and high, pagoda-shaped and domed, rectangular and square. A city square filled almost completely with pagodas, like that before the palace in Kathmandu, is a total environment of actively integrated, like forms. Yet the architectural impact of these temples does not depend strictly upon their grouping together in the sense that the temples of Benares or the skyscrapers of New York City have greater effect as complexes than as individual structures. The Nepalese pagoda can and does stand alone in field, forest, hilltop, even in the middle of a lake, and in such solitary placement the structurally simple but elaborately decorated temple is best examined in detail.

There is no source of architectural marvel in the brick and wood structure of the pagoda. A simple trabeated system of horizontal beam resting upon vertical wall or column supports the superstructure while the roof presents the only angled elements of the skeletal design: the downward sloping roof beams, usually with no horizontal understructure, and the support beams or struts that slope upward from the body of the temple at an angle of less than 45° to meet and support the roof beams and the heavy roof covering that rests upon them. The skeleton of the roof complex resembles the frame of a huge umbrella with the roof beams as the umbrella's ribs and the struts as its supportive spokes. The strut bases are firmly set into notches along the shrine wall and they are further braced at the bottom by projecting cornices along the length of the brick core that is the main body of the temple. The square or rectangular body of the shrine is nearly always of double wall construction wherein the inner wall, separated from the outer by open space, projects upward to become the outer wall of the next higher storey. The telescoping structure built upon double wall construction is very strong and stabile, as evidenced by the superior ability of temple buildings to withstand seismic shock in the earthquake zone that includes Kathmandu Valley.

The pagoda usually rests upon a square or rectangular base made of stone, brick, or both together. Its shape follows that of the temple plan but the foundation is evidently not deeply rooted; the base "rides" the ground rather than nest in it. The base or plinth may become an imposing structure in itself as it rises in a series of steps in echo and complement the multiple roofs of the temple that rests upon it, lifting the temple to dramatic height and visual prominence.

Like the medieval Hindu temples of India, the Nepalese pagoda is not primarily designed to enclose interior space or to accommodate congregational worship. Its impact is mainly exterior. The interior space of the ground floor usually consists only of the small garbha grha, or womb house, in which resides the sacred image or symbol of the god, although numerous buildings have upstairs prayer halls. The most important exceptions to the rule of minimal interior space are the Buddhist vihāra monasteries called bahāls or bahīls which include much devotional and living space within their total complexes, although never within the main shrine itself. The upper floors of nearly all free-standing shrines are kept closed and the lower floor of the free-standing shrine is itself of meagre access with only one of its often multiple doors left unlocked. The windows that pierce the four walls of each storey in most temples are merely decorated pinholes opening into nonfunctional spaces rather than effective sources of interior illumination.

Space may be wasted in the upper storeys of such towering structures as Siva Mandir in Kathmandu's palace square, but there is no question of their value in terms of design, for the extraordinary multiplication of roofs, together with the sea of colored ornament and iconographical story that covers the pagoda, makes this structure burst forth from amid the plain walls of village houses and surprise the passerby amid dark forests or rolling fields. Such a building is a landmark in the best sense, not blending with its environment but subtly contrasting it while being built of materials native to the land. Angular in shape and bright in polychrome painting, it does indeed stand out in the surrounding landscape, yet it belongs to its setting in harmony.

The pagoda of Nepal is not an aesthetically heavy building despite the mass and weight of its parts, for its silhouette is lightened by the attachment of metal or tile curves at the roof corners. These give a sprightly upward tilt to the extremities of the

heavy roofs and flips the viewer's eye skyward rather than allowing it to follow the flow of the roof slope diagonally down to the ground. The impression of lightness is emphasized by shimmering metal pinnacles atop the roof and by gently swaying bells suspended all along the roof edges, seeming almost frivolously delicate as they flutter above the massive wooden dragons or leogryphs that support the roofs at the corners, where most of their weight is concentrated. Lighter than the tile roofs are roofs of gilt-copper that are given as great offerings to certain important shrines. The golden roof covering tells the viewer even more emphatically than does roof multiplication that these buildings are not of this world. Over all is hung lacy ornament—flags, birds, perforated borders, cloth banners—that lend unreal delicacy to the temples. Yet the structures are anchored to earth by their red brick that speaks of the nearby rice fields and their profuse wood carving that clearly has its origin in the mountainside forests. No hothouse flower offered as a nosegay to the gods, the pagoda shrine is at once remotely holy and immediately secular. The temple uplifts the spirit of man but at the same time it offers him a concrete place of shelter, a refuge in times of trouble. It takes many severe beatings by the elements and decades of human neglect to bring a temple like Kṛṣṇa Mandir to the brink of collapse in Panauti. The Nepalese pagoda is vibrant, masculine, strong. Defiantly stabile yet delicate, it is a tapestry woven in primary colors, a chiselling that remembers the axe.

Daniel Wright's estimate in the second half of the 19th century was that 2,733 shrines and temples were to be found in Kathmandu Valley, a plausible number even now.1 The complexity of exterior form in these many structures is not usually so great that the individual building is best seen from above, as is the case with contemporary buildings of northern India, if the organization of its plan is to be understood. A square plan with four entrance sides, clearly reflective of symbolic associations to be discussed elsewhere, is common to free-standing pagodas, but rules both mathematical and theological are often bent in Nepal to accommodate the construction of buildings that are logical and practical in terms of the individual sites. Therefore the great walled compound of temple and fountains at Matatīrtha south of Thankot is not quite rectangular in its sloping hillside location, and the complex of shrines and monuments that have been erected through time around the temple of Jala Lingesvara Mahadeva in Sankhu seems

almost haphazardly arranged. The small shrine of Sekha Nărāyaņa near Pharping is placed to one side of its courtyard rather than at its center, in accordance with the contour of the cliffside behind it, and the stairway that descends from the large pagoda of Gokarna Mahādeva sweeps off at one of the few angles in the rectilinear plan of the structural complex in order to meet the river that flows past the temple foundation. The accumulation of temple and palace structures within cities and the growth of riverine groupings of shrines follow few set rules, yet the masses of buildings that grow up are living complexes of vital forms; they are not cells but organisms.

Individual structural elements of the temples are little affected by the coexistence of structures or variations in natural setting, so that regular arrangement is maintained as the buildings are brought to many locations and situations both geographical and social. The variety of temple plans that has resulted from combinations of geographical, social, and theological considerations will be treated in succeeding chapters, but an underlying unity is evident in structural and decorative elements that are part of Nepalese pagoda architecture throughout its development. The temple will be examined from base to roof in terms of its basic construction and then in terms of the ornament that is applied to it. In the process, Nepalese architecture will be revealed as a tradition in which the greatest care is lavished upon the smallest details, but without loss of respect for the simplicity of basic form.

A. The base

1. Pavements

The pavement of streets that pass by or border upon temples, and the courtyards of the temples themselves, are usually made of brick or a kind of flagstone. Baked bricks, which are strong and readily available, are generally found to be more satisfactory as pavement than are hard to acquire stone slabs, for the latter become very slippery when wet. Gutters are found at the borders of courtyards and at the sides of paved streets or walkways. Shallow indentations or deep troughs, they serve merely to gather sewage within a fairly limited space rather than to carry it away from human settlements. Another kind of gutter are the very shallow depressions that are found within some courtyards all around temples and directly below the lowest of roof overhangs where they catch and confine the water that drips down from the roofs, so that

the courtyard does not become awash with rainwater. Part of the temple structure itself is the *somasūtra*, a drain that allows the libations that are poured over a *linga* as procreative symbol of Siva, or other sacred object inside the temple, to flew out of the shrine enclosure after having been collected in the *snānadronī* indentation at the base of the sacred form.

The paved area in the immediate vicinity of a shrine usually demarcates the sacred ground of the site. Shoes are not to be worn upon the pavement before many temples, therefore, while at the "Golden Temple" in Patan, Hiranya Varna Mahāvihāra, shoes may be worn on a raised platform around the paved area but not in the sunken courtyard itself. The bricks that are used for paving such areas are usually small and square, while paving stones are large and rectangular. The size, color, and durability of all paving blocks differ according to the kind of brick or stone that is used. With some variation—covering of finer quality being preferred for interior use—the same materials are employed to pave the floor of the inner shrine as are used in the courtyard. Early temples reveal the use of special bricks called taliaete (Nepālī) or cika appa (Newārī) for interior flooring, these usually being nine inches square although the earliest are 12 inches on a side. Square bricks currently used are of six inch size but these, like earlier blocks, may be impressed with the design of the sacred mandala, about which more will be said later. Paving bricks are oil-baked for extra durability according to traditions now revived as part of the renovation of the palace in Kathmandu.

2. Plinth of brick and stone

The plinth, a stepped base of two or more levels, has been mentioned as repeating the pattern of multiplied roofs on some temples and raising the pagoda to visual prominence while setting it apart from secular buildings around it. The plinth is more than a pedestal, however, and whether it consists of one step or a dozen it is of practical value as it lifts the shrine above the often wet and muddy street level or damp courtyard and removes it to some degree from surroundings full of the activities of children and animals. The shrine is never made a thing apart by such elevation, however, and the intimate coexistence of the temple with its Newār community has been maintained with regard to all but a few secret shrines. Removal of the temple from its secular setting is not the goal of its elevation upon the plinth, nor is the comfort of its pūjāris

or temple-keeping priests taken into account as the building is raised from the damp ground. Rather, visual dominance and symbolic meaning are concerns that give rise to this major tradition of design. Above all, the plinth of the free-standing pagoda of square plan reflects its derivation from the mandala, the prime factor governing its form.

Few official excavations of temple foundations have been carried out in recent times in Kathmandu Valley, and no new temples have been established for many years, so that inferences must be made concerning the physical composition of the plinth without the support of concrete evidence. Indian architectural manuals and practices suggest that the core of the plinth may be made of unbaked brick or stone rubble, and the foundation is probably of shallow penetration into the ground. The visible portion of the plinth is made of brick or brick and stone, with the top of each step often paved with stone. The stone covering may be extended to pave the interior of the shrine as well, but in most cases stone is used as a kind of reinforced trim on the plinth and it is never a major structural part of the pagoda.

The plinth is marked at the entrance side of the temple and often at its other three sides as well by stone or brick steps bound by low balustrades or borders that separate the stairway from the high platforms of the base. Stone lions and other guardian beasts, minor deities, and important or semi-miraculous human figures are usually mounted beside the stairs, and if the plinth has several platforms of large size they may hold secondary shrines. These are placed at the corners of the plinth around the central shrine in the pahcāyatana plan, as at the temples of Taleju in Kathmandu and Tripureśvara at Thapathali in the same city.

The plinth is of symbolic importance not only for its geometric shape that relates to the total temple plan but for its bricks that are moulded into forms both decorative and meaningful. Ornamental bricks have been found in the ruins of early Buddhist monuments in the Terai, including examples of many patterns as part of the plinth of the temple of Māyādevī at Lumbini and a lotus-bearing brick that covered a relic casket in the stūpa/vihara construction at Sāgarwā. Recent finds from Lorikudan, including bricks of indented checkerboard design, are displayed in the newly opened government gallery inside the old palace of Patan. Their pattern reflects those of present-day plinth decoration. The base of the shrine of Mahādeva at Pachali, an unusual construction with three

brick sikharas, is especially elaborate, with several rows of moulded bricks on each of its foundation steps. A line of three-dimensional lotus flowers is the most delicate motif while other rows of bricks present borders of entwined snakes and various medallions and roundels. These patterns lighten what is certainly a heavy part of the temple scheme, while supporting the blocks of stone that pave each step of the base. At the upper of the three stages of the plinth the usual texture of baked brick gives way entirely to that of moulded terra cotta as all eight rows of brick stand out in relief with only the winged lions that stand below each column of the temple porch to punctuate the decorative field of baked earth. The lowest level of bricks forms a bevel at the base of each step of the plinth, meeting the stones of the courtyard at the bottom level of the base. At Cangu Nārāyana temple the bevels and even most of the facing of the plinth are of stone, but the physical and visual functions of the plinth remain unchanged. A change in form does occur, however, when the plinth is extended before the temple to form a platform for dance performances and assembly, as before the shrine of Hari Samkara in Mangal Bazar, Patan.

A common variation upon the usual form of the multi-stage plinth occurs at the temple of Krsna in Panauti, where vertical blocks of stone are mounted at the corners of each step of the base. An unusual variation is found in the eleven-stage base of Taleju Mandir of Kathmandu, the highest plinth in Nepal, wherein the standard pattern of square within square, as stages of the plinth are raised one atop the other, is multiplied by zig-zag indentations in a regular pattern along the walls of each level. Each step is found to expand itself toward a larger mandala that is physically and symbolically more complex than the simple square. Whether the plinth is raised in several stages like that of Taleju Mandir or is merely a symbolic square lying flush with the pavement of the brick courtyard that is its matrix, as at Balakaumārī Mandir in Patan, it is an essential part of the total plan. In relation to the total scheme of sacred design, it is the boundary of the temple's internal universe

B. The walls

1. Brick walls and wooden frame

The Newar house confronts the viewer with broad expanses of brick, punctuated by windows that vary in size from very small at

ground level to very large on upper storeys. When the bricks are sun-dried and when the house itself stands weathered and unpainted, the appearance of the walls is very dull, so that they appear to have no aesthetic value, only functional necessity. But when the walls are constructed of fine baked bricks, they bring a gleaming solidarity to the form of temple, palace, and home. Like the bricks of temple plinths, these bricks are sometimes moulded into borders of high relief that resemble closely in form carved borders of wood that are much more common. At the riverside temple of Jagannātha (Jagat Nārāyana) near Patan these moulded bricks of the walls represent lotus petals, garlands, even lion heads, but such borders of brick are much more common on sikhara temple towers than on pagodas. The motifs are entirely those of wooden decoration, equally detailed and different only in material and color. They are suited to their placement upon the walls, for the main body of the pagoda shrine is emphasized much more as a decorative field than is the geometric block or massive stepped pyramid that is its base.

Bricks are put down in conjunction with a wooden frame. The wood, called argrakha, is that of the Sal tree (shorea robusta) that was once abundant in the forests of Kathmandu Valley and beyond.2 This frame may be a holdover from earlier times and somewhat less sophisticated structural methods in which, as in Sikkimese peasant architecture and some mountain dwellings of Nepal, wooden posts and beams used in absolute combination with other materials were essential to the stability of the walls of brick and stone houses. The wooden frame is less essential today, perhaps, as it provides support to the superstructure and bridges the openings of doors and windows. A criss-cross lattice of wall beams is not necessary. The roof frames utilize no diagonal braces for extra strength, but angled struts do support the overhanging roofs from the outside of the walls. Purlins, horizontal timbers laid parallel to the main beams of the roof edge, also provide support for the fanning beams that follow the slope of the roof. Cornices of brick and wood underlie the struts along the walls with extended wooden beams at their corners that cross over each other and protrude from the building or from the wooden frame that is visible inside of large buildings, without structural function. In very large temples like Dattatrāya in Bhaktapur, tie-beams or collar-beams are sometimes placed horizontally as braces and, through the use of connecting vertical struts placed on top of them, as supports for the

rafters above. These tie-beams pass through the temple core, to connect rafters on opposite sides of the sloping roof and to counteract their thrust, at the height of the wall plate. They are one among many examples of wooden elements that are, while not structurally part of the exterior walls, essential to the support of upper storeys and the roofs. The wall plate, as a timber laid horizontally on top of the wall to receive the ends of the rafters, may itself be considered part of the frame. It is exposed when the roofs of temples are removed during reconstruction, as at the temple of Nārāyaṇa in Bangemudha Tol, Kathmandu.

The double-framed Nepalese roof is sturdy, but the superfluousness of certain other parts of the temple frame, at least in some structures, is revealed in the construction of Balakaumārī Mandir of Patan. The vertical beams that are mounted into the corners of the building at its exterior may be moved from side to side by hand, turned in place to show that they support nothing. Some of the "load-bearing" columns prove to vibrate independent of the weight of bricks above them. Both are non-functional remnants of an architectural tradition in which they were once essential supportive parts, yet they remain effective as they visually articulate the sheets of brick that are the walls of any large building in Nepal. In the palace structures of Gorkhā and Nawakot these exterior parts of the frame restate and amplify horizontal themes within the design and bring a strong linear factor to it, just as they outline and define the geometric form of Balakaumārī Mandir. They serve this function in Nepalese architecture in general.

The frame of wood is much more than the visual articulator of brick masses as it is part of structures that have very open lower storeys. As most brick is eliminated from the lower walls of temple, shop, or resthouse that require wide openings for easy accessibility, the wooden columns that are part of the frame come to bear tremendous weight. Thus the same corner posts that were useless at the back of the inner wall of Balakaumārī Mandir, which is filled with brick except for one small doorway, are made to support the weight of two upper storeys at the front of the building. The enclosure of the lower storey is, at the front of the building, little more than a columned porch. An even more open structure, with only a single brick wall at the back to share the weight of its towering super-structure with the wooden columns of its "porch," is the temple of Mahālaksmī in Thaibo.

The aesthetic system to which the Newar subscribes requires

the use in architecture of brick and wood in absolute combination, whether sound construction requires it or not. There are no temples made of wood alone, and the rare shrines made entirely of brick that do exist, like Mahābauddha in Patan and a strange "pagoda" built of brick near Dhum Varāhī, lack the lively silhouette of temples constructed of brick and wood, as well as their finely carved ornament. That the combination of wood and brick has been both aesthetically and structurally satisfying to the Nepalese is apparent in its continuance, essentially unchanged, for at least seven centuries. It is as valid as the pattern for building today as ever but its future as a living tradition, now that other building materials, often of less cost, and other methods of construction become available, is uncertain.

2. Door frames, window frames, and niches

The undecorated door frame is a simple form. It contains an opening less than six feet high and about three feet wide in domestic buildings, only slightly larger in temples. It has a high threshold that must be stepped over in many houses and temples. The frame itself extends outward as the beam of the lintel is embedded into the brick wall and as the beam of the threshold extends horizontally below. An additional frame of wood surrounds these beam extensions, the lower of which is shorter than the upper, and the entire complex becomes a field for decorative and symbolic carving. The doors themselves are double, with a lock at the exterior and a sliding bolt to secure the door from within.

As part of the elaborately ornamented walls, the frames of windows are more variable in form than are door frames, with square, rectangular, oval, and round openings. They are open, shuttered, or covered with wooden screens that diffuse the light that enters the home or temple and appear from within like honeycombs dissolving against the bright sunlight. The screens preserve the privacy of dwellers within the house who can look outside without being seen, but this function is not a necessity in Nepal, where purdah, the seclusion of women, is not customary. Whatever their size or the kind of building of which they are part, the frames generally have small openings, with their transoms and sills extending horizontally into the walls. Between these extensions additional "wings" of wood, curvilinear or even triangular in outline, may be added to the frame. Like the rest of the window enclosure, these are covered with carving.

Of somewhat similar form but smaller than the individual windows and containing no openings are wooden niches that are set within frames that are usually from one to two feet high. These are mounted into the walls beside the door frames or in place of windows at the upper levels of temple walls. Never found on domestic structures, these punctuation points upon the walls of temples may hold figural images of gods or the faces of deities or guardians.

The windows are very practical sources of light and air when they are enlarged and compounded for use in the upper floors of dwellings, monasteries, or certain Hindu shrines, where they open into sitting rooms and prayer halls. Such window complexes, rectangular in shape and bordered by unified frames having as many as five or six openings, are sometimes built into balconies behind which heavy columns support the weight of walls. It is therefore possible for as much as half of a building's façade to be covered with windows in their decorative frames. The compound windows may have rectangular, arched, scallop-cut, or round openings and these are either closed by shutters or screens or left open except for curtains of cloth. They often lack the extensions of transom and sill that are the mark of smaller windows but. especially as part of balconies, they are the glory of domestic and monastic ornamental design. Such large window complexes are rarely seen on temples except those having second floor shrines and therefore requiring ventilation and illumination at the upper levels. As part of such shrines, the windows are likely to be part of balcony enclosures.

An important part of some window frames and an element of their structure that cannot be seen from outside of the buildings to which they belong are telescoping interior frames. These multiple frames of considerable depth bridge the brick overhang that results from the penetration of the thick wall of the domestic or temple structure by the opening of door or window. The stepped upper portion of such frames is formed as the wall cavity is spanned by multiple lintels, each at a higher level than that which is below it and closer to the exterior opening, which may be screened or open. The stepped form of the mass of lintels, although not the function of its parts, is like that of one side of a corbel arch. The unusual form of the frame, with its lintels locked into the brick wall at different levels and different depths from the exterior surface, makes possible increased size of window or door openings and

increased diffusion of light into the interior. The second of these factors can have no use of such openings in interior walls, like that in the central bearing wall of the old palace in Nawakot.

3. Balconies

There are many kinds of balconies that are part of house and temple design, protruding from the simple geometric form that is the body of both structures. They vary from small wooden squares that project only inches from the walls around them to major extensions that allow for movement within them by worshippers or inhabitants. Much of the area enclosed by Daṭṭāṭraya Maṇḍir, for example, is balcony space in an open complex of two levels above the main shrine where secular structural patterns are blended with religious function. Simpler balconies with low railings, elevated only five feet above the ground, have provided sleeping space to Hindu pilgrims at the temple of Kaṣṭhamaṇdapa in Kathmandu for at least eight centuries. Borrowing from domestic prototypes seems very likely in early temples having balconies, for the inclusion of vast space within sacred structures is not part of the Nepalese approach to temple design in general.

Balconies are supported at their base by beams that extend outward from the ceilings of storeys within the temple proper. These beams underlie the floor of the additive structures. The walls of the balcony may slope outward from this floor to meet its own overhanging roof or the main roof of the building, or the walls may not slope at all. When the balcony space is self-contained rather than an extension of the interior space of the main building, walls that are perpendicular to the floor allow the balcony to contain maximum interior space. Such a balcony, like that of the Nawakot palace tower, is entered through a large opening in the brick wall of the main structure. This opening is formed as wooden lintels of considerable size are supported by columns in single, double, or triple rows, depending upon the mass of the building and the thickness of its walls. In very shallow balconies, like those that hold viewing seats on the southern side of the Kathmandu palace, columns between window openings help to support the weight of the brick superstructure from which the windows project.

Balconies remain a common feature of domestic architecture, with a curious but not unsuccessful blending of concrete and wood bringing very large balconies to the second floor levels of a new pair of palaces recently completed for use by the royal family in

Maharajganj north of Kathmandu and the old and new palaces of the King. Most balconies built as part of houses in recent years are visually open and rectangular, without the wooden screens and carved decoration for which balconies have been noted in the past. The structure has become a strictly practical feature of the house—a place to hang clothes to dry, a storage area—rather than a decorative part of the façade In the cold, cemented houses that now sprout on the valley floor balconies are being replaced by open roof terraces and houses for the first time have little to do with pagoda design.

C. The roof

Since the roof frame and struts that support it have already been discussed as structural elements, the only non-decorative parts of the roof that need be mentioned here are the roof coverings. Thatch is only rarely used to roof domestic buildings and never used on temples because of its impermanence. Interlocking tiles are normally used for both kinds of structures and metal, either brass or gold, is applied as roofiing for important temples and palaces. Further details are treated as part of the analysis of temple ornament.

NOTES

- 1. Daniel Wright, Vamsavalī-History of Nepal, Cambridge, 1877, p. 20.
- 2. When Henry Oldfield was residency surgeon in Kathmandu in the 19th century a Sal forest covered the southern side of the Cheryaghati range through its entire length with an average width of from five to ten miles (Henry Ambrose Oldfield, Sketches from Nepal, London, 1880, p. 55).

4

A Veil of Ornament

The veil of ornament that is "hung" upon the Nepalese pagoda is much more than mere external display. It brings intricate wood carving, embossed metal, colored cloth, and polychrome paint to nearly every corner of the building, yet none of the ornamental additions of which it consists is truly additive. Rather, ornament completes the universal scheme that is captured in the temple plan and in its three-dimensional form. These essential decorations satisfy Philip Rawson's "exhaulted" definition of ornament as "a functional aspect of art, embedded in it, not a gratuitous extra."

The meaningful ornaments of Nepalese art are lavish gifts to shrines and their production requires long hours of painstaking labor in small Newārī workshops or at the temple sites. Part of the total complex of ornament is poetry, music, and the visual arts that is called alamkara in Sanskrit, the gilded flags, perforated borders, canopies, and other adornments are suitable as rare and costly baubles to become the "jewelry" of the gods. These additions decorate the bodies of the shrines just as bracelets, crowns, and necklaces adorn the forms of the figural images in bronze for which Nepalese sculpture is best known. Temporary decorations like flags and cloth banners that flutter at roof edges are the special dress worn by temples on certain occasions, while the horns of sacrificial animals and other personal gifts to shrines are displayed less as ornaments than as tokens in remembrance of individual devotees.

The artistic genius of the Newārs is best revealed in the ornamental scheme that they have woven around the sacred structure, for the lapidary care that they have traditionally given to the craft of bronze sculpture has been given equally to the fashioning of temple ornament. Attention to fine detail has usually taken precedence over the handling of sculptural mass in Nepalese imagery, but the best of Nepalese sculpture and ornament results as both elements are stressed equally. Much of the ornament is indeed

veil-like—thin sheets of metal that are hammered and then applied to underlying areas of carved wood, perforated metal borders of such airy lightness that they seem to melt in the sun's rays—but some ornamental additions to the shrines are of much greater impact in space. The heads of lions and dragons jut forth from cornices; dragons rear up in monumental size from roofs high above the streets; immovable figures of men and beasts stand as guardians in stone or metal beside temple entrances and stairways.

The most important carvings of all are those that are applied to struts supporting the temple roofs, for these represent the gods themselves. The finest of such carvings, like the nearly life-size images attached to the large shrine of Indreśvara Mahādeva in Panauti, are figures of swelling mass and "breath-filled" forms as fine as any in Indian sculpture. They are delineated and vitalized in their sensuality by carved jewelry and naturalistic garments of much detail. In the totality of Nepalese architecture, ornament is a veil that reveals.

Although much decoration is clearly additive, being hung onto the exterior of the temple, most ornament is integral with the structural parts of the building. Functional ornament includes that which is carved onto the struts, the imagery of door and window frames, moulded bricks of the base and walls, and other elements of design. Few wooden parts of the basic structure are left undecorated, and certain parts of the frame seem to exist for a combination of structural and decorative reasons. The extensions of the door frame at the lintel and threshold, for example, strengthen the brick walls above them and firmly anchor the wooden frame into the surrounding wall, but they also provide a prominent field for religious carvings that are, on temples at least, indispensable. Cornices at the base of struts, panels at the base of doors, the doors themselves, window screens and shutters, ceiling beams that penetrate walls to become visible at the exterior—all are functional elements of the temple structure that become important decorative parts as well.

The symbolism from which nearly every decorative motif is derived is that of Tāntric Hinduism and Buddhism, with the religious significance of visual elements in temple design to be discussed in succeeding pages. The reference of certain motifs may be touched upon here, however, as the puzzle of iconography that the temple displays begins to be pieced together. Exemplary temples will be named as each ornamental category is discussed,

but most motifs are widely distributed in Kathmandu Valley and often outside as well. Once again the pagoda will be discussed in terms of its structural division into base, walls, and roof.

A. The base

As the ornamental aspects of the temple plinth or base have already been mentioned, it remains to be pointed out that the pavement itself is not decorated, except in a very few examples. The floor of the interior of Paśupatinātha Mandir is the most noteworthy of these, for it is covered with marble that is inlaid with gold coins.² The courtyards of many shrines bear inset lotus flowers of stone or metal. Such flowers are not simply decorative since they, like the sculptures and emblems that are set up in profuse number atop pedestals in temple precincts, function as auspicious or protective symbols.

Decorative bricks and guardian beasts are part of the temple base complex. As has been pointed out, the bricks of bases and walls may take on the same forms in decorative rows that are found in wooden cornice carvings. Animals and other attendants are mounted hierarchically according to their relative physical or religious power beside the stairways of some temples, such as Nyātapola Mandir and the stone sikhara that stands beside the 55-windowed hall in Bhaktapur. Among such attendants may be found representations of humans who were known for their extraordinary strength, such as the wrestlers Jai Mal and Patta who may be seen as colossal stone figures before the entrance of Dattatrāya Mandir in Bhaktapur. More common at the stairways and usually located at the highest plinth levels are minor deities of power greater than that of beasts or men. These include Simhini and Vyangini who guard the top of the long and multi-figured stairway approach to Nyātapola Mandir. These deities and beasts differ from those that are placed atop the high pillars, called stambhas, before temples. The stairway figures are chosen for their ability to guard the temple and its approaches from the evil impulses of both spirits and men. They are, therefore, less like the pillar-mounted figures, who are most often shown in ritual poses of devotion as vehicles or attendants of the gods, or temple donors, than like the lions or dragons which commonly stand at temple doorways as protectors.

The Newārī sculpture has always excelled in the representation of the ferocious deities of Tantrism, deities who, in their terrible power, are often chosen for representation at temple exteriors. When detached from the immediate enclosure of the sacred buildings, such guardians are nearly always made of stone, but some small figures in bronze are found in niches beside the outer entrances to temple compounds. Among these is a small figure in metal repoussé, representing Bhairava, at the courtyard entrance to a small school and shrine east of Bagh Bhairava in Kirtipur.³ More common than guardian figures in stone or metal are fierce wooden masks, also protective images, that are found just inside the porches of Buddhist vihāras. Neither these nor the figures set into niches are properly part of the temple base, although their function is the same as that of guardians that stand at the plinth.

B. The walls

The walls of many temples are painted red, with yellow paint added to pick out the mortar lines between bricks or even to create the illusion of mortar where none is present. Some walls are plastered over entirely, a practice that has been confined in temple architecture mainly to the buildings in the Hanumat Dhoka square of Kathmandu, from which the plaster has recently been removed. Frescoes and other paintings are very colorful additions to the walls which were once a very important part of the temple scheme, but very few have survived to the present day. Ceramic tiles have been added to temple walls both inside and out in a practice that presumably got its start during the period of Rana rule, with its indiscriminate importation of European materials and styles in art. Ornaments attached directly to the brick walls are few.4 Brick walls in Nepalese design remain important beyond their structural function mainly as the warmly colored but unobtrusive matrix into which decorative and structural elements of wood are set.

1. Doors, door frames, and toranas

The domestic doorway as already described is not complex structurally and it does not bear a great deal of decorative carving or painting. Floral motifs are most commonly seen as part of house design, while the images on paper that are applied to the door at festival time are not of artistic interest. Plaster panels are sometimes attached to the walls around the doors of houses or their courtyard entrances as a kind of extra frame of rectangular outline and these are painted with birds, flowers, and some religious symbols, but in all cases the designs are simple and executed with

limited care. The large eyes that are often painted upon the panels of the door itself are interpreted as the all-seeing eyes of Adibuddha in a Buddhist context and the eyes of Siva among Hindus. They have the power to deflect and nullify any evil eye that might be cast upon edifices either sacred or secular. A most remarkable feature of Nepalese stūpa architecture, as well as that of Tibet and Mongolia, these same symbols are painted upon the four sides of the harmika or base of the umbrella spire of the stūpa.

All decorative motifs that are applied to houses are found on the exteriors of temples as well, but the reverse is not true. Like most decorated parts of the temple, the door frames of temples are much more elaborately carved than those of houses, and of much greater variety. As gateway to the garbha grha or womb house, the doorway is a passage of transformation between the profane, mundane world that surrounds the shrine and the holy space of the inner sanctum that is animated by the divine presence within it. The pilgrim too is transformed as he approaches the sacred portel, but he is often restricted from passing through it. He may entrust the performance of his sacred duties to a priest who carries out the necessary rituals on the pilgrim's behalf. The doorway takes on additional importance, therefore, as the farthest point to which the average devotee may advance.

The doorway is marked at the top by a semi-circular tympanum of wood, the torana, that is attached to the temple at the level of the cornice or the window frame behind it but is not set into the brick walls. This object, resembling a flattened and up-ended canopy, projects from the façade of the building at an angle, slightly overshadowing the door. It is a separate object quite different from other parts of the door frame. Its base rests upon the cornice projection of the lintel above the door, and it is usually attached to the wall behind it by a chain or rope. The name of the torana in Nepal is taken from that of gateway lintels in ancient Indian architecture, such as those that are part of the vedika railing that surrounds the great stupa at Senchi, and its form is related to those of countless arched coverings over doors and windows that still survive in India, occasionally influencing the patterns of modern architecture. The torana is an important part of the Nepalese temple, as is the fronton of the Khmer temple, and the sacred structures of Nepal and Cambodia are, of course, related through their common dependence upon Indian models.

The torana is always covered with carving or with repoussé metal mounted upon a wooden base. Its subject matter is entirely religious and of complex reference even when the forms themselves are simple. The pattern of the torana is stylistically consistent whether it is attached to a Hindu or Buddhist shrine, with the main deity to whom the particular temple is dedicated usually represented at its center. The torana may be set up singly over the main door of a shrine, or its form may be added to all the doors and windows of a shrine and multiplied as part of compound doors, multiple windows, and colonnades. It varies in size from small objects about 12 inches long that are placed over niches to major door coverings more than six feet wide at the base. Very large toranas are produced as many boards are stacked horizontally and braced and attached to each other at the back, but small toranas are often carved from a single plank of wood.

The internal designs of the objects are often very elaborate, although certain patterns recur again and again. General themes are usually those of Indian temple ornament of the medieval period and before, so that literary sources of that period which deal with the subject of architecture are invaluable to the interpretation of Nepalese design. Ornamental additions to the Nepalese temple are usually fewer in number than those of Indian temple architecture in its fullest development, and the viewer is less overwhelmed by ornament as he confronts the pagoda than stone sikharas of medieval origin in India. The Nepalese scheme of symbolic decoration is more clear-cut and defined, more economical, but of equally fine craftsmanship as compared to its Indian counterpart. It is a lavish scheme but it never reached Indian magnitude in its scale or multiplication of parts.

The shape of the semi-circular torana is perhaps derived from ancient wooden prototypes in India, wherein windows and gateways or doors were bent toward each other and tied at their junction to form an arch. A "tie-rod" connected the poles at the bottom, possibly reflected in later times in the base of the Nepalese torana. The torana in India is usually a false window, containing an image or symbol. The situation of a major image in the center of the Nepalese torana suggests that this object may also be a symbolic window, although its form is very unlike that of true windows in Nepal. The central figure of the torana is nearly always that of the deity who is enshrined within the temple, and the torana is thus a "window" into the sacred center of the shrine. Such a

fronton might be expected in a culture whose devotees must be content, in most cases, with viewing the temple from its exterior only.

In many respects the torana remains close to its Indian origins and models, especially in having the Face of Glory or Kirttimukha at its apex, makaras or water monsters at its base, and naga snakes in various locations in association with the Kirttimukha. These are in fact the only elements essential to the torana design except for the central figure and the "curls of breath" that are exhaled by the Kirttimukha as foam, curls, wings or flames to become the outer border of the torana. In Nepal the Kirttimukha is often replaced by Garuda, and this bird-man deity, like the fierce mask replaced by it, grasps and conquers writhing snakes and nagas that are themselves prominent in the torana design. As in the Kālamakara pattern of India, makaras are nearly always present at the base of the toraņa, facing outward. In Indian examples Kīrttimukha appears as Simhamukha, the head of the lion or solar animal, and the makara as Capricorn, the gate of the gods and their way of ascent. The jaws of the makara are ways both of exit and entrance, with figures alternately proceeding from and being swallowed by them. Not all four of the "essential" symbols—central figure, makaras, nāgas, and Garuḍa or Kīrttimukha—are always present in a single torana, but a great many additional symbols may be. These extra symbols or images are added either as embroidery upon the basic decorative design of the torana or, more likely, to more fully express the universal pantheon attendant to the main deity. At Pi Bahāl⁷ in Kathmandu, the main torana includes carved images of 32 figures other than the Padmapāni image that is central and of largest size within the complex. These are the avarana devata, secondary deities around the main god. The figures are arranged in horizontal rows, each deity or guardian within his own aureole, and a border of flames meets a base of lotus petals to encompass the whole. Such a compound iconographic arrangement is rare in Nepal although the rule in Tibet, and at Pi Bahāl the dynamic quality of the individual images keeps the whole from being static

A quite different effect results at the shrine of Indrayani on the Visnumati River in Kathmandu where there is another torana holding many figures. A number of deities on this torana, also symmetrically arranged, appear electrically charged. This is not because of anything suggested by their own fairly subdued postures

and expressions, but rather by their surroundings. The nāgas above them, the makaras beside them, and the floral setting that contains them writhe and twist wildly all over the frame. The curling ribbons of the parasol at the apex, through which this movement spills out of the contents of the frame, capture and freeze this movement that assaults and nearly confuses the eye. Only the parasol itself, and to some extent the seven orderly arranged halos of the gods, bring some solidity to the whole. At this site the tympanum is one of the least "solid" parts of the temple, the field for the most unrestrained in artistic embellishment.

Symmetry is maintained no matter how many extra figures or ornamental details are brought to the torana, but floral motifs, as the least likely to be rigid or geometric, do much to bring freedom and movement to the compositional whole. Vegetal forms may fill the oddest background space or the most irregular border area easily, but on the older of two toranas at the front of Bagh Bhairava temple in Kirtipur they define and organize the overall composition. Leaves and vines encircle and interconnect eighteen figures that are attendant to the central grouping of deities. The vegetal forms are harmonious with the curved bodies of the makaras and dragons of the lower torana as with the entwined bodies of the nāgas shown in their male and female manifestations at the center. An arched composition containing many figures is thus formed without lining up a number of images in parallel rows like a map of the pantheon of Bhairava. The newer of the two toranas, dated Nepal Samvat 791 (1671 A.D.) is much less unified in design with the parts of its composition more obvious than the whole. This is a common problem in repoussé-covered toranas which must be made in sections, although a skilled craftsman can blend the separate parts together. The metal torana of Hiranya Varna Mahāvihāra in Patan is, for example, a totally integrated form.

The toraṇa of Yatkha Bahāl in Kathmandu is of such unusual form and possibly of such importance in its attachment to one of Kathmandu's oldest shrines, that it must be considered separately. This wooden toraṇa is elongated or stretched out over the lintel of the vihāra shrine door, with a large spiral of vegetation curling outward at each end in place of the makaras that are usually found in that position. The makaras instead turn inward, vomiting forth a vegetal branch that forms the upper arch of the toraṇa. This branch is in turn bitten off by a very large monster mask at its center, the Kīrttimukha. The ferocious being has horns longer than most, and

wears an odd crown or pedestal above its head that was perhaps a kind of lotus base for some object or image that is now lost. The beast is without arms, and therefore probably related in origin to the traditional Kirttimukha of India. A similar beast in Nepalese art, but with arms and human-like hands that grasp and hold the snake that it bites, it related to the chimidra (chi-mi-'dra) of Tibet, a variation upon the monster mask motif that is probably derived from the t'ao t'ieh of China. Within the arch of this toraṇa appears Sākyamuni Buddha preaching to lay-followers in a non-segmented "scene" that is itself remarkable because of its unity. Comparison to early lintels of India and Southeast Asia is called for, especially because pre-Angkorian lintels dating from the 7th century A.D. show a similar positioning of the makara and Kirttimukha or Kāla, based upon borrowings from Java, and ultimately from India.9

Finally, it must be added that the Kirttimukha and the form of the torana in general are anticipated very early in the decorated niches or false openings of small stone caityas or miniature stūpas that are scattered all over the cities of Kathmandu Valley. These were set up as Buddhist monuments by the Licchavis and their successors from the 5th through 8th centuries A.D. The caityas are rarely inscribed, and their ornament and imagery are of direct relation to later Nepalese art. The decoration of these small monuments is confined to architectonic borders and the floral enclosures of niches that once held images. The developed harmikas and chhatrayastis or spires that are attached to many of the caityas appear to be later additions, dating most likely from Malla times.

The doors of the temples are sometimes left quite plain, but one exception among many is the double-door entry to a small shrine located just across the road from Yatkha Bahāl. The all-seeing eyes that are commonly painted or carved on shrine doors are formed at this Hindu monument by pairs of fishes that follow each other to make circles in high relief. They occupy the door panels at their centers, while above them are other circular medallions that suggest the whirling rgyan 'khyil of Tibet, like the yin-yang or tai-chi symbol of China an emblem of the ceaseless change or "becoming" that is life. The fishes imply generation as they rise from the waters, as well as the freedom from restraint that is the boon of the emancipated state of Buddhism wherein no obstacles are encountered. Both of these symbols found in Nepal

are supportive to the general interpretation of the temple doorway in Indian art as a place of transmutation as it must be undergone by man if he is to acquire a celestial body himself; the river. symbolized by the river-goddesses Gangā and Yamunā, is the means by which man is cleansed of all the impurities of his human state. Small figures of the goddesses often grace the lower sections of the door jambs in Nepal as in India, and the multiple frames seem to imply an ocean of existence in which the vitality of life—in open blooms and garlanded bells upon the lower panels—alternates with the spectre of destruction expressed in rows of death's heads. The correlation of decorative motifs with water cosmology. in Nepal should not be overstressed, for many door frames, as at Musya Bahāl in Kathmandu, also show non-aquatic symbols like the sacred flame and endless knot. Finally, most decoration of the extended door frame in Nepal is of architectonic form—a multiplication of sills, ledges, and beams, all of which are nonfunctional—so that only rarely are doorways found in Nepal that are covered over with the vegetal motifs essential to the Indian theme of the descent of the Ganges, of Sakti, and of the ascent of life that; competes for its heavenly origin in the creepers that ramble upward in the "branches" of the frame. The frame as a whole and the doors as well may be covered over with thin sheets of brass or even with precious metals. 10

The most typical addition to the door frame in ancient and medieval shrines of India are guardian beings. Found at the bottom of door frames in Nepal, these figures often occupy their own rectilinear frames which may or may not be of "telescoping" type. They function on behalf of the deity enshrined in the garbha grha and represented at the center of the lintel, as in India. They often take on the terrific form of the main god, like Mahākala who guards the shrines of his master and essence, Siva. As dvārapālas or guardian demi-gods, they hold in their hands weapons that are recognizable as belonging to the deity or deities being defended. Time and Death are among the guardians because of their role in the cycle of rebirth. The guardians may be found in other positions than that beside the door, including at the strut level where they may be major elements in the total scheme of imagery, but whatever their location or size, they are always among the most emotionally expressive of sculptures.

The lower part of the lintel of the door is usually of dentil form, but each dentil section follows a trapezoidal form that is

fairly unusual in South Asian art. Each of these may be carved with the likeness of a deity or sacred symbol, or they may all be left quite plain except for the central dentil, which should hold a likeness of the deity to whom the temple is dedicated. Above this, the upper portion of the lintel is of compressed and multiplied architectural form to be discussed in later sections together with the mandala plan. This portion of the complex lintel is often continuous with the main cornice that passes around the entire building.

The doors are frequently filled with perforated screens of wood in a variety of patterns, but they may be covered over with embossed metal or even left quite plain without even a peephole in each. The openings are usually rectangular in form, but some doors have curved arches, like that of Vajra Yoginī in Sankhu, especially if they are part of a complex of several openings. Their extended lintels are likely to present the images of deities in temple design, whereas in domestic architecture their patterns are floral or have dragon forms. Prayer wheels are sometimes set into the carved extensions of lintels on Buddhist shrines, as at Itum Bahāl in Kathmandu, but this element is not typical. A special prayer wheel railing is usually constructed to hold these objects of prayer and meditation.

Ledges used to block door openings may be quite high, as a Musya Bahāl, and the wood of which they are made may be plain, carved, or covered over with metal. The threshold below the high ledge is usually plain—a single raised step often flanked by lions—but at Dnu (Do) Bahāl in Patan the threshold is ornamented with bronze images of high quality. These forms in high relief, cast rather than pounded out, present the combined sacred symbols of Buddhism at their center with attendant dragons and elephants at the sides. This elaborate threshold is not the only unusual figure of the door complex at the small Buddhist shrine, for small figures of donors to the temple face forward at the top of the threshold on either side of raised lotus flowers that are used as lamps. A more typical variation upon general patterns is the placement of Buddhist disciples rather than lions or other guards beside the entrance.

The most unusual part of the temple door frame and the most difficult to interpret are the "wings" of wood that extend from the frame half-way up its height on either side of the opening to penetrate the brick wall. Usually of curvilinear outline but

sometimes triangular, the wings are not structurally necessary, nor do they seem to be natural outgrowths of the basic door frame or even of the overall decorative scheme. They are not found on domestic or palace buildings and even many temples, especially shrines that are primarily of Buddhist orientation, lack these extensions of the door frame. They bear a considerable amount of carving, often with winged makaras at their lower end. From the mouths of these water beasts emerge the figures of deities, especially goddesses. Their bodies are twisted unnaturally in many representations, and the females are among the most seductive in Nepalese art. It has been suggested that they correspond to the yakṣī or dryad figures that support the toraṇas of gateways in India as early as the 1st century B.C., most notably at the great stūpa of Sanchi. Such devatas or divine attendants are the main subject of door extension carvings, but important deities like Durga Mahisāsura-mardinī may also be shown. Because the makaras belong to the water cosmology of creation, they are a proper part of the doorway complex whatever deities are associated with them. Their tails end in flamboyant curls of vegetation that fill large parts of the wing.

The shape of the extension is more puzzling than its decoration. At first glance, its shape suggests that of the flag or banner that is common in Nepalese art, but further examination proves that its form is often quite different. In many examples it is not even a "wing," for its upper end may join the extension of the lintel above it, coming to enclose an additional image in the intervening space between the extension and inner door frame. The wing in general is different in form from any other element in the temple scheme, seeming to belong to the whole only in terms of its decoration, yet it is found throughout pagoda architecture. Accepted without interpretation by devotees and priests who take it as a traditional part of temple design, the wing of the door frame is of beginnings that are now lost, but a clue to its origin may be uncovered through investigation of the mandala in temple design.

2. Niches

There is no need to consider niches alone in great detail for these additions to the temple wall relate very closely in form to those of doors and windows. Because of its small size—usually about 2 feet in height by $1\frac{1}{2}$ feet in width—the niche only rarely has

extended beams at its lintel and sill to anchor it into the brick wall. It reveals in its carving, however, the multiplied architectural parts that characterize the frames of larger openings and it often possesses its own torana that is carved in the usual way and mounted so as to slant forward from the wall. An interesting addition that is given to niches and small windows only is a kind of reverse torana, an extra half-circle of wood that is mounted below the silf. This resembles in form and placement below an opening or "entrance" the moonstone threshold of early temples in Ceylon, and its carved design is not that of the *toraṇa*. At the shrine of Balakaumārī in Patan this half-circular lip, carved upon a brick rather than a block of wood, holds entwined flowers and leaves at its center with several decorative borders leading to an outer enclosure that resembles the border of "foam" or flame that encompasses the torana. It is as if the extending step or base of the niche as a false entry had been laid down flat against the shrine wall. The frame of the niche as a whole is nearly as variable in form as that of the window, with small frames in the side wall of Harisiddhi Mandir in the village of that name, for example, being carved into the shape of lotus blossoms with the opening of the niche contained within their petals.

The niche exists to hold an image or symbol and this object is frequently representative of the deity to whom the temple is dedicated. The very origin of its inclusion in the temple plan may, in fact, be due to the need to erect cult images at each of the cardinal points of early wooden temples, to which niches were added axially. From such early niches are derived the rathas or pagas as vertical recesses or salients in the walls of India's sikharas, according to Andreas Volwahsen. The niche may also contain images of lesser gods attendant to the main deity, or fierce guardians. The images are usually of wood or stone, although they are sometimes made of bronze or gilt-copper. Like the windows, the niches may be interpreted as symbolic perforations that pierce the walls of the sacred enclosure to allow the radiance of its divine inner light to burst forth, so that the glittering building is not just a reflector but a producer of brilliance, a divine lantern lit by its sacred spirit.

Through holding their images the function of the niches, as very minor parts of the structural whole, is to re-emphasize the symbolic reference of the temple scheme and to provide extra objects of veneration at the lower level of the building, where they

may easily be approached by devotees. At upper levels, niches display the attendants of the main deity, especially beside central windows that often hold carvings or metal images of the main god himself or open into the holy space that is his inner shrine. Images of the lower level walls are sprinkled with small offerings by worshippers, but they are never major objects of veneration, except for one important image in Bhaktapur.

The temple of Bhairavanātha in Bhaktapur, located beside Nyatapola Mandir in a large square just below that of the palace, is of unique plan and organization. Its main entrance, in fact its only entrance, is located at the back of the temple. The door opens there upon a very confined courtyard and the path of approach to this small space is obscured by a number of small buildings. From the large square the front of the temple at first appears to have an entrance at the center of the ground floor façade, just where the temple door is located at the very similar shrine of Bagh Bhairava in Kirtipur, but the triple doorway that exists there is completely sealed. It has never opened. Instead of a functional opening there is only a small hole through which oblations flow. Before this is a very small niche that is enclosed by seven inner door frames, a niche upon which the composition of the entire façade is focussed. It contains a tiny bronze image of Bhairava, only five inches high.

Since most worshippers are not allowed to enter the main shrine of Bhairavanātha, which is located on the second floor of his shrine and reached only through the back entrance, the tiny bronze figure at the ground level is for them the major object of devotion at this temple. Animal sacrifices in great number are offered before the tiny figure and crowds of people come to it to worship every day. It is a startlingly small focal point for a temple compound that is one of the largest shrines in Nepal. The niche occupies the place of a major door opening and is covered over by its own large torana. There is little difference between patterns of ritual worship as they are carried out at this site and before most shrines because devotees are usually stopped from entering the inner spaces by priests or by a high ledge that blocks the door opening, just as they are blocked by the non-functional entrance of Bhairavanātha. In fact, the physical representation of the god is more immediately accessible at Bhairavanātha than elsewhere. The devotee may touch the symbol of the god with his own hands rather than pass his offerings to a priest as intermediary, or toss his gifts into a shadowed interior.

That the temple of Bhairavanātha should attract the attention of worshippers in great numbers who perform without question rituals that keep them clustered at the feet of the shrine where they cannot leave even the pavement of the street seems rather remarkable to the outsider. Such a fact attests to the basic lack of need for interior space in pagoda architecture, especially that which is primarily of Hindu orientation. The sacred image at Bhairava-sātha is a major symbol of the god, even if it is secondary to whatever symbol is enshrined in the upper room. It is part of exterior display and in Nepal exterior display, together with rituals of worship, captures the spirit of devotion as it surrounds and includes the ocean of story that is Nepalese iconography and the Himalayan pantheon of gods.

3. Windows, window frames, and balconies

The setting for the holy image at Bhairavanātha is not actually a niche for there is an opening behind it, while a small "window" of wood from which peers the face of Narasimha at Viṣṇu Maṇdir in Chapagaon is not properly a window since it is closed. The window and the niche are interchangeable, but the semi-circular "base" remains a differentiating feature since it is usually applied to niches and not windows.

The individual temple window is the same in form as its domestic counterpart but it is more decorative. It may, like temple doors, have "wings" attached to its jambs and these may hold figures of gods and apsarases. They are also carved with kumsalas or leogryphs and in this respect they are different from temple door frame attachments. The kumsala is shown in profile and is much better adapted in form to the extensions than are the females which are shown frontally and twisted to fit the wings.¹² The angular extensions of the base that hold guardian figures on temple doors is found at the base of windows as well, but they are more likely to be decorated with flowers than carved with guardians. This is perhaps because the windows are not "entrances" in need of protection.

The window itself may open upon the image of the main god, as in the famous window of Siva and Pārvatī in the second floor of their temple in the palace square of Kathmandu. The image of a deity looking out of his temple directly upon his subjects is meant to be awesome, but the god may appear somewhat informal in this setting. To the outsider, the result may even be comical.¹³

The window is enclosed by many frames within frames and its

lintel is of multiple parts like that of the doors. It may have a torana mounted upon it and slanting toward the ground below, but this is not a necessity. When it contains an image, the opening is likely to have a tripartite arch. Doors and charm boxes may have this kind of opening as well, and it is a common feature of Tibetan art. A window in the courtyard of the resthouse below the old palace of Gorkhā is an especially fine example of this kind of window.

Except for tripartite windows, those holding sacred images, and those rare windows upon which sacred emblems are carved in large size, domestic architecture has all the same window types as are found attached to temples. The styles of window carving are of such variety that it is difficult to compartmentalize them for study. The most general categories consist of single windows, single windows with balconies, compound windows, and compound windows with balconies. There are no major changes in the window design as it is attached to a balcony, however, and the single windowed balcony is very rare indeed. As the part of Nepalese architecture that has received the most attention by outsiders and as the element that preserves the best in South Asian wood carving traditions, the window deserves special attention.

The basic frame of the single window has already been described, but variations upon this form are endless. The outer frame may or may not have wings attached to it, and if these are present they may be large and flag-shaped or they may be barely protruding curves. The extensions may hold semi-anthropomorphic nāgas, twisting dragons, or even attendant deities in stiffly frontal poses. The lintel of the frame is commonly of dentil type but it may hold a nailhead border of three-dimensional diamond cuts. It may be of multiple lintel type or it may be quite plain. The ledge below is sometimes carved to include the nearly free-standing figures of Sūrya and his team of solar horses, or it may take the form of a kind of false balcony adorned with peacocks, snakes, and dragons. It may be screened, and it may have the semi-circular base that is usually restricted to niches. More important than any of these variables, however, is the shape of the window opening for this sets the theme for and determines the design impact of the window. The theme is complex and difficult to define. Whereas the design and iconography of the door frame reveals a theme of water cosmology in its iconography and multiplied rectilinear forms in its physical shape, the window is much more the field for the personal inventiveness of the artist. Its

symbolic carvings are in a general way auspicious—treating the peacocks, nāgas, horses, lotus flowers, and vajra thunderbolts—but the representation of major gods is very rarely part of its scheme. Certainly it, too, is of multiple architectural parts in its design, but its frame ranges in outline from the most severely rectilinear to the most curvilinear and "baroque," so that a basic model of its form cannot be given. Even the wooden screening, which at times suggests a mathematical model of geometric plan as dependable as that discerned in the screens of stone or wood that are part of Islamic architecture in India, may sometimes appear to follow a burst of imagination on the part of a craftsman which is never repeated. Variation from the simple rectangle of plain domestic architecture is the measure of the carved window of quality, and it is not the need for better illumination, protection from cold or rain. or preservation of privacy that leads the Newārī artist to experiment with window design. Rather, it is love for skillful carving and fine detail that draws a selective and intriguing veil of ornament across the temple. In window design more than in any other aspect of temple art symbolic reference is less important than decorative pattern. Horror vacui does not result; the windows are highlights.

The single window opening may be square, rectangular, arched, oval, or round in shape and, as noted, it may be shuttered, open, curtained, barred, or screened. If covered with a screen of carved wood its opening may be filled with squares, sunbursts, stars, diamonds, circles. The patterns in the sections of the screen usually result less from the way in which the lattices are put down, as at the temple of Chamunda in Patan where a sunburst of wooden slats reaches out from the small central image of a deity like the spokes of a wheel, than from the way in which they are carved. By the action of the carver's knife, the squared lattices of a dwelling window behind Nhu Bahāl in Kathmandu become the most curvilinear of entwined snakes that are harmonious in form with those that are carved upon the wings of the frame. The horizontal and vertical parts of a window screen belonging to a dwelling north of Hiranya Varna Mahavihara are broken down into a series of circles by the carver, while stars formed by intersecting triangles fill a window near Hakhu Bahāl in Patan. Rosettes cover the screens of houses near Maru Hiti in Kathmandu and across from Jaibhageśvarī Mandir in Devapatan, showing how the window screen, which is decorative even in the pattern of unadorned squares and diamonds that results as lattices are put

down in rows horizontal, vertical, and diagonal within the frame, may become one of the most ornamental parts of domestic and sacred architecture. The window as a whole is the only part of the domestic structure which may properly be as elaborately decorated as that of the temple. Some windows, such as the peacock windows of the Pujari Matha, monastery dwelling beside Dattatrāya Mandir, are well-known through publication abroad.¹⁴

Leogryphs, nāgas, lions, apsarases, and pūrna kalasa symbols are part of a dwelling window located near the Kṛṣṇa temple of Kathmandu's palace square and the figure of a deity may be seen upon its lintel as upon that of a temple door; a tiny Garuda image takes up this position upon a window of especially serpentine form on the porch of a pagoda of Siva at Pachali, as on both lintel and sill of a window in the southern courtyard of the old palace of Kathmandu; its carvings close in symbolism to those of the standard torana, a uniquely framed window in the courtyard of the Siva pagoda at Pachali holds in a triangular extension of its upper border a full-size monster mask, the chimidra. Yet all of these windows are more important for their decorative impact than for their iconographical meaning. No devotee sprinkles offerings upon them. The structural parts of the window enclosures may be so fantasized in their exaggerated multiplicity as to become a vibrating, almost visionary frame for the window opening. This quality of the window carving, echoed in its finely rendered borders and decorative screens, makes of the Nepalese window an object of incredible delicacy. It might be taken as the symbol of artistic inventiveness in Nepal, a creation without prototype.

The single window that is brought forward from the wall to become a shallow balcony has the added impact of three-dimensionality, but its decorative form remains unchanged. Such windows are rare, presumably because their protrusion is so slight that they are of little functional use, but a fine example of a central window protruding from a grouping of three to take on its own roof and form its own balcony is found at the side of Ekalakhu Tol in Patan.

Compound windows preserve all of the decorative qualities of single windows and certain refinements are added to them. Like the single window, the multiple opening may jut forth to form a balcony. Since this changes its decorative aspect not at all, the two kinds of windows may be considered together. The compound window, usually having three openings but sometimes as many as

five, is often associated with single windows in an overall complex that makes of an entire wall a composition of rhythm and balance greater than that of ordinary fenestration. A mere string of windows is far less than the integrated grouping that is conceived of and carved as a single entity.

All of the shapes given to single window openings are found in compound windows as well, with visual interest increased as they are used in combination. The size of the guardian or attendant figures found at the base of the window jambs is increased because this, osition becomes more prominent as it lies between adjoining windows. The figures carved here both join and separate the parts of the whole and they represent Garuda, the peacock, winged leogryphs, deities, and, occasionally, erotic scenes. The images of deities and erotic subjects are usually restricted to sacred structures, but a few dwellings have them as well. Balconies are frequently attached to temples and are part of all vihāras, and in such placement their screening itself may be of increased significance. Crossed vajras or thunderbolts form a screen at Musya Bahāl in Kathmandu, for example, and a hanging border of wooden pendants frequently sets the sacred balcony apart from its domestic counterpart, as at this shrine. The lower parts of many balconies and some windows are marked by a kind of garland that appears either floral or serpentine in form. These may relate to the half-circular bases attached to niches but they usually contain no carvings separate from the screens over which they are carved. The garland is possibly merely decorative, but it may have Garuda applied to it or it may be formed by the twin bodies of a pair of nāgas.

A more puzzling addition to window compounds and balconies are nearly free-standing haloes or decorated arches that project from the upper frame over the window openings. They may relate to toranas in that they support parasols and small carvings of deities at their apexes, but they seem to be more clearly ornamental than symbolic. They are covered with three-dimensional foliage that is as dramatically decorative as it is non-architectural. These additions are found as part of palace or dwelling windows, and the openings over which they are mounted are usually arched but may be rectangular. The form of the halo may itself have been derived from window openings, especially those with 3-part or 5-part arches. When the haloes are seen as part of complexes like that of the eastern wall of the the Mulcoka courtyard of Hanumat Dhoka

or that attached to a school wall fifty yards east of Chikanmugal in Kathmandu, they are almost ephemeral in appearance; they are lacy additions floating upon the face of solid frames. They share this illusion of lightness only with the hanging fringe of pendants that is an equally non-structural addition to the window complex.

The opposite extreme in window and balcony ornamentation. of severely rectangular scheme unbroken by any but the most modest curvilinear elements, is represented by a dwelling balcony near Musya Bahāl. The geometric plainness of this balcony is in utter contrast to the extreme decorativeness of the facade of the private temple with its elaborate balcony beside Yatkha Bahāl in Kathmandu. The balcony has at its center a tripartite arched window and this is flanked by two openings with curvilinear, five-part arches. Each opening has a floral halo carved above it and the slanting verticals of the balcony present many-armed deities like those carved upon roof struts. Architectural bases of multiplied parts underlie these figures and these in turn are supported by a screened section of the base upon which are represented leogryphs, snakes, and deities. The lower border of the base is formed by forty-six birds that face forward in high relief, and the same motif appears as a sill for each of the window openings. The slanting sides of the balcony are framed by columns like those of temple door frames and the upper beam of the balcony is similar in shape to the lintels of shrine doors. The balcony rests upon beams that protrude from the temple interior and short struts below the overhang provide further support. These are carved with gods and kumsalas. In total, the balcony is the main decorative field of this temple and it is more symbolic in its carving than most because of the presence upon it of proper temple struts holding major deities.

The variety of window and balcony design is better examined in photographs than through description, so that concluding remarks about the subject will be based upon a single domestic complex, that of 14/42 Tengal Tol, Baidi Chok, Kathmandu. One approaches the courtyard entrance of this house, the most elaborately decorated in this part of Kathmandu, by way of the street that leads north to Yatkha Bahāl from behind the octagonal Kṛṣṇa temple in the Hanumat Dhoka square. Only a single balcony of better than average carving is noticeable on the exterior side of the building and one enters the courtyard through an ordinary door,

but the large open space within is not at all ordinary. The best of Nepalese domestic decoration is found within the courtyard and all around it, and this domestic complex is typical of the high standards attained by wood carvers in the valley of Kathmandu.

The courtyard has domestic quarters on all four sides, the center space being used for washing and drying clothes as well as for drawing water and keeping poultry. All of the building's walls are four storeys high but the top floor is in part a recent addition or reconstruction that is incongruous within the whole except that it is made of brick. The walls are crumbling and some window frames are falling away, but the perfection of the original structure may still be imagined. It is not lavishly decorated in comparison to sacred enclosures like that within Kaumārī Bahāl, the home of the living goddess, but it is a practical living space in which clean planes of brick alternate dramatically with wooden areas of intense decoration at door and window. The enclosure is of balanced design and decoration, a place for living with life as well as with art.

The western wall of the court, the first visible as one enters from the street, holds six single windows with arched frames and two compound windows. The upper of these large windows occupies the fourth floor and is an unremarkable row of arched and screened openings separated by columns attached to the frame. Below this, however, is a very ornate balcony with slanting walls that rests upon a rectangular window grouping covered with equally fine carving. Both of these compounds have tripartite, arched openings. The upper compound is unusual as part of a domestic structure for it has four deities carved upon it in the position of struts. They are not multi-armed but they are nearly as large as the divine images mounted upon the Augadaya temple balcony. A colonnade fills the center of the lower storey on all four sides of the court, and only the eastern or entrance side, which has three single windows at the second floor level, is fairly subdued in its degree of decoration. The individual windows of this wall are classic examples of their type nevertheless.

Variation upon classic themes is most interesting in the windows of this courtyard. A small window on the northern side presents a lintel of geometric motifs that blends with and is repeated in an upper lintel of moulded bricks. This is a common feature of window design, but very unusual is the window's screening, which consists of fifty small peacocks set in eleven rows.

Very little light enters the house through the small perforations that exist between the birds, but the unscreened windows of the same wall probably provide enough light to illuminate the interior. All windows of a single level are interconnected visually by string courses of moulded bricks in floral patterns and wooden cornices or string courses that pass all around the courtyard. A second cornice with moulded bricks defines the division between the second and third storeys, as between the first and second, and the walls are, therefore, effectively subdivided into three zones by their horizontal elements.

In detail the carvings of Tengal Tol are as rich as those of any sacred courtyard. The compound window of the western wall may be said to represent the best in Nepalese design. Its overall texture of delicate porosity is broken down into row upon row of finely rendered decorative motifs, punctuated at regular intervals by images of deities and larger guardian figures. Dozens of sacred symbols and semi-divine beings are brought together in a web of decoration, but that web never becomes tangled. There is complexity in the whole but absolute clarity in the parts. Each element in the design, each border, each section of the screen stands alone in absolute definition but at the same time blends perfectly with the whole.

The parts that make up the carved area of only one broad section, that between the top of the second floor window openings and the screened base of the third floor windows, provide sufficient evidence to show that the window frame is a summary of traditional decorative schemes in Nepal. From the lotus flower and leaves that fill the corner of the right window, with its tripartite arch crowned at the apex by a tiny seated deity, the frame extends in a cornice marked at the edge by a capital of two lintels multiplied five times. The ends of each lintel part turn up like roof curves or like the extended beam ends of larger cornices. They are marked by the deep shadows that underlie them as among the more protruding parts of the frame. Upon this protrusion at the upper corner of the frame stands a monkey, presumably Hanumat, in a very active stance as if he were about to leap from his perch. Lotus petals form a border behind him and upon the lintel of the frame, and above this rise eleven more borders before another sculptural level is reached. These borders include several of floral design, a row of birds, bells, and a miniature version of the extended beam ends that are carved on temple walls to represent beasts and death's heads. A row of rosettes or stylized crossed vajras underlies the rippling body of the nāgas that passes across the balcony as a continuation of the courtyard-encircling cornice between the second and third storeys. Upon this rest praying Garuda images nearly forty in number and each only a few inches high. A second row of birds projects from the wall above the images of Garuda, larger in size than those below. Finally, an architectural border and a second row of flower petals intervene before leogryphs burst forth below slanting walls to mark the base of the upper balcony.

The intricacy of all these borders in carving as well as in patterns of light and shadow makes the window frame appear much lighter than its rather heavy construction with few openings would otherwise warrant. To this lightness of detail is added implied movement, resulting from the projection of the central portion of the balcony further forward than the rest of the compound. Extra corners are turned by border motifs in the middle of what may be seen as three carved levels between the two rows of windows, so that the borders that are formed by bells and foliage, nāgas, and birds come to have extra life and movement. There is, therefore, an active thrust of that part of the carved frame that holds the largest of the "living" border elements. This is perhaps to keep these portions from being too much dominated by still larger beasts that project as attached "struts" beneath the deities of the upper windows. In any case, this illusion of subtle movement serves to increase the impact of carved windows that are both hyperdelicate and forceful in their decoration and form.

4. Cornices and string courses

The windows of Tengal Tol are separated by running string courses as horizontal divisions of powerful thrust that are complemented rather than interrupted by the wavy form of the snakes that are carved upon them. The visual importance of these ledges of wood or wood together with moulded brick has already been discussed, but their symbolic importance must be considered more fully.

The bodies of the sacred nāgas that are present under the ground and in the streams and rivers as divine spirits to be placated and respected circle the dwelling or temple as well. They do so in art as a border motif within the cornice, or as the main form that is carved upon the non-supportive string course. The holy snake is

more than a symbolic boundary of the universe that swirls around the temple. It encircles a shrine at the wall or plinth level to embrace the building and protect it while defining its parts. The wooden border may be carved into a detailed likeness of halfanthropomorphic nāgas in male or female form, or it may be of generally serpentine form without defined head or tail. The snake's body usually projects slightly beyond the plain or lightly decorated borders that touch it, and it is typically of major importance within both cornice and string course designs.

The cornice is much more complicated in organization that is the string course of serpentine form, and it is of structural as well as ornamental significance. It is characteristic of Nepalese temples that the struts supporting the roofs rest upon prominent ledges that pass over the lintels of the doorways or above the architraves of colonnades to encircle the shrines or courtyards in their entirety. These will be examined in detail.

The projecting ledge or cornice is made of wood, but it is usually topped with broad and flat bricks as a kind of "pavement" at the top. This prevents moisture from soaking into the ledge. Both brick and wooden parts of the cornice extend beyond the corner of the temple or shrine, where they cross each other to reach into space as beam ends with upturned edges that resemble the curves placed at the corners of roofs. The underside of such beams are carved into the shape of human forearms with hands that support the beams, palm upward. The cornices are found at the base of struts on all levels of multi-storey temples and on single-storey structures as well. The integration of the human arm attribute into the crossed beams is difficult to explain, but the structural form, at least, relates to those of the internal frame of the temple. Their structural function at the temple exterior is negligible, however, and even the massive crossed beams carved with dragon heads below the ceiling of Kasthamandapa would not seem to better support the structure by extending beyond their joining at the corners. Their use even in the high dark reaches of that great shrine appears to be only decorative.

Visually, the crossed beams of the cornice are among the most important exterior parts of the temple because their upturned curves re-emphasize the curve of the roof corners and bring the silhouette of the shrine body into absolute harmony with that of the roof. This integration is essential to making of the temple a total structure, not just a brick core wearing a tiled cap, and the

extended beams of the cornice are a dominant element in the overall theme of multiplied architectural parts having such curved corners. It is a theme that brings walls, windows, and roofs into a coordinate illusion of vibrating, uplifting movement. The roof curves and extended beam curves are the most prominent conveyors of this movement but the lintels, frames, and columns develop its multiplication to the extreme.

The decorative scheme of the cornice includes many motifs already found in other parts of the temple, but they are part of a whole that in one respect at least is surprising. The cornice is surprising in its similarity to the Corinthian cornice of cyma recta, dentil, ovolo, fascia, and cyma reverse mouldings. All of these parts are found in the Nepalese cornice as well, although in slightly modified form and not always in classical order. While questions of origins will be better dealt with elsewhere, it would be noted that other mouldings, borders, and figures are found in Nepal that are similar to forms in western architecture. These include atlante figures that hold up parts of the building, cable moulding resembling that found in Romanesque Europe, cavetto moulding of quarter circle section, cyma recta mouldings concave above and convex below, and a kind of nailhead border of repeated pyramids similar to an early English motif.

The borders of the typical Nepalese cornice are carved one atop the other in distinctly separate rows. They are generally of low relief, except for dragon and death's head border that is carved upon beam ends that protrude a few inches from the cornice after passing through the temple wall from the interior. The cornice of Chusya Bahāl in Kathmandu may be described as a representative example.

At Chusya Bahāl the cornice begins as a concave border that projects above a plaster panel of the brick wall. This lowest of several borders stretches across the façade in the form of floral loops separated by bells on chains. The loops are double, one within the other, and a sacred Buddhist symbol is carved in the center of each. Above this are two small mouldings of semi-circular section, baguettes in western terminology. A pattern of intersecting triangles follows this, appearing in section rather like a fillet or listel. A second concave border decorated with individual lotus petals is the next higher and a narrow border marked by diagonal lines covers this. A running nāga border is next, and it underlies a zigzag pattern of pyramids deeply indented along their edges by

diamond-shaped cuts. Above this geometric border, the heads of lions and fierce birds protrude five or six inches from the cornice background. These have sacred symbols such as the crossed vaira and lotus flower carved between them. The immediate front of the shrine projects slightly from the greater extension of the wall behind it and at the corners of this projection the guardian beasts of the cornice face out at oblique angles rather than frontally. These two corner beasts support the extended beam ends at their point of crossing, but each beam also has an arm in human shape beneath it. Small "hanging" cylinders form the next cornice border and, after another plain baguette, three final borders of lotus petals and meandering line motifs occur before the final covering of bricks upon the cornice is reached. The bricks are in three levels with the lower two forming a pair of upturned ends. This completes the cornice of a single bahāl and its order is one of hundreds following a general scheme of numerous coordinated borders underlying ledges with extended and upturned beam ends.

The parts of the cornice just examined show a variation from finely detailed floral carvings to sharply geometric cuttings and from engraved markings to cylinders in high relief and strongly projecting sculptures in the round. Representational reliefs alternate with geometric forms and plain inter-spaces, but the varying parts blend, nevertheless, into a consistent total form. Its intricacy never intrudes upon the overall design, but a wealth of detail is there for the observor who wishes to experience it.

5. Columns

The decorative designs that are displayed as a textured plane upon the face of the temple in door, window, cornice, and string course are twisted and projected fully into space as part of the column. Brought into full three-dimensionality, the carvings are even more dynamic in their forms and shadowed depths, for all that projects or recedes upon the wall appears to do so doubly upon the column. This is true even of pilasters that project only slightly from the wall, for corners are turned and circumferences are followed, but when the column is lifted away from the wall its design becomes truly free. The column does not regularly stand alone within temple or house, but the traditional Indian emphasis upon the central post as prime regulator of house-construction is reflected in Nepal, at least in the posts of the central bearing wall and in resthouse design.

The column may be rectilinear, rugged, and powerful like a square pilaster of the outer door frame of Balakaumārī, or it may be graceful, lyrical, and refined like a thin colonnette freed from the wall matrix at the same temple. Whereas the former has a large unmarked block as its core, clasped at top and bottom by daggers of angular vegetation, the latter is covered with diffused floral arabesques for most of its length. At the Nārāyana temple of Balima Tole in Patan a plain lintel above the colonnade and the unmarked lower halves of the columns themselves are dramatically contrasted by the decorative complexity of the upper halves of the columns. Each of these is carved into 24 registers of decorative borders, deeply cut away in horizontal sections so that a staccato silhouette is taken on by the column as a whole. The great weight born by the shafts is belied by the undercutting of the columns and by the weightless dragon forms that float upon their capitals. This contrast of decorative lightness and undecorated mass is typical, and its value within temple design as well as the beauty of its ambivalence is apparent when a building like the Nārāyana temple is compared to a structure having plain columns, such as the poorly repaired shrine of Umā-Maheśvara atop Kirtipur's hill. The temple with undecorated columns, and there are few of these, seems to drive its shafts into the ground with the weight of its roofs. Upturned roof corners are not enough to visually lighten the design of a shrine if its wooden elements are left to speak only in terms of uncut, unmodified mass.

Perhaps the lightest columns in appearance are those that have capitals which meet one another to form smooth and unbroken arches. These are not common, however, and the curved arch is not an indigenous element of Nepalese architecture. At Tengal Tol the three upper storeys of each side of the courtyard enclosure rest upon arched colonnades wherein the upper parts of the columns, the arch frames, and the lintel are completely covered with intricately outlined flowers and leaves. The very delicate colonnade is somehow not quite architecture but it is not simply ornamental gingerbread either. Certainly, the rhythmic procession of parts that constitute the colonnade is pleasing to the eye. The capitals born by the more usual impost block columns normally meet to form a kind of scallop-edges arch as well, but neither these nor the variety of columns that are bridged by toranas are as weightless in appearance as is the arched colonnade of Tengal Tol

The architectonic quality of ornament that is given to the wooden parts of the temple comes to fullest development in the form of the column, with its base and upper portion often divided into numerous miniature lintels with upturned ends. With deeply cut spaces between them, these horizontal sections are defined by their shadows as individual, flat rectangles, a compressed accordion of structural parts. Interjected between them are floral medallions. bell forms, petal borders, and nearly always the stylized pūrna kalaśa that is either pressed down or stretched upward in accordance with its setting upon the column. The eight-sided form often mildly suggested by the central portion of the column between its squared upper and lower sections is sometimes most pronounced in the form of the pūrņa kalaša, with pendants of vegetation marking the eight angles of the jar. The symbol is equally adaptable to the square column, however, and it is often seen as part of columns that are set into the brick walls of porches. Both these and the free-standing column supports sometimes have floral medallions carved upon the flat faces of their shafts just below the upper zone of decoration, whether or not the column is of stop-chamfer type. Lions or Garudas with nagas may adorn them, but in general the column is likely to hold much purely decorative carving. The colonnade of Siva Mandir in Pachali, enclosing a porch around the pagoda shrine, displays the best of Nepalese traditions in carving and is a suitable example with which to conclude this separate consideration of ornamental carving at the wall level. Its thirtythree registers include upon each column lions and flattened pūrņa kalasas, rosettes, and Garudas with spread wings. Above the shafts the capitals are carved not only in relief but also with fully three-dimensional leogryphs that adorn the capitals in rampant pose at their undersides.

6. Flags

Metal flags on poles are part of some temples as they are set up beside entrance doorways. They are auspicious emblems but in themselves they are not revered as are, for example, the symbols of the lotus flower and the conch shell. Their form precisely follows that of flags made of cloth, and they are shaped like the banners of red that are found clustered about the main shrine of the Gorkhā palace. Also like cloth flags, they are frequently attached to the roofs and pinnacles of temples. The banners that are affixed to poles are always double pennants, and the traditional flag having

two points is the model for the national flag of modern Nepal. The modern flag and its counterpart that stands in metal beside the entrance to the temple is marked by the sacred and timeless symbols of sun and moon. The metal flags and their poles are usually about six feet high, with the banner modelled in repoussé.

7. Paintings

The subject of painting upon the walls of temples should occupy many of these pages, and taken together with domestic paintings such works should constitute the subject of a major study. The unfortunate fact, however, is that so few wall paintings remain preserved in Nepal that not even the most general statements may be made regarding their stylistic development or traditional subject matter. Instead, the few paintings that remain must be treated as quite unique works with too little evidence available to establish their chronology. Very late paintings must be considered together with early ones if this discussion of temple art is to be based upon more than a mere handful of examples, even though the late examples often bear little relation to early works in terms of style. In general, the late paintings are more colorful and more crude.

Paintings probably adorned a great many temple exteriors in medieval Nepal and the majority of palace interiors as well, the frescoes within the palace of Bhaktapur being but a tantalizing remnant of a full-blown tradition. The composition of the works probably involved multiple registers with long tales of gods and men unfolded through continuous narrative, as is the case both with the palace paintings of Bhaktapur and the paintings upon the walls of Bagh Bhairava Mandir in Kirtipur. 15 Both complexes of scenes include elaborate processions with many wheeled carts and hosts of royal and divine personages. Also among certain prominent but artistically mediocre paintings of very recent date, such as those of Jaibhageśvarī Mandir in Devapatan, Bhagavatī Mandir in Nala, and Bhagavatī Mandir in Naksal, several works of traditional themes stand out. These offer material for serious study because of their historical or sociological importance, and they will be briefly mentioned here.

A rock on the shore of Gauri Ghat near Pasupatinātha is painted red and bears the facial features and forehead mark of Siva picked out upon it in yellow paint. The wall paintings in question far surpass the crude designs of such markings upon natural stones,

however, and they may once have equalled or even surpassed the fine quality of mural art found elsewhere in the Indian Himalaya. such as the frescoes from the palace of Chamba which are now preserved in the National Museum in New Delhi. Paintings were made upon the palace walls in a technique, now lost, that resembled that of the western fresco. The art of the fresco in India. of course, is of origin earlier than the 5th century A.D. and the great accomplishments of Gupta art at Ajanta, but Tantric beliefs later brought to it the colorful forms of fierce deities. One of these gods, probably Mahākāla, glares at passersby from a much fragmented painting on an outer wall of Bhīmasena Mandir in the Dattatrava square of Bhaktapur. The single figure was many times life size and of frontal stance in its entirety, and it still raises its sword high to threaten all evil or defiling beings and spirits who would approach the holy ground. Its face is boldly formed by many intersecting curves in a quite abstract way, and these curves must have continued as jewelry forms to wind over and define the monster's body, as does the large earring or garland that may still be seen below the guardian's right shoulder. White paint is used as a highlight upon the dark blue body, with red and black the only other colors remaining. Even if the painting was originally of such a limited color scheme it did not suffer in coloristic impact, for the small and ruined portion that is still visible is itself of powerful expression.

In the directness of its impact upon the viewer the painting of Bhaktapur is surpassed two-fold, even ten-fold, by the great mask of Tika Bhairava in the hills at the valley's edge, south of Kathmandu. This painting is dynamic not because of superior technique, fine draftsmanship, or harmony of color, but because of its great size. Covering the entire wall of a crude porch recently built to hold a small shrine in front of the sacred boulder for which Tika Bhairava has always been known, the monumental mask of Bhairava explodes before the devotee. Its length is about 12 feet and it is taller than any man. Its eyes are uncompromising bull'seyes, targets three in number, and its huge nose with flared nostrils is a smear of blood taken from dozens of beasts sacrificed each week before the mask. Blood squirts from severed veins upon the face of the thirsty god to make a macabre action painting. The mouth and fangs of the deity, carefully outlined in the Bhaktapur painting, are barely indicated at Tika Bhairava, for the flimsy wall erected by man cannot contain the divine visage in its entirety. Everything is reduced to essentials at Tika Bhairava as the shrine becomes only a roofed wall, a strut supporting the roof of a nearby porch is reduced to a non-figurative bracket except for a grotesquely enlarged phallus, and the face itself becomes eyes alone. These eyes of purely circular form vibrate as lines of primary colors alternate with wide black bands to outline them. The face is strongly contrasted by a dainty garland of pearls that dances across the wall above it, but this incongruous element only emphasizes the brutal directness of the forms below. The eyes dwarf the viewer and hold him like a magnet. They are both terrible and fascinating.

Both the Tika Bhairava mask and the Bhaktapur guardian are very different in form and style from a much more decorative figure that is painted in monumental size upon an outer wall of Chandeśvarī temple in Banepa. This fine painting of folk art brilliance gleams in jewel-like colors filling geometric forms, and its style is very distant from that of either of the other wall paintings. It is a very recent work.

The paintings of Chandeśvarī and Tika Bhairava are not frescoes and no true frescoes are painted in Nepal today. Vestiges of fresco traditions hang on in the placement, at least, of wall paintings. Large lozenges about three feet high are attached as plaster panels to the outer walls of many vihāras, like Lagam Bahāl in Kathmandu, and long panels are painted upon them above or below the cornice and window level of some Buddhist shrines. Hindu temples like those along the river at Panauti sometimes reveal casual attempts at wall painting on rest houses attached to them, but these are mere sketches. In general the works are poor; even though the iconography of deities and scenes may be depicted in complexity, it is not depicted with skill. Lozenges usually contain representations of single gods, such as Mañjuśrī or Tārā. Long panels are close in both subject matter and style to those of the locally-owned scrolls that are unrolled and displayed out of doors for one day of each year in the monastery courtyards of Kathmandu Valley 16 One of these panels is found upon the façade of Nhuche Bahāl, a very small former vihāra in southern Kathmandu, and it may appear to be an early example if its Malla costumes are considered. It is painted in a very linear style and with considerable detail as it shows Buddha presenting a series of gifts to a mustachioed male who wears a cloth headdress and long robe. The pair are repeated several times, each sub-scene separated from the others by architectural forms that represent the typical Newārī

house type and certain temple forms. The panels are very different in subject matter and expressive intent from the violent painted guardians. The narrative type of painting is further developed, probably at an earlier time, in the wall paintings of Kirtipur.

Beneath the overhanging lower roof of the Bagh Bhairava temple and painted on plaster panels about five feet high at the sides and back of the shrine and three feet high over the entrance are some of the most important wall paintings in Nepal.¹⁷ They have recently been treated for preservation by the Archaeological Department, but much was lost before this could be done. Some painted sections have fallen away in pieces according to color so that now the scenes are represented in tones of red and white only, while the greyish plaster beneath stands for the missing paint. Most of the forms remain distinguishable, at least in their general outline.

There are many kinds of scenes painted at Bagh Bhairava, including what seem to be royal court scenes, episodes of warfare, processions, and hieratic presentations of the gods wherein each deity occupies his own halo and base. The haloed figures appear above the main entrance to the inner shrine, which contains a previously mentioned image of Bhairava in his tiger form, while other walls present the gods in much more active roles. A decorative border of garlands is painted at the top of the side walls but the front panel eliminates this in favor of a lower border of dragon heads facing forward. These heads are the same size as those usually carved upon protruding beam ends but they are strictly two-dimensional in this case, making them quite unique in early temple art.

The Brahmāyaṇī temple in Panauti, a three-storeyed pagoda on the river bank, is a Hindu temple having wall paintings of yet another type on its interior. These are located high above the shrine floor and upon the inner walls of the core of the temple which rides above the garbha gṛha. They are smoke-blackened and crumbling. Nevertheless, they reveal on one wall a series of eight standing deities, perhaps different forms of the main goddess herself, circled by haloes of flame and supported by lotus bases. Across from these are the remains of six representations of larger size, again on lotus flowers but in seated positions. The center one of these figures is a rather rotund god dressed in white and wearing two garlands which appear to be made of human skulls. The face of the god is obscured by soot and the darkness of the shrine and this, like the forms of all

the deities, may only be properly examined through systematic restoration. All four walls of the garbha grha are painted on the inside and if properly cleaned and studied, the paintings may prove to be of considerable significance. Certainly the few wall paintings that remain in Nepal should be preserved as surviving remnants of a great heritage.

8. Photographs

The photographs attached to the shrine and porch of the Gorkha palace are a means by which soldiers bring themselves into closer and continuing contact with their protective deity. In the same way, worshippers who traditionally associate themselves with a certain shrine may frame their own photographs and have them mounted upon the central building or a resthouse attached to it. The subjects of the photographs are most often young men, but families, children, and elderly individuals are also represented. Local priestly authorities have the right to accept or reject the attachment of photos within sacred areas, and at many temples such permission is evidently not given. The shrine of Daksina Kālī, one of the most important in the valley, has a great many attachments of this kind within its compound. The photographs are of abiding interest to those who are represented in them, as well as to their families and friends, but further investigation is required to fully interpret their significance.

9. Miscellaneous additions

A temple may become barnacled with so many non-decorative additions that its general form is obscured and its ornaments overwhelmed. This has occurred at the hilltop temple of Adinātha in Chobar, a fine structure blanketed with metal offerings, and at Bhagavatī in Nala where the roof struts are covered over at the front of the building with tarnished offerings. At both of these temples the additions are metal pots and pans mainly, given as valuable sacrifices to the gods. They are attached to Buddhist as well as Hindu temples, including Vikramaśīla Mahāvihāra in Kathmandu, perhaps at the time of weddings. The main items collected in a bride's dowry are copper and brass vessels, one or more of which might be offered to a patron deity on this auspicious occasion. The sacrifice of costly utensils may also have something to do with supplying the needs of this world in the afterlife. In either case, the objects themselves—

jars, jugs, bowls, plates, spoons, and other utensils—are unfortunate additions to the temple schemes. They are tacked onto the exterior without regard for the elements that they cover over or mar. The boards so awkwardly mounted in various lengths upon the façade of the Nala temple to be used for the attachment of vessels not only introduce strong and repeated horizontal elements below the roof where they throw the total design off balance, but destroy the uncluttered silhouette of the temple as a whole. They do this as they extend beyond the limits of the struts to which they are nailed. Such conglomerate forms in temple architecture are not frequent, however, since utensils are only rarely mounted in great numbers upon the shrines. It is quite likely that such offerings are more often stored inside shrines that have screened spaces below their lower roofs, such as Kumbheśvara in Patan and Paśupatinātha in Deopatan.

Animal horns are frequently nailed to temples at the lower strut level as a reminder of the sacrifices of buffalo before the gods enshrined. They may be simply hooked over struts as well, as at the single storey shrine of Bhagavatī behind Taleju Mandir in Kathmandu, and they are neither so permanent nor so disruptive to the overall temple design as are utensils mounted upon boards and applied to the façades. As another reminder of animal sacrifice, entrails may be strung up upon the face of a shrine. This practice has been observed by the author only once, at Bhairavanātha in Bhaktapur, but it does occur elsewhere.

Finally, mirrors are a very practical addition to temple façades. Slanting toward the courtyard floor in frames attached at the first strut level, mirrors of various sizes allow the devotee to have a view of himself as he applies a *tika* to his forehead to mark his visit to the shrine that day. Everyone uses the mirrors in this manner and the significance of these common additions to the temples is not symbolic.

10. Ceramic tiles

It is easy to dismiss ceramic tiles, part of Nepalese architecture only since contact with the West became frequent, as an incongruous and unpleasant addition to temple design. Their colors are overly bright to the outsider, and brilliantly lighted shrine interiors walled with shiny white tiles appear latrine-like to him. Both judgments are unfair, for they are based upon a western aesthetic and western experience. The color scheme that the westerner accepts as exotic and expressive at Chandeśvarī temple is actually

brighter than the sugary pastels of the tiles that he relates to cheap mass production, a concept that itself has no meaning in Nepal, and the tile-lined bathroom that he is reminded of belongs to his own distant world. Matters of taste must be separated from aesthetic judgment, a problem for both native and foreigner.

Decorated tiles as they were first brought to Nepal were themselves "exotic" and in their colorful and very precise designs they were considered to be especially fit for temple ornamentation. They are sometimes plain but are usually decorated with floral or geometric patterns and they may be moulded in low relief. A great many temples in Nepal have them as coverings on both exterior and interior walls. They are always incongruous within the overall pagoda scheme of brick and wood and they transform the façades to which they are attached into something totally new in Nepalese architecture. Because their own patterns are dominant, they make the temple much more two-dimensional in impact than is traditionally true, as well as much more coloristic. Those parts of the elaborate façade of Naka Bahāl in Patan that protrude, such as the second floor windows and cornice, are quite unnoticed in their solidity because they are lost among the stripes, diamonds, flowers, and checkerboard patterns that emblazon the walls around them. A broad white outline has been painted around the windows of the top two storeys so that these traditional elements might not be completely lost on their tower above the tiled sections.

The temple of Siddhi Vināyaka in Devapatan is set in a candy-striped enclosure choked with the painted concrete paraphernalia that has become all too common in "renovated" courtyards, so that its tiled lower storey, equally garish, does not seem out of place. A checkerboard door frame that surrounds the shrine entrance at Nhaykam Bahāl in Patan is disharmonious, on the other hand, for it is added to a complex that is traditional in all other respects. Similarly, the first floor wall of Si Bahāl in Patan is extremely bright and busy with tiled patterns since the second floor has no such decoration at all. It is just as bad for a temple to have too much as too little tiled decoration, however, as at the riverside Mai shrine of Bhaktapur that is so shrouded with tiles at the interior that no part of the underlying structure shows through at all. Both here and at Camunda Mandir in Patan the "op art" patterns of the walls dominate to the extent that they detract from the major shrine images that are set before them.

With both too little and too much tiled decoration causing problems of design, the closest thing to a solution, short of

eliminating tiles altogether, is probably reached at the temple of Bhagavatī in Dhulikhel. Here a brightly geometric panel of tiles covers part of the inner shrine walls and the upper half of the exterior at the first storey. The tiles make a lively decorative impact but they do not completely interrupt the structural continuity of the building as a whole. Even at this temple, the expression of mass that should be present at the lower level of such a multi-roofed structure is somewhat undercut and dissolved by the tiled decoration, however. What should be visually heavy is made light, and the temple loses the balance of design that is its greatest attribute. The three-roof temple of Harisiddhi in the same town is still less successful as a total form, strengthening the theory that ceramic tile, as exterior decoration at least, is basically incompatible with temple design in Nepal. With its lower storey covered all around by white tiles dotted here and there with squares of color, the shrine appears almost weightless below the cornice. Its towering roofs and extra large pinnacle are a mountain sitting on a bandbox.

C. Additions to the roof

1. Metal roof covering

Structurally, the roof covering of metal is watertight and it does not require an underlying layer of earth. It is much lighter, therefore, than is the roofing made of tiles. Visually, it does not merely imitate the appearance of tiled roofs in a more lavish material. Its form is more angular and more linear than that of the tiled roof, without the heavy ribs or rows of tiles along the hips or ridges of the roof necessary as tiles are used and without the shadowed texture of hundreds or thousands of roof pieces. The metal roof is smooth; its gilt-copper finish shines brightly in the sun; its surface is marked only by small ribs that follow the slope of the roof in parallel rows two or more feet apart. The ribs divide the roof "vertically" into sections rather than fanning outward like the beams of the roof understructure, and their structural derivation is unclear, although they may result from linking the metal plates of the roof together. Metal roof coverings are given to temples only, often on only one roof of many but sometimes covering all of a temple's multiple roofs. They are gifts to the gods. Mīnanātha Mandir in Patan, the temple of Vajra Yogini in Sankhu, and Kankeśvarī Mandir in Kathmandu are examples of three-roofed temples with coverings of gilded metal at all levels.

All of the structural elements of the Nepalese temple have

been mentioned in the brief remarks above. The shrine building is a simple one structurally; there is no need for lengthy discourse upon its construction. The ornamental and symbolic additions to the basic structure are a far more complicated subject for investigation, and in these are captured the significance of the Nepalese pagoda within local religious belief and within the history of Himalayan art. Every visible part of the wooden frame is in some way decorated; paint covers most elements of the wall and even the undersides of the roofs; ornaments made of many materials, both temporary and lasting, are attached in great abundance all over the pagoda structure. The Nepalese temple bears more additive decoration than any other shrine of the Indian sub-continent, yet it is far more than an Asian Christmas tree. Its meaning is in its ornament.

Whereas domestic buildings in Nepal may be of saddleback, hipped, or gambrel roof type, temples usually have hipped roofs, with sloping rather than vertical "ends." The roof may be square or rectangular, even octagonal or round, but it is always covered with tiles or metal. It is also hung with a great many ornuments at the edges and the pinnacle. Except for the ribs that are raised along the slopes of metal roofs, however, the covering itself is quite plain. The ribs are raised in parallel rows vertically upon the face of the roof; they are not fanned like the beams on the underside of the roof. This limits the analogy of the roof construction to that of an umbrella and the roof ribs as they are make the upper part of the temple appear more solid than would otherwise be the case. Their color and brilliant reflective quality as well as the high material value of the gilt-copper or brass covering make such metal roofs highly desired as additions to shrines, with gold even more suitable to bring honor to the gods who receive it. Gilding and gold itself are symbolic of purity, and some roofs, like that of Pasupatinātha, are periodically re-covered with pure gold. 18

Anyone who has sufficient means and is a faithful devotee may donate a metal roof or roofs to a temple, and his donation is usually recorded upon a plaque within the temple grounds or embossed upon part of the roof's border. A remarkable grouping of such metal-covered roofs is found at Patan's Hiranya Varna Mahāvihāra, with all three roofs of the main building, that of the small tower attached to it, and the multi-roofed complex of the small shrine in the center of the courtyard all covered with dazzling gold roofing. In these brilliant metal parts is the origin of the temple's popular name, the "Golden Temple" of Patan.

2. Tiled roof covering

The narrow body of the free-standing pagoda is sandwiched between two heavy elements as it is roofed over with tiles, for the roof slope covered with baked tiles of clay repeats the visual solidity and roughly pyramidal shape of the massive plinth. The roof frame of the house or temple is covered with boards as a horizontal overlay upon the sloping fan of beams and the supportive purlins of the roof frame. Over this layer of boards. close-fitting and strong, is put down a layer of earth and clay from one to several inches thick to form the base for a final covering of tiles. This earth layer helps to waterproof the building, keeping the moisture that seeps between the tiles from reaching the boards and beams below and causing them to rot. The earth layer acts as a kind of blotter, but a very heavy one that doubles the weight of the roof as a whole. As another disadvantage of this covering, the earth layer retains enough moisture to support the growth of grass and weeds upon the roof. These push up between the tiles after their seeds find their way onto the roof and germinate in the earth layer. widening cracks between the tiles and allowing more and more water to reach the wooden parts of the structure. It has recently been proven, however, that a mixture of lime added to the earth blanket will retard the growth of the destructive plants. The final covering of tiles usually rests directly upon this earth layer, although an intermediate layer of wooden planks is sometimes used.

As has been noted, the last of the ceremonies of worship that are carried out by Newārs as they construct a temple or house is that which accompanies the covering of the roof, after which the building is ready for occupation by man or god. The tiles are excellent covering material, baked hard and strong. The clay of which they are made is of the best quality that is available, making for great durability. Tiles are abundantly available in the valley and their cost is not beyond the means of the average farmer. Clay for the manufacture of tiles and bricks is available in great quantity in the alluvial soil of the area, a drill hole made at Lagan Tol in Kathmandu showing clay to a depth of 288 meters in a total of 376 meters. Clay is used as fertilizer and to make pottery and cement as well.

Tiles are laid in rows along the roof horizontally, each tile hooking its carved ends into those of the tiles behind and in front of it. In section the tile is an ogee, its shape an elongated S, and it is put down with horizontal linkage. Each row of tiles overlaps that below it and further down the slope of the roof. The size of individual tiles varies from about eight inches by five inches to extra large pieces of eighteen inches by ten inches. Tiles of extra large size are found only on palace buildings and, like all roof tiles, they are rectangular. At the hips and ridges of the roof angled tiles, resembling the bonnet tiles of western architecture, cover the joint of standard tiles at the meeting of two roof slopes, keeping rain from soaking into these important junctions. If no angled tiles are used, a great many ordinary tiles are stood up on end and placed against each other in a close-set row along the length of the junction, but this kind of covering is much less impervious to water than is that of specially formed tiles. Curved corner pieces are added to all roofs, regardless of the material that covers them, and these may be of metal or baked tile.

The roof covering made of tiles is more clearly functional than is the costly metal covering, but the individual pantile tiles, S-curved in section, have in themselves attractive and rhythmic forms. At the edges of the roof these interlocking parts are of an attractive visual pattern but also of a pattern suitable to keeping water flowing down the slope of the roof to drain onto the pavement below. The visual texture of the tiled roof reveals the thickness and weight of the covering material and is therefore essential to the maintenance of balance in the total form of the temple, at least in its impact upon the viewer. For this reason the tiled roof is superior in terms of design to that covered with metal. In addition, its warm coloration is both more harmonious with the colors of other materials used in temple construction and more a part of the total setting of village or town. The red-orange roofs of two temples of Nārāyaṇa on the main road in Chapagaon are part of the ochre world of earth, walls, and roofs that surrounds them, while the rather spindly Ganeśa shrine of Thaibo, with minimal floor space but three elongated storeys is, in its roofs of tile and wood, an integral part of its village setting. Some roofs are blemished by cement or plaster coverings that replace angled or up-ended tiles at the roof ridges, and in one or two examples the roofs are entirely blanketed with heavy white layers of plaster. Most tiled roofs are of traditional appearance today, however. The materials for their construction and repair, more complex in manner of manufacture than are bricks, remain in production in Kathmandu Valley and outside

3. Metal faces

The many roofs of Hiranya Varna Mahavihara are marked at the edges by metal faces that are three-dimensional additions to the sloping ribs. Such visages are very common as part of metal roofs, where they represent attendant demi-gods. They are feminine in appearance generally, and they wear elaborate crowns of headdresses. Their symbolic function is probably less to protect the major deities than to surround them with their suspicious presence as they encircle the roofs of the shrines. They may be the faces of anthropomorphic nāgas with the roof ribs as their bodies or they may represent the goddess Tārā. Another kind of head, representing a mustachioed male, is sometimes found as a termination of the large sloping ribs that cover the corner ridges of the roofs. It is located slightly behind the upturned curves at the roof edges. This head, of puzzling identity, is nearly life-size and it is somewhat more fully round than the more mask-like faces with crowns. The crowned heads are only a few inches high and sometimes flattened at the back. The large male heads may be sideburned, with their hair and facial features defined in black paint. They are of lively expression and more natural or earthy than the crowned faces. They are not fierce in expression in comparison to proper guardian demons, but they are more guardian-like than are the smaller visages. The monastery of Hiranya Varna Mahāvihāra has such heads on its roofs, and good examples of the type are found at Kankeśvarī temple in Kathmandu as well. The large heads are nearly as familiar as the crowned type as additions to temple roofs, but their symbolic significance remains rather unclear. In their placement at the edge of the roof they seem to be a unique feature of Nepalese architectural ornament.

4. Hanging borders

While faces and heads are part of what at least appear to be structural parts of the temple, hanging borders at the roof edge are among the few architectural additions that might be called superfluous. ¹⁹ Their intricate embossed or perforated decoration is effective in lightening the building visually, however, and in their shimmering detail they are the paraphernalia of another world, thus suitable to adorn the architecture of the sublime. The ornamental border is a necklace for the gods and its symbolic meaning, vaguely involving bells and lotus flowers, is far less important than its decorative impact.

In their form the borders of metal relate to cloth banners and cloth flags like those hung upon resthouse, temple, and parasol at festival time, and both long strips of thin metal plating and individual "pennants" of metal strung side by side are used to edge the roofs. Garlands of beads and foliage are the main theme in border decoration, however, and these do not relate to cloth prototypes. The borders are attached to roofs at any level, sometimes with the records of dedications and donations marked upon them in embossed letters, and they appear at the edges of metalled roofs as well as tiled ones. 20 Their variety is best indicated by considering several examples.

The simplest of metal borders is a thin plate attached to the horizontal beam of the roof edge, as on the upper roof of Vajra Yoginī Mandir at Pharping. This border may cover the face of the beam only, or it may hang free of it. Borders of this kind are often marked by embossed dedications and they are quite plain except for the characters in Devanāgarī script that read across them from left to right.

Slightly more elaborate than the above plate is a border stretched across the back roof of Woku Bahāl in Patan. This edging is a single piece of thin metal that hangs free from the horizontal beam, but it is cut into scallops at the bottom to suggest a hanging garland or a series of small banners. Some decorative details of intersecting ribbons and leaves are embossed upon it in low relief and in this respect it is like the roof border of the single-storeyed shrine of Nava Durgā on the Bagmati River below Paśupatinātha. The single band border of this temple is deeply embossed with a double row of looped garlands having leaves within each loop as stationary pendants.

Embossed borders of single piece stretching around the roofs look solid despite the delicacy of the designs that are pressed upon them. They are lightened in appearance when cut into many smaller sections to become rows of flags along the roof edge, as at the temple of Vajra Yoginī above Sankhu. Further cutting and perforation to eliminate parts of the metal background define flowers and beads or ribbons that make the border appear almost weightless. The borders of Nārāyanasthan Mandir in Bhaktapur are considerably lightened by a few cuts, but the best of border art is made up of parts so lacy that it is difficult to see the separations that exist between metal plates, or even to think of the border as made up of solid parts. The lower roof of Guhyeśvarī temple is

hung with such a border, and it is so airy that the points of its attachment to the roof are almost invisible. They are mere threads of metal that anchor fully formed beads, leaves, and flower petals as they "float" in rhythmic scallops around the temple; the borders are the lightest of festoons upon the face of the sacred structure. The filigree of this perforated border is made to appear lighter by contrast as it hangs below two more solid borders that are attached to the upper two of the temple's three roofs. The upper borders are formed on half-round pennants and bells that are suspended by wide ribbons of metal.

When sunlight passes through perforated hangings like those on the façade of Woku Bahāl or Matsyendranātha in Kathmandu. the borders are dissolved until they appear like strips of filmy textiles. The arrangement of decorative parts within the band, parts that are not themselves textile-like, follows a basic pattern which may be repeated in a variety of ways. In section the border built upon this pattern is simple, but in total it appears quite complex. A large floral pendant is a basic part of the design. It is bound within a large loop like a ribbon or thin drapery, and this loop intersects neighbor loops as it nears the point of its attachment to the roof. More loops are formed at the points of intersection and these contain leaf forms that are embossed or cut-out. Leaf pendants similar to those enclosed in the largest loops often occur between the small loops at the bottom of the border, and extra leaves, flowers, and beads may be worked into the design in a variety of ways. The upper roof of Vajra Yogini has an especially intricate example of the perforated border. It is formed by dozens of segments, each of which is about eight inches wide. The individual beads and flowers are highly embossed but the links that join them together are so fine that the garlands seem to have only shape, not mass.

5. Bells

Bells attached at the edges of temple roofs do not continually fill the air with tinkling sound, as some romantic accounts of Nepal would have it, for they are simply too heavy to blow easily in the breeze. They do charge the roofs with constant movement, however, when they have large pendants of thin metal attached to their clappers. These pendants, leaf-shaped and often gilded, move and turn in the wind, and they occasionally bring the clapper to strike the body of the bell hard enough to make a soft sound. The

bells themselves are from two to four inches long, but the length of the hooks that attach them to the undersides of the roofs varies considerably.

The sound or implication of sound of the small bells, like that of large bells found mounted in stone frames in palace squares and before most temples, brings devotion to the gods and projects the prayers of devotees to the realms of divinity. The small bells do not serve to communicate warnings to the populace, as palace bells have traditionally done, but they are accepted as necessary parts of temple design both within Kathmandu Valley and outside. They are essential to the light appearance of the pagoda as seemingly weightless suspensions from its roofs, and they are more common than are hanging borders of cloth or metal. They adorn virtually all pagodas of the valley. They are not attached to houses.

6. Descending banners

Descending banners, given the name dhvaja or patuka, are dramatic vertical accents upon temple façades. They hang as gilded belts of metal plates from the uppermost roof and pinnacle of a temple to below the edge of a lower roof, usually the bottom one. At the edge of a roof the banner dangles in space with a large pendant at the end of its shimmering rope, a pendant that holds an image of the main deity of the temple. The god lowers himself toward the earth by means of the descending rope or banner until he almost sets foot in the mundane world. Hung with tiny pendants that flutter in the slightest breeze, the pendant that holds his image or at least implies his presence may be a dazzling sunburst of gilded metal. In other instances the pendant is simply a wider extension of the banner as a whole, shaped like the roof banners of scallop-shaped edges.

Many banners of this type may hang upon the facade of a temple, or none at all may be found. Only the central shrine of the courtyard at Hiranya Varna Mahāvihāra is a prominent structure with such additions on sides other than its façade. The number of banners as well as their length is probably dependent only upon the resources of individual donors, but they function equally well whatever their number or length. The banner is symbolically very important, for it brings the deity close to man, just as do small figures of major gods that are carved into the lintels of shrine entrances and the central figures that are prominent upon temple toraṇas. If a worshipper prays diligently, if he is worthy, and if his

problem is great enough to warrant the individual attention of a god, the deity concerned may descend from his own realm to come near the earth and the devotee. He does so with the gilded banner as his ladder. It is a rope marked by sacred symbols and princely decorations, a passage toward the earthly world that does not touch it. A god descends only as far as the pendant that marks the end of the banner, but this is far enough to make it possible for him to directly intervene in human affairs. The god is visually present in a tiny metal image upon the pendant or his presence is simply taken for granted upon an unmarked banner. In either case, the banner is much more than a brilliant ornament. It is a concrete link to the gods. ²¹

7. Corner flags and vases

Individual flags of small size having two or three points on their lower edge, each point with a small pendant attached, hang below the two roofs of Matsyendranatha temple in Kathmandu on all sides of the building. The more usual location for individual flags, however, is beneath the roof corners. They are usually from 1 to 2 feet high and they are thin metal plates decorated much like the roof borders already discussed. They occupy the corner positions at Kankeśvari Mandir in Kathmandu and at Woku Bahāl in Patan, as on hundreds of other temples. They are cousins of the cloth flags that are attached to temples to mark special events or special days of worship at any shrine and, like the metal flags that are set up beside entrances, they make permanent what is otherwise a fragile symbol of devotion. Often quite plain, they are frequently embossed with images of the gods and in this they relate to Tibetan flags, but they do not have prayers written upon them as in Tibetan tradition.

A flag that hangs from a roof inside the courtyard of Chusya Bahāl preserves the form and decoration that such ornaments took in wood. A finely cut flag of two points, one overlapping the other, it encloses within its rectangular center the figure of a graceful female dancer with one leg raised from the ground and sprigs of foliage in each of her hands. The background space around her is completely cut away as she balances in an active pose upon a lotus flower base. The frame around her is entirely covered with rosettes, leaves, and a small peacock. Leaf-shaped pendants were attached in typical position at each of the flag's two points, and the ornament is of the size usual for metal corner banners. This carving

in wood is superior in design and visual interest to most metal flags, in spite of its similarities to them, for its representation of human form is more lively, its borders more delicate. The wooden banner perhaps represents an earlier mode of decoration than that of metal craft, and certainly it is more expressive in this respect. Unfortunately it is one of the last to be seen in Kathmandu Valley.

The corner position held by the banner may also be taken up by the pūrṇa kalāśa or vase of plenty. These hang by metal hooks under the roofs as full size vessels made of metal, and they may be perforated. They bear no additional decoration as sacred vessels as compared to domestic utensils, and their form is quite simple. The vase of plenty represents the source of all things and it is most commonly used as part of column and door frame. As a roof ornament it may alternate at different levels with the corner banner. Like both bells and banners the vases sway with the wind, but they do not have pendants attached to them to emphasize this movement.

8. Corner curves and miscellaneous additions

The curved tiles, plaster pieces, or metal pieces that are attached at the roof corners above the horizontal beam are simple forms, although the brackets that attach metal curves to the beams may be perforated with floral or geometric designs. The metal curves are concave on their undersides and they may have the additional support of similarly curved panels of embossed metal below them, as at Matsyendranātha in Kathmandu. A rolled edge sometimes outlines them and continues as part of the roof edge to outline the length of some temples, but metal curves may also be attached alone to the corners of roofs that have no other metal parts. They are gilded, and because of their concave form they catch shadows and reflect light, thus emphasizing their own thin form. Because of this thinness and their polished color, they appear lighter than do corner curves made of clay.

The roof curve usually follows a single, semi-circular swing that leads back toward the temple roof. A few corner pieces have double curves, however, like some S-shaped pieces at Hiranya Varna Mahāvihāra, and the forward end of such a curve may form the head of a bird. A most unusual variation in form marks the shrine of Vajra Yoginī at Pharping where corner curves are replaced by gilded makaras that spew forth masses of vegetation from their mouths. The foliage hangs down over the edge of the

roof in highly embossed and perforated metal with only the upward-curled snouts of the beast to counter the strong downward-directed movement of the corner pieces. In this variation the usual function of the curve in temple design, to direct the viewer's eye upward again after its descent along the roof slope, seems to be disregarded.

An addition to the corner curve that is as common as the makara is rare is the small bird that perches upon its tip. Such birds, sometimes called chantikla, are approximately life-size, resembling sparrows or crows, and they are fully modelled in the round. They frequently have small pendants hanging from their beaks and these flutter freely in positions unguarded from any breeze. The birds appear so active and their legs are so slender as attachments to the tips of the corner pieces that they do not interrupt the dynamic curve of those corner elements. Only those bird-forms that take on pierced decoration and elaborate "feathering" of their peacock-like tails are obtrusive in the overall design of the roof. They are more like tangled bunches of wire than clear-cut birds, and their detail is too fine to be properly discerned from ground level. The curves are much more hindered in their lightening effect, however, when they are themselves modelled into the form of animal heads, as at a small temple of Daksina Kālī near the new palace of Kathmandu.

While birds attached to the roofs are basically decorative, they may have some symbolic meaning as well, for it has been suggested that the chirping of birds might be interpreted as a kind of warning and that, in this sense, the bird mounted upon the roof is one of many guardians of the temple. The addition of birds to the roof is one indication that the construction of a temple is completed and special rites that are conducted as this stage of the building is reached include the roofing ceremony already discussed. That birds are not essential parts of the temple scheme is indicated, however, by their absence from a great many roofs, including many that are adorned by corner curves.

A single example of a unique temple addition at the roof level is that of a wooden figure, a seated male, that rests at the base of a small tower in Bhaktapur. The tower itself, which is small but very finely carved, is attached to a house located on the left side of the main road that leads from Nyatapola temple to the shrine of Dattatraya. The figure at its base faces the street rather stiffly, raising his right hand to grasp the beads or rosary which he wears

around his neck. Whether or not the carving represents Siva or one of his followers, which seems likely, its placement is remarkable. In effect, the entire lower structure becomes a pedestal for the god to rest upon, and the free-standing image is clearly an additive part of the total complex. The placement of animal figures at the upper reaches of temples, like those frequently found in Orissan temple architecture as well as reflected in the design of Mahābouddha Mandir in Patan, with its standing beasts at the uppermost pinnacle, is not traditional to Nepalese art.

9. Pinnacles

The topmost part of any temple and one of its most significant parts symbolically is the pinnacle. A point of plaster or gilded metal, it crowns the pagoda. It is the Nepalese equivalent, perhaps, of the amalaka or sun disc of Indian sikhara architecture, or the amrta-kalaśa (pūrna-kalaśa) that rests upon the āmalaka as vase that holds the nectar of immortality. It brings the roof slopes of the free-standing pagoda of square plan to a sharp point and punctuates the rectangular roof of vihāra or rectangular shrine with a vertical movement that interrupts the horizontality of the roof and calls attention to itself. It is a very effective focal point but also a symbolic finishing piece that sums up and finalizes the directions and intents of temple design. The spire stands from one to four feet high. It varies in form from a simple cone of plaster modelled as a cap at the meeting point of the tile roof slopes to a complex grouping of spires, umbrellas, pedestals, and floral frames that stretches all along a roof ridge. In all cases, the pinnacle is much more than an ornament.

The most common variety of pinnacle is a single, roughly cone-shaped spire, like that of Siva Mandir in the Kathmandu Durbār Square. In essence its form is borrowed from India and it is generally the same in meaning in Nepal as in Indian traditions. As with their bronze sculptures, the Newārī artists went beyond Indian prototypes in the decoration that they brought to the borrowed form, however. In its simplest expression, the pinnacle consists of a flattened globular base, sometimes beaded at the lower edge, plus an elongated cone or bell form, the *cudamani*. This is topped by a round or pointed finial.

The multiple pinnacle is made up of the simple spire duplicated from three to many times, with odd numbers of spires being preferred. An essential addition to the simple spire alone or in groups upon many temples is a triangular frame of metal that stands over the spire, one leg on either side of it, to support a small parasol over the top piece. The parasol, usually made of brass and consisting of several levels, seems to float above the roof. It is even more important than the pinnacle itself in lightening the impact of the roof. Certain other symbols, notably the trident of Siva, may be supported by the parasol frame beside the spire. These include the nāgas that are part of the parasol supports at Bhairavanātha in Srikandapur and in the courtyard of Nakham Bahāl in Kathmandu. The triangular support itself does not seem additive or discordant atop the temple, for its shape echoes that of the roof silhouette. Single vertical rods, sometimes seen as umbrella supports, are less successful in this respect. The rounded form of the spire is given direction by the parasol support, and the metal frame usually faces front with both legs viewable from the entrance side of the shrine. This directional orientation is strengthened as additional spires are made to stretch along the rectangular ridge roof in a single line, as at Woku Bahāl, or as additional spires of reduced size are set up around a central peak, as at the temples of Matsyendranātha and Taleju in Kathmandu. Always standing at the center of the temple, the pinnacle is the world mountain, the bell, the vase of plenty.

The size and shape of a temple as well as the deity to which it is dedicated help to determine the style of the pinnacle. The triple spire, for example, is said to represent Brahma, Visnu, and Siva on temples of the Hindus, while Buddha, Dharma, and Sangha are symbolized at Buddhist shrines. While the stone pinnacle of the eight-sided Kṛṣṇa temple in the palace square of Patan, known as Chyasimdeval, is not typical of pagoda architecture because of its material and extra large size, it does clearly present the variety of complex forms and symbolic associations that are reflected in most pagoda spires. Firstly, the spire itself rests upon a flat base that is mounted upon the top of the temple proper. It is of simple square form, but on other temples it commonly consists of multiple flat layers of different lengths that end in the upturned curves already seen in so many parts of the pagoda, as on the Siva-Pārvatī shrine in Kathmandu. Above the base at Krsna Mandir is a much flattened pair of circular rings topped by a large ovoid that is the basic form of all pinnacle spires. A border of scallop design marks the ovoid here, and above it is a decorative edging of circular forms that underlies a flattened bell-shape, a kind of miniature spire in itself. Upon this rests a spherical division divided into petal-like segments as a symbolic lotus flower and above that rises a sphere that represents the holy kalaśa or water jar. After a series of three tiny rings, the finial of the pinnacle is reached, this pointed culmination of the spire representing a sacred jewel.

Krsna Mandir does not have a sacred parasol mounted over the spire as most Nepalese temples do. This object is itself very ancient as a sacred symbol in India, and it continues to be so regarded today. In Nepal it is painted upon the front of Vajra Yogini at Pharping and it is repeatedly embossed upon the descending banner of Hiranya Varna Mahāvihāra. Many divine images and sacred symbols have umbrellas or canopies mounted over them, and they protect Kaumārī, the living goddess, during her rare ventures outside of her temple home. They are part of both royal and religious processions in the country today, and even brides and grooms are honored by being covered by parasols during their wedding processions. As an indication of supreme veneration the parasol is placed over the temple spire. It honors the holy precincts, but in particular it honors and protects the deity enshrined within the sacred building. The umbrellas are nearly always of metal and brightly gilded, and they are desirable additions to any shrine. They are not essential, however, as indicated at Krsna Mandir. These and metal spires, which are cast and gilded in sections, may be seen in production at the Patan Industrial Estates.

As with the pinnacle itself, the parasols are of variable design, ranging from one to thirteen stages in height. Each umbrella of the parasol complex is slightly smaller than that mounted below it on a central rod. The tall compound object that results is sometimes unstable and it may become bent in wind and rain, especially if it is supported only by a single metal rod. The parasol is properly supported in this manner only if its size is very small. The temple of Siva-Pārvatī is crowned by a triple pinnacle that is surrounded by a supportive frame of gilded metal. This frame is very ornate, exemplifying the floral decorations often applied to the pinnacle complex. It has three arches that consist of entwined vines and flowers, and small umbrellas of several levels are mounted upon the frame over each arch. The spires themselves are of two distinct bulbous stages. The pinnacle complex as a whole is delicate and ornate. It adds a light note to the rather ponderous shape of the broad temple roof. Possible variations upon themes of pinnacle

design are so great in number that in the entire Durbar Square of Kathmandu there is not a single other pinnacle that is even generally similar in form to that of the Siva-Parvatī shrine.

When the pinnacle complex extends all along the ridge of a rectangular roof it is no longer central as a final element, a crescendo of the temple design; it is instead a kind of standing border. It may therefore be a horizontal element in the overall design rather than a strong vertical accent. At Bagh Bhairava in Kirtipur a grouping of one dozen golden spires with an unusual metal canopy protecting the central of them is not too dominant because of the temple's large size, but at the Taleju temple of Bhaktapur the roof spire complex is too large for the comparatively small structure, which has only one roof but supports a string of very large spires. Also to be noted at Bagh Bhairava is the repeated use of pinnacles on the lower roofs as well. The multiple spires are set against the body of the temple where the roofs join the walls of the storeys above them. The silhouette of their form is of far less impact than upon the upper roof, but the multiplication of any auspicious symbol is always considered as desirable and proper.

10. Struts

From the famous yaksīs of Sanchi to present-day gopura sculptures of the South, human or animal forms attached to or supporting architectural parts of sacred structures are common in Indian architecture. The presence of such forms in Nepal is a direct result of Indian traditions, and a close parallel to Nepalese figures in wood below overhanging roofs is found in the temple carvings of Kerala. There are considerable stylistic differences between the wood sculptures of these two areas, however, and nowhere in India are there models as close in form to Nepalese strut carvings as, for example, are Pala bronzes in relation to medieval Nepalese metal sculpture. Carved roof supports in Nepal are the primary ornaments in an architectural tradition in which exterior decoration of temples is the major expressive element.

The structural function of the struts is obvious. Without them the overhanging roof which is necessary to drain water away from the body of the shrine would be unstable. The struts vary in length and thickness according to their placement, most being from four to six feet in length. Those beneath the corners of overhanging roofs are longest and heaviest while those that support balconies which project only slightly from the temple walls or domestic

building are short and comparatively light. Struts offer a variety of sculptural grounds, therefore, but their general shape is always rectangular and vertical.

The figures that are carved upon the struts are neither rectangular nor columnar. Human forms are adapted to their vertical setting in such a way that their curves, not angles, are the theme of design upon the struts. The rectangular frame of the strut is not interrupted by these curves, but contrasted and even emphasized by them. The supportive beam gains rather than loses impact in the total temple scheme as it is carved to contain unexpected, swelling volume. The base and top portion of the strut are usually somewhat separated from the whole, for they are plainer than the central part of the strut; they are more purely rectangular than the rest of the form and they clearly present the architectural attachment of the strut to the body of the building and its roof. The base is carved into the shape of rocks, foliage, or separate scenes related to the main image of the strut, and the upper portion of the beam takes the form of stylized tree branches with heavy foliage hanging down.

The center section of a strut, comprising 50% or more of its total length, nearly always holds a three-dimensional image of a major god or attendant. This figure has the appearance of being carved fully in the round, but it is in fact one with the flat strut at its back. Each strut beneath a temple roof may be carved to represent a different god, or many guises of a single deity may surround a temple at the strut level. Whether representing the "family" of a god or the god himself in various expressions of his infinite variety, the struts surround a temple with a protective pantheon. At the same time they clearly present to devotees part of the vast ocean of story that is Nepalese and Tāntric iconography as they circumambulate the shrine. The struts tilt toward the ground and the viewer, presenting their stories boldly. With a single active gesture or through symbols held in more than a dozen hands, a deity expresses his power and wisdom. His clothing and jewelry speak of his majesty; a garland of human heads or skulls attests to his ruthlessness; a divine vehicle at his feet indicates his greatness while waiting to support his every action.

The gods represented upon the struts belong to both the Hindu and Buddhist pantheons, but in many cases minor deities are preferred in this context as guardians or attendants who are suited to supportive roles within the total iconography of temple

ornament. Buddha is not represented in strut carvings, and major Hindu gods are often present only in guises that terrify. Thus Kālī, Mahākāla, Vajra Yoginī, Vajra Varāhī, and other ferocious gods are more likely to be found at the strut level than Śiva, Visnu, or Brahma. The fierce gods are likely to be accompanied by their benign forms as well, however, especially in the case of the mother goddesses. At Candeśvarī near Banepa, for example, goddesses both ferocious and gentle alternate upon the struts all around the shrine, intriguing and mystifying devotees with their great variety. They are like a catalog of the expressions of the deity enshrined within.

Since any "secondary" gods may be represented upon the struts, together with the forms mentioned above, the field of subject matter is very broad indeed. The images may be multiplied upon a single strut as well as within the complex as a whole. This means that a pair of gods or demi-gods, usually a male and his consort or female expression, will stand side by side upon the face of a support. In a rarer kind of grouping, female attendants and grotesque protectors are mounted one atop the other along the length of a strut, tracing with their bodies a meandering line from wall base to roof. Such vertical groupings are carved upon four struts at Nhuche Bahāl in Kathmandu. The carvings are delicate and charming but they are also important in terms of design, for they include a great many figures without destroying the vertical orientation of the strut. This orientation is nearly lost in rare carvings wherein many-armed figures are multiplied horizontally upon a single roof support, often accompanied by numerous attendants with the whole group set upon several lotiform bases. The resulting complex is iconographically expressive but so wide that the figures make up a broad tangle of carved wood that looks pinched between a base and upper border too small for it. Such a carving does interrupt the verticality of the strut.

The attachment of many arms to single figures does not lead to their being too wide for their vertical matrix. There is space between the fanned-out arms, and the main body of the strut remains visible. Visually the arms are like sunbursts or stationary pinwheels upon the face of the temple. They are spots of centrifugal design that occur at intervals along the length of the structure to call attention to the figures of which they are a part. They are essential as symbols, for they define and identify the gods according to their specific attributes and degree of might. They are

not mere signs but substantial forms, proportioned to fit the bodies of the central figures as convincing appendages. They are more than additive spokes.

The identification of the many gods is a very complex problem which must be the subject of a separate study, for dozens of very similar figures are likely to appear upon the structure of any single temple. The reader is referred to the works by Gordon, Getty, Bhattacharyya, Rao, Lalou, Tucci, Filliozat and Renou and other sources listed in the accompanying bibliography as specific questions of iconography arise. As important as an aid to identification as are the formal attributes of a deity, like those adequately diagramed in the profuse drawings that accompany the published investigations of Benoytosh Bhattacharyya (The Indian Buddhist Iconography, Calcutta, 1968), are the colors that are applied to the carvings. Many of the carved images of gods are identical in every respect except color; their hue is of directional significance within the cosmic map that is the pantheon of deities. Wood carving as applied to struts is necessarily a coloristic art as the iconography and directional orientation of figures represented is dealt with; it is unlike the more decorative and patternistic carving that is part of window and door frame design. Those worn and neglected carvings that now present strut carvings in the unpainted "purity" of raw wood are in fact lacking the paint that would normally make them whole. The western observor who prefers wood grain and clear-cut chiselling to the blazing, often form-obscuring colors of paint must remember that the Nepalese aesthetic demands color. This rule applies to the struts and usually to the cornice below them, as well as to the underside of the roof. The latter is painted red and green or yellow and it is often marked with free-form dots of black outline. These unusual markings may be stylized bird forms or leopard spots, according to local informants, but their symbolic intent, if any exists, is unclear. In parts of the cornice and under the roof, color may in fact be merely decorative, but at the strut level it is employed for iconographic clarity.

The only sections of the strut complex that do not require color for clarity are the minor scenes that are carved at the bases of struts, tree and rock forms, and the *kumsalas* that support the roof corners. The fantastic dragon appears in a number of colors and, although its hue may, like those of the quarters of the inner *mandala*, imply direction, it need be identified only as a type and not an individual. Like the struts that present the forms of deities,

leogryph supports are found in Kerala as well. While this "connection" should be investigated further, other so-called parallels such as the general European reference to the beam that receives the shortened rafters on both sides of each corner of the roof overhang as the "dragon beam" must be dismissed as coincidental.

As an indication of its virile strength, the *kumsala* is usually male and ithyphallic. That the phallus is symbolically important within this particular motif is obvious at Tika Bhairava, where the form of the *kumsala* is lost in a stylized and minimized play of curves upon a corner strut belonging to a resthouse but the phallus itself is enlarged and emphasized.

The beast is fanged and rampant when shown in its entirety, with gaping jaws and long claws ready for attack. It offers symbolic defense as well as very real support to the pagoda. Part of Nepalese design in many variations, the dragon is most prominent as the main form of the corner struts. It is elongated because of its position, but such struts are always the most massive of all. The beast may be doubled, so that one *kumsala* stands atop another, and it may have small scenes carved upon its base. These are usually of a sexual nature.

Lizards are also carved upon some struts. These supports are always minor, either because they are short and attached to secular structures or because they are very thin and provide only secondary support to the roofs. They may be much narrower than ordinary struts—little more than poles carved with the form of one or more reptiles. The lizards are only occasionally found in temple art and they occur at least as often in domestic situations as part of sacred buildings. Their presence sometimes seems rather whimsical, as upon the Golden Door of Bhaktapur where a curious reptile peeks around a corner of the upper door frame. The animal may belong to the theme of water cosmology in temple ornament to which the makara belongs, or it may be largely the product of the artist's imagination. In comparison to kumsalas, lizards are a very minor part of the temple scheme. The larger beasts effectively complement the intricate carvings of deities with forceful directness, great size, and broad formal treatment of large masses that are picked out in brilliant color.

Among motifs or scenes that are carved in the lower panels of struts are the *kirttimukha* as in the southern courtyard of the Kathmandu palace, the *stūpa* shown between two flags as at

Nhuche Bahāl, portraits of donors as at Sekhara Nārāyaṇa temple, and the unadorned mountains, rocks, and lotus flowers that are carved upon many other structures. Most struts, however, have scenes on their bases which present protective or attendant demi-gods, tales of the exploits of major deities, or erotic subjects. The last of these, although a very small part of the total scheme of temple art, have captured far more than their share of attention from foreign visitors.

Erotic scenes in temple art involve unclothed men, women, and animals in a great variety of sexual encounters.22 More naked than nude, the figures are remarkable in terms of gymnastics but they are always inferior works of art. Ranging in subject from individual, very graphically exposed females to masses of tangled bodies, they constitute a Nepalese travesty of Khajuraho nearly always without grace. A common explanation for their inclusion in the overall scheme of temple ornament is that their flamboyant presence upon the exterior of the shrine causes a distraction that tests the devotion and attention of worshippers. Another, more frequently voiced explanation is that the scenes are frightening to the goddess of lightning, a virgin, and that their presence upon the shrine protects it from her destructive visit. Yet another interpretation is that the Nepalese people were purposely shown such scenes so that they would be encouraged toward increased procreation. While none of these explanations can be taken as fully satisfactory with regard to the complex subject of sexual analogy in Nepalese art—a powerful theme indeed—it should be pointed out that Nepalese artistry is always of a sensual nature but not usually specifically sexual. The carvings of the strut bases are their least important part, always crudely painted like those of Jagannātha Mandir at Hanumat Dhoka, and often of awkward visual organization. Human forms of supple grace are found only in very exceptional scenes, like those of the southern façade of the Kathmandu palace.

Struts are still being carved in Nepal, some in miniature size for the tourist trade and some to replace decayed carvings as temples are renovated. The fine style that made the best of the earlier figurative struts charge the rectangular form of the beams with active compositions of curving, lively dance forms has been lost, however, and today's strut figures tend to be somewhat flat, squat, and much stiffer in their pose than were their prototypes. Today as in the past, struts carved of wood and painted in

polychrome colors are the ordinary type that are made, but some struts of wood covered with thin sheets of embossed metal are still created for purposes of temple renovation. Strut figures of cast metal, like those of Taleju Mandir in Bhaktapur, are rare today, as always.

To conclude this examination of strut carving, the great variety of types of carvings will be treated in terms of only two figural types and one strut complex. These are the two-armed guardian figure, the heavenly attendant, and the struts of a single "classic" pagoda. Multi-armed figures will not be considered separately in stylistic terms because they differ from the above mainly iconographically.²³

1. The two-armed guardian

The category of guardian is further defined as two-armed in order to differentiate these figures from major gods who appear in their multi-armed guises to terrify and overwhlem, thereby "guarding" the temple as well. Theirs is a more abstract kind of protection than that offered by proper guardians, the dvārapālas and other protective beings of visual forms simpler and more free than those of major gods. They are frequently placed on short struts attached to minor buildings, and they are suitable occupants for the small spaces that exist below major figures on longer struts. In some instances, however, they are the subject of full-size struts attached to temples. One of these of very fine quality is found on the northern side of Tamreśvara Mahādeva, a small pagoda of two roofs in Devapatan.

The Devapatan figure stands slightly less than 3 feet tall upon a strut marked by curvilinear foliage at the top and schematic rocks at the bottom. A male sits among the rocks, apparently as some kind of scribe, according to his tools. Above this figure and directly below the guardian is a kneeling horse. The main figure stands poised on one foot upon the back of the animal. His pose is one of active dance, with his left foot raised high in a kick toward the body after having crossed over his right leg at the front. The guardian's body sways toward the right, but his head with its large crown tilts slightly toward the left.

The arms of the protector are missing at the elbows so that he holds no symbols as clues to his identity. It is likely, however, that his hands were posed in the abhaya mudrā expressing protection. like those of a very similar carving at the Bhairavanātha temple in

Panauti. The guardian wears the large crown, earrings, snake necklace, and garland of human heads that are often associated with Bhairava, and his identification with this divine protector might be expected upon this small shrine of Siva.

If there is nothing remarkable in the identity of this figure, there is indeed something special about its stylistic treatment. The guardian is alive in terms of design. He leaps upon the face of the strut, with the space behind his foot and leg cut away to silhouette this appendage as it lightly touches upon the horse vehicle below. A scarf of the protector's drapery sails freely between his legs and his long garland curves along his swelling body to hang weightily at his knees. The slight incline of his head and the movement implied by it are picked out by a deeply incised outline that defines no concrete form but emphasizes those that exist, and the lush vegetation of the foliage over the guardian echoes in its outline of curves the sprightly movement of the figure below. By contrast, the flat and sharply geometric rock forms at the base of the strut anchor the large figure to earth and call attention to its full volumes. As a guardian figure, this representation is almost gay in mood. As a wood carving, it presents a striking combination of sharply cut detail and swelling, breath-filled form of prana. Even without the other excellent strut carvings that are attached to the small shrine, this guardian brings major artistic significance to what might otherwise be considered a "minor" temple.

2. The heavenly attendant

Heavenly attendants representing yaksīs or forest dryads, apsarases as angelic females, and the playful or indolent maidens called alasā kanyā bring their graceful forms to a number of strut complexes around Kathmandu Valley. Some of these are among the oldest sculptures in wood in Nepal and a few, while physically distant from each other, are so close in style that they suggest the hand of a single artist of outstanding ability. For these and other reasons the heavenly females of the struts are very important to any study of Nepalese art, yet they have hardly been noticed until now.

The figures are the main carvings upon their lengthy roof supports. As they stand with one leg crossing over the other below the knee, theirs is an exaggerated version of the *tri-bhanga* ("three bends") pose of S-curve body line. The head of the female tips in the direction of her hip swing, but this directional movement is

countered by the flow of drapery between her thighs and by the movement of her crossing leg. The figures are never so distorted as those that are carved upon the wing-like extension of the temple door frame, but they are as curvilinear in outline as is possible within the rectangular matrix of the struts as a whole. The sensitive modelling and rhythmic composition of these carvings is truly remarkable. They are a highpoint of achievement in Nepalese temple art.

Female attendants of swaying pose are represented among the strut carvings of Woku Bahāl in Patan, Yatkha Bahāl in Kathmandu, Jagannātha Mandir in Sonaguthi, Itum Bahāl in Kathmandu, the resthouse opposite the Kaumarī temple of eastern Patan, Tahram Bahāl in Kathmandu, Jayamanoharu Mahāvihāra in Patan, and beside the temple of Matsyendranātha in Bungamati. All of these are standard supportive struts joined to their buildings at the base and top, except for the struts of Yatkha Bahāl which are part of a balcony and the strut in Bungamati which remains from a temple that is now destroyed. The figures are found as part of both Hindu and Buddhist shrines, but the best and perhaps the oldest of these grace the Buddhist courtyards of Itum Bahāl, Woku Bahāl, and Yatkha Bahāl. Those of the Nārāyana temple and Jagannātha seem, because of their lack of grace and unity, to be later variations upon the basic theme of design.

The model of the heavenly attendant is stated in its purest form in the carvings of Itum Bahāl. These figures are as quietly soft and feminine as the guardian of Tamreśvara Mahādeva is active, sharply rendered, and masculine. The shrine itself, which inscriptions prove to have existed at least as early as the 14th century A.D., has three such struts of fine quality remaining. They have been neglected and one is now crudely wired together to keep it from falling, but they still reveal hyper-refined grace of form. Dating probably from the 15th or 16th century, they capture a purity of vision that existed in medieval Nepalese art and exists no longer.

The figure that rests upon the cornice immediately to the left of Itum Bahāl as seen from within the courtyard may be examined in terms of design applicable to all three of the females of early date that are found there. Together with the carvings of tree branches found above them, the full-breasted bodies of the females are of continuous, undulating surfaces that ripple along the length of the struts. Their total form is a series of cylinders and

spheres that is contrasted, once again, only by the geometricity of the rocky base.

The female is the source of all delight, all blessings, as she reaches toward the luxuriant tree above her, the inanimate equivalent of her fertile goodness. She is one with the tree, and its branches are no less sensuous than is her body. The rhythmic forms of both are opposed by the form of the grotesque atlante that crouches at the base of the strut. They are the bhāra-rakṣaka figures, weight carriers and spirits of the earth also bearing the name bhārakendrāpida, "master of the weight-center." Their presence may indicate points of particular stress in a building.²⁴
The female to the right side of the entrance to Yatkha Bahāl rests one toe upon the raised elbow of an atlante while her other foot disappears behind his head; the crouching male below the female to the left of Itum Bahāl twists to the left at an oblique angle to offer his back as a support for the heavenly attendant; one of the atlantes at Bungemudha Tol sinks his head into his lap in order to support the feet of the semi-divine female upon his shoulders. Such stocky and twisted figures usually accompany the swaying females to protect them, but they also call attention to the sleek beauty of the female forms through the contrast of their own rugged bodies. They are among the most stylized human representations in Nepalese art, for their anatomy is pulled and crushed to fit the compressed space at the bottom of the strut. Only at the temple of Jagannātha and Tahram Bahāl do the female attendants rest upon minor scenes carved in the usual way. In all other cases they are intimately associated with the fully three-dimensional atlante figures that are unique both in their form and their large size. In several examples, an aged and bearded man of unclear identity takes the part of the atlante, and on the north side of the Woku Bahāl courtyard two such figures, one atop the other, support a willowy female. In a few rare instances they support a second figure as well, which appears at first to be an infant but upon closer examination proves to be a small naga. These are carved at waist level beside the heavenly attendants of Bungamati and Itum Rahāl

3. The strut complex

The shrine of Indresvara Mahādeva in the village of Panauti, located a few miles north of Banepa on a very rough road, is a free-standing temple of three roofs that is a classic example of

Nepalese pagoda architecture.²⁵ More important than this, the carvings in wood that adorn this shrine may be dated with certainty to the 15th century A.D. They are very old sculptures and they are also very good ones—the finest strut carvings in Nepal.

When seen from afar, for the temple occupies a very large courtyard near a river on its southern side, the struts are not especially noticeable. They are all of the two-armed variety and there are, therefore, no sunbursts of multiple arms upon the structure. Furthermore, no painted color remains to give them extra impact. When they are approached closely, however, they prove to be not only larger than most carvings but of such exquisite detail that they be compared only with the very finest carvings to be found elsewhere in Nepal, such as the goddesses of Candeśvari temple in Banepa. They are superior even to these, in fact, as graceful but not so understated as the heavenly attendants already discussed and as powerful but even better carved than the guardian figure of Tamreśvara Mahādeva. Set within a tremendous field of carved detail upon the temple walls, the struts are a fitting summation of the veil of ornament that adorns Nepalese temple architecture.

From any side the building presents the viewer with three separate levels of carvings, one under each of its roofs. The upper of these is so high that it is difficult to see, and it bears corner images and boards mounted upon it for the display of donations, as do the lower roofs. The carvings placed at the top level are small and of mediocre quality in comparison to those below. The carvings of the second roof, on the other hand, are of equal quality to those of the lowest and easiest seen level, but on a reduced scale. Subject matter at both levels is of unusual variety, and the deities, many of whom are major gods rather than simple guardians or attendants, are represented clearly and concisely according to their specific physical appearances rather than in terms of a swarm of symbolized attributes. The vehicles or attendants upon which the gods stand are participating figures carved in the round, rather like the atlantes of the heavenly females, except that they are of greater variety and are always shown in pairs. The upper portions of the struts are covered with foliage, but this is slightly more schematic than that which accompanies the females previously discussed, being treated more in terms of pattern than as convincing, growing tree forms. The cutting of details of jewelry, coiffeur, and costume is as fine as that to be seen anywhere.

Since the strut complex of Indreśvara Mahādeva is in itself sufficient to justify the fame of wood carving as the greatest Nepalese art form, it should be examined closely. Photographic evidence is more useful than words in this connection, but a few comments about selected carvings will be made.

As background to the struts, toranas surmount each of the temple's four main doors with images of Siva in his male or female expressions as conquering, all-powerful deities of many heads and numerous arms. These representations are not ferocious but benign in demeanor, and the mood imparted by all of the figures taken together is one of benevolence. Even the emaciated Kālī is less threatening upon the struts than in her more substantial expressions in stone elsewhere. The three odd figures of wood that sit within the windows of a resthouse opposite the shrine are less than threatening, although they must represent guardians of some sort. The painted mask of a protective deity that stares out from a second storey window of the main temple is more menacing than these.

As well as in the torana carvings, various forms of the main god appear in ornate window frames at all three levels of the temple, with niches on each side of them decorated with flowers and monster masks. False windows and niches are numerous on all four sides of the shrine. Like the struts, they are unpainted, and the total complex is of warm and pleasing coloration. This was probably not its original state, but it is strange that no traces at all of applied color remain on the building.

The strut carvings are beautiful, this adjective being better applied to no other works of Nepalese art. Males are crowned and richly bejewelled like princes rather than soldiers, with great circular earrings and lotiform bracelets upon their upper arms and ankles. They are adorned as well by skirts of interconnected strings of beads, much like the aprons of human bone that are still worn by priests of Northern Buddhism in Tibet and Nepal. Panels of drapery swoop down between their legs to counterpoint the swing of their hips, as with the heavenly attendants of Itum Bahāl, but these males and all of the figures of Panauti are less exaggerated in their poses than are the females. The arm on the opposite side of the figure from the swinging hip is raised, but it does not actually grasp the overhead foliage or become lost in it, as often occurs in the representation of the yaksi. A few of the males keep both hands before them. Stylistically, balance is maintained between the broad

body planes, which are uninterrupted in the swelling chest and arms of each figure, and the precise rendering of intricate chains, clothing, and jewelry that define and outline the body masses. Because the details do not overpower the figure or emphasize its two-dimensional aspects, the image remains solid and vigorous in its maleness.

Certain of the female figures wear costumes very similar to those of the males and are almost identical to them, but more numerous and more prominent than these are females who are dressed very differently from the males and who hold no weapons or symbols in their hands. They are similar to the heavenly attendants mentioned above and their form is also suggestive of the yaksi, but they wear much more ornament upon their heads and bodies and their poses are more subdued.

The strut complex of Indreśvara Mahādeva is noteworthy, finally for the comparatively small figures that underlie each of the main images. Naturalistic and active, the supportive figures are the perfect foil to the elegant, even ethereal perfection of the divine males and females who stand over them. They are a delightful footnote within a total complex that represents Nepalese temple ornament in its fullest development.

NOTES

- 1. Philip Rawson, "An Exhalted Theory of Ornament: a study in Indian aesthetics," in Harold Osborn, ed., Aesthetics in the Modern World, New York, 1968, p. 223.
- 2. The temple of Pasupatinātha has been so much modified in modern times by repeated renovations that it can hardly be taken as a valid example of traditional Nepalese architecture. The most unfortunate change involved the replacing of most surrounding buildings on the river side of the shrine with concrete and corrugated iron-covered structures during the present century. The temple is atypical in the silver and aluminim paint coverings that have been applied to its struts and other carvings, in the naturalistic bust of King Mahendra that stands before its southern door, in the marble facing of its outer walls, in the flood of electric light that illuminates it by night, and in the plaster figures that stand upon its main gateway.
- 3. Gopal Singh Nepali *(The Newars*, p. 300) recounts a traditional tale that refers to Bhairava as a Rakṣaśa prince who was asked by Kṛṣṇa at whose side he would fight during the battle of the *Mahābhārata*. When the prince answered that he would fight on the losing side, which Kṛṣṇa took to imply that of the Kauravas, he was beheaded with the god's discus, the *sudarśan cakra*, and his head was thrown back to his home in Kathmandu Valley. In sculpture the head of Bhairava often stands alone, therefore, sometimes in the form of a large jug into which rice beer is

poured. The best known of these is the colossal mask of Hanumat Dhoka, the scene of a nocturnal contest among young men to drink the streaming liquor that is piped out of the god's mouth during the festival of Indra Jatra.

- 4. The shrine of Pasupatinātha is extraordinary in that its walls and floor are covered inside and out with marble slabs. The stone covering, partially embedded with coins, was added to the conglomerate structure more than fifty years ago by Candra Śamśer.
 - 5. Stella Kramrisch, The Hindu Temple, p. 319.
- 6. The makara is a very common motif in Nepalese sculpture and architecture, twenty-two makara heads forming the spouts of the well-known Balaju fountain outside of Kathmandu. In classical literature the makara is vehicle of Varuna as god of the oceans and of the river goddess Gangā. It appears first in Gupta art, as the crowning element of window frames, disgorging from its mouth strings of pearls (ālamba), creepers (latā), and other foliage.
- 7. Pi Bahāl is not, a famous monastery in Kathmandu but one among several important structures mapped for the first time by David L. Snellgrove in an article that may be considered to represent the beginning of serious study by western scholars of Nepalese architecture: "Shrines and Temples of Nepal," Arts Asiatiques, Vol. VIII, Nos. 1-2 (1961), pp. 3-10, 93-120.
- 8. Among toranas in Kathmandu Valley examined in detail as part of major doorway complexes at 29 shrines—10 Buddhist and 19 Hindu—the frequency of the kirttimukha and other motifs is as follows:

Kirttimukha: 5 Buddhist, 7 Hindu Nāgas: 8 Buddhist, 17 Hindu 9 Buddhist, 16 Hindu Parasol: Floral decoration: 10 Buddhist, 15 Hindu Makaras 7 Buddhist, 18 Hindu Kinnaras 1 Buddhist, 1 Hindu 3 Buddhist, 12 Hindu Garuda Large central figure 10 Buddhist, 19 Hindu

While the sample is too small to be decisive in determining the frequency of motifs in general, it is apparent that there is no symbol within the complex of forms modelled upon the *torana* which may be called exclusively Buddhist or exclusively Hindu. Only one element of the *torana*, the large central deity, with or without attendants, occurs on all examples. Its identity varies with the dedication of the temple.

- 9. The procedures that have been employed for dating pre-Angkorian temples based upon close study of the stylistic development of their decorative schemes might serve as a model for future work in Nepalese architectural history if it becomes apparent that a "development," rather than strict adherence to essentially unchanging traditions, did in fact occur. The works of Philippe Stern, G. de Coral-Remusat, and Jean Boisselier would be basic to the development of such an approach in Nepal.
- 10. The gold and silver doors of the southern side of Pasupatinātha temple were donated by General Bhimasena Thapa in 1820. With the permission of King Rajendra Vikrama Sah, he later placed four silver doors around the inner enclosure and one at each side of the exterior as well, according to Daniel Wright (Vamsāvali—History of Nepal, p. 162).
 - 11. Andreas Volwahsen, Living Architecture: Indian, p. 53. These correspond

to the complementary deities that appear in the outer niches of Indian temples, the parsa devatās. They are parts (angas) of the main deity as, for example, the attendants of Siva which the Silpa Prakāsa defines with reference to his temple: Ganesa on the southern side, his śakti Ambikā on the northern side, and Kārttikeya, the god of war, on the western side.

- 12. Guardian beasts are carved upon the wing-like extensions of the central windows of the Mahā Mayura shrine above Sankhu. The rearing animal, the same in form as those that support the roof corners of all early pagodas, is so well adapted to the curved shape of the wings that the question arises whether its silhouette in profile is the origin of the curvilinear wing addition to the door frame and window frame.
- 13. The temple of Taleju in Kathmandu has several large metal masks mounted in its upper windows, probably to represent the goddess herself. Hieratic and stern in appearance, they are unlike the sculptures in wood of Siva and Pārvatī that look down casually from the window of the temple named for them in Kathmandu's palace square. Legend explains that Lord Siva felt, some 300 years ago, that at least ten people should pass his temple each day and that he stationed himself at the window to watch the streets below. From his vantage point he once overheard some criminals talking and had them arrested. A few other window images are also found, but these are usually quite crudely modelled. They relate to local folk tales. Examples are seen at the monastery beside Dattatrāya Mandir, at Jaya Bahāl in Patan, and at a few other shrines.
- 14. The famous peacock windows of this monastery include one in which the tail feathers of the central bird are perforated to form a screen and one in which dozens of small birds sit in the tiny frames that make up the screen as a whole. A fine "sunburst" window adorns the front side of a building facing Dattatrāya Mandir, but the more famous windows look out upon a dark and narrow alley at the back. The monastery is being restored by a West German team.
- 15. Origins in the Malla period are suggested in both of these works by details of dress and subject matter. The paintings at Bagh Bhairava may date from the 15th century and the period to which the old *torana* and the building may be dated by inscription.
- 16. These painted scrolls often present events and miracles that are associated with the monasteries in which they are displayed. They include landscapes painted in Nepalese style as well as the images of gods and men, and they are major works of art. Fewer and fewer of these paintings are seen each year at the time of their display, and it is urgent that they be preserved from destruction and from indiscriminate sale before no example of this major tradition of painting remains inside the country of its origin. A fine example of this art is a banner belonging to the Hiranya Varna Mahāvihāra, Patan's Golden Monastery.
- 17. These paintings resemble in subject and style those that are located inside the portion of the Bhaktapur palace that is now a museum, but they are larger in scale. They are not as well preserved as the palace paintings, however, and they are much less detailed than the exquisite wall paintings of Taleju Mandir in Bhaktapur that date from the 17th century (Madanjeet Singh, *Himalayan Art*, Greenwich, Conn., 1969, pp. 192-83, 206-09). Wall paintings are found inside other palaces and domestic buildings as well, but they remain unpublished and restricted from public view. A large section of the Kathmandu palace, separated from the main structure

after New Road was pushed through the city following the earthquake of 1933, was pulled down in 1969. Its wall paintings were destroyed.

- 18. Raw gold was traditionally brought to Nepal through trade with Tibet. According to Daniel Wright (Varnsavali—History of Nepal, p. 127), the temple of Pasupatinātha was reduced in size from a temple of three roofs to one of two roofs during the 16th century with the gold of its middle roof used to make a pinnacle for the top of the temple.
- 19. The name kinkinimala, "garland of little bells," is sometimes given to this ornament but it is not in general use.
- 20. The decorative motifs applied here are often derived from the asta mangala, or eight auspicious symbols. Of varying number and identity, these symbols are defined as including the kalasa or water jar, the srivatsa or endless knot, the padma or lotus, the dhvaja or flag, the chamara or fly whisk, the matsya or pair of fishes, the tomchatya (chatra) or double umbrella, and the hima sankhya (sankha) or white conch shell. As at Krsna Mandir (Chyasimdeval) in Patan, the forms of the ratna (jewel), kalasa, padma, and ghanta (bell) may be part of the pinnacle.
- 21. When the cart that carries Matsyendranātha is pulled through the streets, dhvaja and patuka banners are displayed at certain spots within the city. The different gods represented upon the banners thus gather in harmony with Matsyendranātha during his festival.
- 22. These are inferior versions of the Indian *mithuna-mūrti*, the amorous couples who illustrate graphically the ideal interpretation of physical love as recorded in the *Śilpa Prakāśa* (I, 498-99):

Desire is the root of the universe. From Desire all things are born. Primordial matter (mūla-bhūta) and all beings are reabsorbed through Desire. Without Siva and Sakti creation would be mere illusion. Without the action of Desire (kāmakriyā) there would be no life, no birth and death.

Rāmacandra Kaulācāra, Silpa Prakāsa, p. LIII.

- 23. Prime examples of temples having particularly fine images with multiple arms are Candeśvarī in Banepa, Nyatapola in Bhaktapur, and Cangu Nārāyana. The last of these is especially important because its struts are in good repair and of full coloristic impact.
 - 24. Râmacandra Kaulācara, Śilpa Prakāśa, 1, 343-53.
- 25. Epigraphic evidence related to the site is discussed by Śankarmāna Rajvamsi in "Panauti Indresvarako tāmrapatrābhilekh." (*Pūrnimā*, No. 14, Summer, 1967, pp. 140-43), translated as "A Copper-plate inscription of the Panauti Indresvara temple," and especially in "Jayasimharāmako samjhanāma rākhieko Panautī Indresvaramandirako tāmrapatra [A copper-plate inscription placed in the Panautī Indresvara temple in memory of Jayasimharāma]" in the same issue.

The Sacred Womb

A. Form of the shrine interior

The shrine interior is the center of the universe as it is symbolized by the sacred mandala diagram that gives rise to the pagoda structure. It is enclosed and protected by the towering temple and adorned by the ornaments that are placed upon the temple exterior. It is the most important part of the building as a whole, no matter how large and complex the total shrine enclosure may be. Despite its importance, however, it is a simple room, an almost humble space.

Whereas the exterior organization of the temple clearly reveals its internal division into storeys, it does not reveal the place or manner of access between floors or the location of the main shrine space, the garbha grha or womb house. In most temples the only connection between storeys of receding size are small trap doors, and sometimes even these are eliminated, but others, including all major shrines dedicated to the god Bhimasena in Kathmandu Valley, have stairways leading upward. This is because they have major worship spaces in the second floor level and the garbha grha is located there as well. Most shrines have the grabha grha at the ground floor level, however, where it may be sunken into the earth. Variations upon this basic pattern will be further discussed elsewhere, while the ground level shrine remains representative of the role of the core space in pagoda architecture.

As a single example of the garbha grha to be examined in detail, the inner shrine of Kankeśvarī Mandir is useful because its interior is well lighted and neither photography nor the admission of foreigners is actively opposed. It was once possibly an open-air shrine and it is not entirely typical. The temple honors Kankeśvarī, a fierce mother goddess or mātrkā, Camundā, and one of the many threatening forms of Durgā. Her physical form is ugly. Her free-standing pagoda of three roofs stands beside the Visnumati

River in the southwestern quarter of Kathmandu, outside of the original city. It is a tīrtha, a place of pilgrimage beside water that is a "ford" or "passage" for the pilgrim in his search for salvation. Within its environs and attached to a small brick shrine of Mahiṣāsuramardinī is one of the oldest sculptures in Nepal, a relief from the 5th or 6th century A.D. that probably represents Siva and Pārvatī.¹ The sacred site itself, filled with Buddhist caityas as well as images and objects of Hindu orientation, was surely venerated in very early times. The temple as it stands has been many times renovated, but its garbha grha well illustrates traditional patterns of construction and the organization of its essential parts. The roofs of the temple, on the other hand, have only recently been covered with gilt copper and much of the exterior decoration is new.

The garbha grha of Kankeśvarī Mandir is slightly larger than most and it has wide openings on all four sides. The weight of the super structure is borne by the brick corners of the building to allow for such openness of construction. The main doorway is large, more than four feet wide and six feet high, and its threshold is raised above the ground level by two small steps. The visitor descends by five steps into the shrine itself, and such access at this temple is not restricted to the pūjarī or temple priest alone. Crowds of devotees swarm into the shrine on festival days to sacrifice chickens and goats within the garbha grha.

Because the floor of the inner shrine of Kankeśvarī is sunken, it relates to many other important shrines also dedicated to the divine mothers. This form of the garbha grha may, in fact, have been essential to the earliest religious practices in this area. Worship or sacred ceremonies conducted in deep, dark recesses in the ground remain a common pattern of devotion in Nepal, perhaps as a remnant of indigenous, pre-Buddhist and pre-Hindu religious practices that involved the sanctity of natural stones and perhaps a literal "earth mother." Further investigation is required to determine the relationship of such earth shrines and the objects contained in them to the megalithic traditions in sculpture of Asia as a whole and especially to the crude markers of stone and wood discovered by Giuseppe Tucci in western Nepal.² The sunken shrines in Kathmandu Valley are generally associated with fierce deities, and they are too deep to be explained by a mere shifting of ground level through the centuries. The floor of the Bhairava shrine in Ekalakhu Tol, Patan, for example, is nearly four feet lower than the courtyard level around it.

The enclosure that forms the garbha grha at Kankeśvań Mandir is cubicle. Its ceiling is about nine feet above the floor and its walls are faced on the inside with white ceramic tiles. The openings on all but the entrance side of the shrine are separated from the central space by two oil lamp railings, the lower resting upon a small arched colonnade carved with flowers and the upper an unadorned horizontal beam. Four massive pillars replace the inner wall of brick that is usually found within the lower storey of a pagoda, so that the space of the garbha grha is more open than that usually found. The metal shrine-house of the goddess is set against the southern side of the inner cavity, opposite the door. Much light enters the central area since each of the three extra openings is as large as the main door, and it is possible for a passerby to look down into the garbha grha from all four sides of the building. Therefore this is not a secret space, at least visually.

B. Holy images

As one enters the womb of Kankeśvari, he passes beneath an oil lamp railing mounted upon a frame that has its angularity broken by floral arches that are set into its corners. As a whole, however, the entrance side of the temple is especially rectilinear in design from the squared pūrna kalasas at the base of the door frame to the angular body forms of the goddess herself as she appears in metal at the center of the entrance torana. This angularity is left behind as one enters the inner space, for the arched insets of the lamp frame and the great half-circle of the torana are the first indication of the theme of echoing semi-circles and curves that dominates the design of the interior. Circular movements spread upward and outward from the floor of the shrine like ripples from a stone splashed into a pool in the arched forms of haloes, snake garlands, parasol supports, and the frames of oil lamps. The "stone" is the central object of veneration in this temple, a rock both actually and figuratively.

The central stone at Kankeśvari is embedded in the floor at the center of the "altar" grouping on the southern side of the shrine. It is attended on each side by six more rocks that presumably represent others of the pantheon of females, as the main rock represents Kankeśvari herself. Worshippers often interpret these forms as representing the children of Kankeśvari. Each of the uncut rocks has a metal frame or halo mounted behind it, the stones being typical both in this additive decoration and in their

multiplication within the shrine. As a group they form nearly a full circle, but elsewhere either rocks or fully formed images of the goddesses may be arranged in a straight line. The central stone is surrounded by a halo larger in size than the others, called a prabhamandala, while all of the frames have at their centers the chimidra with snakes in his claws.

As has been seen, the roots of Nepalese devotion to sacred forms exist in such uncut or only slightly modelled forms as those in this garbha grha. Such stones indicate the presence of divinities whether they are located inside or outside of temple enclosures and the Visnudharmottara prescribes the installation of sacred images, arcā, in a great many locations:

Installation should be made in forts; in auspicious cities; at the head of shop-lined streets...; in villages or hamlets of cowherds where there are no shops, the installation should be made outside in gardens, ... Installations should be made at riversides, in forests, gardens, at the side of ponds, on hill-tops, in beautiful valleys, and particularly in caves. At these places, the denisens of heaven are present. In places without tanks, gods are not present. A temple therefore should be built where there is a pond on the left, or in front, not otherwise. If a temple is built on an island, the water on all sides is auspicious. 4

The rocks are almost always splashed with colored powder, flowers, or other offerings and they are profusely decorated when they are the main images of large size within shrines like Kvena Ganesa near Chobar.

Sacred images enshrined within or beside present-day shrines illustrate all states of sculptural development in Nepal, including the Indian style of the half-buried Buddha made of stone enshrined on the river bank below Pasupatinatha to the magnificent Bodhisattva in bronze that is secreted away in a brick building above the temple of Vajra Yogini in Sankhu. The holiest of all images in Nepal is the golden four-faced linga of Siva that occupies the garbha grha of Pasupatinātha temple. It may not be seen by foreigners or photographed, but a similar sculpture is visible within the garbha grha of Kumbhesvara Mandir in Patan. Nepalese sacred art has its greatest visual impact upon devotees. perhaps, in the form of massive guardian figures, like Mahākālā in his temple on the Tundhi Khel and the great metal mask of Bhairava in the Hanumat Dhoka square. Such images, often frenzied in their composition and iconography, electrify their sacred enclosures as they present the symbolism of Tantric Buddhism and Tantric Hinduism in all its complexity to shake, frighten, and finally enlighten the worshipper.

C. Attendants and symbolic ornament

If the unmodelled rocks that constitute the main symbols of the goddess Kankeśvarī and her attendant pantheon are unimportant in terms of style,5 such is not true of the attendant figures located beside and behind them or the ornamental complex that encloses and shields them. Two small figures, three feet high and made of brass or bronze, are of simply modelled but expressive form as they support oil lamps to the left and right sides of the central rock. A male and a female, they presumably represent devotees, probably donors to the temple, since they wear secular dress and the male raises his hands in the namaskara mudra of devotion. He wears a flat hat that is unlike either the modern Nepalese topi or the earlier Malla headdress that might be expected on a donor, however, and the sari-clad female extends her right hand in the abhaya mudrā of protection or blessing that might be expected of a divinity. In any case, they represent the minor attendants that frequently are found inside the garbha grha or at its entrance in the form of small sculptures in stone or metal. Guardian lions are the commonest of these.

Closer to the sacred stones within this shrine and part of the group of semi-circular or arched elements that radiate outward from them in a series of three very large halos, made of embossed metal. The series begins with the chimidra halo already mentioned and proceeds to a border of flames and another border of entwined snakes. These support small parasols as they stand before a miniature shrine made of metal that is as analogous in form to the temple as a whole as are the haloes and serpentine borders to the outer torana and door frame with its cosmological symbols of earth and water. The compounded frames within frames that shelter and surround the simple rock are an extension of the exterior decorations of the temple in terms of both their multiplication and their symbolic intent. The differences are that inside the shrine the nagas are more prominent, especially as they form a canopy with their hooded heads above the central stone, and anthropomorphic renderings of the gods are found here upon the widest frame. In general, the latter are more likely to be found within the garbha grha than anywhere on the exterior of the temple below the strut level. The widest of the haloes inside Kankeśvari, the prabhamandala, holds ten metal reliefs that represent some of the ferocious mothers, each standing about 1 foot high and occupying her own halo of flames. All is symmetrical within the overall composition

except some bells that hang seemingly at random on chains or hooks and large metal weapons that are mounted beside the halo complex. These are a sword and a trident of Siva ornamented with severed heads and skulls. Banners with twin pennants, made of cloth at the shrine of Gorkha's demoness, are here made of metal and placed beside the central grouping.

The cubicle space of the garbha grha is enlivened at this riverine shrine by its many symbolic and ornamental additions, but it is dominated in both design and meaning by the great mandala that covers its ceiling. Only its outer edge is square like the mandalas that govern the plan of the temple or pagoda, while the centre of this mandala is a circular map of Kankeśvarī's pantheon with the goddess herself standing at its center within two inter-secting triangles that form a six-pointed star. Separated from the central figure by floral motifs and borders of circles, the forms of the other goddesses spin outward with their feet toward the center of the circle. The composition of the mandala is extremely centrifugal and the great metal disc, bright in its gliding and made three-dimensional by the projecting bodies of the females modelled in high relief, seems almost capable of active movement as one looks up at it from within the shrine. It is too large to be properly seen in its entirety as one stands below it and the viewer finds his own equilibrium, and therefore the balance of the entire arrangement of parts within the garbha grha, tipped and activated as he looks up at the mandala. The entire space becomes twisted, dynamic, exciting. Made of the same materials as the other sculptural forms within the space and of parts having the same identity as those below, the *mandala* summarizes and dominates the total composition of the inner shrine as it brings the total scheme of decoration and symbol to a climax. Such mandalas of the ceiling are common in Tibetan temple architecture, but this great unifier of interior space is not common in this position in Nepalese temple art. As it draws together and summarizes the parts of the garbha grha and by its precious nature emphasizes the sanctity of the holiest of spaces, the ceiling mandala becomes at Kankeśvari one of the most important features of the temple design. It has no parallel on the exterior of the pagoda.

In its expanding energies, the ceiling mandala of Kankeśvarī restates the classical Indian interpretation of the temple structure as having its bricks or stones pressed outward from the center of the building toward its perimeter by the dynamic space of the small

hollow that is the garbha grha. Brick mouldings and fillets of the exterior are thus the direct projections of this energized space as it presses upon the outer wall. Carved borders in wood may also be so interpreted. Because it contains the energized garbha grha, the building "makes its rhythm proceed from the center in the oscillations of its elastic boundary." This horizontal thrust from the interior is figurative only, for the brick structure that is the Nepalese pagoda, like Indian sikhara temples of stone or brick, is made up of weights that rest directly upon their supports with little or no lateral thrust.

NOTES

- 1. The panel, which is not in its original setting, has been interpreted by N.R. Banerjee as a love scene between Siva and Pārvatī. Together with four related carvings, he deals with this image in "Parvati's Penance as Revealed by the Eloquent Stones of Nepal," *Ancient Nepal*, No. 2 (January, 1968), pp. 27-38.
 - 2. Giuseppe Tucci, Nepal—The Discovery of the Malla, New York, 1962.
- 3. Other shrines having such open, non-secretive spaces as their inner cavities include Balakaumārī in Patan, Mahālaksmī in Thankot, and the Mai shrine near Hanumat Ghat in Bhaktapur. The last of these is very like a small pati or resthouse in its construction.
- 4. Visnudharmottara, Part III, Chapter XCIII, 25-31, quoted in Stella Kramrisch, The Hindu Temple, p. 5.
- 5. Kankeśvarī is typical of local Mai and Ajima goddesses in being symbolized by a stone. Like those of most of the Mais, her temple is located very near a Newar cremation ground, the river ghat in this case. Unusual among these powerful mothers is Annapurna Mai who presides over the grain market in Kathmandu's Indra Chowk and is represented within her shrine by a large grain measuring pot made of silver.
- 6. The main image of Taleju Mandir in Kathmandu is itself a symbolic diagram, a "cabalistic figure" according to Francis Hamilton, and no one is admitted to her presence except the Rājā, the Rānī, the special guru or spiritual guide of the prince, and the pūjarī who is always a member of the guru's family (William J. Kirkpatrick, An Account of the Kingdom of Nepal, Edinburgh, 1819, p. 211).
 - 7. Stella Kramrisch, The Hindu Temple, p. 163.

6

The Mandala as Origin

As the following chapters will show, there is great variety of both gods and temples in Nepal. The setting of the temple, the way in which it is approached and used by its devotees, its symbolic intent, and its relationship with shrines that predate it all help to determine the form that a particular shrine takes. In terms of the kind of ornament given to it the sacred building is dependent upon the wealth of its patrons, but not, it should be emphasized, in terms of the artistic quality of that ornament. For their continued support some temples are endowed with the produce of certain lands on a formal basis, and therefore their programs of repair and rebuilding may be sponsored from within the immediate temple community as priests and lay committee, the guthi, work together. The substantial gifts of individuals have nearly always been essential, however, to the construction of the major temples of the valley.

While patronage may govern the material grandeur of the pagoda, it has little influence upon the style and orientation of its architectural design. Architectural treatises like the Mānasāra Silpa-sāstra and Vāstu Śāstra were followed in Nepal as in India, with works like the Jīrnoddhāra and Samarānganasūtradhāra directly treating specific problems of temple design and usage. The treatises were never regarded as absolute law in Nepal; they were always open to interpretation according to local interests. Their study was and is the province of temple priests, although minor treatises, usually dealing with the methods of construction and proportions of specific buildings, are consulted by architects and craftsmen. Carried about like a kind of proto-blueprint, the construction manual records symbolic requirements of the temple plan as well as specifications as to the size and shape of its parts.

Construction manuals obtainable from craftsmen in Kathmandu Valley treat the multi-root pagoda temples very specifically, as guides for construction, but architectural treatises borrowed from India do not. The Indian works describe the processes of selecting a sacred site and excavating its ground, putting down of a ground level diagram for the temple, the ritual procedures of construction and decoration, and the installation and reverential treatment of sacred images. Nowhere is there a description in visual terms of the pagoda temple or any specific directions for its construction, except for the simple manuals of Nepalese builders. Elaborate treatises like those of Indian art do not exist independently in Nepal. E.B. Havell's notes on buildings of the Saivite schools being given visual importance as they are raised cube on cube in a kind of pyramid are based upon his own interpretations of late buildings rather than upon traditional writings. This does not mean, however, that the possible existence in Indian art of forms similar to that of the Nepalese pagoda, even in early times, should be categorically dismissed. On the contrary, for "similar" shrines may be found today in northwestern and southern India.

Further relationships with Indian architecture will be discussed elsewhere, but first two important influences upon pagoda architecture must be carefully considered. These are, firstly, the sacred mountains that dominate the country not only geographically but because of their sacred aura as the dwelling place of the gods, and, secondly, the mandala diagram that was borrowed from outside to become the focus of architectural design in Nepal. The mandala is of Indian origin, but its use in Nepal is colored by both indigenous concerns and other foreign influences.

A. The Himalaya and pagoda architecture

Hindus and Buddhists of the North have always believed the Himalaya to be the seat of the gods and so they have named the peaks after their deities. They are, among others, the females Nandadevī, Pārvatī, Durgā, Gauri, and Annapūrna, and their all-powerful lord, Śiva, as Gauri Sankara.

Religious leaders in Kathmandu Valley are quick to attribute the form of the Nepalese pagoda, at least to some degree, to that of the mountain peaks that are visible from the valley. Certainly it is no less credible to make this association between natural and man-made forms than to find the inspiration for the earliest shrine buildings of South India, for example, in natural boulders, as does Andreas Volwahsen (Living Architecture: Indian, p. 136). The holy Himalaya, named "Seat of the Snows" by the first Aryan immigrants to India as they sang of the rivers that descended from the

mountains to water the valley of the Indus,2 may be of more than figurative importance in the religious traditions that govern art.3 The great mountain of Kailasa in Tibet which stands on the northern side of Lake Manāsasarovara at the center of the greatest mountain chain on earth—the Himalaya, Trans-Himalaya, Karakoram, and Kuenlum—has long dominated the sacred landscape of the Hindus. It is the paradise of Siva; it is his home. More than 22,000 feet high, the mountain is pyramidal like the roof of the Nepalese pagoda. It stands remarkably alone in nature, unexpected in the midst of nothing, and the impact of this form on Asian thought has been so great that it is difficult to accept the view of A. K Coomaraswamy that Mount Kailasa only happened to reflect later temple forms and diagrams that developed separately. The great mountain is regarded by Hindus as a holy object, a form graspable despite its sanctity, and they circumambulate the mountain like a shrine, prostrating themselves as they do so. It is known in India by its Sanskrit name, but the Tibetans call it Gans-rinpo-c'e, the Jewel Mount, or Gans-ri, the Mount of Ice. With vertical faces of dark yellow limestone it stands as a tetrahedric prism, its top covered with ice and snow "like a diamond blazing in the sky." 4 The holy mountain appears in the writings of Kālidāsa as does the famous lake, the world's most sacred, that lies before it. It is a major goal of pilgrimage in the Hindu world.⁵

The traditional prominence of the Himalaya in Indian thought and faith led E. B. Havell to suggest that the temples were consciously modelled after the mountain forms. The theory is supported by Yogi Naraharinātha of Pasupatinātha temple, a learned leader of much influence, but whether this is correct or not, the developed pagoda form is certainly in harmony with its mountainous domain. The shrine of Muktinātha beyond Jomosom on the trail to Mustang in western Nepal reveals this harmony in its three-roof silhouette as perhaps the example of classic pagoda architecture most remote from Kathmandu Valley. In Kathmandu, particular reference to the most sacred mountain of Tibet exists in the name given to the ancient palace of King Amsuvarman, Kailāsakuta, and in reference to the hills behind Pasupatinātha which are called Kailasa. Popularly it is said that Siva's bull, Nandi, needs green space to roam in and that the slopes of his master's mountain are ideal. Thus empty spaces beside shrines dedicated to Siva, like the garden of Kumbhesvara temple, are frequently called Kailasa.

B. The mandala and pagoda architecture

If the mountain peaks of the Himalaya are not of specific relation to the structure of the pagoda, such is not true of the mandala. The form of an architecturally all-important vāstupurusa. mandala is square; it is the essential form; its origins are Vedic. As a means of reintegration with the Absolute through meditation and escape from the forces of māyā, the mandala presents to the meditator with precision the formless tangle of forces that underlie the movements of the world so that he may grasp, dominate, and dissolve it. The mandala is above all a map of the universe in both its temporal and spatial expansion and it is a geometric projection of the world reduced to its essential pattern. As such, it gives rise to the temple, first in plan and then in three-dimensional form. David L. Snellgrove takes exception to the general theory of the mandala as source of the temple plan, interpreting the sacred design as a derivation of the pre-existing temple. He finds Giuseppe Tucci's association of the mandala with the Babylonian zikkurat, the imperial city of cakravartin monarch, and the sacred mountain as center of the universe (Giuseppe Tucci, The Theory and Practice of the Mandala, London, 1961, pp. 30-31) relevant but too vague to explain the immediate origin of the mandala. He states that its source may be "closely related with the development of templearchitecture in India, particularly with the tiered pagoda-temple, which is reported by Hsuan-Tsang and of which there are still so many fine examples in Nepal" (David L. Snellgrove, "The Notion of Divine Kingship in Tantric Buddhism," International Congress for the History of Religions, La Regalita Sacra-The Sacral Kingship, Leiden, 1959, p. 213). Traditionally, the original mandala is sometimes said to have come from the lake of Manāsasarovara, 64 miles in circumference, which serves as a mandala to the "temple" that is Mount Kailasa. The central pole of the developed mandala, however, is Mount Sumeru or Meru as axis of the universe.

The mandala takes many forms within Hindu and Buddhist ritual. It is sometimes dedicated to a particular deity and concerned with creating a manifestation of that deity in the mind of the worshipper who meditates upon the diagram. Such aids to meditation may have detailed renderings of the individual deity and his attendants painted upon it, while other mandalas may be severely geometric. Every mandala is essentially a yantra, a geometric form that represents a particular force of power and

energy that increases in proportion to the precision of its rendering, until the creation and control of ideas becomes possible. The sacred design is essential to Nepalese ritual in both two and three-dimensional form. It is constructed as a temporary shrine inside a temple or prayer hall and it may be "built" of twigs and strings in a shallow depression at the riverside, as observed by the author near Kankesvarī Mandir. Whether or not the diagram portrays the gods in specific detail, it is always a revealed image of the cosmic structure.

Rekha is the process of drawing the yantra or mandala, the cosmic map, and in its creation may be found the creation of the temple plan, at least in a general sense. The mandala is thought of as a palace wherein Sakva, King of Gods, sits upon a throne in heaven; the creation process itself may be thought of as a coronation or baptism Tibetan mandalas follow Indian patterns and specifications while adding an embroidery of details to the basic form. In both cultures the act of creating the mandala, like painting the thanka, is itself a form of meditation. Both mandala and thanka are essentially drawn rather than painted, and no line may be erased. A mistake reveals a lack of concentration on the part of the artist.

As the mandala is drawn upon the ground, it is placed on a purified and consecrated surface, with powders of different colors being used to trace lines and draw figures by means of a thread dipped into the powder.6 The mandala is enclosed by one or more borders as concentric circles, itself consisting of a square cut by transversal lines that divide the area into four triangles, each of which may contain an emblem or a figure of a god. The central area is the "palace" of the diagram, the architectural form, and it is measured by units that are one-eighth of the brahmarekha, the line that bisects the mandala from north to south as its axis, Mount Sumeru. The outer enclosures of the mandala as they are interpreted in Tibet consist of the meri or mountain of fire in the form of a flaming wall at the outer edge of the diagram, the rdorje raba or diamond border of unchanging cosmic consciousness, a border of graveyards as the eight aspects of the individual including his five senses that tie him to the mundane world of samsāra, a girdle of lotus leaves that signify spiritual rebirth, and the paradises which appear at the cardinal points around the inner square. In Nepal these borders are believed to be invisibly present around the precincts of the structural temple as a symbolic, if not structural, enclosure

The first element within the diagram of precise architectural reference is found inside the borders just described. In the middle of each of the four sides of the basic Tibetan mandala is a T-shaped gate or door. It is flanked by seven bands of five colors that represent the walls of the sacred palace of the mandala. Toranas resting on pillars cover these gates, and a cakra, the Wheel of the Law, stands over each.

While the mandala is extensively described in the literature of India, Nepal, and Tibet, a single example may be taken as a model by which the architectural associations of the diagram may be considered. This is the Guhyasamaja Tantra, a Tibetan text of considerable antiquity that is based upon an earlier work in Sanskrit, dealing in part with the construction of a three-dimensional mandala. An accompanying illustration shows a mandala that was constructed in 1970 by a Tibetan monk at the monastery of Svyambhūnātha according to the exact specifications of the tantra. For additional reference and clarity a painted mandala that is not dedicated to the deity of the Guhyasamaja Tantra is used. While it is different in details from the model, it is the same in theme and represents the two-dimensional form of the diagram.

Each major deity in the tantric pantheon of India, Nepal, and Tibet has his own mandala, or several of them, and whatever their geometric form, that of Mahākāla being possibly triangular, for example, they are of architectural reference. Some forms of a single god's mandala may be simple while others are complex. In the case of Guhyasamaja, the floor-drawn mandala of the god is simpler than that drawn on cloth. The clay model appears to have duplicated as many of the requirements of the cloth-drawn mandala as possible, so that both versions of the diagram should be considered in light of the text.

The symbol that underlies the squared central portion of the design and extends out from it as four circular forms is the viśvavajra, the crossed thunderbolts. Its four prongs face the four cardinal directions, and within each is contained an elaborate torana of brilliant colors and many levels, with numerous decorative borders and golden garlands. Its total form is so complex that it seems only fancifully architectural in diagram, but in the three-dimensional model each prong rises as a double-storeyed porch above each threshold on the four sides of the building. Its exact form has no parallel in the Hindu śikhara or the Tibetan monastery

shrine, and it does not much resemble the Nepalese pagoda, but parts of the form and decoration of the design are found in all three buildings and it is significant that the *mandala* structure is square and multi-storeyed, like the Tibetan and Nepalese shrines.

The central portion of each torana, from which garlands of beads are suspended, represents an open space that appears in the model of clay as a kind of window. The upper portion of the doorway, the cross of the "T," is defined in the painting by a thin blue line called the mūlasūtra and it is called the kapola or kapolaka, the "cheek" or the space below the eye in the face. The lower portion of the T is the "neck" of the door and the space within this lower opening is the niryuha, a covering over the porch just outside of the door. The vedi is described in the text as existing just outside of the door. It is covered over by the niryuha in the drawing, but it probably consists of three or four steps that lead into the shrine, for these appear in the clay model. Approaching the niryuha area on each side is the widest of the squared borders, a red band that indicates the upper step of the two-step platform upon which the structure rests. It is decorated with curving lines of gold, perhaps as cloud symbols or free-form apsarases. Half-moons and vajras also decorate the band. The lower step of the base is not clearly represented in the painting. Thin bands of five colors that include the innermost squared outline, the mūlasūtra, represent a high transparent wall of crystal and, presumably, the main structural wall of the structure. The porches extend outward from this wall as projections of the basic square of the palace or shrine. Finally, the circular center of the mandala is expressed in three dimensions as multi-level roof or spire that resembles the broad chhatrayasti or umbrella staff, of the Tibetan stūpa.

The four squared borders that lead from the red band outward do not represent parts of the base, as may first appear, but parts of the superstructure. The structural diagram is like an accordian crushed flat as these borders present clues to the roof forms as they are projected into space. The pink band contains diamonds and rectangles in the five traditional colors and represents an upper roof that covers the second storey and extends as a ledge as far as the second step of the base, or just inside it. Were the painted mandala dedicated to Guhyasamaja, this band would be yellow. It is called the pha-gu. Located next to this in the painting and above it in the model is a dark blue border with garlands painted upon it in white. These appear structurally in the model as hanging

garlands supported by short pillars around the roof of the second storey, with two half-garlands found between each pair of pillars. There is an equivalent of these, perhaps, in the borders of garlands that appear at the overhangs of temple roofs in Nepal, although such garlands are not supported by vertical pillars as in the model. No precise counterpart exists in Nepal for the elements indicated by parallel lines in the light blue border that next appears, for these indicate rain spouts that are modelled upon the clay model as large pendant-like appendages of the roof. While the lotus border in white that forms the outer squared border is a motif common in Nepalese temple design, the Guhyasamaja Tantra requires instead a fortress-like crenallation that is clearly represented on the upper roof of the model made at Svayambhūnātha. The pillars that support the porches and toranas appear in the painting as multicolored bands with V-shaped extensions painted red, blue, and green. In Nepal the torana is a smaller and less rectilinear part of the design than it appears in this painting and model, and it is possibly related to the mandala form in another of its parts rather than its torana section over the dvāra.

As certain terms met with in the text of the Guhyasamaja Tantra are essential to the interpretation of the mandala as structural space is represented by it, they are reviewed as follows: 8

Dvāra (Skt.)	Door, gate. The opening within the
	T-form at each cardinal point of the
	diagram.

Pakṣa (Skt.)	Wing, side, flank. That portion of the T
	crossbar that extends beyond the verti-
	cal space of the body of the dvāra.

Vajrāvali (Skt.)	Border of thunderbolts that is part of
	the outer ring.

Brahmasūtra (Skt.)	Cross lines through the center of the
	mandala from its cardinal points.

Koṇasūtra (Skt.)	Cross lines through the center of the
	mandala from its corners, forming
	triangles that are painted green, yel-
	low, red and white.

Hārārddhahāra (Skt.) Garland and half-garland, painted on Dra-ba-dra-phyed (Tib.) blue or black background.

Patika (Skt.) Broad red border representing the Adod-snam (Tib.) second step of the base. Band, fillet, moulding of the base, etc.

Rajobhuva (Skt.)

Riseg-pa-sna-ingu(Tib.) the mulasutra.
Mda-yab (Tib.)	The outer border of the square, white
·	in color, but yellow according to the
	Guhyasamaja Tantra and crenellated.
Niryūha (Skt.)	A kind of turret-like ornament on a
	column or gate, a pinnacle, turret,

column or gate, a pinnacle, turret, chaplet, or crest; wood placed in a wall for doves to build their nest upon; a door, gate. The space within the T of the mandala.

Five-colored border that includes

Kapolaka (Skt.) Space above a door, the cheek, an upper part of a building.

Pha-gu (Tib.) Projecting ledge of the main roof, extending out as far as the patika.

As these many terms taken from the manual for drawing the two-dimensional mandala and constructing its projection into space are considered, it becomes clear that the mandala is related to the Himalayan temple not only generally in terms of its plan but quite specifically in terms of its structure. The Tibetan gönpa or monastery reveals the greatest number of parallels to the mandala plan, especially in its portal and roof additions, but the diagram relates also to the Nepalese pagoda in a number of important ways.

The border motifs of the pagoda correspond in many instances to those of the mandala from Tibet, suggesting that the symbolic intent as well as the visual form of the two "structures" may be similar. The hārārddhahāra and lotiform borders are the same in both, while the torana borders of the pagoda façade reflect the circular enclosure of the outer mandala. The squared base of the monk's model suggests that of the free-standing pagoda, and the deeply-cut diamonds of small, cube-shaped indentations common as a border on many pagodas may be the Nepalese counterpart of the protective vaira motifs in the mandala diagram. Even the mandala's strange "rainspouts" may suggest the makaras that disgorge vegetation at the roof edge of Pharping's Vajra Yoginī temple. More important, the square plan with openings in the center of each side of the building at the cardinal points is exactly paralleled in Nepalese structures, including Kasthamandapa of Kathmandu. Indeed, such a plan is basic to the classic pagoda design. In this aspect of its form as well as in most of the border

motifs just mentioned, the pagoda of Nepal has depended upon borrowings from India, but its sources do not end there.

If the circular superstructure of the clay model is very distant from the multiple roof forms of the pagoda, and if its porches project into space more dynamically than any horizontal extensions of the Nepalese building, there is one detail of the mandaladerived architectural form that may solve a mystery of pagoda design. That puzzle involves the unusual shape of the Nepalese temple's door frame. As the mandala structure is examined, its parts around the door are the two-step base with the steps of the vedi, the niryūha extension that covers over the porch, the paksa wings that support the porch covering, and the pha-gu ledge that is part of the second storey roof. It may be conjectured that if these forms are adapted from a building of fairly large interior space and strong spatial projections to a simpler building of minimal interior space and less complex organization, the projecting parts might be flattened and condensed toward a more surface-oriented design without losing their symbolic significance. This may have been the case as the Nepalese temple developed from the germ of India's vāstupurusa mandala with a strong later influence coming from the developed tantric diagrams of Tibet. It is as if the northern model of the divine structure were compressed to fit a simpler frame. Therefore the Nepalese doorway with its unexplained "wings" and extending lintel and threshold beam may be interpreted as the flattened diagram of the niryūha as it is pressed upward upon the face of the building, the columns as they are pulled into the door frame, and the supporting arms of the paksa as they are pushed outward against the wall of the building as wings no longer functional as supports. 9 As has been mentioned, these wings may be carved with the forms of supportive leogryphs, as at Indreśvara Mahādeva Mandir in Panauti. The pillars pressed back into the door frame appear today as part of the condensed multiplication of parts that occurs as the formerly projecting parts of the temple are flattened against the façade. The looped garland or curved sill that is often found below window or door in Nepal may be interpreted as the curved step of the portal that is pushed downward by the force of compression just as the niryūha is pushed up to become, perhaps, the Nepalese torana. The extended threshold beam mounted into the brick walls may recall the edges or sides of this former extension, the porch. The façade of the Nepalese pagoda, while a structural form, is therefore closer than is generally realized to the design of the two-dimensional mandala, and is perhaps derived from it.

Painted over gateways to temple courtyards as upon the floors and ceilings of shrine interiors, modelled in metal as ceiling elements over sacred images, and cast in bronze or carved in stone as symbolic markers within sacred environs, the mandala is an essential part of the temple site in Nepal. It is a map, a symbol of prayer, a path toward righteousness. In its humble expressions as canopy over temporary image or diagram in minor rituals at temple or home, the mandala is an evocative part of everyday religious observances. It is as important as the focal point of the ceremonies of Bhai Pūja or brother worship carried out in the Newārī home as it is as the unifying "center of the universe" on the ceiling of Kankeśvarī temple.

NOTES

- 1. E.B. Havell, The Ancient and Medieval Architecture of India, p. 120.
- 2. Rg Veda, III, 33.
- 3. Chanda is the rhythmical disposition of building, and among the Paiākadi-sat-chandas of the principal treatises of northern India, the Samarāngana Sūtradhā-ra and the Aparājitaprechā, occur the mountain Meru, and Khanda Meru chandas. The first involves a temple form with central pinnacle rising from the ground surface with sides sloping step by step in many gradations until they reach the ground; the second is of similar form except that a portion of the Meru is cut off vertically, leaving the exposed surface as a "precipitious cliff" (D.N. Shukla, Vastu-sastra, p. 227).
- 4. Giuseppe de Lorenzo, "The Himalaya in Art and Science," East and West, Vol. 8, No. 2 (July, 1957), p. 139.
- 5. For an account of such a journey, see Bhagwan Sri Hamsa, The Holy Mountain, being the story of a Pilgrimage to Lake Manas and of initiation on Mount Kailas in Tibet, London, 1937.
- 6. The specific interpretation of the basic *mandala* is taken from Giuseppe Tucci's *Theory and Practice of the Mandala*, while interpretation of the diagram in terms of Nepalese architecture is the author's own.
- 7. The Guhyasamaja Tantra has been recently translated by Christopher George of the University of Pennsylvania and Columbia University, and he has helped the author to interpret the mandala in terms of its three-dimensional form and architectural features.
- 8. The definitions are based in part upon K. Acharya, *Indian Architecture According to the Mānasāra Silpašāstra*, London, n.d.
- 9. The function of the paksa is similarly discussed by Percival Brown as representing the yaksi bracket of the torana gate.

7

Varieties of Form in Nepalese Temple Architecture

The Bhubanapradipa, the Silpa Prakāsa of Ramachandra Kaulacara, and many other traditional treatises on temple architecture describe in detail the many kinds of sites that may be utilized for the construction of Indian temples and the types of structures that are proper for those sites. The same variation of setting is found in Nepal, and speculation as to the suitability of ground to structure is no less profound in the mountain country. The complete operation of planning and building the temple, designated by the term prāsādamandana in northern India, begins long before a single stone or brick is put down. The procedures involved are clearly described in the treatises, from the drawing of the sacred temple diagram on the ground to the demarcation of squares that make up the reptilian floor plan of the sacred nāgas that dwell underground. Chief among these is the Nāgabhanda.

The Nāgabhanda is the great serpent Ananta who carries the earth on his head and encircles the building site with his body. His form is divided into eight parts that correspond to the eight Digpālas, the presiding deities of the eight quarters. The miraculous body of the serpent revolves beneath the earth, making a full revolution every three months. As the temple plan is laid out, the location of the head of the Nāgabhanda determines the location of the doorway. In the middle of the month of Aswina the head lies at the eastern point of the compass.

The body of the holy serpent helps to determine the placement of temples, but it is not the only factor that is considered by priest and builder. Astrological conditions are also of basic importance in building, and construction of a temple or house may begin only under favorable stars. The Vāstupurusamandala is itself of cosmological and magical implications, and it is, according to the Samarāngana Sūtradhāra, the first concept that the architect must master.

The many rules and directions that exist to govern temple architecture would seem to make a cut-and-dried procedure of the planning and construction of temple structures, but such is not the case in India or in Nepal. Even if the Nepalese pagoda fit any of the model plans described in the foreign manuals—and it does not-its form would be adjusted and changed, no doubt, from the ideal. It would vary according to the terrain and specific character of the natural site and according to its own situation in reference to other buildings. It varies in just this way today.

The Nepalese pagoda in its great variety cannot be briefly described. No one building can be taken as a "typical" example of its style. Certainly there are some patterns of structure and plan that are more numerous than others, such as the free-standing pagoda of two or three roofs or the vihāra shrine of two levels, but the total range of forms is too broad to be abbreviated. In many instances, the physical limitations or special attractions of an individual site are the primary factors determining the design and orientation of a temple. A shrine must always fit its location. In this light is best examined the variation of sacred architectural forms in Nepal.

A. The temple joined to other buildings along a street

The physical setting that is probably of least advantage to the impact of a sacred structure in terms of its design is one that offers the shrine no drama or seclusion by means of escape from the encroaching, mundane world. Such a setting is that which consists only of a street-side opening between domestic buildings. The shrine built in such a spot must be tucked in between other, less important buildings that are always simple, even drab by comparison. Yet temples of the street are numerous.

The façade of a street shrine is open to the gaze of every passerby. Its eaves nearly join those of neighboring domestic structures that are usually hung with strings of onions and peppers. Its entrance is directly accessible from the street and its door, no larger than that of an ordinary house, although it may bear more decoration, is as likely to be entered by a hungry dog or a curious cow as by a devoted Hindu or Buddhist. Yet the very accessibility of such a shrine is advantageous in terms of the use of the building, if not its beauty. The temple in Patan of the Master Architect himself, Viśvakarma, is a structure of this kind.

The street-front temple is joined at the sides by other

buildings, most often of equal height, and it cannot, therefore, have the uncluttered and balanced silhouette that is the mark of the free-standing pagoda. Although a small tower is sometimes attached to it, the shrine of this type often has only one roof, like an ordinary house. In all cases the proportion of cube to pyramid, that is of walls to roof or roofs, is much greater than among unattached shrines. The brick body of the building appears heavier than is usual in pagoda design so that this "earthbound arrow" never threatens to leave the ground. Only when located at the corner of intersecting streets does the shrine of this type retain what might be called a total individual identity.

The street-front shrine is of heavier appearance than its free-standing cousins, but there is lightness in its sacred ornament. The façade of the temple, the only clearly visible side of the building, has great impact by being very different from the ordinary structures that flank it. As a whole the shrine form is usually that of a house, but its surface treatment makes it the house of a god, not man. Even though the roofs of the street-front temple do not stand out in the Nepalese skyline, it is noticeable as the most publicly visible of shrines. Indeed, much of the "exotic" appearance for which the towns of Kathmandu Valley are famous derives from these, the most accessible of sacred buildings.

The Viśvakarma temple of Patan stands out from the surrounding buildings on its narrow street as it does from most other temples in Nepal. This is because its façade is completely covered over with metal repoussé. With only one small tower to distinguish it from domestic buildings on the street in terms of its structure, the temple is separated from the brick context of its setting by the "wallpaper" of metal that swathes it in brass.

A more typical street shrine is a small building of three storeys located across the street from the courtyard entrance to Yakha Bahāl in Kathmandu. It is entered at ground level through an opening with a finely carved pair of doors set into an especially elaborate frame. The opening is equal in size to the standard house door but it is distinguished by a large torana mounted above it and by its own banded frame of open lotus flowers, rows of petals or flames, indented checkerboards, and an all-encompassing border of death's heads. A pair of dvārapālas are carved beside the threshold, while the main symbolic motifs of the doors themselves are a sacred flame that is carved at the center of the junction of the doors, pairs of fishes (matsya) that form circular "eyes" in center

panels of the doors, and the whirling Tibetan symbol known as the rgyan 'khyil which symbolizes the ceaseless change or "becoming" that is life. This resembles the classic Yin-Yang symbol of China.

The doorway is enough in itself to set the shrine apart from other buildings on the street, but in addition to this the shrine is somewhat taller than most other buildings on the street, and it has two especially ornate windows with toranas on its façade, one of which is part of a screened and projecting balcony. The balcony itself is larger than most domestic balconies, its walls slanting toward the street below. To the left of the shrine is an attached resthouse, and this structure, like the temple, is marked by the excellence of its wood carvings. Both buildings are built flush to the "wall" of the street as a whole.

The temple of Chuma Ganesa in Bhaktapur, in contrast to the Kathmandu temple, is separated to some degree from its streetfront setting both physically and in terms of design. It projects further into the street than the buildings around it, it is set at an angle to the road, and it has a small courtyard on its right side rather than an adjoining building.

Even more separated from its surroundings than the Ganeśa shrine is the temple of the goddess Harisiddhī, located in the village of the same name. This structure is so removed from the wall of houses around it by its corner location and its retention of a multi-roof pagoda silhouette, only slightly longer than usual in its lower storey, that it seems only incidentally attached to the buildings beside it. Harisiddhi Mandir towers above the village and dominates its setting visually in a way very rare among street-front temples. Its identity as an individual monument depends mainly upon its four full-size pagoda roofs.8

The three-roofed temple of Augadaya near Sighah Bahāl in Kathmandu is also dominant visually in its domestic setting. This is because its lower section of three storeys, as tall as the houses beside it and projecting into the main courtyard no further than they, is topped by a full-size tower of three roofs. This shrine, like Harisiddhī Mandir, shows how the least attractive of sites may be compensated for in temple design by the attachment of a massive superstructure to that part of the building that is "lost" in its street-front or courtyard setting.9 The structural addition is more successful in drawing attention to such a monument than is mere surface decoration like that applied to Viśvakarma Mandir.

Two final examples of temples joined to other buildings along a street differ from the preceding in that they provide access. through large doorways or "tunnels" through their centers, to areas beyond or behind them. The large pagoda shrine of Bhagavati Durgā Mahiṣāsuramardinī in lower Bhaktapur opens into a large courtyard ringed by houses at its back, and the gilded temple of Siddhi Ganeśa in Nagardeśa contains as a high arched opening a processional entrance to the village. Both of these temples, and most such shrines of the street, contain the garbha grha at the second floor level. Their back sides are quite plain, even though they may be viewed by many from the spaces that the temples open into, but their facades are flamboyant statements of the taste for carving and color that is so evident in the art of Nepal. Standing before the central door of Bhagavatī Mandir, the observor looks upward at such iconographic complexity that only the main gods are picked out and remembered. Three polychrome toranas are mounted over two central windows and the central door, one at each of three floor levels. They are concerned with Durgā Mahisāsuramardinī as theme and main image. Each of the other four large windows of the façade bears a brilliantly colored torana as well, while the crowning pieces of the temple's two side doors are especially large, almost equalling that of the central door. The right hand door opens onto a stairway that leads to the upstairs shrine room and therefore it is gilded. As if all of this decoration were not enough to distinguish the shrine from its shop-lined street, the building as a whole projects slightly beyond the walls of its neighbors. An extra roof and small pagoda tower mark it further, but the design impact of Bhagavatī Barahī Mandir is due mainly to its decoration. The same is true of Chuma Ganeśa, where a golden window and a very large torana marked at the center by a sixteen-armed image of Bhairava flanked by Ganeśa and Kaumara or Kaumarī in their rarely seen fierce aspects are part of the entrance complex. Both of these shrines are part of the city street, a harmonious entity in terms of color and architectural style, yet their surfaces are extraordinary. They adapt but they do not blend.

B. The temple built into walls around a courtyard

Temples built into small, self-contained courtyards differ from street-front shrines in many important respects. 10 Of principal significance in terms of their religious function is that these shrines are usually Buddhist, whereas the street temples are predominantly

Hindu. The courtyard enclosures were originally monastic settlements, and it is not necessary to speak of the blending of the shrine itself with the structures around it for the complex is conceived of as a single architectural whole. This whole consists of shrine, prayer hall, sleeping and eating rooms, rooms for instructions, and galleries. The vihāras of Nepal, like the earlier monasteries of Nālandā or Sanchī, are structurally additive in no way at all.

Every vihāra existed at one time as a combined living. educational, and worship space, but none remains as a fully functioning monastery today. Most monastic communities have found it necessary to give up to domestic habitation those parts of the vihāras that once housed monks, The monks themselves, who for centuries have not been bound by laws of celibacy in Nepal. became part of the lay community. The shrines themselves were not usually given up along with the rest of the vihāra building and these are still tended by Buddhist priests, fewer in number than before the decline of Buddhism which was hastened by the Gurkha invasion, or by laymen who now inhabit the courtyard buildings. 11 The local Hindu/Buddhist population still respects the temples. especially the Newārs. The Newār Vajracharyas and Śakyas are grouped according to the vihāras where they worship and hold their social ceremonies, and they continue to send their sons to the local monasteries for the ceremonies of Acha-luyegu and Bare-chhyegu which initiate them to the full rank of Buddhist priesthood. 12

Two monasteries are of useful reference because of their different degrees of preservation and differing treatments of the basic monastery plan. One, Choya Bahīl near the "Aśokan" stūpa of northwestern Patan, is collapsing and all but abandoned, but the other, Chusya Bahāl located behind the former American Embassy on Kanti Path in Kathmandu, is in good repair and fully occupied by families. Both are complex total forms, diverse but unified, that focus upon their sacred shrines.

The standard plan of the early vihāra as it developed under Hīnayāna Buddhism in India involves a large rectangular room with small dormitory cells all around it. The ground plan is the classical catusala in which the inner court is enclosed on all four sides by buildings, a plan in which walls facing the street have few or no windows, for reasons of security (Andreas Volwahsen, Living Architecture: Indian, p. 45). Occurring as early as the time of the Indus Valley Civilization (ca. 3000-1500 B.C.), it is a severe plan usually without colonnades on either the exterior or interior. The

well. The specific organization of the ground plan may be traced, once again, to the vāstupuruṣa maṇḍala.

The earliest monastery structures upon which later vihāras are directly based were made of wood, and they may have been closer in design to the buildings of Nepal than are the rock-cut or structural vihāra remains that still exist in India today. With the passage of time the more developed monastery plan of Mahāyāna Buddhism came to include a covered gallery between the cells and the court, as found at Choya Bahīl. As the monastery complex moved underground in the rock-cut architecture of India, the garden became an assembly hall, while in Nepal the central space is always paved. The central space is open to the sky but it is never used as a garden; a sacred tree planted before the entrance to the shrine room may be its only greenery. Bronze mandalas mounted on lotiform bases, caityas, sculptural representations of Bodhisattvas, donors, and guardians are often found within the court, and a large bell is always mounted in a special frame of stone or wood beside the door. 14

In contrast to the street-front shrine, the vihāra looks inward upon itself. The passerby must seek it out; its entrance is sometimes almost hidden among other doors or down an alleyway. It is a "pagoda" only in terms of its materials—brick, wood, and tile—and because it expresses the Nepalese world-view in terms of architecture. The Nepalese vihāra is not oriented toward the enclosure of space in the manner of the cave temple complexes of India. Because it lacks the central hall of those enclosures almost all of its shelter is given over to small cells lined along the "arms" of the square of the building. Some monasteries in Nepal, such as Hirānya Varna Mahāvihāra in Patan, have a fairly large prayer hall on their second floor levels, but this low-ceilinged room is hardly more than an extended cell. The spaces are humble, not grand.

The square plan of Choya Bahīl, oriented toward the center, is very similar to that of Buddhist Cave No. 2 at Ajantā. Both enclosures are entered by way of an open verandah, that of Choya Bahīl opening outward through a small door rather than a wide entranceway marked by columns as at Ajantā. Both of the

verandahs are deep spaces and the person who enters either compound looks directly across the central space of the vihāra toward the doorway of the inner shrine. Cells for the occupation of monks border the central rectangles of both vihāras, separated from the court by a columned gallery that bounds the inner square on all sides. 16 This gallery is roofed by the balcony of the second floor at Choya Bahil. The floor itself follows the plan of that below. It is impossible for the cave monastery to have windows on other than the entrance side because it is set into the mountain, but even the structural vihāra has very few openings in its outer walls. Those that exist are hardly more than ventilation holes, measuring only a few inches high. Except for the functional and symbolic focus of the vihāra upon its central court, there is no reason for this lack of perforation toward the outside in the brick wall enclosure.

At Choya Bahīl the shrine room is physically separated from the total matrix of the building so that it stands alone. With the encompassing outer wall of the vihāra passing around it on three sides to enclose a passage 3 feet wide at the sides and back of the garbha grha, the shrine room may be circumambulated as a free-standing structure. In actuality, it is not independent, for a wooden floor extends from the adjacent walls of the second storey to the shrine room so that circumambulation is possible at that level also. An image of Buddha stands inside the lower level of the garbha grha.¹⁷

The exterior of the Nepalese vihāra is not elaborately decorated, in keeping with its central orientation toward its charged inner space. Some such edifices have fine wooden struts on the outside, like those that represent Bhairava on the street side of Chusya Bahāl, 18 but the ornamentation of the vihāra is generally contained within its courtyard.¹⁹ The street entrance of a monastery, usually a small door with a high ledge at the threshold and very low opening, may be differentiated by carved images in stone of guardian beasts, like the lions of Chusya Bahāl. Plastered gateways with Italianesque volutes alongside painted versions of the allseeing eyes of Adibuddha sometimes announce the processional paths leading to certain popular vihāras, including Woku Bahāl in Patan. This same vihāra illustrates the conglomeration of polychrome ornament, statues, inscriptions, and various offerings that sometimes chokes the inner spaces of such buildings, more than compensating for their exterior simplicity.

From the air, Kathmandu appears pock-marked with hollow

squares by the dozen, each an enclosed courtyard that is electrified and defined by the presence of a holy edifice among its secular structures. Many of these are vihāras, although some are courtyards containing free-standing Hindu shrines. All are bold architectural statements of ritually sanctified spaces. This constellation of temples is a macrocosm while the decorative scheme of a single shrine complex is a microcosm of the universe in Nepalese religious thought.²⁰ The essential patterns of carved ornament that embroider the severe geometricity of the monastery and amplifies its meaning are exemplified in the decorative scheme of Chusya Bahāl.

The symbolism of the cornice carvings that are important as part of the central shrine at Chusya Bahāl could be made the germ of an exhaustive study of the philosophical ocean of story in Nepal as it is made concrete in art. Chapter One in such a study would deal with the mandala, for it is the beginning. The façade of the shrine room projects forward about 10 inches from the wall of the enclosing square of buildings, suggesting the individual identity of the square shrine room which is of mandala derivation. The elements of the cornice ornament follow this slight protrusion and stretch across the façade of the shrine, themselves echoing the details of the painted mandala. ²¹

No treatises exist to direct the carver in his creation of the border motifs that intrigue and puzzle the investigator, and traditional modes are handed down in workshops from father to son. The construction, consecration, and, to a small degree, the decoration of the *vihāra* are outlined in detail, however. Such an outline is the *Kriya sangraha-panjika* by Kuladatta, a collection of rituals in Sanskrit language written in Newārī characters and preserved by the Asiatic Society in Calcutta. As briefly translated by Rajendralala Mitra in *The Sanskrit Buddhist Literature of Nepal* (Calcutta, 1882), this manuscript presents clearly the philosophy of Buddhist monastery architecture as adhered to in Nepal.

The treatise directs one who wishes to erect a vihāra to bring the matter before his spiritual guide and teacher, the Achārya, under auspicious stars and on an auspicious day. He should ask three times for permission to build the shrine complex, making a small payment. His guide will then carry out the ceremonies that attend the erection of the building, the gathering of materials, and the removal of obstructions. The Āchārya begins by counting his prayer beads "one hundred thousand times" and by chanting a

sacred formula. The examination of the building site (vāstuparīkšā) follows. As in the selection of any temple site, the "caste" of the soil must be determined.²²

Few differences are found in this text used in Nepal and dealing with vihāra construction as compared with Indian architectural manuals already mentioned, and its close relation to Orissan and North Indian texts should be noted. The specifically Buddhist orientation of this manual is clear, especially as it treats the consecration and decoration of the monastery. As the Acharva dedicates the building through sacrifice, he is instructed to sit every evening in a square diagram cleansed with cow dung; he would worship the three jewels and praise the ten dikpālas, who are the guardians of the four quarters, the mid-points, the zenith, and nadir, by chanting gāthās; with his left knee touching the ground and his hands folded, he should ask the divine protectors for the land upon which the vihāra stands. After several other ceremonies that involve propitiation of the earth, the spiritual guide must ritually remove any "evil working bones" that lurk beneath the ground.23 He goes on to worship the vāstu, building, and honor the vihāradevata, the gods of the vihāra. The measurement of the ground with string, the examination of the vāstu serpent, the laying of the foundation stone, the division of the vihāra into rooms, and the choosing and felling of trees follow. In the process of its creation as well as in its finished design, no other essentially Nepalese structure is as clearly reflective of Indian patterns as this, the vihāra.

Like the procedures of consecration outlined in the Kriya sangrahapanjika, directions for painting the shrine are given in a way quite specifically Buddhist in orientation. The shrine room that holds the supreme image should be painted with the Tathāgatas, the multiple Buddhas, as well as Bodhisattvas, Vidyādharas or aerial dwellers of the Himalaya who are attendant to Siva, and the "goddess of knowledge." ²⁴ Just beside the image of Buddha should be painted a Bodhi tree. Varuṇa as encompasser of the world and, in the form of Aditya, chief among Vedic deities as god of the ocean or waters, should stand on the right side of the image. ²⁵ Lokhadhipa, lord of the world, should stand on the left. On the right side of the door should be images of Mahābala and Mahākāla, the great destroyers. ²⁶ The first is black and has a fierce face with three circular eyes outlined in red, protruding teeth, and brown hair that stands up. He is dressed in a tiger skin and wears

eight serpents as ornaments. Mahākāla is very similar in appearance but wears a garland of human skulls instead of serpents. On the left side of the door should be painted the king and queen of hārīta birds, a kind of pigeon, seated on thrones of emerald and ruby.²⁷ Hārītī also guards monastery entrances.

C. Free-standing temple within a courtyard

Neither the vihāra shrine as part of the hollow square that is its courtyard complex nor the street-front temple is a freestanding pagoda. These buildings do not stand alone. The shrine that is completely free of all attached structures is a more dynamic form than these, and the attributes of its design have already been discussed as an introduction to this study. Obviously, it has no single "façade" with the attendant compositional and decorative limitations of facing only one direction. As it occupies the middle of a courtyard rather than merely punctuating one of its sides, the shrine radiates the drama of its projecting form and ornamentation toward the four quarters. Its great decorative scheme is not icing on a flat surface, it outlines the temple structure in its entirety; it details the total spatial definition of the building. More a sculpture in the round than a relief, the shrine invites the viewer-indeed almost forces him—to move around the building in the sacred path of circumambulation. As he does so, as at Matsyendranatha in Kathmandu, the worshipper is protected by the polychrome eaves of the overhanging roofs and dazzled by their lacy hangings in perforated metal. He cannot ignore the powerful statement of this building in terms of both form and surface as he is propelled around the shrine in the compressed space of its own courtyard.

The large Buddhist temple of the White Matsyendranātha in Kathmandu has two roofs and one of the most baroque entrances in all of Nepalese architecture.²⁸ The building seems to expand its dimensions within its fairly small courtyard that is hemmed in all around by domestic structures three and four storeys tall. It is a welcome opening in the congested mass of the city center. The silhouette of the temple is somewhat distorted when viewed from the courtyard enclosure, so that it has less impact on the viewer than does the decorative veil that covers the shrine, teasing and intriguing the eye. At its base, a profusion of small monuments, mostly caityas and statues, makes a forest of stone that must be penetrated before the viewer is able to approach the door of the shrine. As he moves toward that point of entrance, the devotee sets

foot within the immediate "electrified" space of the shrine door and the garbha grha. The roof, the stepped base of the shrine, the railings of oil lamps are all barriers that seem to push outward from the temple, yet the devotee is drawn toward the glittering doorway through which the god himself may be glimpsed.

The wooden figure that represents Matsyendranatha is bedecked with flowers and silver ornaments. His white face is tiny. fragile, and cold within what seems a crushing mass of metal decoration. When he is undressed for his yearly bath and repainting by a priest, this patron god of Nepal around whom swirls the gilded jewelry of one of Nepal's most ornate shrines seems almost pitifully small.29 Yet he is the great Nātha Yogin who is the protector deity of Nepal. In the temple plan he occupies the germ space from which all else radiates.30

Matsyendranātha Mandir is perfectly proportioned; its wide lower storey provides ample support for two roofs that seem, because of their abundant ornament, to be heavier than most. The courtyard is large enough to include space for circumambulation and gathering on special occasions, yet small enough to dramatize the scale of the shrine in its center. A low railing mounted with prayer wheels and oil lamps stands along three sides of the plinth of the temple, separating the temple body from the encompassing brick pavement of the courtyard. A metal fence serves the same purpose at the front of the temple and the devotee is drawn to move around the shrine inside the passage between rail and wall. As he does so he may examine paintings mounted in glass upon the outer wall of white tiles. These represent 108 forms of Avalokitesvara 31

The structure itself differs little from the ideal patterns already discussed, except that the walls of the lower storey are covered on three sides with white ceramic tiles and the façade is covered with metal repoussé. The triple toranas of the entrance complex are framed by filigree of metal foliage that nearly obscures the tripartite form of the doorway—an explosion of curvilinear forms over the repeated horizontals of the door frame. This takes precedence in visual terms over the polychrome struts, at least on the front of the shrine, but the figures are sensitively carved and worthy of attention. They again represent Avalokitesvara. From the corners of the shrine base, rampant leogryphs leap out diagonally into the courtyard space to draw the visitor around the temple enclosure more forcefully than do the paintings on the wall

or the elements of the roof. This shrine, and any free-standing pagoda located in its own courtyard, is honored ritualistically and defined structurally by the movement that takes place around it.

D. Free-standing pagoda of square plan

1. Shrine resting at ground level

The free-standing pagoda as it exists outside of the temple courtyard, in any location at all, is much like the shrine of Matsyendranātha. It reaches great height, however, mainly when it is not narrowly enclosed. The Siva temple of Kumbheśvara Mandir in Patan, one of only two five-roofed temples in Nepal, is such a building. It dates from 1392 A.D. although popular legend places its origin much earlier, even to the reign of King Amśuvarman. It is among the oldest standing monuments in Nepal, but it would be a major monument whatever its date. 32

Kumbhesvara Mandir differs from Matsyendranātha Mandir firstly in terms of its setting, for it occupies the corner of a large and sprawling space that is part courtyard, part hilly garden, part private home, and part public bathing place. The activities that surround the shrine are of greater variety than those carried out in the busier but less communal space of the city temple in Kathmandu, largely because of the differing natures of the sites. Secondly, Kumbheśvara impresses the viewer less in terms of intricate decoration than uncluttered mass and volume. There are no large surrounding buildings to blur or interrupt the pristine outline of its silhouette, and the total thrust of the structure may be taken in from all sides, both within and outside of the immediate enclosure of the shrine. The low elevation of the site robs the building of prominence in the skyline of the town as a whole, but it soars skyward when seen from the street or court level around it. The roofs of the shrine project upward as square within square for five elevations and the body of the temple is duplicated a corresponding number of times. Aligned with the rectangle that is formed by streets at the outer perimeter of its enclosure, Kumbheśvara is rooted to its site both architecturally and geographically.

Kumbheśvara is fronted on the west side by a large resthouse with open porches and some outstanding window carvings. The circular window in an extended frame over the outer entrance to the courtyard enclosure is noteworthy for its sill supported by thirteen rearing horses. Before this outer entry and within the main open square of Konti Tol are two sunken bathing places and a small one-roofed shrine dedicated to Ganesa. The bathing place closer to the Ganeśa shrine has attached to it some important stone sculptures of considerable antiquity. Most of these represent Siva. especially as he sits atop Mt. Kailāsa with Pārvatī, his consort,33 but a small image of Kāliya-damana set into the wall above the central water spout dates from about the 8th century as a rare example of this subject in Nepalese sculpture.34

A third bathing place is found within the temple grounds. It is lacking in sculpture but its ritual significance is much greater than that of the others, for it is the setting each year, at the time of the Janai Pūrni festival, for the display of the temple's main image. A small wooden platform is set up in the middle of the depressed bath which is then flooded to a depth of 5 or 6 feet. A narrow plank leads from the courtyard to this platform above the water and the main priest of the temple uses this as a runway to the platform, where he places the gilded linga wound with snakes that is the holiest of symbols. At this moment the tank comes alive with men and boys who leap into the water to swim up to the platform, and crowds surge forward to follow the path taken by the priest so that they may sprinkle their offerings of rice and flowers upon the wooden image. The temple is circumambulated by worshippers as is the tank itself, and once again the pagoda is defined by patterns of ritual movement around it. The image itself is paraded around the shrine, its structural manifestation, before it is placed for a single day in its aquatic setting.

Looming over the scene of such activity, the shrine of Kumbheśvara occupies a stabile square amid a tangle of movement that is more a microcosm of the real world than is found in the confined enclosure of Matsyendranātha. Children play on the low hill behind the shrine, said to be the grazing place of Siva's bull, Nandī, and old men relax and smoke their pipes in the pātī resthouse or in the small shrine to the left of the main temple that is used especially for the performance of sacred music. Two smaller pagodas, each having two roofs, stand in the northwest corner of the wall-enclosed grounds where they echo and complement the height and rhythmic outline of the larger shrine. Kumbheśvara itself is a simple and classic building, a living monument surrounded by life. It is a classic example of the most basic of pagoda types: the free-standing pagoda of square plan resting at ground level.

2. Shrine resting on a multi-level plinth

The most obvious example of the square, free-standing pagoda as it is raised atop a base of several steps is Nyatapola Mandir in Bhaktapur. The name of the temple means "fivestoreyed" and this shrine of Taumadhi Tol is crowned by five roofs and stands atop a plinth of five steps. It was built by King Bhūpatindra Malla, who personally carried some bricks used in its construction, in 1708. It is like Kumbhesvara Mandir in its structure and to some extent in its polychrome decoration, but its high placement sets it much more dramatically apart from its surrounding townscape. Its solid base projects in steps upward like a brick telescope, repeating the extensions of the temple body. The plan of the temple and its multi-level plinth, like that of Taleiu Mandir in Kathmandu, consists of repeated squares, one within the other, from the lowest step of the base as an outer border to the small enclosure that represents the fifth and highest storey of the tower. At the epicenter of this expanding series of square is the garbha grha as the core of the structure.

Nyatapola Mandir is an extreme example of the importance of the exterior manifestation of the Nepalese temple, for its inner shrine is never opened to worshippers. There is, in fact, some doubt as to the identity of the goddess who is enshrined in the building. She is a secret Tantric goddess, possibly Siddhi Laksmī or Bhairavī, who was brought to the square and given a massive temple so that she might control the troublesome Bhairava whose major temple, Bhairavanātha or Ākāsabhairava Mandir, also stands in this square. The secret of the identity of the goddess is kept by the few priests who have access to the Hindu shrine, and popular belief, at least, is that the deity is unmanifest and requires no votive object. The outer door is kept locked.

In terms of its religious usage, this temple would function equally well as a solid brick monument as it does as an architectural form that provides shelter and encloses space; the worshipper never glimpses even the dark inner space of its lowest level. With no glittering shrine entrance to attract the viewer and no monumental image, like the Mahākāla of Tundhi Khel in Kathmandu, to receive the personal devotions of worshippers, Nyatapola is outstanding among shrines strictly because of its towering exterior form. The details of its surface are relatively ordinary; its polychrome wood carving is of average quality. The combination of its multiple steps, the guardian beasts that stand

beside the stairway approach, and its repeated roof forms that climb higher than any others in all of Nepal's complex of temple design bring to this remarkable building great height and superb balance.35 The physical effort required to climb to the top of the platform by means of its steep stairway is itself part of an act of reverence, recalling the way of approach to much in Khmer and even Pre-Columbian temple architecture. The plinth design relates more closely, however, to that of certain ruined temples in northeastern India. Both are, perhaps, traditions of more "pure" relation to the mandala than are the later, polyhedral plinths of Indian temples in stone.

E. Free-standing pagoda-rectangular plan

1. Shrine with multiple roofs

Several temples that are classical pagodas in all other respects, including their multiple roofs and decorative schemes, follow plans that are rectangular rather than square. These include both of the major temples of Bhairava in Kathmandu Valley, located in Bhaktapur and Kirtipur, 36 Bhīmasena Mandir in Patan's Durbār Square, 37 and many other important temples. These structures are more likely than pagodas of square plan to have their main shrine rooms at the second rather than the ground level, and in fact the rectangular plan seems to be a pre-requisite for such lofty placement of the inner germ, but several have ground level shrines. Bagh Bhairava in Kirtipur, for example, enshrines its famous image of Bhairava in his tiger form in a ground level garbha grha. 38

The rectangular shrine is, of course, well adapted to placement in rectangular sites such as those described in the Silpa Prakāśa and elsewhere, but most occupy sites in Nepal that would easily contain temples of other plans as well. Unlike the pagoda of square plan, the rectangular temple is oriented in its design toward a façade, an entrance side. There are no false doors at the sides of such a building and if a door is present at the back, there is no attempt to make it duplicate in form the main doorway. There is, therefore, a lack of the orientation toward the four quarters that is essential to the squared temple, and each rectangular shrine—even Bhairavanātha, with its odd back door opening toward the upper level shrine—have a dominating entrance complex front and center. The shrine is more than a mere façade, as the street-front temple seems to be at times, for one can and does move around the

free-standing building, but its rectangular plan prevents the building from entering space as actively as does the square shrine with its four equal "façades." The derivation of the rectangular plan from the *Vāstu-purusa mandala* or other sacred diagram is correspondingly less clear.

Rectangular pagodas are never mounted on high bases or placed on top of palace buildings; they always stand at or near the street level. Because of their frontal orientation, their horizontal balance, and their comparatively large size, these buildings come closest in Nepal to demanding a processional approach by the devotee. This "formal" approach, however, is of microscopic scale in comparison to that of Todai-ji in Nara or the T'ai Ho Tien of Peking's Forbidden City, buildings that are so integral with their elaborately landscaped settings as to be very foreign to the much humbler Nepalese designs. In general, geometric layout of the town or temple complex has never been strictly required in Nepal, with the exception of the vihāra plan as it was directly borrowed from Indian prototypes. 39 The temples of Bhimasena, Akāsabhairava in Kathmandu, and Bhairavanātha in Bhaktapur all occupy rather chaotic settings. Bagh Bhairava, however, is emphasized in its monumentality and its placement at the edge of Kirtipur's high hill by the large courtyard that encloses it, offering an entrance directly opposite the shrine.

Bhairavanātha is a good example of the pagoda of rectangular plan as one of the largest of such structures, one of the most frequented temples in Bhaktapur, and an impressive architectural monument by any standard. Established as a smaller structure of only one storey by King Jagat Jyoti Malla (1617-1638 A.D.), Bhairavanātha was enlarged to its present size by King Bhūpatīndra Malla in 1718. It was badly damaged during the great earthquake of 1934, as was Nyatapola, to a lesser degree, beside it, but both temples were reconstructed in their original forms. Bhairavanātha stands seven storeys high and has three roofs, the uppermost of which is covered on the front side only with gilt-copper. It is crowned by a pinnacle of seven spires.

The under-roof supports vary at the different levels, with struts beneath the lowest overhang, wooden screens with attached struts below the middle roof, and screening alone under the topmost roof covering. Wide cornices of carved wood and special bricks divide the body of the temple into horizontal registers, and these elements, together with the broad expanses of the roofs,

emphasize the heaviness of the building. This heavy stability is lightened but not counterbalanced by the roof corners and the tall parasol lifted above the highest pinnacle. The frontal expression of Bhairavanātha, more than that of most other shrines, may be reduced to a scheme of horizontal and vertical lines, among which the former dominate. The roof coverings are less prominent in the total form than is usual in pagoda design and the diagonals of their slope are secondary to the vertical lines of the walls.

It is not today possible to walk all around Bhairavanātha, although it was built as a free-standing shrine. Walls have been added to connect the building to a small resthouse at its left side and to the domestic structures behind it. These extra walls, perhaps part of the post-1934 reconstruction program, are physical barriers as well as interruptions in the temple design, for it is now possible to reach the temple entrance only by going through the large gateway in the resthouse beside the building, through a small courtyard, and down a few stairs into the very confined space that is the rear courtyard of the temple. The back door of the shrine, its only functional entry, opens into this tiny court, as discussed earlier.

Those who actually take the rear approach to the temple and climb to the main shrine inside its second floor level are comparatively few in number, for there is a much more striking "entry" in the façade of the building. This false entry complex consists of three sealed doors topped by toranas and having screened windows at their sides as well as a compound window covered with gilded metal above. At the center of the main door stands a miniature bronze image that receives the devotion of thousands. This, also previously mentioned, is Bhairava, overcoming a fallen enemy in frightful triumph. A small hole, a vertical slit, is found in the center of each of the false doors. The central of these is framed by a trilobe arch of metal.

The figure of the god is 6 inches tall. Bhairava wears his garland of human skulls and hoists a sword over his head while standing just before the central opening in the wall. Below all three is a ledge covered with metal, blocking the doorway completely at a height of three feet above the ground. 40

The doors were once covered with metal repoussé but much of that is now lost. The base of each of the four columns that are part of the door frame is supported by a leogryph with flowing mane. The curved "threshold" below each door is filled by the figure of a flying apsaras. The frame complex is completed by pūrna kalāsas,

carved of stone and set into the wall of brick on either side of the door frame, and small windows covered with brass. In panels above these appear an embossed sword, a lotus, and a sun/moon combination. The repoussé metalwork of all is rather crude, but some fine wood carving is found at the back side of the temple, connected to the rest of the building by a wide cornice that includes fierce pig faces among its border motifs.

The second storey of the shrine is bound within two cornices at the front of the building. The arrangement of its parts is oddly asymmetrical. A large golden window is set into the wall's right side but it is balanced on the left only by a tiny wooden opening that is covered over by a painting of the god and some attached entrails. The larger window was undoubtedly added some time after the completion of the building.

The central group of windows of the lower level is part of the slightly projecting central third of the façade. This projection of only a few inches is too slight to interrupt the design of the otherwise flat façade and there is no structural necessity for it, yet it does bring at least a slight undulation of surface to what would otherwise be an unrelieved box . . . the rectangular body of the temple. At the "corners" of this projecting section occur cross beams supported by carved representations of human arms, as at proper cornice crossings. The larger projecting section is found echoed in other architectural examples, as in the body of Jayavagiśvari and the plinth of the Kathmandu Taleju, but such projections are usually less subtle than at Bhairavanātha. The extension serves to emphasize the section of the façade that holds the entranceway, but only when seen from reasonably close range.

Row upon row of small windows and cornices emphasize the rectangular orientation of the façade design in the upper third of the first level of the temple and in the body of the building between its second and lowest roofs. These rows continue on the sides of the temple and on its back except on the lowermost level of the temple's right side, which has no openings at all. This side of the temple serves as a storage place for the massive wooden wheels that support temple carts at festival time.

The back of the temple, very important because it holds the only real entryway of the shrine, is very different from the front. It is uncluttered by the paper signs, paintings, and bamboo poles with banners that are periodically added to the façade. It is "classic" in

its contrast of carved wood with brick, although most of the wood carving all around the building is dabbed with white "highlights," and in the division of its walls into horizontal registers by means of cornices made of carved wood and moulded brick. The small doorway, set in a standard extended frame, is flanked by especially fine carvings of the asta-mangala, the "eight glorious emblems." The large torana above the door is of repoussé-covered wood, with a 25-headed image of the main god with two attendant figures appearing in cast bronze at the center of the door marker. A halo of nagas with pendants in their mouths frames the central half-circle of the torana, while nagas and makaras accompany Garuda on its outer border. The entire torana is chained to the window behind and above it, slanting forward toward the visitor in the court below. The window itself is made entirely of carved wood, a fine example of Nepalese window art, with scallop-edged openings and a torana of its own. Unlike the smaller windows nearby, it is unmarked by white paint but like them it has an upper ledge of bricks that are moulded in the shape of wing-like beam ends. In total, the complex of the rear entry provides access in a quiet, secluded space to what is as a whole a flamboyantly powerful monument. The dark doorway opens into a stairwell that connects to the upper level where an image is enshrined. At the ground level within the dark hall may be glimpsed three tiny slits of light as other "entries" into the sacred home of Bhairava. These openings, already seen in the false doors of the temple façade, are passageways through which small offerings and ritual oblations are poured into the mysterious inner space of the great temple as they are offered to the tiny metal figure that represents the terrifying god.

2. Shrine with one roof

Bhairavanātha is a vertical rectangle marked by strong horizontal elements that anchor it to the ground; it is a pagoda. Other shrines are found, however, that are much simpler rectangles horizontally oriented.⁴¹ They usually hug the ground, they are covered with one roof only, and they resemble dwellings as much as shrines except that they have more decoration. Some, like Siva-Pārvatī Mandir in Kathmandu, are very large, but most, including Nava Durgā Mandir below Paśupatinātha on the Bagmatī River, are much smaller than the standard pagoda. Nava Durgā Mandir is of straightforward, simple design. It may be easily circumambulated and its gilt copper roof of large size is so close to the ground that it becomes the most expressive element in the total

form. There is much ornament attached to the shrine, with the face of Durgā mounted as metal sculptures at each side of the gilded torana. The shrine has a triple doorway, the two side openings of which are covered only by screens of wood and metal repoussé. The small building is one of several that reduce the theme of slanting metal-covered roof over rectangular body of brick to its purest expression in Nepalese art. The building type is especially devoted to the Nava Durgā or Astamātrka.

Because it has no inner core, the rectangular shrine of one roof encloses more than the usual amount of space for a temple of its floor area.42 A large hall is found inside the Hindu shrine of Maneśvarī in Harigaon, for example, as a garbha grha for the massive stone linga that is its main image. The temple of Siva-Pārvatī in Kathmandu displays its many images along the back wall of its spacious interior, and, on a smaller scale, such shrines often recall resthouse architecture in both their exterior and interior designs. The "mother" shrine of Mahālaksmī that is located in the fields outside of Lubhu while the "daughter" shrine of the same goddess inhabits the town, is very similar in form to a small resthouse on the main road in Sankhu. Both enclosures are very open and the garbha grha of the shrine, actually its entire interior, is by no means a secret space. Two large doorways reveal the interior to all who pass by, and such a simple shrine is the most open of all settings for enshrined images.43 Mahālaksmī in Thankot, Balakaumāri in Patan, and the single-storeyed temple of the goddess Mai that stands beside the river below Bhaktapur are all quite exceptional in this very openness. They are even more accessible than are the shrines of the street-front; they are appropriate to the Mother Goddesses.

F. Free-standing pagoda—octagonal plan

Octagonal temples in Nepal are rare and they are all dedicated to Kṛṣṇa.⁴⁴ The most famous is the Kṛṣṇa temple of Patan's palace square, called Chyāsimdeval or Chyāsimdegah, meaning "eight-sided." It is a modified śikhara made of stone that relates much more to Indian traditions than Nepalese. It was built in 1723 A.D. by Yogamatī, great-granddaughter of King Siddhi Narasimha Malla and daughter of Yoganarendra Malla.⁴⁵

A second example is distinctly Nepalese, although it is also called Chyāsimdeval. The eight-sided pagoda of Kṛṣṇa is located in the Durbār Square of Kathmandu, across the road from the

Hanumat Dhoka gateway.46 This structure has three roofs and stands upon a base of five steps made of brick, the uppermost of which is part of the main structure and contains the embedded bases of the columns that surround the temple porch.⁴⁷ The plinth is less than 10 feet high, but it effectively raises the shrine above the street and above the base levels of all nearby temples except those that are part of the palace structure complex itself. In this sense it is well set apart; in another sense it is crudely isolated. Brick walls of comparatively recent construction join the temple to separate it from the property of private dwellings behind it, thus blocking the path of those who would circumambulate the structure in ritual movement. This blocking of divine motion is especially unfortunate in the case of this shrine, for its octagonal form is the most "façadeless" of all pagoda designs. It has no front or back but only a single tower of eight sides directly analogous to the spire of the Indian sikhara. It is perhaps an especially Nepalese expression in art of the holy axis of the universe, Mt. Meru, that inspired the sikhara form in Indian architecture. As it stands, the Chyasimdeval of Kathmandu is cut in half and made to become a four-faceted façade rather than a structural whole.

Krsna Mandir, despite its awkward situation at present, is a pagoda in every sense, differing in detail from the classic temple of square plan only as its extended beam ends project from corners of obtuse rather than 45° angles and as the struts supporting the roofs fan outward from eight angled meetings instead of four. T-shaped capitals meet to form arches between the columns of the porch, carved with scallops at the edges and painted with yellow flowers. In very recent years the shrine has been restored, involving in part the removal of a plaster covering that had disfigured the top storey and the removal of plaster ribs that had weighted down the two lower roofs at their sloping edges and at their upper edges around the temple core. Also, the upper roof of corrugated metal was replaced with a covering of tiles more in keeping with traditional design and the crude post that had been the top-piece of the structure was replaced with a proper pinnacle.

G. Temple tower attached to other buildings

1. Square and rectangular plan

Sacred structures attached as towers to domestic or palatial buildings are common in Kathmandu Valley, the private shrine of family kuladevata dedicated to Bhagavatī and built on top of a

dwelling house in Kathmandu's Durbār Square being just one example. Such temples are generally of restricted access as they are frequented by a single family or clan or as they are opened only to royalty and their priests. In the first instance, the tower shrine is an outgrowth of the room for private worship that is part of the traditional Newārī home. It is simply expanded and given its own distinctive roof, as in the Bhagavatī shrine. The second type of shrine, those restricted to royal patronage, are of more complex development for they are major shrines enclosing much space and having great impact in the setting of the towns and palace squares, but they are never opened to the masses and they are more remote from the earthly world than are any other Nepalese buildings.

The goddess Taleju, as protectress of Nepal and Nepal's king, has traditionally been honored by the construction of the most elaborate temples in the palace complexes of the main cities.49 The free-standing pagoda of the palace compound in Kathmandu is dedicated to her, as is the largest of the temple towers that are attached to other buildings: Taleju Mandir in Patan. The temple of Taleju is placed atop the Mulchok palace of Patan as if it were a pedestal. It is the highest structure in the palace square and the tallest building in Patan.50 It is attributed to the reign of King Siddhi Narasimha Malla (1620-1661 A.D.), although some parts of the palace compound are perhaps as early as the 14th century in date of origin. The tower appears somewhat more compressed than most because its roofs are of more gradual slant and have less core space between them, but from the street directly below, the height of the tower is very impressive indeed. This shrine is a traditional, free-standing pagoda of square plan in every way, except that it has been built on top of another building. There is no element of the design to integrate tower temple with palace base, and a high wall all around the shrine does more than enclose a cirumambulatory space; it is a strongly disruptive band, a barrier, between the upper and lower halves of the brick tower.

The cube that is the supportive palace building below the temple is four storeys tall, and the tower as a whole is one of the tallest structures in Nepal. Traditional belief is that planners and priests sought to bring the three Taleju shrines of the main cities of the Valley to equal elevations, so that divine communication would be facilitated among them. The temple of Bhaktapur, resting on a high outcrop of land, needed no further elevation, but the temple

of Kathmandu required a high plinth, and that of Patan a still higher structural base to reach the level of the shrine in Bhaktapur. It is easy to accept this legend as fact in light of a historical linkage that was made in modern times as the palace of Kathmandu was joined physically to the shrine of Pasupatinātha more than two miles away by a kind of sacred umbilical cord in the form of a banner by which divine communication was maintained between the king and Lord Śiva. 51

Two temples are attached to the roofs of the Kathmandu palace compound opposite Siva-Pārvatī Mandir. They are dedicated to Bhagavatī, but also to Akalaya—the joint worship of 330 million other deities, and they illustrate two different themes of design in temple tower architecture. The larger of these, like Taleju Mandir in Patan, is an independent building that looks as though it just happens to be set on top of a palace, but the smaller is both structurally and visually part of the building below. In contrast to the larger of these two temples, which is marked at its "base" by a circumambulatory passage with a high wall, the smaller tower has the lower of its three roofs blended with the main roof of the three-storeyed arm of the palace. The balcony of wood that supports this lower roof is as much a part of the palace as the temple tower. In terms of both its material and its design the small shrine is integrated into both the street-side wall of the palace and the complex as a whole, with its many such towers. There is an open shop in the street level portion of the building below the tower which reveals that the inner core of the tower is not continuous to the ground, but the surface articulation of the lower building, with a projection of that section of the wall that underlies the tower, forms a "base" for the upper structure.

A small tower attached to the roof of the palace just over the Hanumat gateway is part of the larger building simply because it sinks into it, the brick core of the tower piercing the tiled roof below. As the tower is worn like a cap by the main structure, its physical support is lost in the walls beneath it. Yet even this tower is better integrated into its structural setting than are those towers that make pedestal-like foundations out of the buildings upon which they rest. All of the tower temples, except the humble examples that are part of private homes, are as remote and unapproachable as they are visually striking in their high placement.

2. Round and octagonal plan

Of the great many temple towers attached to other buildings in Nepal, only two are round in plan and one is octagonal. The octagonal building is part of the Mulchok courtyard in Patan, while the round towers are dedicated to Siva in the Paśupatinātha compound ⁵² and a tower shrine of Hanumat located inside the gate of the Kathmandu palace. ⁵³

The Hanumat shrine is clearly viewable from the main courtyard within the palace, and from the palace tower. It is an extraordinary structure, for it injects the only circular element of design into the scheme of rectangles and sloping diagonals that is the rule, but for one other exception, in the design of the entire palace complex.⁵⁴ The tower of Hanumat contradicts every structural rule in pagoda design, except that its multiple roofs recede in size and are supported by struts over a telescoping core. There are no extended beam ends because there are no corners. There are no heavy struts carved with kumsalas to support the roofs at their greatest overhang, for the overhanging roofs are of the same length all around the building. In spite of these differences, the round tower illustrates balance of its roof area to brick core that is as perfect as that of any classic pagoda and it is a dynamic accent that both punctuates and emphasizes the rectilinear matrix that is the palace compound as a whole. It is an active spiral in a stabile, rectangular world.

H. Temples with second floor shrines

Temples that have their main shrine rooms on the second floor rather than at ground level are numerous, and they are very different from the free-standing shrine of square plan. They differ in their relationship to their sites, in their degree of accessibility, and in the kind of space that they enclose. Inner shrines that are freely accessible to worshippers in physical terms, connected to the street by wide stairways like that of Akāsabhairava Mandir in Indra Chok, Kathmandu, remain figuratively remote because of their elevation. Other second floor shrines, screened at the exterior and opening to the street only through narrow, dark chambers, appear very secretive indeed. The ground floor entrance to such a shrine is a mere passageway; it does not reveal the holy enclosure of a god And the drama of the confined garbha grha is somewhat lessened as it becomes part of the larger prayer hall that usually exists at the upper level. The cubicle of the god is no longer the

sole inner space of the monumental enclosure, it is no longer the only living womb.

1. Temples with balconies

With relatively few exceptions, such as Bhairavanātha in Bhaktapur, temples with second floor worship areas are more segmented in design and less clear in their overall organization than are more standard pagodas. This is the case of Vajrayoginī in Pharping, a three-roofed building that is two storeys high at the lower level. Beneath the lowermost of its roofs a screened balcony with three open windows at the front projects outward with slanted walls covered with screens. This is the exterior expression of the upstairs prayer hall. It looks down upon a courtyard enclosure that is very much like that of a vihāra, a feature that is not surprising since the goddess Vajrayoginī, consort of the terrible god Heruka, belongs to the Buddhist pantheon. The side buildings, those of the "arms" of the temple, are occupied by local families who care for the shrine. The enclosure is completed by a high brick wall at the front that holds one small door while a second door provides an exit to the left of the shrine and toward the cave temple of Gorakhanātha. Both temples are set into the high hillside that towers above the village of Pharping. Vajrayogini Mandir dates from the 17th century.

There are two entrances to the shrine of Vajrayoginī, and the simpler is the more important. At the ground level the façade is opened by a large and prominent double door that leads the visitor into a very open lower shrine that is walled at the front side only by iron bars. 55 This shrine shelters large stone images of Vasundhāra, Sakyamuni Buddha, and Matsyendranātha, but it is a simple space without ornamentation or any elaborate paraphernalia of worship. The second and much simpler entrance, a small door located to the left of the projecting cube of the lower storey, leads upstairs to the spacious hall that is the main area of worship.

The second level of Vajrayogini Mandir is spatially more complex than is suggested by the exterior of the shrine. The central part of the multi-roofed building is set apart by its projection of several feet into the courtyard space, but the upstairs prayer hall occupies more than just this projecting section of the shrine. The garbha grha that one expects to find under the roof tower is in fact there, but a second shrine room exists as well. This enclosure is located several steps to the right, at the back of the empty hall that

is the upstairs space of the right wing of the building. It contains a fine image of the goddess in bronze that stands 3 feet tall and is modelled in great detail. Further investigation is required to determine the relationship of this shrine room to that which occupies the traditional place of the garbha grha, directly below the roof tower, and the plan of the building is unusual in many other respects as well.

The naked image of the goddess in the "secondary" shrine is emaciated and terrible to behold, but the figure is at least whole and therefore less grotesque than her headless form called Bhattarikā Vajrayoginī. The bloody goddess is represented in the main shrine as well, but in the form of a much simpler image that is hung with a great deal of silver ornament. Her attendants are Simhavaktrā and Vyāghavaktrā.⁵⁷ On the outside wall of this core shrine is mounted a small glass case that holds two brightly painted images made of wood and dressed in colored cloth. These doll-like figures represent Tārā and stand about 2 feet tall. The garbha grha itself, as the core space of the tower, may be circumambulated, but the second "womb" is structurally part of the outer walls of the building. The inner shrines are not unusual except that there are two of them. The first has the more elaborate doorway, framed with silver and covered by a gilded torana, while the second has the finer image.

In the layout of its second floor, this temple is far removed from the standard pagoda plan that is hinted at by its tower of multiple roofs. The arms of the building that enclose its courtyard are functionally part of a single interior space at the second level, not simply adjuncts to the central shrine. The screened halls at the right and left sides of the second floor temple are more than passageways, and the space within them and within the upper floors of the domestic wings makes for a total enclosure that is quite complex. The plan of the upper level is roughly M-shaped, but it is not symmetrical since the central tower is closer to the left side of the building than to the right. Vajrayoginī Mandir is unique in many respects, but it shares with other balconied temples the dynamic projection of its prayer space before the garbha grha into the courtyard enclosure, the inclusion of much open space in its upper level interior, and restricted access to the elevated shrine by means of a stairway passage. Of major importance as well is that, because the balconied walls of such temples are screened or contain open windows, the upper prayer halls of such shrines are the brightest interiors in all of Nepalese architecture.

2. Temples without balconies

Some temples with second floor shrines do not have balconies and their interiors are therefore very different from that of a shrine like Vajrayogini. The exterior of Bhagavati Barahi Mandir is described in terms of its flat, polychrome façade, its tunnel-like passage to the courtyard behind it, and its attachment to other buildings along the street. None of these factors reveal anything of its interior space, however, and it is difficult to guess from outside the temple even what floor the garbha grha might occupy. It is, in fact, located on the second floor. 58

A gilded door to the right side of the façade leads from the street to a dark stairway. This in turn takes the visitor to the second floor and into a small hallway in which he turns to go through a low door and into the prayer hall or outer shrine space before the garbha grha of the goddess. The stairway itself proceeds upward to living quarters above the shrine room.

As he enters the door on the second storey, the visitor or devotee cannot see the garbha grha itself until he has advanced a few steps. An L-shaped extension of the wall acts as a screen to prevent light from entering directly the outer hall and striking the door of the holy enclosure. It also acts as a further restriction toward entering the secret space too easily. Two small windows with wooden screens are very deeply set into the wall opposite the inner shrine to provide the only illumination in the dark outer hall. Between them is an oil lamp railing mounted along the wall. A second rail of oil lamps stands before the entrance to the garbha grha, which is at the visitor's right as he enters. This restricted space, glimpsed only briefly by the investigator, is of surprisingly bright illumination, suggesting that several windows open into it. Many bells hang from the ceiling inside the inner room, seen through its small doorway that is attended by stone figures including Ganeśa.

Unlike the second floor shrine room of Sehkali Devi in Khokana, that of Bhagavati Barahi cannot be circumambulated, and unlike the upper shrine rooms of all balconied temples, that of this shrine allows no structural hint of its garbha grha or prayer hall to be expressed on the exterior of the building. While the garbha grha may be bright and perhaps even rather open when seen from within, it is a dark secret from the outside. 59

I. Temples of domestic plan

Several shrines of considerable size and antiquity in Kath-

mandu and Bhaktapur merit consideration as a separate category in temple design, mainly because of their unique use of interior space in the manner of domestic structures. Kasthamandapa and Simha Satal, both in the Durbar Square area of Kathmandu, and Dattatraya Mandir in Bhaktapur enclose much space throughout their many levels. They have functional balconies on all sides, and they contain spacious inner shrines rather than the very confined garbha grha spaces that are usual. These are the most complex temples in Nepal because of their division into many functional storeys and their active penetration of exterior space. Their plans are closely allied with those of resthouse architecture, and they all have provided shelter for visitors at some time. The large temple of Krsna located to the left of Kasthamandapa is weighed down with concrete accretions and marred by ground floor "remodelling," but the other structures largely retain their original forms. This is true in the case of Kasthamandapa because of a very extensive renovation program, directed by the Department of Archaeology of His Majesty's Government and completed in 1966, which removed all accretionary structures from the lower floor of the building and thoroughly restored the temple as a whole.

A priest or devotee may move easily through the many corridors and stairways that honeycomb the four storey structure of Dattatraya Mandir.61 The core of the building may be circumambulated within the structure itself, for open balconies at the third and fourth level together with a screened passage or corridor at the base level pass all around the temple core. Like Kasthamandapa, Dattatraya is square in plan, and tradition states that each was built from the wood of a single tree. The shrines may, in fact, have originated with the same sect of Hindu yogins and their origins in time are not far separate. Dattatraya dates from 1427 A.D. and the reign of Yaksa Malla, with major reconstruction carried out by King Jita Mitrā in the 17th century, while Kasthamandapa dates from at least as early as A.D. 1143 with traditional belief being that the temple is more than 1000 years old.62 Unlike the temple in Kathmandu, the superstructure of which is supported by massive pillars within the lower floor. Dattatrava reveals true double wall construction. The space between the outer walls and the walls of the ground level garbha grha is wider than usual, allowing for a spacious passageway all around the central shrine.⁶⁰ This is enclosed by wooden screening.

Kasthamandapa has even more interior space than Dattatra-

va, breaking the rule that Nepalese temples are not conceived in terms of interior space. Lacking even a central core, the main part of the shrine is a great hall. The central square that is this main hall covers more than 1000 square feet of floor space within a total ground area of more than 5000 square feet. Its ceiling is raised to a height of more than two high storeys above the floor and the tremendous weight of the upper two floors, both of which also enclose spacious halls, rests directly upon four central pillars within the lower level interior. These main pillars, and additional load-bearing walls of brick, are placed at the corners of an imaginary square 33 feet on a side. Within this square but not at its center rests the stone sculpture of Gorakhanātha (Goraksanātha) that is the main image of the temple.64 Twenty-four pillars fill the spaces between the supporting walls of brick at this level and 32 columns support the overhanging roof at its outer edge. Part of the trabeate scheme of Nepalese architecture, Kasthamandapa when drawn in section reveals diagonal elements only in the slope of its roofs and in the ladder-stairs that connect its floors. The use of columns inside the temple makes possible the enclosure of very considerable space without the use of walls as inside a properly domestic structure, but such columns are sometimes found inside the large living rooms or central bedrooms of Newārī houses as well. The general principles of construction are the same in both.

J. Temples attached to living rock

Shrines carved from living rock in the manner of Indian cave temples do not exist in Nepal, for all temples that penetrate the body of hills or mountains in Nepal have structural parts attached to them as more than mere façades. Gorakhanātha above Pharping, for example, is rock-cut in part, but structural buildings make up the bulk of the shrine. Bisankhu Nārāyana is fronted by the massive brick buttresses of its covered stairway, but the sacred shrine itself is a natural, twisted cave through which the pilgrim crawls after being admitted through a tiny opening hung with a chain curtain. Mai Mandir at Sundarijel is hidden among boulders and shelters a natural rock with a goddess image as its sacred image but it is structural in its entrance and double doors made of wood. Only a small shrine of cubical shape on the hillside below Vajrayoginī in Sankhu is properly rock-cut—a free-standing enclosure carved, presumably, from a boulder-but the form of even this shrine is that of a structural building. In an aesthetic

sense, these buildings are not "of" the stone from which they are carved or to which they are attached.

The best known among shrines attached to living rock, Sekhara Nārāyaṇa Maṇḍir on the main road to Pharping from Kathmandu, reveals the structural integrity of pagoda architecture as it is placed in the most uncompromising of sites. At the same time, its very origins evolve from the respect, even reverence with which the natural environment is regarded. In the construction and dedication of this temple are recognized the miraculous, holy qualities that may be manifest in nature. A kind of worship is involved that goes beyond the forceful statement of devotion that is the temple building itself to bring together temple and holy rock, land, forest, or lake in revered totality.

The shrine of Sekhara Nārāyana looks as if it has been cut in half lengthwise and pushed in part against the wall of the cliff behind it. More properly, it looks as if it has partially penetrated the great mass of rock. Located high above a stream and pond that make its surroundings a popular picnic area, the wall of rock has an unusual projection. This bulbous natural form located some 20 feet up the cliffside has been likened to more animate natural forms, including a cow's udder, and it is this extraordinary formation that has caused this site to be picked out and worshipped as a sacred place. The rock is an agent of miracles so it is proper that a temple be built upon its face, even within it. The temple of Sekhara Nārāyana or Harihara, the combined emanations of Siva and Visnu, occupies this extraordinary position.

A single image of carved stone stands within the shrine, at the left side, and beside it rests a small pyramidal stone that is painted red and set within a floral halo made of bronze. A small resthouse stands upon the broad terrace of the shrine, some distance off to the right side, and this is occupied by a resident priest. He cares for the temple and its images, including an early image of Visnu Vikrantamūrti as he crosses the worlds of existence in three miraculous steps. This work is very similar in form to an early sculpture of the same subject located in a field across the Bagmatī from Paśupatinātha (Stella Kramrisch, *The Art of Nepal*, pl. I), if not in style. It stands against the cliff wall beside the shrine and it is much older than the graceless sculpture in the garbha grha.

Peacocks adorn all of the short struts that support the single roof of the temple in rather unexpected association with the god enshrined at this site, and erotic scenes of sexual acrobatics are carved beneath each bird. The center struts of the groups of three that are found on the right and left sides of the shrine bear kneeling figures with their hands joined in prayer—a man on the left and a woman on the right. They represent donors, and the building to which their subjects presented gifts is the only structure in Nepalese temple art that occupies not only a hill but a cliff as well. It is also the only pagoda that was forced to blend so completely with an unmarred, natural setting. It was cut in half to join the holy rock. The temple shares with all pagodas, however, the decorative scheme, harmonious materials and processes, and balance in design that are themes in Nepalese temple architecture. The balance of brick core to overhanging roof is perfect, and even the corrugated roof and hideous concrete additions that have been applied to the shrine and its grounds have not disguised the basic qualities of long tradition that distinguish this building.

K. Temples at the riversides

Kankeśvarī Mandir in lower Kathmandu could well be described in terms of its decoration and its sunken garbha grha—a core of stability within the ceaseless whirl of existence that is captured in its ceiling mandala. The setting of the temple will instead be dealt with, however, for in this respect Kankeśvarī relates very specifically to other temples all along the Bagmati, Visnumati, Hanumante, Khasankhusun, Manahara, Balakhukora and other rivers and streams of Kathmandu Valley. It relates as well to riverine shrines outside of the valley, such as the Bhairava shrine below Nuakot, and to temples outside of Nepal like the Nepalese shrine on the Ganges at Varanasi and Indian river shrines in general. In the interrelationship of the temple and its neighborhood, the river, and its devotees, Kankeśvarī is in no way unique.

The Visnumati River flows beside the shrine of the goddess, which does not face the water but is built very close to it. A structural platform or ghat (ghatta) leads down to the water so that worshippers may bathe and pray in close proximity to the sacred building. Ritual ablutions are encouraged but not required of the Buddhist or Hindu devotee before he enters the temple area, as they would be required of a Muslim. An elaborate stairway complex connects the temple of Gokarna on the road to Sankhu to the river that flows past its feet, and Pasupatinātha Mandir and its attendant shrines and other buildings make an elaborate river-

oriented complex that recalls the much larger scene at Varanasi. The temple of Kankeśvari takes advantage of the river's proximity but is not strictly oriented toward it in terms of design. Several small shrines in the courtyard stand with their backs to the water. as an interruption between the open courtyard and the river. By contrast, the compound shrine of Daksina Kalī, one of the most important holy sites in Nepal, is defined and organized according to the stress that wanders through it. A situation that is again very different from that of Kankeśvarī is found in the very much river-oriented grouping of temples and sculptures of all types that stretches along the Bagmati River at Pachali, just below the confluence of this and the Visnumati rivers at the edge of Kathmandu.65 While some of the temples in this sizeable area are separated from the overall setting by their enclosing courtyard walls and the main shrine, that of Pachali Bhairava, is set back some distance from the water, most of the Pachali shrines are intimately associated with the river. The rivers of Kathmandu Valley are lifelines of both physical and spiritual well being; they are the focus of art and ritual. It is instructive, therefore, to examine at least one riverine complex in detail.

No tour buses drive to the edge of the Bagmati River and the area known generally as Pachali, but local residents know it well as the largest conglomeration of temples and sculptures to be found anywhere in Kathmandu outside of the palace square. The area is less frequented than the home temples of the goddesses Kankeśvarī, Indrayanī, and Sobaha Bhagavatī located upstream on the Bagmati, but it is much larger and of greater variety than the shrine complexes of any of those sites. Structural ghats for bathing and cremation are bordered by temples and domestic buildings of many types and architectural styles from the Pachali walking bridge nearly as far as the bridge to Patan.

Pachali is something of an anthropologist's dream with its crowd of temples receiving active worship among dwelling houses that contain traditional Nepalese society, with both kinds of structure as yet unmarred by blankets of pink cement, flourescent lights, or enamel paints. Yet there is little here to delight the archaeologist, for early inscriptions, like that of Cangu Nārāyaṇa and early images, like the Gupta-inspired Buddha of Cha Bahīl, must be sought elsewhere. Nevertheless, the value of continuing traditions in design and craftsmanship may be found here. Many works of mediocre quality are found at Pachali, such as the strange

sikhara tower of brick with wooden balconies proper to a pagoda added incongruously to it, located on the main road leading from the nearby bridge to Kirtipur,66 but more typical are the fine structures in brick and wood that abound all along the river, complete with finely crafted Nepalese ornament. Such a building is a pagoda of Siva located within its own courtyard midway along the river.

A walk through Pachali might begin at the lower end of the ghats at the confluence of the rivers where a towering temple of Nārāyana again illustrates the odd sikhara-pagoda combination already mentioned, but with at least the color harmony of brick walls upon brick base. A stone figure of Garuda as vehicle of Visnu kneels in a position of reverence atop a pillar before the temple. and a bulky shrine of concrete holds several other small images. Of more interest than these, however, are three fine window frames filled with wooden screening that are mounted into the upper floor of a resthouse to the right of the tower. The two side windows of this grouping are unusual in their curvilinear silhouettes, while the central panel of three openings has arched inner frames that are formed by entwined nagas and a lower border of almost free-standing birds that appear to support the complex. These carvings are typical of the many along the riverfront that illustrate the best of Nepalese woodcarving, but, as is too often the case, the roof of the resthouse to which they are attached is ruined and the building is collapsing.

As one proceeds upstream beside the third and fourth circular platforms of the ghat, he passes an open court that contains a caitya, for Buddhist and Hindu monuments coexist throughout the area, a tiny shrine containing a Sivalinga, and a semi-open resthouse which a huge black bull has made his permanent residence. In front of the last building stands an image of orange color that is at once grotesque and charming. A figure of Hanumat. Rāma's great monkey soldier, the sculpture has received so many offerings of paste, other foods, and colored powder that it has become an almost featureless blob.67 More recognizable is another sculpture that lies upon the ghat before Hanumat and closer to the water. Like the famous image of Budha Nilkantha, it represents Vișnu as he sleeps upon the cosmic waters.

The visitor moving on passes more than a dozen paths that lead down to the riverside, some of which are paved with bricks. A small shrine to Siva, two dwellings, and a domed temple located in

a closed courtyard guarded by another image of Hanumat are on his left as he walks upstream. Beside another dwelling stands a square temple of Siva with sacred foot-prints carved in stone before it; a stone umbrella mounted on a base within its court shelters nothing but the space where an image once stood. The ghats in this area have proper steps leading to the water and are the setting for two large resthouses and carvings in stone of Sūrya atop his horse-drawn chariot and the ever-present, elephant-faced Ganeśa. ⁶⁸

Near the footbridge some distance further upstream two minor shrines are found within walls attached to riverfront dwellings. Only one small Siva temple rests on the ghat platform at this point, but behind a second structure downriver from the bridge are twin temples of Siva, each containing a linga. Just beyond the bridge stands an imageless structure, and beside it the entrance porch of the large courtyard enclosure of the temple of Siva Mahādeva already mentioned. The porch has an especially fine window frame over its wood-arched doorway that is noteworthy for the almost completely detached serpents that are an outer border of the frame and the triple line of birds and rearing horses that form its lower sill. Still more unusual than this large frame are the two windows that flank it, for the horizontal sills that extend at the top and bottom of all such windows to anchor them into the brick walls of which they are a part are dominated by the flamboyant curves of the "vertical" frames so that the flowing contours of dragons and nāgas are echoed in the overall shape of the windows, not only in their decoration. In such an adjustment of basic structural forms for the sake of variety is evident the creativity as well as the craftsmanship of the Nepalese artist. Carvings on both the exterior and interior wooden surfaces of this shrine are of high quality, and the columns of the circumambulatory passage around the temple's lower storey exhibit the best of indigenous design. Especially to be noted are rampant dragons that are part of the underside of each column capital.

Beyond the temple of Siva Mahādeva and closer to the water are several more images of Ganeśa and a curved wall of concrete in which are mounted stone carvings of the ten incarnations of Visnu. Behind these rests a large image of Buddha and beyond them a long line of recently constructed buildings that present a mixture of sikhara towers, domes, flat roofs, and stūpa forms. Behind these is a courtyard-enclosed temple of Siva Mahādeva with three sikhara

towers that are mounted upon a base that is itself remarkable because of its abundance of decorated bricks in terracotta. The three-stepped base presents garlands, rosettes, entwined serpents, lotus leaves, and spirals in alternating courses of brick. The guardian lions usually found are multiplied so that the base level is ringed by such beasts, and an overhanging roof of tiles and wood supported by wooden columns again presents evidence of the combination of sikhara and pagoda architecture that was strangely attractive to the planners of Pachali.

The riverfront complex continues beyond the three-spired temple to a point where the paved walk is interrupted by trees and undergrowth, the most noteworthy monuments being a very large image of Hanumat and an open, very colorful temple/resthouse that holds two recently carved statues of Rāma and Sita. The most remarkable of holy sites at Pachali is reached by way of a path behind the spired temple which connects to a broad unpaved road, however. It is the shrine most removed from the river, that of Pachali Bhairava. It is not an architectural monument.

L. Open-air shrines

Since it is not properly part of a consideration of pagoda architecture, the open-air shrine of Pachali Bhairava will be discussed only briefly as a representative of the many open-air sites that are among the most revered shrines in Nepal. Turning right on the unpaved road behind the spired temple of Siva, the visitor reaches a large open courtyard around which are clustered several resthouses. Within the open space is found the sacred image of Pachali Bhairava beneath his mammoth tree. 69 One steps down into the sunken area at the center of the courtyard into the shadowed space beneath the branches of the great tree to see first a life-size figure of a prostrate male in metal repoussé, the vanquished victim of the fierce protector god. Bhairava. The deity himself is represented simply by a number of stone images and natural rocks of small size, including the panchalinga, five lingas. To all of them have been added sumptuous ornaments, gilded parasols, haloes, a canopy supported by metal snakes, and a metal flooring for their inner court. In this flooring a circular hole reveals another stone that is the holiest of all and, perhaps, the earliest of the sacred objects.

This important shrine, the scene of sacrifices both colorful and bloody, is by far the most "primitive" at Pachali. I'his is true not

only in its visual configuration, for these sunken stones, this root in the living earth, and this twisted and aged tree that shades the shrine were all present symbolically or in fact at the birth of Nepalese religious art and belief. They are the very origin of sacred imagry in Nepal. As the visitor looks down the brick path toward the river and the staccato skyline of the temples and dwellings along its edge from his place beside the awesome deity Bhairava as he emerges from the dust of antiquity in the mountain kingdom, he will perhaps find that Pachali speaks to him not only of the fine craftsmanship and variety of Nepalese architecture both early and late, but of origins as well.

M. Temples surrounded by water

Divinities of the rivers take on anthropomorphic form in the pre-Cupta art of Mathurā, Begrām, Amarāvatī, and Nāgārjunakonda, but the ritual importance of water in South Asia is much older, reflected as early as the third millenium B.C. in the great bath of Mohenjo-daro. Fluvial associations in art are nowhere stronger than in those few temples of Nepal that are completely surrounded by water. Unlike the wooden platform built for the linga of Kumbheśvara Mandir, which is set up for only a brief time in a tank beside the temple, these shrines are surrounded perpetually by the waters of existence, symbolizing the fluid ocean of becoming that precedes, contains, and survives after the evolvement of the physical world.

The small temple of Siva in the center of the Rānī Pokharī, or Queen's Tank, in Kathmandu⁷⁰ and Macche Nārāyaṇa in Macchagaon⁷¹ are approached by means of raised platforms, while the temple of Vārahī on a small island in the lake of Phewā Tāl near Pokhara can be reached only by boat. All three shrines are unusual in their complete integration into a water environment. The structure of Phewā Tāl is a pagoda while the other two shrines are domed.⁷² An inscription of King Pratapa Malla, carved on the base of a statue of Viṣnu Madhava on the northern side of the Rānī Pokharī, refers to the sanctified waters of the picturesque pond wherein reside the holy nāgas and where Viṣnu and all the gods choose to reside.⁷³ The pond is dedicated by him to Parameśvara and Parameśvarī, Siva and Pārvatī, and to Brahma. It contains the sacred waters of fifty-one tīrthas or pilgrimage sites at places of water in India and Nepal.

Many legends surround the origin and history of the shrine of

the waters, partly because they are so rare and because they are so noticeable. Rānī Pokharī is now considered to be fraught with ghosts, including the troubled spirits of the many who have committed suicide there by drowning. A more involved legend surrounds the origin of Phewā Tāl and its island shrine and, because legends of great lakes having been miraculously drained to expose fertile plains are widespread in the Himalaya, a popular version of this legend, involving a deluge rather than a draining of waters, will be recounted here.

Traditional belief is that the lake of Phewa Tal did not exist in antiquity, when the populated area now covered by the waters contained a very wicked village filled with sin. A divine messenger was sent by the gods to inspect the city, and he discovered upon arrival that it was impossible for him to find shelter among its uncharitable inhabitants. At last he met a woman who granted him sleeping space in the vestibule of her small house. She humbly fed him and was kind to him, so that he took pity upon her and told her that in the night the village would be entirely destroyed by flood because of its wickedness. He advised her that only her own house would be spared as a reward for her goodness. Thinking that the stranger must be mad, the woman paid no attention to his warning and slept. When she woke at dawn, however, she found her house surrounded by water and the village gone. She knew then that her guest had been divine. The woman found a boat that he had left for her and by rowing to the next village she was able to tell her miraculous story. A pounding utensil that had been hanging on the wall of her home was discovered to have revealed supernaturally an image of Vārāhī, and it was decided that a temple should be built upon the island that was spared by the gods. It is said that to this day the roof ridge of the kindly woman's house sometimes emerges from the waters around the island, upsetting boats when the water is low.

N. Forest temples

There are very few forest temples in Nepal, such as the small shrine in the bamboo grove of Bansbari north of Kathmandu. Temples of the forest are surrounded by dangers to the devotee, malevolent spirits of the cremation grounds and others who dwell in dark places, and it goes without saying that such temples are less likely to receive devotions after dark than are shrines of the towns. Ferocious minor deities of the Tantric pantheon dwell in the environs of forest sanctuaries.

The shrine of Vajravārāhī looks inward upon itself, its paved courtyard enclosed by a low wall, but this slight separation in no way removes it from its romantic setting in the dark forest of Chapagaon. It remains allied as well with the cremation grounds to which it is attached. A pathway paved with smooth stones draws the visitor into the shadowed greenery that encloses the temple of the goddess Vajravārāhī, saktī or Hevajra/Sambara, fierce deities who are closely allied with the great destructive god Heruka. 4 She is described in the Sadhamālā as consort of Sambara, red in color, naked, and three-eyes. She wears a khatvānga or magic stick at her hip, 75 a garland of severed human heads, "five auspicious symbols," and an image of Vairocana Buddha on her crown. She is naked and her hair is dishevelled. She holds a vajra and a kapāla or skull cup full of blood. 6 Her visage is very similar to that of Vajrayogīnī in which her head is in place, and both goddesses are at home in cremation grounds. In their imagery, however, only Vajravārāhī tramples a corpse that lies upon its chest." Despite the iconographical guides that exist to guide the artist in creating a representation of the bloody female, her symbol in the ground floor shrine of the temple is an uncut rock. A second image may exist within the screened second storey, but this is unlikely since entry to the second floor is possible only through a small trap door in the ceiling over the garbha grha. It is not a frequented worship space.

Vajravārāhī Mandir in its general design is more strongly reminiscent of East Asian architecture, especially the pagodas of Japan, than any other structure in Nepal, but this is due more to its secluded forest setting than to precise structural parallels. The movement of worshippers as they approach the shrine is less formal than that which attends most Japanese temples, however, and devotees glimpse the shrine through a kind of strip-tease by trees and bushes and alternately conceal and reveal the shadowed building and its grounds. At last the visitor reaches the resthouses that stand opposite the shrine, passes the two stone lions that guard the outer entrance, and steps down into the brick-paved courtyard. He presents offerings to the small stone that is the main object of devotion, and to the large metal buffalo that stands before the doorway as the main attendant of the goddess. 79 The bull is only one of many attendant animal sculptures in the open court, and living animals are brought to the shrine to be healed. Most important in terms of the organization of the plan and the impact of the temple in its setting is that all secondary buildings remain opposite the shrine, not at its sides or back. Therefore the continuity of the pagoda with the open forest environment all around it is preserved. A more complete integration with the natural environment is found at Vajravārāhī in Chapagaon than at any other shrine.

O. Hilltop shrines

Many temples are built upon the hilltops of Kathmandu Valley, including Adinatha in Chobar town, Bhagavatī Mandir at a high point in Dhulikhel, the damaged temple of Umā-Mahesvara in Kirtipur, 81 and Santaneśvara Mahādeva west of Thaibo. 82 Their location on hilltops does not make access to them extremely difficult for they all rest atop relatively low hills. There is little concern in Nepal for bringing temple architecture to the dramatic solitude of the higher mountains, except where Tibetan influence is strong and in Sherpa architecture in general. Only a few of the higher hilltops around Kathmandu Valley itself are marked by sacred shrines, including Pulchoki near Godavari and Sivapuri beyond Budha Nilkantha, and these structures are not major monuments. Among all of the hilltop temples, one stands out as the oldest and most important of all—a building that could stand alone to represent the very best in Nepalese art and architecture. This is the classic Hindu shrine of Cāngu Nārāvana.

Cāngu Nārāyana is a suitable monument with which to complete a study of the varieties of form in Nepalese temple architecture and its variety of setting. This venerable shrine gathers together the best of many expressions in plan and decoration and returns these variations to the basic pattern from which they all derive: the free-standing pagoda of square plan. At the same time the temple is elevated upon the greatest of pedestals—a steep hill of cone shape, called Dolagiri, that rises from the riverine valley floor. Located beside the Manahara River about 8 miles east of Kathmandu and 3 miles north of Bhaktapur, the shrine of Cāngu Nārāyana is one of the country's most ancient monuments.

Legend connects the original construction of a temple at this spot with the reign of King Hari Datta Varmā in the 4th century; the earliest inscription at the site dates from 464 A.D. This is the most important epigraphical find in Nepal, carved upon a broken stone pillar near the corner of the temple, a pillar that once

supported the colossal Garuda that now rests at ground level beside it. 85 The inscription records the military exploits of King Mana Deva. The temple itself was restored during the lifetime of Gangā Rānī, consort of King Siva Simha Malla (1585–1644), but it burned in Nepal Samvat 822 (1702 A.D.) and was again reconstructed. King Bhaskara Malla added commemorative inscriptions on copper plates in 1708 A.D., and numerous additions have been made to the general area during the past two centuries. Repainted in recent years, the building illustrates the brilliant polychromy that is native to decorative traditions in Nepal.

The climb to the top of Dolagiri is a steep one, taking about 30 minutes to complete at an average walking speed. It is not taken by means of a formal, processional walkway like those that lead to Vajra Yoginī Mandir above Sankhu or Svayambhunātha stūpa but by way of an unpaved path. Only at the final ascent of the western approach does a constructed stairway direct the visitor toward the top of the hill and the wall of the temple's courtyard enclosure. Even this final way of approach is compromised as the stairway levels into a walk, turns, and rises again before finally propelling the visitor into the courtyard space. A second entrance stairway at the eastern side is even more meandering in its path. From that side of the compound is obtained a breathtaking view of the Himalaya, but neither entry into the courtyard enclosure affords the visitor an advantageous initial view of the shrine. Both entries face the building at an angle, from the southwestern and northeastern corners of the court. At the southwestern side two minor shrines stand between the visitor and the temple.

The main temple, of square, mandala-shaped plan, is not centered by measure within the courtyard, but visual balance does exist between the structure and its setting. This is especially true of the eastern side of the courtyard which extends to include more space than the other sides and allow for an overall view of the temple that is not obtainable from within the other, more compact spaces of the court. The temple may be circumambulated from the paved courtyard level or upon its low plinth, and if the paths of outer approach are somewhat chaotic, all is order within the courtyard. The six minor shrines that stand around the temple, four of which are small pagodas, and even the platforms upon which sculptures stand inside the court are laid out in longitudinal harmony with the plan of the main building. The accretion of shrines and images that has become attached to the main shrine is

orderly in its distribution, as is the case with most complex temple groupings.

Most remarkable among the secondary shrines is a rectangular temple one storey high that contains multiple images of the divine mothers, presumably forms of Durgā. It is very similar to the temple of Nava Durgā on the Bagmatī River below Paśupatinātha, another low building that hugs the ground and is dominated by a very large gilded roof. Numerous stone images, generally restricted from the gaze of foreigners, occupy the shrine room where they rest under individual toranas and within haloes or mandorlas of entwined snakes. The powerful mothers protect the great deity Visnu; they are his "ladies in waiting." In the dark recess of the main shrine, enclosed by frame upon frame of brilliant gold and silver, Visnu rides upon the back of the most important of his protectors, his vehicle the man-bird Garuda.

The subsidiary sculptures around Cāngu Nārāyana are of such major importance that the history of Nepalese sculptural style is revealed through their detailed examination. They stand together in groups upon stone bases or around trees and some occupy individual shrines, having been added to the environment of Cāngu Nārāyana through fifteen centuries to honor the sacred hilltop site. Only now coming to light outside of Nepal through publication, these images, along with Nepalese sculpture in general, deserve much more attention than they have received.⁸⁷

The two-roofed pagoda of Cāngu Nārāyana overshadows all the objects and buildings at its feet. It charges the space all around it with the dynamic energy of its carved, painted, and repoussécovered decoration. The entrance side of the shrine, its western face, is distinguished from the others by the abundance of metal sheathing that shimmers upon its door frame. Makaras disgorge voluptuous maidens at the extremities of the frame and the decoration in total is unusually rich. More remarkable than the entrance complex or any other decorative or structural part of the design, however, are the struts that support the roofs. These beams, carved with multi-armed representations of Visnu in his many forms as well as lesser deities, are extraordinary not only for the excellence of their detailed carving and their coloristic and formal impact as they ring the shrine with sunbursts of iconographical symbolism but for the extra structural parts that change their role in terms of design. Since the visit to the site by Percival Landon shortly before the appearance of his illustrated book in 1928,

additional narrow struts carved with raised floral designs of red and blue color have been placed at each side of the original struts There is harmony of attitude in the verticality of these extra struts and harmony of color and shape in their decoration, which is the same as the floral pattern that fills the upper third of each major strut. The narrow struts of each pair hug the figural strut that they stand beside, and together the wooden objects form a tripart grouping that is repeated in sequence all around the temple. The formal presence of each main strut is thus widened beneath the roofs, making each central strut slightly stronger structurally and much more prominent visually. Since the additional struts appear beside all but the corner kumsala supports, the strut level is more like a sculptural frieze than a series of separate spokes. Because of the unusual pattern, this iconographically important part of the exterior takes on greater importance at Cangu Narayana than in temples of more typical design; it is evidence of the manner in which this great shrine not only sums up the accomplishments of Nepalese temple art in its great variety but improves upon them.

NOTES

- 1. Nirmal Kumar Bose, Canons of Orissan Architecture, Calcutta, 1932.
- 2. Rāmacandra Kaulācāra, Silpa Prakāsa, trans. by Alice Boner and Sadāsiva Rath Sarmā, Leiden, 1966.
- 3. The Aśvalāyana, among others of the Grhya Sūtras, deals in great detail with the proper selection of a site and the testing of its soil (Amita Ray, "House-Building Rituals in Ancient India," p. 306), while D.N. Shukla treats this aspect of the architectural process in detail in his translation of the Vastu-śastra, Chapter VI.
- 4. Ananta is among deities interpreted by Yogi Paraharinātha of the temple of Pasupatinātha as being represented by the varying numbers of roofs and temple storeys. Hindu temples from one to seven storeys high are more fully described as they represent by their form the following deities:

One storey: One god, usually Siva, as symbol of the earth

Two storeys: Ananta, representing the seven underground

levels

Three storeys: Indra, representing seven levels above ground

Ananta, representing the underground levels

Siva, representing the earth

Four storeys: Bhaskara (sun), representing the upper heavens

Ananta Siva

Visnu

Sūrya

Five storeys:

Ananta

Siva

Visnu

Sūrya

Devi

Six storeys:

Ananta Siva

Visnu

Sūrya

Devi

Ganeśa

Seven storeys:

Ananta

Sūrya

Visnu

Siva

Devi

Ganesa

Kaumār

- 5. Rāmacandra Kaulācāra, Śilpa Prakāśa, p. xxx.
- 6. Nirmal Kumar Bose, Canons of Orissan Architecture, p. 29.
- 7. The rgyam 'khyil is perhaps evolved from the ancient Chinese symbol that is called the triskelion in western terminology. See the Newark Museum, Catalogue of the Tibetan and Other Lamaist Articles, p. 39.
- 8. The same is true of the similarly situated temple of Sekhali Devi in Kokhana.
- 9. The temple of Matsyendranā in Bungamati, dedicated in fact to Avalokiteśvara, is of similar form.
- 10. The founding of many Buddhist monasteries of Patan, Bhaktapur, and Kathmandu, buildings which take this shape, dates from the 13th century according to B. Bhattacharyya, indicating that many of them were established immediately after the Moslem conquests of India by refugees who fled from the plain to Nepal (Benoytosh Bhattacharyya, *The Indian Buddhist Iconography*, p. 41).
- 11. The main shrine building is usually structurally distinct from the domestic structures that surround and touch it, but in some instances the levels above the ground floor of even the central shrine are given over to domestic habitation. A large balcony with glass windows added by its inhabitants to the upper level of the Lagam Bahāl shrine, for example, serves to secularize the entire enclosure and destroy the unity of the shrine façade. Such an occurrence is, however, very rare.
 - 12. His Majesty's Government, Physical Development Plan, p. 50.
- 13. Andreas Volwahsen, Living Architecture: Indian, p. 103. See also Sukumar Dutt, Buddhist Monks and Monasteries of India, London, 1962, and James Fergusson and James Burgess, Cave Temples of India, London, 1880.
- 14. The walls around the central space are hung once yearly with painted scrolls or banners on the day of Bahi Dyo Bayegu (Newārī), "Looking at the Gods of the Vihāras." The practice is carried out in all three cities of the valley although many monasteries are now very poor in terms of art treasures, as has been discussed in connection with Nepalese painting. Only about eighteen of the many monasteries in Kathmandu still display works of art on this day, for the viewing of which the living

goddess Kaumārī travels from place to place. At Itum Bahāl in Kathmandu a painted scroll depicting the legend of Guru Mapa, devourer of children, is displayed, while at Thum Bahīl in the same city are displayed old costumes, manuscripts, and a banner depicting the story of Simhala and the magic horse Balaha. Banner paintings are shown at Kva Bahāl (Hiranya Varna Mahāvihāra), I Bahāl, and Guita Bahāl in Patan, the latter shrine displaying as well an unusual manikin in an upstairs window that is said to represent a pious old woman from whom Buddha accepted alms ages ago (Mary Slusser, "Guladharma—The Sacred Month of Buddhism," American Women's Organization in Nepal (AWON) Bulletin, Aug. 20, 1969).

- 15. Such upstairs prayer halls frequently open into the courtyard spaces below by means of wood-screened windows or open balconies. They and other rooms on the second floor are brighter than those below.
- 16. The cells are of more irregular arrangement at Choya Bahīl than at Ajanta, several being rectangular rather than square and L-shaped rooms marking the corners. This may be explained by the probable function of part of the monastery as a school, making the complex properly termed a bahīl rather than a bahāl. Some larger rooms are always required in such a structure to accommodate gatherings of students and these may have been the corner spaces.
- 17. The collapsing state of Choya Bahāl, with its entire northern side fallen away, made it impossible for the investigator to approach the second floor shrine in order to determine its contents.
- 18. Also to be noted are the elaborate torana carvings, like that dated N.S. 796 or 1676 A.D., on the façade of this 17th century monastery (date provided by Dr. Mary S. Slusser).
- 19. Vaku Bahāl (Woku Bahāl) in Patan is unusual in having carved struts of very fine quality—early in origin and representing lovely forest dryads—located on its back wall.
- 20. Selected Buddhist monasteries, together with numerous Mahāyanist texts and Buddhist pilgrimage sites are discussed by Hemarāja Sākya in Nepal Bauddha Vihārā Vagrantha Sūchi (List of Buddhist Monasteries and Texts), Lalitpur, Nepal, 1956. See also Sudarsan, ed., Itihasika Tīrtha Yātrayā Sacitra Report (Pilgrim's Historical Report on the Historical Buddhist Pilgrimage Sites), Kathmandu, 1965.
- 21. Bordering the carved cornice is a wide band of plaster that presents crude paintings illustrating the life of Buddha.
- 22. The problem is actually to find a soil that is suitable to the caste of the people for whom the structure is to be built, based upon tests of the soil's color, taste, texture, etc.
- 23. Mitra gives the term salya to designate these bones, perhaps intending salya, which is defined by Arthur Anthony MacDonell (A Practical Sanskrit Dictionary, London, 1929) as "the point of an arrow or spear: thorn, sting, dart.
- 24. The latter, presumably, is Sarasvatī as consort of Viṣṇu, who in Hindu belief takes the form of Buddha as one of his avatāras. Sarasvatī is goddess of speech and learning in Vedic and classical (post-Vedic) Sanskrit literature.
 - 25. Varuna is painted white and he holds a terrible noose in his hand.
- 26. This direction would seem to refer to the outer door, that is the entrance to the monastery as a whole rather than to its inner shrine. These particular guardians are often replaced by others, such as Guru Mapa who protects the entrance to Itum Bahāl.

- 27. The depiction of the destroyer gods in paint or carved wood is the rule in Nepal, but such representations of birds have not been noted by the author.
- 28. This temple is less famous than that known as the Red Matsyendranatha in Patan, but both are major monuments. The earliest record associated with the Patan building is an inscription of 1582 A.D., but its origin, perhaps with a king named Marindra Deo (Henry Ambrose Oldfield, Sketches from Nepal, Vol. II, p. 262), is unclear. The same is true of its sister temple. The shrine of Patan is the focal point each year of the most important of Newari festivals, Matsyendrajātrā, held each year in early summer. The shrine stands within a very large grassy courtyard, a space that it shares with a sizable caitya painted white. Within the shrine resides the god in whose power is the bringing of rain, crops, and prosperity. Legend has it that when Makunda Sen, King of Palpa, invaded Nepal from the west in the 13th century to defeat the Nepalese king Hari Deva, the festival of Matsyendrajatra was about to be celebrated in Patan. The image of the god was left unprotected, but the five nagas that formed a canopy over his head spouted forth five jets of water that poured down upon the head of the deity. Awed by the miracle, Makunda Sen took a gold chain from his neck and threw it over the image. It is still worn by the god. The deity was pleased by this action, but the supreme lord, Pasupatinatha, punished the foreigner for his invasion by loosing upon him and his army a plague that destroyed the foreigners within fifteen days. The king himself fell dead at the frontier, running for his life after Siva had revealed his horrible face with teeth bared in fury, the visage now seen in the southern face of the precious linga at Pasupatinātha. The worship of Matsyendranātha is undoubtedly of great antiquity in Nepal. K.P. Chattopadhyay suggests that the god was revered in Nepal in pre-Buddhist times and that his cult could not have grown up there after Indian Buddhism had penetrated the country. The god is not emphasized within the vast Tibetan pantheon, but in India he is, along with Goraksanatha a first master of the Kanphātā subdivision of Saivite yogīs (K.P. Chattopadhyay, "An Essay on the History of Newar Culture," Journal of the Asiatic Society of Bengal, p. 482). Both of his images in Nepal are of wood, one painted white, one red.
- 29. Daniel Wright reports that when an image like that of Matsyendranatha is repainted its spirit is removed and kept in a jar of water until the painting is finished (Varisāvalī—History of Nepal, p. 75).
- 30. Matsyendranātha is not identified with the Bodhisattva Padmapāni at this shrine, according to Henry Oldfield (Sketches from Nepal, Vol. II, p. 323) but with the less prominent Samantabhadra, another of the 108 forms of Avalokiteśvara. As required of this deity, the white image displays the varada mudrā of gift-bestowing (Benoytosh Bhattacharyya, The Indian Buddhist Iconography, p. 399) with its right hand, but the deity holds no lotus at its chest with its left hand. The pose of the standing figure in white is close to that of the 9th century Padmapāni in bronze that is illustrated by Heinrich Zimmer (The Art of Indian Asia, pl. 600) while the form of the body of the more famous image in Patan is very rough. The festival of the deity of Kathmandu occurs in the early spring and lasts for four days during which the single cart of the god is pulled through the city streets, being protected by the eyes and face of Bhairava that are painted on its wheels and on the protruding log by which it is pulled. The festival is an abbreviated version of that which occurs in Patan annually, being an especially great event every twelfth year. The great festival of Patan is described in detail by Gopal Singh Nepali (The Newars, pp. 369-375).
 - 31. Copies of these paintings are reproduced by Benoytosh Bhattacharyya (The

Indian Buddhist Iconography) with the author's explanations. The drawings are by a Nepalese artist and student of iconography, Vīrmān Citrakāra.

- 32. The oldest inscription at Kumbheśvara is a clearly cut message on a piece of slate, dated Nepal Samvat 512 (1392 A.D.) which records the founding of the temple by a certain Jayabhima to promote the recovery of his wife from a fever. The woman died, but he kept his promise, with the consent of his second wife and sons, to house the image of Siva Kumbheśvara in a proper temple (prāsadā) rather than the simple house (āvāsa) that it had occupied (Cecil Bendall, A Journey of Literary and Archaeological Research in Nepal and Northern India, Cambridge, 1886). A square-built treasury (chāturmukhakośa) was also built upon the newly cleared grounds, but its relationship to presently standing structures in the temple compound is not known. A photograph of a rubbing taken from the inscription and a partial translation of its message is found in Bendall, p. 83.
- 33. Among the best examples of these images, called Umā-Maheśvara, are two sculptures in the outer bathing place at Kumbheśvara Mandir which may date from as early as the 9th century.
- 34. The projected date, like those of the early Umā-Mahesvara images, is taken from the files of photographs that are kept by the Archaeological Survey of India in New Delhi. The subject matter deals with Krsna as he subdues the river serpent Kāliya.
- 35. Beside the stairway and at the top of each stage of the plinth, the approach to Nyatapola is attended by a series of guardians. The closer proximity of the sanctified building is apparent in the increase of the relative strength of each pair of guardians, increasing ten-fold with each advance toward the top of the long stairway. The lowest figures, one on each side of the stairway, are Jai Mal and Patta, famous wrestlers of Bhaktapur who were each believed to possess the strength of ten men. Above them in order of ascending power are two lions, two griffins or sārdūlas, and finally two minor deities, Simhinī and Vyanginī, each of which possesses 100,000 times the strength of the mighty wrestlers at the bottom of the stairs. The mighty protection of the attendants and especially the high elevation of the plinth is especially appropriate to the house of the fierce gods of Tantrism. No image of Buddha is ever so remotely enshrined.
- 36. The most ancient Bhairavas in Nepal are considered to be those of Pachali in Kathmandu, Bhaktapur, the village of Sanga east of the valley, and Nawakot. The god, together with Bhairavī and Ganeśa, is considered by many Newārs to be the most important of deities and he is worshipped most frequently at his temples of Akāsa Bhairava, Kal Bhairava (commonly called Kāla or Kālī), Bagh Bhairava, Pachali Bhairava, and Mahākāla Bhairava. In the villages of Ridi and Palpa in western Nepal, Kal Bhairava occupies the main temples of the towns, centers of annual festivals observed by the local Newārs. The only temple of Nepalese design built in Varanasi honors this fierce god. As symbol of physical force and locomotion Bhairava is represented on the front of carts that carry the images of Matsyendranātha, Kaumārī, and Bhairavī, just as his eyes are painted upon their wheels. He who falls beneath the crushing wheels falls victim or sacrifice to the god. As the carts are pulled through the streets the images of Bhairava are worshipped, sometimes receiving more offerings than do the images carried inside the carts, as during Bisket Jatra in Bhaktapur.
- 37. Bhīmasena, one of the Pandava brothers of the Mahābhārata and later revered as god of wealth, is very popular among Newār traders of the Shrestha and

Udas groups. He is not considered to be of local origin but to have come from Dolakha, east of Kathmandu Valley, where he is more revered than even Siva or Bhagavatt. A temple to the god exists there, and in both Dolakha and Cherikot his festival is a major event. (Gopal Singh Nepali, The Newars, p. 322). His large temple in Patan was restored by King Srinivasa Malla in 1682 and again extensively repaired by His Majesty's Government in 1967.

- 38. The image, presumably a statue, may not be seen by foreigners. Henry Oldfield states that it is painted and that the temple was erected by "one of the royal family, A.D. 1513" (Henry Ambrose Oldfield, Sketches from Nepal, Vol. I. p. 129).
- 39. The movement of the visitor as he approaches the temple is consciously manipulated in terms of spatial progression in Nepal only in the long stairways that ascend high plinths, narrow alleyways that lead the viewer toward monumental stūpas like those of Yatkha Bahāl and Bodhinātha (before its unfortunate renovation which widened its path of approach and destroyed much of its spatial impact in a confined space), and the galleries of some vihāras. A great many courtyard entrances bring the viewer to the enclosed temples from their sides or even from back angles with no regard for the balanced impact of the facade. There are no paved or pebbled expanses of courtyard to set the shrine in perspective, as in Japanese architecture, and as he dealt with the approach of man to shrine, at least, the Nepalese architect was often insensitive. Clearly the approach of man to god in Nepalese architecture is generally of ritual, not aesthetic, importance.
 - 40. The central door is blocked by a large boulder and brick fill.
- 41. The wood opposite Pasupatinatha temple, Mrgasthali, is very sacred and abounds in small, single-roofed temples. On the 14th of the month of Aghan edible offerings are scattered there during the festival of Bala Chaturdasi or Satbyū. On its far slope, deep in a forest of oak and champā trees, rests the temple of Guhyeśvari, one of the most unusual in Nepal. The shrine of this great mother goddess is crowned by condensed multiple roofs, a golden bellows pushed flat, that are four glittering borders of delicate ornaments. The temple itself is only one storey high, however, and it is open to the sky at its center. Guhyesvari, like Svayambhūnātha, was discovered by the Bodhisattva Manjuśrī who adored Svayambhūnātha as the divine lotus flower and Guhyeśvari as its root (See F.D.K. Bosch, The Golden Germ, The Hague, 1960, p. 242). She is a form of Kālī; she is supreme among goddesses. Worshipped by both Hindus and Buddhists, the symbol of the goddess is a hole in the earth. This is seen by Buddhists as the root of the lotus from which Adibuddha appeared and by Hindus as the anus of Uma which fell to earth from her decaying corpse as the maddened Siva carried her over the earth after her suicidal death by sati (Gopal Singh Nepali, The Newars, p. 307).
- 42. A low shrine beside Cāngu Nārāyana follows the same plan and encloses multiple images of Durgā within its considerable interior space. It is discussed in a later section.
- 43. Seclusion is by no means required of all sacred images and many of the most important sculptures in Nepal, including the monumental Visnu Anantasayin of Budha Nilkantha, stand in the open air.
- 44. As manifestation of Visnu, Krsna, and his son Pradyumna, are the nucleus of the two great compilations of Nepalese Brahmanism, the Pasupati-puranu (VI-XIII) and the Nepāla-Mahāmya (VII-XII).
 - 45. The shrine honors the wives of Yoganarendra Malla who burned them-

selves to death by committing sati upon the demise of the king. The formal emphasis upon the octagon is prefigured in India in the columns of various shrines to Visnu and Krsna (Ernest Binfield Havell, A Handbook of Indian Art, London, 1921, p. 45).

- 46. A slab of stone on the wall beside the door bears the date Nepal Samvat 769 (1649 A.D.) and belongs to the reign of Rājā Pratāpa Malla. It records the consecration of an octagonal temple (vasupatrapadma sadriśa) with eight sikharas (sringa) built for the sake of two queens, Rūpamatī and Rājamatī (Bhagvanlal Indraji, Twenty-three Inscriptions from Nepal, p. 29). The language is Sanskrit, the characters Newārī.
- 47. An eight-sided shrine which may have been the Bhaktapur equivalent of the shrines in Patan and Kathmandu dedicated to Kṛṣṇa once stood opposite the Golden Gate of the palace in that city. Pictured in plate 43 of Kurt Boeck's Aux Indes et au Nepal (Paris, 1907), the building was very open at the lower level, had arched windows in the second floor, and was covered by two roofs. It was destroyed in the earthquake of 1934.
- 48 These are to be differentiated from small open towers without functional interior space that are sometimes attached to the roofs of houses of vihāras.
- 49 Taleiu, also called Taleiu Bhagavatī or Taleiu Bhavanī, is a form of Kālī or Durgā who is mentioned in Nepalese religious history as kul deity or patron goddess of "Hari Singh Deo, a descendant of the Karnatic Prince, Nanva Deo" (Gopal Singh Nepali, The Newars, p. 308). She was buried under the waters of the Sarya River at Ayodhya although her origin is earlier. She was rescued from the waters by the king of Ayodhya. She was brought with the king to "Simirawn Garha" where she was worshipped as the kul deity of the Karnatic dynasty. She further requested of the king that she be brought to Kathmandu Valley, where the Malla kings came to regard her as their protectress and built temples to her honor in their four capitals, including Kirtipur. Her image was brought to Bhaktapur; the shrine in Kathmandu enshrines a copy of it. During Navaratra, the ninth day of Durgā Pūja, the temple of Kathmandu is opened to the public and buffaloes are sacrificed to her in great numbers. She is deity of the Newars above all others, and the rulers of the Sah dynasty have paid greater homage to Pasupatinatha than to Taleju. Her priest must be a Joshi Newar. King Rana Bahadur Sah who took the throne of Nepal in 1777 defiled and smached to pieces the chief idol of the temples of Taleju after the death by suicide of his queen, who had been disfigured by smallpox. He destroyed other images as well before the populace rose up against him and forced him to abdicate (Percival Landon, Nepal, Vol. I, p. 71).
- 50. The palace complex of Patan contains as well two other temples dedicated to Taleju. One of these, sometimes said to be in fact a shrine of the goddess Bhavani, is deemed more important than the larger tower of Taleju. It has large images in metal of Gangā and Yamunā beside its entrance, but the structure itself is simple and small. The third shrine is an octagonal tower of five storeys that is built into the Mulchok courtyard.
- 51. In about 1600 Ganga Rānī, who is credited with building the present temple of Paśupatinātha, had a kind of ribbon 5 kilometers long stretched from the holy shrine to the palace, thus following the thousand-year-old example of King Sivadeva who also relied upon this divine umbilical for direct communication with the mighty god. The practice was again revived by King Pratapa Malla in the 17th century (Sylvain Levi, Le Népal, Vol. III, p. 465).

- 53. The temple of Hanumat was built by Rājā Pratapa Malla who took the throne in 1641 A.D. It is said to contain a five-faced image of the monkey god. The same king is responsible as well for the construction of Mohan Chok and Nasala Chok of the palace compound, the temples of Indra and Jagannātha in the Durbār Square, and the palace gateway with its large guardian figure of Hanumat. A lengthy inscription of 1654 set into the palace wall nearby the Hanumat image displays the fifteen different scripts and languages that were studied by the king, including French (Daniel Wright, Varnšavāli—History of Nepal, p. 128).
- 54 The other exception is the "elephant-ear" tower that crowns the sixth floor level of the palace above the Kot. It may also be easily viewed from the main tower of the palace, its form being borrowed from Islamic and Bengālī traditions in India.
- 55. Bhagavatī Mandir in Dhulikhel is similarly enclosed by iron bars on its entrance side, perhaps in order to keep animals from entering the open porch.
- 56. The back roof and core of the lower storey echo this projection so that the building appears to be a free-standing pagoda joined to the courtyard by additive walls.
- 57. As explained by Benoytosh Bhattacharyya, the worshipper who concentrates upon the headless form of the goddess, Bhattarikā Vajrayoginī, is instructed in the Sādhanamālā to envision her two attendant yoginīs to the left and right as the green Vajravarnanī and the yellow Vajravairocanī (Sādhanamālā, Gaekwad's Oriental Series, 2 vols., nos. 26 and 41, pp. 452-53). Bhattacharyya mentions no attendant figures for Vajrayoginī in her other forms, however.
- 58. It was not possible for the investigator to gain access to the garbha grha and he was, as a non-Hindu, forced to leave the prayer hall of the upper level after only a few minutes inside.
- 59. The garbha grha may in fact be quite spacious as well as brightly lighted, for only a small portion of the large upper floor of the building is taken up by the hallway that stands before the inner shrine.
- 60. The Mānasāra Silpasāstra, like most other classical treatises on architecture, makes no distinction among its 98 kinds of mansions as to whether they are to be occupied by men or gods. D.N. Shukla finds that there is generally no fundamental difference between the two kinds of buildings, mānavavāsa and devavāsa, but that the Samārangana Sūtradhāra traditionally ascribed to King Bhoja of Dhara (1018-1060 A.D.) does in fact properly differentiate among the residences of men, the palaces of kings, and the residences of the gods—sala-bhavanas, rājā-vesmas, and prāsādas (D.N. Shukla, Vastu-šāstra, pp. 99-101).
- 61. The deity of this spacious shrine, Dattatrāya, the Absolute, the Lord of Lords, is described in the Sandilya Upanisad (3:2). See also Jaya Chamarajendra Wadiyar Bahadur, Dattatreya—The Way and the Goal, London, 1957 and Hariprasad Shivaprasad Joshi, Origin and Development of Dattatreya Worship in India, Baroda, 1965.
- 62. One legend states that an ordinary man spotted the Tree-of-Wishes, Kalpavrksa, in the guise of a vulgar idler who watched the parade of Matsyendran-atha. The divine stranger was seized by the citizen and as ransom for his release was made to erect a shelter for wandering monks, constructing it from the wood of a single tree (Sylvain Levi, Le Népal, Vol. I, p. 61).

- 63. The temple requires heavy beams as horizontal braces between the outer and inner walls of the ground floor because of the extra width of this passage. The beams, elevated about 8 feet above the floor, are easily seen from inside the passageway for there is no ceiling of wooden planks between the ground floor space and the underside of the sloping beam above it.
- 64. This carving in stone which stands about 3 feet high almost certainly represents Gorakhsanātha, patron saint of the Gurkhas, but it may be an image of the much lesser known deity Loyipada Siddha (Ramesh Jung Thapa, "Kasthamandapa," Ancient Nepal, No. 3. April, 1968, pl. VIII). This same article is illustrated with a plan and cross-section diagram of the shrine.
- 65. The tīrtha or junction of the Bagmati and Visnumati rivers is the most sacred in the valley, and it is included in the lists of the Buddhist Svayambhū-purāna and the Hindu Paśupati-purāna and Nepāla-mahātmya. It is called the cintamani-tīrtha and, like all tīrthas, it derives from the sacred subterranean waters of the Ganga, Yamunā and Sarasvatī rivers of India. The waters are the dwelling place of Varuna who has the power to fulfill every desire (Sylvain Levi, Le Népal, Vol. I, p. 419).
- 66. This blend of disparate architectural forms is less awkward than that of the much more prominent temple of Kageśvara Mahādeva in the Hanumat Dhoka square, a chopped-off sikhara tower that perches on top of a half-built pagoda base.
- 67. Hanumat has only a minor place in the Hindu-Buddhist pantheon of Nepal, being little more than a gate-keeper at the palace of Kathmandu and occupying minor temples elsewhere. Only in Bhaktapur is he given considerable honor as the main *ghats* on the Hanumante River are named for him and Rāma, his lord.
- 68. Ganeśa is especially highly regarded in Nepal by both Gurkhas and Newārs. His worship by the chief lady of the house is prerequisite to all domestic ceremonies of the Newārs (Gopal Singh Nepali, *The Newars*, p. 247) His images are found by the hundreds and thousands, from tiny household figures to a nearly life-size figure on the Hanumante River below Bhaktapur; he is everywhere. Traditional lists of his "major" temples vary greatly as the shrines are so numerous, but that of Sūrya Vināyaka south of Bhaktapur is most generally recognized as of special significance. It is a sikhara temple; its color is red.
- 69. Protected by the branches of the mammoth tree that embraces its immediate setting with its gnarled roots, the sacred site of Pachali Bhairava much resembles that of Dakṣina Kālī, dedicated to Dūrga or Kālī and the scene every Saturday of abundant animal sacrifice. Another shrine to the bloody mother is that of Mahākālī just north of Bhaktapur, an open air area holding a number of uncut stones arranged in a circle on a small hilltop. The devotion to bloodthirsty deities in Nepal is so pervasive that even a Buddhist shrine like Iku Bahāl in Kathmandu may include within its precincts a blood-spattered altar of Durgā.
- 70. The Rānī Pokhari or "Queen's Tank" was constructed during the reign of King Pratapa Malla (c. 1640-1674) and dedicated by him in 1670. On the artificial island in its center stood a small pagoda temple of Siva, but this no longer exists. Henry Oldfield bemoaned the destruction of the original shrine and its replacement by an "ugly brick-and-plaster structure" by Jang Bahadur in 1850 (Sketches from Nepal, 2 Vols., London, 1880, p. 111). The present structure may be a further reconstruction.

- 71. Maccha Nārāyana is associated in name with the fish, maccha.
- 72. All three shrines are circumambulated on the terraces upon which they rest. It is possible to circle Varahī Mandir by boat but this is not ritually done.
- 73. Mary Slusser, "The Rani Pokhari," American Women's Organization of Nepal (AWON) Bulletin, Vol. XIV, No. 8 (February 17, 1969), pp. 7-13.
- 74. Varahīs are a third group of divine females, less important than the primary goddesses Sarasvatī, Laksmī, and Pārvatī or the secondary females Brahmayanī and Indrayanī as wives of Brahma and Indra. Still lower forms of the goddesses are those of the Ajima or Sitala order who are all local deities but who are often more respected than the Varahīs because of their distinctive powers (Gopal Singh Nepali, *The Newars*, p. 310). Other low forms of Durgā or Kālī are the Mais or mother goddesses who protect local areas and are usually represented by rounded stones. They are generally given the name Bhairavī after the consort of Bhairava.
- 75. This object is often lost from Nepalese bronzes, to which it is usually attached as a separate appendage.
 - 76. Benoytosh Bhattacharyya, The Indian Buddhist Iconography, p. 161.
- 77. A small but powerful representation of the goddess in bronze is discussed by Benoytosh Bhattacharyya and ascribed to the 15th century ("Three Buddhist Metal Images in the Baroda Museum," Bulletin of the Baroda Museum and Picture Gallery, Vol. II, Part I, August, 1944-January, 1945, pp. 39-44). The figure has the head of a boar attached to the left side of its own head. In its raised left hand is a karti knife with vajra handle to symbolize the power of the goddess to destroy all ignorance; the right hand holds a bowl filled with human flesh and blood symbolizing the oneness of duality and non-duality. The tantra, Vajravarākī Kalpa is dedicated to the fierce goddess.
- 78. The unadorned rock is to be expected, perhaps, as the symbol of this deity who is one of the family of fierce goddesses. The small struts that are part of the screened balcony below the first roof are carved to represent many of these divine females, including Kālī, and a pig-faced image may represent Sūkarāsyā. The latter goddess is one of four animal-faced females described in the Nispannayogāvalī and connected with the directions of the mandala; she is described by Benoytosh Bhattacharyya in The Indian Buddhist Iconography, p. 320. Bhattacharyya suggests that an illustration in The Iconography of Tibetan Lamaism by Antoinette Gordon, p. 80, represents this deity, although it is labelled as representing Vajra Varahī.
- 79. The pose of the animal is similar to that of Siva's bull, Nandi, at Pasupatinātha.
- 80. Pulchoki Mai Nau Dhara, another goddess of the forest, is worshipped in a heavily wooded area above Godavari, but the high walls and enclosing buildings around this shrine separate the pagoda emphatically from its forest setting.
- 81. The highest point of the crest of the hill upon which Kirtipur is situated was once occupied by the *durbār* of this city that was once an independent kingdom. Prthvī Nārāyana Sah attacked the hill unsuccessfully in 1749 and again in 1765. After persisting for several months, he succeeded in conquering the town, cutting off as punishment the noses and lips of all inhabitants except infants and those who played wind instruments. The punishment is recorded by Father Giuseppe, an eye-witness, in the second volume of his Asiatic Researches.
- 82. All of these temples are structural, but cave temples are also found on hilltops. These include Gorakhanātha Maņdir above Pharping and Bisankhu

Nārāyana east of the villages of Thaibo and Bandegaon. These shrines may be located on the map on page 51 of His Majesty's Government, Kathmandu Valley Plan.

- 83. In addition to its spectacular visual prominence, it is the foremost of the many temples dedicated to Visnu.
- 84. The founding of the temple is attributed to King Visnugupta in the opening passages of the second vamsāvalī or geneological list found by Cecil Bendall in the Durbār Library in Kathmandu (v², f. 306-f. 36a) and which dates from 1057 A.D. and after. The list is further explained in Luciano Petech, Mediaeval History of Nepal, p. 6.
- 85. In about 1845 A.D. a royal physician referred to as chakrapānī re-erected the pillar, which had fallen, and placed a new capital upon it bearing a lotus and chakra or discus. He buried the base of the pillar in the ground at that time, so that part of the inscription is not visible. A similar pillar with Garuda figure intact survives in Harigaon. Its message is a hymn to Veda Vyāsa, as compiler of the Vedas, the Mahābhārata, and the Purānas.
- 86. The buildings around the courtyard are primarily dharamsalas for the shelter of pilgrims.
- 87. Illustrations of some of the images are found in Kramrisch, The Art of Nepal, Pl. IV, and Singh, Himalayan Art, p. 171, 172, 175. A detailed description and interpretation of one of the most important sculptures is given by P.R. Sharma in "Visnu in Viśvarūpa from Nepal," Bulletin of the Deccan College Research Institute, Vol. 24 (1963–1964), pp. 28–30. The images are dated by P. Pal in Vaisnava Iconology in Nepal, Calcutta, 1970). Kneeling before the temple in a small metal cage are a charming pair of donors cast in bronze, a male and a female in Malla costume. These and other sculptures of comparatively recent origin but very good quality are scattered around the courtyard.

Temples Beyond Nepal and Questions of Origin

From the first "discovery" of Nepalese temple art by Europeans, there has been much conjecture about the origin of the pagoda design as it is expressed in Nepal. It has been attributed with birth in regions and countries to the north, south, east, and west of the mountain kingdom, most opinion linking the Nepalese pagoda in one way or another with the more famous temple-towers of Japan and China. It is the conclusion of this investigator that the links of Nepalese architectural forms to those of the Far East are tenuous at best, and that any comparison of the monuments of Nepal to Indian traditions in building, no matter how convincing the evidence of their interconnections, must take into account a strong element of invention that is purely Nepalese. Certainly there are shreds of evidence, sometimes even abundant evidence, to connect Nepal to each of the areas to be discussed in the following pages, but to no one of them may be ascribed the origin of the Nepalese pagoda. That distinction belongs to the country in which it is found in such magnificent abundance.

While he borrowed from the artistic traditions of foreign cultures with which he came in contact—a detail of architectural decoration, a floor plan, a pinnacle shape, a protective symbol—the Nepalese artist nearly always bent the foreign element to his own liking, creating something new, something Nepalese. There are few copies of foreign monuments in Kathmandu Valley—Mahaboud-dha is something of a freak—and it is not surprising that regions of the extreme south and far north of the country should illustrate the spillover in architecture of the dominant cultures that border them. A comparative approach to the study of Nepalese achievement is justified; a strictly derivative approach is not. Yet the reflections of the pagoda of the Newārs as they appear outside of the kingdom are intriguing for their similarity to the Nepalese forms and for their own considerable beauty. There are other, often disparate

shrines that are much less known and often endangered in their remote mountain settings just as there are the milestones of Asian architecture that prefigure in many ways the creations of the Newārs. The question of their relationship to Nepal's shrines, the necklace of Sagarmatha, has never been answered or even directly approached in detail. As a conclusion to this study of visual form and meaning in Nepalese temple architecture, related traditions of Asian temple art will be considered. The choice of monuments is very selective.

A. North to the Far East

Evidence to discount any direct connection between the early art of China and Japan and that of Nepal is abundant, despite romantic notions that are met with commonly both inside and outside of the kingdom. Intercourse between comparatively tiny, landlocked Nepal and its immense northern neighbor never occurred without the aid of an intermediary, namely Tibet, and there is no record of Chinese visitors entering Kathmandu Valley itself until after Hsüan Tsang's pilgrimage to the birthplace of Buddha in the Terai in the 7th century A.D. Trade was carried out regularly between China and Nepal only in relatively recent times, although direct contact between India and China was maintained by routes bypassing Nepal from at least the 10th century. There is no record to suggest that the influence of the Nepalese artist A-ni-ko in Chinese circles was other than a great innovation in the 13th century.

As always Nepal was a wall, a geographic barrier to expansion toward the Far East, so that even the arduous path from China to India through the Gobi Desert was preferable to that which brought the traders over the frozen Himalaya and through the mountain passes of Tibet.¹ The Silk Route and all other Trans-Asiatic links of trade by-passed Nepal, so that at least in terms of international trade it was indeed "sequestered." There will never be a Begram unearthed in Nepal.

If trade between India and China had no Nepalese link in its chain of economic centers, it is also true that Nepal was remote, at least in a general way, from the direct transfer of ideas that occurred between the two great cultures. The doctrines of Buddhism and, to a much lesser extent, Hinduism moved toward China mainly in a path located to the west of Nepal while independent movements brought the religious impulses to Nepal from India.

The earliest Chinese images of Buddha bear the stamp of Gandharan style, and from Kashmir as a center of Sanskrit learning the ideals of Indian philosophy penetrated Khotan and adjoining Chinese Turkestan. The influences that Nepal had upon the art of China were sure—attested to by the gracefully attenuated Bodhisattva of the Newark Museum which reveals the fluidity of form that was newly brought to the northern countries by Nepalese artists—but those influences came fairly late. Political alliance with China has always been infrequent. No clear indication is found of effects of Chinese technology. There is no evidence of abundant Nepalese impact on Chinese art until after the Islamic invasions of northeastern India caused Nepal to take over the production and export of sacred images for use in Tibet. Because regular contact of all kinds between the Hindu-Buddhist kingdom and its northern neighbors developed so late, it would be rash to assume that the very beginnings of architecture in either area, or even its mature development, depended upon the inventiveness of the other. Even without historical contradictions, the visual evidence of surviving monuments, with far earlier examples being found in China, indicate no common mold.

The Chinese structure that most resembles the Nepalese pagoda is the t'ai or Chinese pagoda. As a multi-roofed tower of many storeys, the building of the Far East satisfies the definition of the term pagoda as used in this study of Nepalese design, certainly much better than do the sikhara temples of India, such as the Temple of the Sun at Konarak, to which Portuguese navigators evidently first applied the name. The first large buildings described in the oldest canonical works on Chinese architecture are these lofty square towers, the t'ai. They are of three varieties: astronomical towers, watch towers, and towers used as treasuries or storehouses. As expressed in wood, the early Chinese t'ai must have closely resembled the pagoda tower of Horyūji in Japan which dates from the Asuka Period (593-644 A.D.). In its plan, the t'ai and its equivalent in Japan, the to, recall the vāstupurusa mandala of Indian architecture and the painted mandala diagram of tantric meditation, both of which have been discussed as patterns basic to the evolution of the Nepalese temple.

The pagoda of Hōryūji, although not following double wall construction or the absolute combination of brick and wood composition that is essential to the Nepalese monument, is of receding width upward in the dimension of its individual storeys

and bears multiple roofs that are at least superficially like those in Nepal. Moreover, the slightly curved roofs are covered at their many levels with layers of tile. Two very important elements of the Japanese design differ significantly from Nepalese patterns. however, and their prominence in even the earliest wooden structures of Far Eastern art creates a chasm between them and their Himalayan "counterparts" that is difficult indeed to bridge. Firstly, the Chinese-Japanese tower (and the two traditions are inseparable in the early period) is constructed around a central pole that extends from its base in the foundation as cosmic and structural axis all the way to the top of the building to become the spire of the chhatrayasti or parasol support that crowns the tower. It is both literal axis of the high tower that encloses it and cosmic axis of the universe. No such post is ever found inside the Nepalese pagoda, although in certain rare shrines a short pole is needed as an extra support for the uppermost roof. Even this minor parallel is a very distant one, for the central shaft at Hōryūji is not properly supportive but essentially symbolic. It is an all important, lifegiving sign which the Nepalese pagoda lacks. It stands alone surrounded by protective walls.

The second aspect of Far Eastern design that separates its pagoda towers from those of Nepal is the manner of support that underlies their roofs, probably the single most important structural aspect of the buildings. The Far Eastern roof, and once again most early evidence must be taken from Japan, is supported not by sloping beams that spread umbrella-like from the body of the shrine to be met by angled struts that rise from the building's core but by an extremely elaborate system of horizontal and vertical brackets, the tou-kung. The multiplicity of thrusts and stresses that make up the Far Eastern bracketing system involves, therefore, an approach to architectural balances and overall design that is very foreign to the much more direct approach of the Nepalese architect. Early monuments like the pagoda of Tien ning sze, a masonry structure in Peking which dates from the 7th century and reflects its origins in earlier buildings that probably employed wooden construction, at least in part, are much more massive than Nepalese buildings with much less emphasis upon the roofs, even as they reveal a floor plan analogous to those of the mountain temples. 3 More important, early Chinese buildings which do reveal an emphasis upon the overhanging roofs come down to us from times as early as the Han Dynasty (206 B.C.-221 A.D.) as tomb models and relief carvings, domestic houses, pleasure pavilions, watch towers that resemble Nepalese buildings only in their height, and in the ribs of roofs and the upturned corners which they sometimes possess. They are indigenous products too early to be useful for specific comparison, such as may be possible with a 14th century archway at the Nankau Pass in China that is said to recall in its ornamentation the Golden Door of the palace in Bhaktapur.4 Ties from China to Nepal did exist and a two-way exchange in art occurred among them that was important, probably being of greatest impact on the bronze art of the eastern country and the cultures with which it came in contact, but this tie was not an early one and it could not have had a deciding influence upon the creation of the Nepalese pagoda. The possibility remains, although it is perhaps remote, that the pagodas of China and Nepal are both rooted in a long-lost Indian model which was probably a tower made of wood. Hsüan Tsang's description of towers at Nālanda refers, perhaps, to this.

B. Temples of the Malabar Coast

More puzzling than the resemblance of the mountain pagoda to those of China and Japan, a resemblance which can in many ways be proved superficial, is the similarity of Nepalese buildings to the wooden shrines of South India, especially those of the Malabar Coast. There are no towers in that tropical scene that may be explained away as the remnants of watchtower forms or an independent evolution of the chhatrayasti passed north from India without effect in Nepal. Instead there are multi-roofed temples, palaces, and prayer halls that recall Nepalese shrines not so much by their form or silhouette as by their techniques and materials of construction and especially by the kinds of their decoration. The shrines include the sacred structures of the Jains, called bastis, in the Kanara area near Mangalore,5 the multi-storeyed tombs of Jain saints in the same area,6 and the temples of "Kerala style" in former Travancore.7 All of these buildings are free-standing and multi-roofed and those that are made of wood or wood in combination with stone display fine wood carvings. Domestic complexes, like the palace of Padmanabhapuram near Trivandrum, dating from 1334 and after, are of related structural and decorative style and display wood carvings as fine as those that are attached to temples.8

The most surprising link to the motifs of the Himalayan north country is found in the wood carving of Malabar, for here the roof

struts of the temples are so like the tona carvings of Nepal that the two elements would seem at first to be interchangeable. In addition. wooden toranas are mounted above the doorways of Malabar temples much as in Nepal as evidence of a common dependence upon Indian symbolic themes. The figures of deities project as supportive struts all along the edges of the sloping roofs and the corners of the roofs are upheld by leogryphs directly reflective of the Nepalese kumsala. The presence of this latter element may be explained by a mutual dependence of the northern and southern schools upon much earlier instances of the lion or leogryph in Indian art, usually as a guardian figure, but the appearance of the kumsala in such a form very similar to that taken in Nepal remains unexpected. As the style of the southern carvings is examined, however, especially those of the anthropomorphic figures, the two traditions appear to be quite different. The images of gods and men in the south are more fleshy and of more swelling mass than those of Nepal, almost rotund in comparison; they are more solidly human, less ethereal. At the same time they may be less lively and graceful than are the swaying, cross-legged deities and attendants that seem to dance upon the surface of the best of Nepalese struts. This is not to imply that the southern carvings are inferior to those of the North, for many of the fleshy forms display the essence of breath-filled form that is always a prime goal of Indian sculptural art. A comparison between the large strut figures of Indreśvara Mahādeva in Panauti and the carvings from Kerala that are displayed in the National Museum in New Delhi well illustrates the differences between the elegantly attenuated Nepalese form of subtle tribhanga pose and sensual body volumes punctuated by the finest of ornamental detail and the more solidly sculptural figures of Malabar. Neither variety antedating the 13th century, at least in surviving examples, both include masterpieces of South Asian art in wood.

The steeply sloping roofs of the South Indian shrines, tombs, and palaces are functionally necessary in an area of rainfall as high as that of Kerala. They are found on buildings rectangular, round, apsidal, oval, and square in plan. The last of these, such as the 14th century shrine of Sathankulangara in Travancore, are in plan and roof form siblings of the Nepalese pagoda, but their roofs are not multiplied in the same way. The roofs of dance-drama halls like the 18th century structure at the temple of Haripad in Travancore, as well as many temples and palaces of Kerala, are proportionally

much larger than those of the mountain pagodas. In total form, and in individual details other than the roof strut carvings, the structures of the Malabar Coast are quite unlike the temples of Nepal, their differences unexplainable merely in terms of climate. The presence of South Indian priests as caretakers of Pasupatinātha in Kathmandu is, as has already been mentioned, a connection that is not an ancient one, so that there is not a historical framework to support the visual impression of sameness that the visitor first feels upon comparing the southern structures with memories of Nepal. Except for the puzzling similarity of strut usage, the Malabar shrines are no more "Nepalese" than are the wooden churches of Norway.

A final look at South Indian temple design is required in this brief examination of southern Indian architecture, but to the eastern coast rather than Malabar. At Nagapattinam which was, like Nagarjunikonda, an important port and Buddhist center of learning, retaining its Buddhist identity until the 16th century, 10 stood an extraordinary building, the Padureli Copuram. This structure of brick, which may have been either quite unique or one of many such structures, was a vertical tower at least three storeys tall, according to conjectural reconstruction. It was pulled down by French Jesuits in 1867, having been known as the "Chinese Pagoda" and its fame may have harked back to the 11th century. The origin of its unusually vertical design has been attributed by T.N. Ramachandran to Javanese or Sumatran impulse, since trade with Southeast Asia was carried on by sea from this area, and it has even been suggested that the building was as a chapel of the Cūdāmani-varma vihāra built by the Sailendra ruler Māravijayottunga. It is a structure that puzzles the investigator for its verticality and its division into storeys in a pattern unlike any other to be found on the eastern coast. Like the brick tower that stands abandoned near Dhum Varāhī north of Kathmandu, it fits no pre-existing pattern; it is quite unexpected here.

C. Roots in Central India

No parallel to the Nepalese pagoda is to be found in the Indian plain, nor is it likely that any ever existed. It would be startling indeed to find there a multi-roofed temple of brick and wood revealing the northern silhouette, for nothing in the birth or development of the ancient and medieval temple of the plain suggests that such a direction would be tollowed, at least according

to the remains that have survived from those early times by outlasting the Islamic conquest. Some investigators go too far, it appears, in suggesting that no building in wood, of which there were supposedly many as replicas of today's pagodas, need have left any record in art or history other than the rather unclear descriptions of early Chinese pilgrims like Hsuan Tsang." Monuments taken by Percy Brown as evidence of a phase of wooden architecture involving the "pagoda" form in pre-Islamic India are intriguing: stone buildings of Kashmir reflecting wooden prototypes, gabled Buddhist temples of Mers in Kathiawar, shrines of south Kanara, and to a lesser extent temples of Orissa with the pyramidal superstructures of the jagamohans, but none of these is structurally or decoratively identical or even strikingly similar to the Nepalese pagoda. Once again, it is only the floor plan that serves as a concrete connecting link between certain of the Indian traditions and that of Nepal. Some similarity of materials is suggested, however, by excavations at the Mauryan capital of Pataliputra which have revealed large roof tiles very similar to those used to cover pagoda and palace roofs in Nepal, 12 but similarity in shape and form of the Indian structures is not proven by Chinese references, even though they were described as being multi-roofed.

The partial evolution of the pagoda tower from the stupa, especially from its harmika and chhatrayasti, is treated in considerable detail by James Fergusson and others.13 The continuing evolution of form and function that is traced between India and the Far East seems to have bypassed Nepal on its path from the Indian plain, however, for the basic stūpa form is of as unchanging prominence, renewal, and consecration in Nepal as in Tibet, and it is of greater antiquity. With the massive anda of its rounded body actually increasing in girth as it is compared to its Indian prototypes rather than becoming thinner, smaller, or clongated as it "evolves" toward the tower, the Nepalese stupa stands alone. It is a final, satisfying form. The large finial or chhatrayasti of Tibetan and Nepalese stūpas like Svavambhūnātha and Bodhinātha, and even that of the similarly shaped and decorated suburghan or stūpa of the Ganden Monastery at Urga in Mongolia,14 does not develop in large size and considerable ornamentation at the expense of the prominence of the base.

With no temple of multiple roofs and receding silhouette known from the Indian plain and with the theory of the developed

stūpa form as origin of the Nepalese tower temple questionable at best, it is not possible to find a southern mold for structure of the mountain shrine. This is not entirely true of the surface detail of the Nepalese shrine, however, or even of its general meaning and orientation. Much of the symbolic ornament and representational imagery that are the life and meaning of the temple has been borrowed from the mainstream of Indian culture. The southern origins of many such motifs, such as those of the door frame and torana, have already been mentioned, but a brief listing of structural and decorative elements as they occur in early Indian temple art is instructive as an indication of the extent to which Nepalese design is imbued with Indian characteristics.

As select examples of structural elements that are often decorative as well, T-shaped column capitals with curvilinear edges are found in the great vihāra Number 15 at Nasik, dating from about 185 A.D., just as they appear even in Central Asiatic architecture in wood, while in vihara Number 17 at Ajanta these capitals cross as they "support" the rock-cit ceiling beams in a pattern like that of the interior of Kasthamandapa in Kathmandu.15 The shorter beam ends that protrude from the walls in rows on temples like Trivikrama at Ker, dating from the 9th century, as on much earlier Indian buildings, are found on the Nepalese façades as standard elements of their design. As is usually the case, wooden prototypes are suggested for the Indian patterns in stone. Also in vihāra Number 17 at Ajanta the rectangle of the base of each column is chamfered off to become eight-sided, a pattern typical of earlier Indian as well as later Nepalese architecture. In a somewhat later excavation, cave Number 29 at Ellora which dates from early in the 7th century, atlantes occur as "structural" supports. These reflect later patterns in Nepal, where attendant grotesques have been seen to bear the weight of dryads and other figures, but like so many other ornamental and structural elements they are rooted, as Gisbert Combaz points out, in the art of cultures to the west of India.16 On the 5th century temple of Lad Khan at Aihole,17 is found a roof of stone shingles put down in the shape of "half-tree trunks" to fan outward along the very shallow slope of the roof, raising questions, perhaps, about the origin of the non-functional "ribs" that occur on the metal roofs of Nepal. The multi-level plinth existed in Indian art before the 2nd century A.D. as support for the stūpas of the Kusānas, later to be employed by the Guptas and the Licchavis of Nepal. The small temple of

Aichattra near Bareilly in Uttar Pradesh, dating from the 5th century and excavated by the Archaeological Survey of the Government of India in 1940-1944 and 1964-1965, rises upon a series of five successive plinth stages. Each of these elements is only a sample of structural and decorative parallels that exist between the art of the two regions, with the earlier expressions consistently Indian. As the two major design traditions are considered, most parallels occur in decoration.

To begin with a "minor" element of decoration, the zigzag motif of indented squares in Nepalese border carving may be a derivative of the indented spaces that occur between the half-blossoms of flowers that are carved in rows upon structures like the large stupa of Dhamek which dates from about the 6th century at Sārnāth. The checkerboard border of Nepalese carving appears on the temple of Laksmana in Sirpur which dates, perhaps, from the 6th century and upon a small stupa from the Swat Valley that is now preserved in the Indian Museum in Calcutta. Revealed on the stupa of Sarnath are rows of flowers carved full-face, hanging garlands of beads, and bells that strongly recall the later ornaments in metal repousse that adorn the roofs of Nepalese shrines, just as the familiar open flowers within squares that are common in Nepal appear first in the art of Amaravati and on the temple of Lad Khan where, as in the Hindu kingdom, they are part of the window screens. Similarly, circular lotus medallions and lion faces much like those that are carved upon Nepalese border projections, appear as early as in the sculpture of Bharhut in the 1st century B.C., where they adjoin the vedikā or railing of the stūpa. Rows of birds carved as another kind of border in Nepal, one that appears at first to be the product of the playful ingenuity of local carvers, are in fact prefigured in the architecture of Aihole and, later, at Pattadakal. Perhaps in the end nothing is pure invention, nothing whimsical in the veil of ornament that the Nepalese craftsman weaves upon the houses of his gods.

It is Percy Brown who sees the figures of Sanchi's yakṣīs captured in the window frames of Nepalese buildings as he turns from minor strings of decoration to major structural and symbolic parts of the temple, and he traces the window shape itself, with its projecting upper and lower beams, to early Buddhist or even Vedic patterns as still reflected in the rock-cut architecture of India. These are among elements of pagoda architecture both major and minor that are always of significance and which find their living

root in the creative soil of India, linking much of the magnificence of the fully developed temple, if not its essential form, to a great culture that must be called Mother. The flower of Nepalese architecture is like the lotus bloom Adibuddha which rose above the waters of the Himalayan land to bloom and mature in its own way, but which would have withered without its life-giving stem. This historical and aesthetic relationship must not be underestimated.

D. Mountain temples of northwestern India— Uttar Pradesh, Punjab, Himachal Pradesh

Dramatic, lofty, and finely ornamented buildings that are loosely described as pagodas are found in many parts of the mountainous regions of northwestern India. Those closest to Nepal. especially in Kumaon, Garhwal, and Almorah in Uttar Pradesh might be expected to be most similar in form to the structures of their neighbor, but the opposite is true. While very little study of these monuments has been carried out, even by the Archaeological Survey of India, the remote temples of this region of the sub-Himalaya illustrate clearly the northward expansion of the themes of temple design in the plains below along with an admixture of odd, even grotesque structural features that result from climatic considerations and the kinds of materials that are available. Most of the shrines of the region might be called sikhara-pagodas as they bring together rather unsuccessfully two different approaches to the temple tower design, only one of which is suited to its climatic setting.

The smaller towers of Jagesvara in Almorah are classical sikhara temples built of stone, but among them stand tall towers to which pitched roofs have been added as simple but incongruous coverings, rather silly hats for vertical towers of massive strength. The temple of Gadagnātha in the same village bears three wooden roofs, two of which cover the mandapa porch and its attached tower while the third is part of a large balcony, complete with railing, that surrounds and encloses the āmalaka or sun-disc that crowns the stone tower. The squared and pitch-roofed additions to the stone tower interrupt its curvilinear design, but they are practical, even necessary additions as they keep rain and snow from collecting on the unprotected āmalaka and seeping into the sikhara interior where it would cause swift decay. The upper levels of such structures cannot be reached without much difficulty so there is no

question of removing the accumulation of snow by hand. Probably no shrine is faced with a greater problem of this kind than the similarly-constructed tower that is located high on the famous pilgrimage route that leads to the holy cave of Siva at Amarnātha, outside of the area immediately under consideration.

The metal roof of the shrine of Pārvatī at Baijnātha in Almorah is ribbed like those of metal-covered temples in Nepal, but the tiny tower that is perched on top of it does not resemble the pagoda towers of Nepal. The same is true of the wooden superstructure that is mounted on top of the temple of Anasya in Garhwal. Like the wooden addition of three roofs that is attached to the temple of Siva at Lakhamandal, complete with naga border and hanging "fringe" of wooden cylinders, these sikhara caps are exotic creations of limited impact upon Himalayan architecture in general. What they do show is that even within an area where the continued cultural presence of the Indian civilizations to the south was strongly felt, invention could occur. A reminiscence of Nepalese patterns is found in the wooden portion of the shrine of Badrinātha, a large carved balcony that sports a hanging border vaguely banner-like at its upper edge with bells below the corners of its roof overhangs and struts of abstracted animal shape sloping upward to support the lower of the temple's two roofs. It is clear that these slanting roofs are essential additions to imported designs as they are brought to a new and very different climate, and, whether carried out in slabs of stone like the Baijnātha temple of Siva in the Kangra district of the Punjab or in wood as in the buildings of Almorah and Garhwal, structures with steeply sloping roofs are to be found in all of these regions.

The stone sikhara with wooden roof is found in Himachal Pradesh as in Uttar Pradesh and the Punjab, most notably in several major structures in Chamba town. Also found in the region, however, are buildings both early and late that reveal traditions of less monumental temple architecture built entirely of local materials and in local styles more adaptable to their mountain environment than are the sikharas of the plains. Such sacred buildings are prominent within their village settings without being discordant. Less numerous and never so sophisticated in design as their relatives in Kathmandu Valley, these temples of the hills illustrate an indigenous response in art to the demands of imported doctrines. Among these is the temple of Devī near Bhandal village in Chamba district, a shrine that is shaped like a tall, A-frame

cottage with a very steeply sloping roof that reaches almost to the ground. It is angular and extremely simple in form, the antithesis of another temple of Devī in Hat Koti village in the Mahasu district of Chamba. This second shrine is extremely decorative, with two roofs of extraordinary concave silhouette at the upper level and fringe-like borders of unusually long cylinders along both roof edges. The roofs are covered over with stone shingles on this and the buildings around it, with at least some of their remarkable decoration dating from after the 8th century establishment of the temple and probably from its 19th century restoration. At the Hat Koti temple of Devī the decorative impact of Nepalese pagoda architecture, in wood if not in metal, is nearly matched.

The two temples above, while certainly indigenous creations, are quite unique and interesting because of their variation from accepted patterns. More representative than these are those shrines that show a certain homogeneity of form and detail so that they may be said to constitute a second Himalayan "style" of indigenous architecture to which yet a third movement, that of the Kulu Valley, may be added as a uniquely Himalayan development in architecture beyond that of Nepal. The shrines of Himachal Pradesh present evidence of considerable antiquity in their structure, wood carving, and metal images, 19 with the very significant temple art of Chamba first brought to light in the West by Hermann Goetz. Among important temples of Chamba that are essential to any study of Indian art, not only its expression in the Himalayan regions, are Laksanā Devī at Brahmor in the Budhal Valley, Śaktī Devī at Chatrarhi, and Markulā Devī (Kālī) at Markula-Udaipur in the Chandrabhaga Valley of Lahaul. These are probably the oldest shrines in the area, dating from the 7th and 8th centuries, according to Goetz.20 The temple of Saktī Devī will be considered here as representative of the style of Himachal Pradesh, with temples of the Kulu Valley to be dealt with separately.

The shrines of Saktī Devī is located on a mountainside in the small village of Chatrarhi half-way between Chamba town and Brahmor, on the side of an extremely precipitous river gorge. This temple, which commands an awesome view of the river valley and snow-covered peaks beyond, looks very little like a Nepalese structure. It is so unlike a pagoda, in fact, that it would be dealt with, if at all, in a single sentence in a work such as this one but for two facts: the temple of Chatrarhi is adorned with wood carving as

fine as any to be found anywhere in India and more intricate than that of Nepal, and it holds one of the most important bronze images in all Asian art.

The gently sloping hipped roof of Sakti Devi temple is covered with shingles of stone rather than tiles or gilt-copper and its walls are partly of wood and partly of stone, not brick. As an additional feature to distinguish the building from Nepalese structures, it has at the front two extended arms, porches unlike the platforms occasionally found before or beside pagodas. It is as if the front section of the temple follows the trisala plan. The shrine of Chamba relates to the pagoda, however, in its interior organization. its circumambulatory passage with T-shaped columns that are supported by shafts of purna kalāśa form, and in its iconography of carving in wood which involves such details as the vegetal scheme of the doorway enclosure and the figures of Ganga and Yamuna carved in the style of the plains. The paintings around the walls within the passage are more a differentiating factor than one of similarity as paintings of Nepal are considered, for the Chamba works are in the style of Pahārī miniatures of India. Nowhere is the brilliant, even gaudy color of recent Nepalese wall painting to be found. Nor is the composition in registers or general subject matter of works like the paintings of Bagh Bhairava in Kirtipur followed in Chamba.

The wood carving of Nepal is clearly defined, almost maplike, as the symbolic borders of the encompassing universe are delineated upon the walls or as the dress and gestures of deities are clearly identified. Individual decorative motifs and figures rarely blend into "scenes" in Nepalese carved art, but at Chatrarhi the entrance door frame of the garbha grha, baroque by comparison, is melded together by intricately carved yet overlapping and interwoven floral designs that wash the walls with a coating of low relief carvings from which only major figures emerge as individual entities. More like an aerial photograph of a stormy ocean than a symbolic map of the universe, the carvings of Śaktī Devī are as technically accomplished as those of the Newārs but visually much less concise and less readable. Yet this tradition of wood carving is the other major movement of its kind in the Himalaya, second only to that of Nepal.

Examining the forms of the temples of Brahmor and Chatrarhi, Hermann Goetz presents evidence to suggest that both temples were originally covered by pagoda roofs of a sort, like the three-stage roof of certain Kulu temples which is "generally... believed to have been imported from Nepal where it is common even today." He adds, however, that since Nepalese sculpture and the imagry of Chamba are so strongly indebted to the Gupta traditions of Harsavardhana, the question arises "whether the pagoda tower also did not come from the Indian plains"—an opinion held by many but never with the backing of conclusive evidence—"and from there was introduced both in Nepal and Kulu in the course of the 7th century." Goetz points to the 2nd century stūpa of Emperor Kaniska at Shaji-ki-Dheri near Peshawar, a structure of which too little is known, as "the oldest example of the pagoda type." It is undoubtedly a potential key.

The temples of Kulu Valley, reached by travelling north from Kulu toward Lahaul and Spiti, are surely not ancient examples of the pagoda type but they are of striking similarity to the temples of Nepal, especially on first sight. Related to other temples of the Punjab, Himachal Pradesh, and Uttar Pradesh in general terms, especially in the style and subject of their wood carving, the Kulu temples are much like Nepalese pagodas in their verticality and multiplicity of roofs and like them they are clearly the product of the forest setting. The parent of the Kulu temple is the deodar tree; this cannot be ignored. Yet as the Nepalese shrine is brought once more into the picture for purposes of comparison, differences are of greater magnitude than similarities.

The foremost example of Kulu Valley architecture is the temple of Hidimbā (Hirma) Devī at Dhungri very near Manali at the northern end of the valley. Once the chief sanctuary of the valley, the shrine of wood and stone honors the man-eating goddess Hidimbā as patroness of Kulu. Three of its four roofs are made entirely of wood, and all four roofs slope steeply toward the ground. The top roof, which is conical rather than pyramidal in shape like the others, is covered over with metal plates. A porch with four pillars made of cement was erected before the entrance in 1964: it shelters the elaborately carved doorframe of the original temple which is similar in subject and style to that of Śaktī Devī in Chatrarhi. Within its five frames the complex displays figures of similar style but somewhat less graceful pose than those of Chamba, images that seem to be closer to those of mountain folk art than the classical patterns of the plains. More than the presence of these deities and beasts, the attachment of animal skulls,

including those of the Himalayan deer with very long horns, lends a bizarre appearance to the portal. This appearance is echoed, coincidentally perhaps, in the conglomeration of buffalo horns that is sometimes mounted upon the façade of the Nepalese shrine. The temple at Dhungri is much later than the shrine of Saktī Devī, having been built by Rājā Rahadur Singh in 1553.24

The animal, floral, and figurative motifs carved upon the doorframe of the shrine at Dhungri, for wood carvings always provide the surest themes of comparison among the distant temples of Nepal and India, are quite different in subject matter and style from Nepalese motifs.25 Two wooden window frames located on either side of the entrance are of form unknown in Nepal, with curvilinear, perforated arches and rounded columns at their centers to conceal the joints of closed shutters. A tour de force of minute carving, the frames maintain a definition of parts that is not found in the doorway of the Chatrarhi temple. Elements that suggest linkage to Nepal are few indeed, consisting mainly of the pūrna kalāsa as applied to structural parts and carved cylinders of wood that hang freely from the edge of the balcony that is mounted over the entranceway and below the second roof. A minor erotic scene is also to be seen, but like the other "similar" motifs, it is of minor importance in the overall decorative scheme.

Visual evidence in surface detail at the temple of Dhungri is clear enough to establish the independence of the building from Nepalese monuments, yet this building of Hidimbā Devī satisfies the definition of the pagoda as a temple-tower of multiple roofs and storeys of receding size. Constructional patterns of the building are entirely different from those that are followed in Nepal, involving not double wall construction and the support of sloping roofs by upward slanting struts, but a simple trabeate system of massive, horizontal roof beams supported by still more massive walls. The fanning roof beams that underlie the pyramidal roofs are upheld by beams that protrude from the body of the building at right angles to it. The walls themselves reveal patterns of crisscrossed horizontal and vertical beams with stone filling between them in a pattern reminiscent more of Sikkimese houses than Nepalese temples, as well as an irregular placement of windows. The horizontal beam that is third from the bottom on the exterior protrudes as crossed beams at the building corners as do the horizontals that underlie the projecting roof supports, but these again appear to be coincidentally similar to Nepalese patterns even though this "pagoda" type, above all others in India, suggests that of Kathmandu Valley. The upper two storeys are formed by open balconies within which stairs may be seen leading upward, while that of the second floor is filled in with stones, this filling perhaps being of recent origin. 26

The area enclosed by the walls is of irregular plan because of the kind of object that is enshrined in the temple. It has an extension at its right side, a "wing" that protrudes unexpectedly several feet from the basic square plan that the temple would undoubtedly retain were it Nepalese. The extension reaches to the back wall of the shrine. The tremendous object that the shrine encloses is symbol of Hidimba Devi, filling the enormous vet confining space with her living, almost pulsating form. This overwhelming form which confronts the viewer as he steps down into the sunken shrine from its recently constructed porch, and dwarfs him within the surprising volume of the ceilingless temple interior, is a gigantic natural boulder. Its bulk protrudes through what might have been the ceiling of the second storey of the shrine and the devotee may climb by means of a ladder onto the body of the holy stone, losing himself in the upper reaches of the shrine. It is the sacred stone already examined as part of Nepalese art grown mammoth and overwhelming, made to seem even larger within the constricted quarters of a temple built just large enough to contain it. Even the impact of living stone that is exploited and manipulated at Mamallapuram in South India is here surpassed by the dramatic presence of this monumental symbol of the blood-thirsty female who is both murderess and mother. That the architects of the Kulu Valley were able to enclose this massive and irregular form within a temple of wood and stone that maintains its stylistic continuity with other temples of local style is in itself a considerable feat.

At Naggar, a mountainside town several miles south of Manali and across the Beas river of the Kulu Valley, stands the pagoda shrine of the goddess Tripura-sundarī, known locally as Saktī Devī. Comparisons with Nepalese architecture need not be pursued much further as Kulu Valley architecture is concerned except that the temple of Naggar does illustrate in purer form than the shrine of Dhungri the other type of "pagoda" monument of the Himalayan region that exists in addition to that of Kathmandu Valley. Recently repaired and re-roofed, the shrine is another free-standing temple of the multiple roof Kulu style, with three roofs

instead of four. It has a cube of stone as its lower storey, this being topped by an overhanging roof and balcony of wood, a second floor level with pyramidal roof hung at the edges with wooden cylinders, and finally a conical upper roof, also made of wood. The overhangs of the roofs are of considerable length in order to drain rain and snow away from the body of the shrine, and their slopes are ribbed by boards that are triangular rather than half-round in cross-section. Tigers in three-dimensional form are carved at the corners of the lowest roof while the second is adorned in a most unusual way by monkeys with birds standing at their backs.

The weight of the superstructure of the temple in Naggar is born upon numerous columns regularly arranged as if to punctuate a checkerboard pattern, rather than upon solid walls of square outline as at Dhungri or upon wall within wall as in Nepal. This is true at least of all but the lower storey, the interior of which was closed to the investigator. With an inner structure quite different from that of its sister temple at Dhungri, the temple of Naggar also reveals ornamentation of its wooden parts that is more carefully rendered. The shape of the columns that may be seen around the outer edge of the second storey is like that of Nepal in the extensions of the T-shaped capitals but these, like the lotus-shaped capitals found on some of the interior columns, have prototypes of great antiquity in India so that no eastward connection is proven. In addition, a heavy central column may be seen within the open second floor level—an element that is never found in Nepal.

The shrine of Naggar is not overwhelmed from within by an en ormous form like that of the Dhungri structure, and its exterior is no more harmonious in design. Like the Nepalese craftsmen those of Kulu held to established patterns, with only slightly more variation in that region than is found in Nepal. The silhouette of the Kulu shrine is nearly as balanced and perfect as that of the Nepalese pagoda, even if the details of its surface ornament are rather poor by comparison. In its high placement against a background of towering pines with the snowcapped mountains of Kulu before it, the shrine of the goddess of Naggar is a fine example of a unique architectural tradition. Unlike the few sikharas of stone that dot the valley, including the temple of Bajaura of the 10th-11th century near Kulu town, which gives evidence of the penetration northward of alien political leadership and attendant styles in art, the indigenous styles of Kulu have not been adequately studied.

The combination of wooden frame with fill of stone or brick is

found in domestic and sacred architecture throughout the Himalava. In Kulu the horizontally-oriented temples of Sandhya Devi at Jagatsukh and the Bhekhli or Bhagavatī Jagannāthī temple above Kulu town illustrate this absolute mixture of materials. The buildings also illustrate the pitch-roofed temple form that is the second major theme of temple design in northwestern India as a whole. In Chamba this type of shrine is represented by Saktī Devī at the village of Gand in Chamba district, dating from the early 18th century, Camunda Mandir at Devi Kothi, constructed by Rājā Umed Singh of Chamba in 1754, and the shrine of Camunda Devi that towers on its hilltop high above Chamba town. The pitch roof of concave shape of the Bhekhli temple recall those of the Devī shrine at Hat Kothi in Chamba's Mahasu District, but most roofs in the area lack this curvilinear silhouette. None is as old as the sikharas that survive from the period of rule imposed from without, 27 but they follow architectural themes that are possibly older and certainly more indigenous. Some shrines, like Sivalaya in Chamba town, reveal not only Pahārī but Islamic inspiration in their painted and carved decoration, but the structural design of the shrines is never Islamic. There is, in fact, often a pleasant contrast between the delicate, even dainty decoration of the interiors and the boldly conceived geometricity of the exteriors . . . the chisel and the quill.

Among all of the shrines of this northern region of India, only one small and very minor shrine dedicated to Siva in Kulu town itself is of silhouette and plan strikingly similar to that of the Nepalese pagoda, but not even that building follows the double wall construction that is the special mark of the Nepalese style. Much investigation remains to be carried out to determine whether areas of Nepal located west of Pokhara and not yet visited by the present investigator will reveal monuments that exhibit a half-way point, that is an aesthetic combination of the styles in temple design of northwestern India and Kathmandu Valley. Those few historical records that do exist suggest that contact between the two areas was cut off fairly early, while the studies of scholars who have so far worked in western Nepal have not yet revealed a style of building that might be termed intermediate.28 As for the regions of Spiti and Lahaul, reached from the Kulu Valley via the Rotang Pass at 13,000 feet, too little investigation has been carried out for the general nature of its architecture to be assessed, and it was not possible for the investigator to enter the area. It is certain, however,

that its temple design is strongly influenced by Tibetan traditions. The same is true of Ladakh.

E. Wood and Stone in Kashmir

There are no pagodas in Kashmir to compete with Nepalese structures as the outstanding indigenous monuments of the Himalayan region as a whole. There are, however, Islamic structures in wood that should be mentioned for their excellence of carving and inventive adaptation of the requirements of mosque design to local materials and taste. At the same time there are stone temples of sloping roof design that are in their physical form much earlier than any standing pagoda of Nepal. No more directly related than any of the other temples already discussed to the shrines of Nepal and showing strong foreign influence in much of their detail, these shrines, both ancient and modern, reveal once again the adaptation of major architectural movements to the raw materials and climate of the mountains.

Kashmir's architecture in stone is treated in detail by a number of qualified scholars, but it is important to this study as it reaffirms the appropriateness of the steeply sloped, pyramidal roof to northern architecture. As remarked by Benjamin Rowland, the roofs of structures like the Siva temple at Pandrenthan near Srinigar, erected in 1135 A.D., are obvious if not entirely successful imitations of wooden forms in stone.29 To the small temple of square plan that holds the garbha grha but is open on all sides are added triangular pediments and trilobed niches that are foreshadowed in the architecture of Gandhara. This and earlier buildings are permanent records of "pagodas" in wood as they existed in Kashmir—probably locally-inspired monuments that were created as part of a remote and relatively isolated culture from about 600 to 1100 A.D., a culture that was not completely dominated by a foreign presence until 1339 and the establishment of Islamic rule over the region of earlier Buddhist and Hindu domination. New and distinctly Islamic modes of building and architectural decoration differed greatly from those of the temple-tower, the stūpa courtyard, and Brahmanical temple complex with courtyard that had been the themes of Kashmiri architecture.30 Two mosques, one inside of Srinigar itself and one located at Aishimuqam near Pahalgam, exemplify the wonders of Islamic architecture in wood, while a third building at Chrari-Sheriff will be mentioned for its special features.

The mosque of Shah Hamadan, built to honor the Persian saint who came to Kashmir during the reign of Sultan Outabud-din (1373-1398 A.D.), is one of the largest wooden constructions in Kashmir. Rising high above the surrounding housetops and attendant religious buildings on the Jhelum River in the heart of Srinigar, this spacious structure with its steeple-like tower and numerous balconies and verandahs is opposed to the wooden temples of Nepal both in its plan and its methods of construction. The first difference is obvious, since the building is meant, like any mosque, to contain large numbers of worshippers in congregational prayer. It has a spacious interior as well as a very large courtyard. More important than this difference is that the building provides no link to Nepal in its manner of construction, despite the similarities of material used and emphasis upon wood carving. Wood is used in the Indian territory not to form a frame within which other materials are employed as fill but as building blocks of small size with which solid, load-bearing walls are constructed. There is little or no consideration of the tensile strength of wood as the walls are built. The blocks of wood are bricks, put down in the "English bond" method and piled horizontally in rows until the desired height of the wall is reached. It is an extraordinary way to build.

At intervals layers of stone or, rarely, brick are put down in place of wood, but the absolute combination of wooden frame with filling of another material that is found in the architecture of Nepal, Himachal Pradesh, Sikkim, and elsewhere in the Himalaya, is not followed in Kashmir. Only minor details of decorative use—the wooden zigzag border at Shah Hamadan, the lotus petal border and open flowers within squares in the 9th century stone temple of Patan—relate specifically to Nepalese design and set the architecture of Kashmir within the enveloping scheme of South Asian temple art by which all of the mountain movements have been touched but none of them oppressed.

The structural methods that are followed in the mosques of Kashmir are completely foreign to those of the Hindu or Buddhist kingdoms just as the nature of the mosque itself is completely unfamiliar. Constructional patterns that seem to press the mosques earthward by the horizontal divisions of their walls are evident in monuments throughout Kashmir, including the 17th century Jama Masjid in Srinigar and the mosque and funerary shrine of Chrari-Sheriff located about 18 miles south of Srinigar. The main

shrine building at the latter site especially, with four compressed roofs of very shallow slope below its final steeple tower is much more strongly horizontal in silhouette and total design than is any structure in Nepal. It is only its final pinnacle, not the building itself, that is an "earthbound arrow."

The walls of the shrine at Chrari-Sheriff are covered almost entirely by a web of shallow tracery in wood that is as skillfully cut as any carving to be found in Nepal. It is, of course, totally dissimilar from the ornament of Nepal in its Islamic orientation, with the usual restriction against all naturalistic imagry of human reference. The cosmic function of Nepalese ornament as it encloses the shrine in an auspicious and protective universe is not relative in Kashmir, but the play upon geometric pattern that is the glory of Moghul decoration is fully developed in Kashmir, equalling or even surpassing the schemes of Akbar's Fatehpur Sikri. Beside the geometric and, occasionally, floral patterns that are basic to Islamic art, the shrine illustrates in its colonnade, as do the balconies and porticoes of the mosque of Shah Hamadan, Islamic architectural forms of slender columns and cusped arches.

A final example of Kashmiri architecture which functions as both complement and contrast to the pagodas of Nepal is the shrine and mosque of Zain Shah Sahib, guardian saint of the Liddar Valley, which is located on a mountain spur at Aishimuqam 13 miles south of Pahalgam. This relatively little-known group of buildings represents the finest of Islamic art in wood. The exterior of the main shrine building—that which contains the grave of the saint and which is built against the high hillside—and that of the nearby prayer hall that rests on the hill just above the shrine, closely resemble that of the mosque of Shah Hamadan and the larger Jama Masjid in Srinigar as well as numerous village mosques. The main difference in the form of the shrine building, however, is that its tower is octagonal rather than square in plan.³¹ The tower rises above the double-roofed covering of the large building as if from a cubical pedestal. It carries a parasol on its tip and its silhouette is greatly complicated by eight narrow gables that protrude from the main spire and by bells that hang from the lower of its two roofs. If the Nepalese shrine is a gingerbread house in terms of its decoration, the spire of Aishimuqam is a wedding cake.

The two main roofs of the shrine bear coverings of earth which were, presumably, once shingled like the roof of the spire. The

rectilinearity of the roofs and the structure as a whole is broken most forcefully by its arched windows that are filled with perforated screens and by the carved tympanums above them. The spire visually lightens the heavy form of the mosque below it, pulling it toward the heavens, just as the steeple lifts the church from its earthly base. At the same time it very effectively separates the sacred building from all of its neighbors, as the Nepalese pagoda is set apart by its tower and elevated plinth. The form of the mosque is more distant in structure and style from the Kashmiri house than is the pagoda from the house of the Newars, perhaps, but similarities nevertheless exist. This is especially true as the multiple storeyed height and considerable space within the mosque at several levels is considered. Above all, it is the dramatic separateness of the building as a whole from its mundane surroundings that brings to it qualities shared by the best of Nepalese architecture, together with the most elaborate decoration in wood of its walls and windows—ornament that among secular buildings would be suited only to a palace.

F. Architecture of the Tibetan sphere

Because of the wooden architecture of Burma is so little known to the present investigator and since historical references of Nepalese contact with that country are perhaps too few to work with at this time, considerations of Burmese architecture must be held for future work. It may be said, however, that any impulses that may have passed toward Burma from Nepal through Assam left nothing Nepalese behind them in the design of temples in the Indian territory. 32 The temples of Southeast Asia will similarly be left untouched except as certain early monuments have been mentioned with reference to the same borrowings from India that were taken by Nepal. The Meru monuments of Bali, like the wadah or cremation towers, seem to be indigenous developments in Balinese art and ritual that, despite their height and covering with multiple roofs, are only coincidentally like the pagodas of Nepal. More like markers or flags than buildings, they are of very flimsy construction, consisting primarily of bamboo and thatch roofing, but they do in fact enclose garbha grha-like spaces. The markers, while very picturesque and noticeable in the landscape, are perhaps not properly to be termed architecture. The same is not true of Balinese temples in stone, but these appear to be unrelated even superficially to Nepalese design.

With the elimination of the above two areas, the last sphere to be considered with reference to the birth and development of the Nepalese pagoda is that of Tibetan influence. This area of contact is very broad, extending far beyond the outlined block which the maps call Tibet, for Tibetan traders, monks, and immigrants brought their culture, religion, and architecture not only to China but into northern India, Sikkim, Nepal, and the Buddhist kingdom of Bhutan. The monasteries of Tibet were established. often without substantial change, in all of these regions, but more important to the current study is that Tibetan buildings often relate in specific detail to the design of the Nepalese pagoda. The monastery or gönpa of Tibet as a whole is a distinctly Tibetan building, a local creation built to accommodate the patterns of study and worship that were demanded by an imported doctrine. the Buddhism of India. In many of its parts it is Indian; it is Nepalese; it is universally Buddhist.

The three-dimensional projection of the mandala diagram, previously discussed, is more properly an explanation of the monastery building than the pagoda, perhaps, especially as its later schemes of ornamentation are examined.33 The chief structural differences between the gönpa and the pagoda are that the Tibetan shrine encloses much more space and usually has prayer halls as major areas of worship on two or more levels. The building traditions of the two northern cultures are very different in terms of materials as well, for wooden parts are subordinated to massive walls of stone or large sun-baked bricks set upon foundations of rock in the gönpas and the walls are thicker at the bottom as well. the shape of the monastery or house tapers toward the top, where it is covered by a flat or only slightly tapered roof.34 The windows of buildings both domestic and sacred are framed by brightly painted carvings, their shapes often tapered like that of the building as a whole.

Structural similarities between the heavy, almost forbidding gönpa and the lighter, more "open" pagoda are few. Beam ends extend from the walls on the exterior of the building to form complex lintels over the doors and windows of the Tibetan structure, and its porch and interior halls employ columns having T-shaped capitals with curvilinear outlines, but the first of these elements, at least, is only superficially like Nepalese patterns that involve projected beams as a continuous cornice rather than only as multiple lintels. More important than small differences are major

ones, such as the form of the Tibetan tower as illustreated in the castle of Yum-bu bla-sgang in Yarlung which is traditionally referred to as the oldest dwelling in the country.35 Tall, narrow. and covered by a single roof, the structure is closer in form to that of the Chinese watchtower than to any building in Nepal. The earliest examples of a "pagoda-style" roof as applied to Tibetan buildings like the 11th century tomb of rNgog Blo-ldan shes-rab, suggests Chinese architecture as well, but Hugh Richardson and David Snellgrove trace the origin of this roof to a religious ornament upon the flat Tibetan building in the South, stating that "the earlier Tibetan prototypes were presumably Indian and Nepalese,"36 and that certainly the pagoda-style roof of China was ultimately of Indian origin. Surely the multiplication of support beams projecting row upon row beneath the roofs, one atop the other, like those that uphold the roof of Tashilunpo monastery.³⁷ is more suggestive of Far Eastern than Nepalese construction.

The derivation of temples with tiered roofs in Tibet from the mandala design that has been called the "mystic circle or divine palace, representing the centre of existence dominating the four quarters of the compass"38 is a rare concrete tie of the monastery to the pagoda. It is surprising in part because the exterior form of Tibetan monasteries is so very different from that of the pagoda but also because so few precise correspondences have been found between the pagoda and other temple traditions so far considered. Orientation toward the four cardinal directions is maintained in the plans of both kinds of monuments, as is the cosmic significance of their parts, including their ornament. Certain elements of the Nepalese pagoda are clearly part of the gönpa scheme, such as the pinnacles of lotus and bell shape that adorn the roof of the Jokhang temple in Lhasa and countless other shrines.39 Other, less prominent details such as minute border motifs are important as well, interweaving the traditions of ornament in the two separate and fully developed cultures into a loose net that holds them together. Several of these continuing themes are prominent in the monastery architecture of Sikkim and Bhutan, being found as well not only in Nepal's northern region of Solo Khumbu but in Kathmandu Valley as well. In almost all Sikkimese gönpas is found the lion or leogryph as guardian figure—often carved in rows upon the lintel of the entrance—while such border motifs as the lotus petal, vajra, and indented diamonds are common everywhere. Intense colors are used to pick out the structural parts of walls and ceilings and to

cover the walls with murals that are painted by monks and a limited number of traditionally trained professional artists such as Kumjung Kapa Kalden Sherpa, the "Kumjung Artist" of Solo Khumbu, Nepal.

As one enters the interior space of the Nepalese pagoda he is embraced, even swallowed up by the building and held within the very limited space of its secret womb. The interior of the Tibetan gönpa, on the other hand, opens both outward and inward from its entryway to overpower the visitor with the multitude of statues. symbolic images, sacred vessels, and hanging paintings that confronts him, and to dazzle him with the riotous colors that cover nearly every surface of the interior. The floors alone are dark and neutral anchors to the earth, while the ceiling vibrates with almost violent color contrasts of red, blue, and green in patterns starkly geometric or representational; the walls are alive with the extremely active and often grotesque deities of Tibet's endless pantheon, A single image—Buddha, disciple, teacher, saint—occupies the central position on the main altar in most shrines but a number of attendants usually stand beside it or in special cases along the walls. Except for the shelves of holy scriptures that are always found within the monastery and the secret room of the darkest gods that is shown to no one but priests, the interior of the gönpa is rather like a pagoda turned outside in. More could be said about the shared symbolism of these two major monuments of the mountains, certainly with regard to the mandala that stands engraved on copper in the Nepalese courtyard and painted upon the ceiling of the gönpa not only as cosmic map but as plan of the sacred shrine, but it is fitting to close this examination of the Nepalese pagoda as it stands beside another great Himalayan monument. The pagoda is a shrine of great exterior beauty, a strong and simple form adorned with the jewels of the ages. It is the pride of the Newars, the wonder of the passing visitor. It shines with the splendor of surface but its soul, dark and hidden, lives.

NOTES

- 1. That barrier was effectively conquered as the Chinese invaded Nepal in the 19th century, as recounted by M. Camille Imbault-Huart in "Histoire de la conquete du Nepal par les Chinois, sons le regne de Tc'ien-Long (1792)," Journal Asiatique, Vol. 12, Series 7 (1878), pp. 348-77.
- 2. One of many opposing opinions regarding architectural origins in the area is that of K.P. Jayaswal who attributes the Chinese pagoda design to sources in Nepal

(Chronology and History of Nepal from 600 B.C. to 880 A.D., Patna, 1937, p. 85), agreeing in his interpretation with Percival Landon (Nepal, pp. 257-58).

- 3. See the pagoda of Ta-yen T'a in Sian, begun in 652 and rebuilt in 704, surfaced with bricks, Ming dynasty (Nelson I, Wu, Chinese and Indian Architecture, figs. 117, 118).
 - 4. James Fergusson, History of India and Eastern Architecture, Vol. I, p. 238.
- 5. See plate XXX, the Jain temple at Mudabidri, in E.B. Havell, The Ancient and Medieval Architecture of India.
 - 6. James Fergusson, History of Indian and Eastern Architecture, Vol. I, p. 79.
- 7. In his curious division of Nepalese structures into the "Siva" type of squared storeys and sloping roofs and the "Visnu" type of curvilinear silhouette, James Fergusson attributes the former category to northern inspiration and the Visnu temples to the plains of India (James Fergusson, History of Indian and Eastern Architecture, Vol. I, p. 277). Repeating Fergusson's categorization, E.B. Havell connects the Siva temple to the Himalayan districts but also to the Malabar Coast (E.B. Havell, The Ancient and Medieval Architecture of India, figs. 44a, 44b).
- 8. Classical treatises on the architecture of the Malabar Coast include the Manushyalaya Chandrika and Tanta Samuchcharya, both dating from the 15th century, and the 16th century Silparatna as referred to by R.V. Poduval (Stella Kramrisch, J.H. Cousins, and R. Vasudeva Poduval, The Arts and Crafts of Trayancore, Oxford, 1952, p. 31).
- 9. Multiple roofs in the temples of Travancore are supported by double wall construction like that of Nepalese pagodas, and they may include gabled extensions that are more complex than any additions made to temple roofs in Nepal, like those of the *gopuram* of Ettumanur temple (Kramrisch, Cousins, and Poduval, *The Arts and Crafts of Travancore*, p. 19).
- 10. T.N. Ramachandran, "The Nagapattinam and other Buddhist Bronzes in the Madras Museum," Bulletin of the Madras Government Museum, NS-General Section, Vol. 7, No. 1 (1954), pp. 13-16.
- 11. The monuments referred to by Percy Brown as indicative that a phase of wooden architecture incorporating the pagoda form in terms of wooden roofs in tiers existed in pre-Islamic India include stone buildings in Kashmir, gabled Buddhist temples of Mers in Kathiawar, temples of southern Kanara, and shrines of Orissa having pyramidal superstructures. (Percy Brown, "Buildings in Nepal," The Journal of the Indian Society of Oriental Art, Vol. 3, No. 2 (Dec. 1935), pp. 85-87).
- 12. K.P. Chattopadhyay in his "Eassy on the History of Newar Culture," Journal of the Asiatic Society of Bengal, NS Vol. 19 (1923), p. 492, quotes Purnachandra Mukhopadhyay as saying that the Newar roof tiles—flat, oblong pieces with two longitudinal grooves, one above and one on the underside, that fit into adjacent tiles as they are arranged in sloping rows upon the roofs—are very similar to tiles which he unearthed at Pataliputra. He indicates as well that tiles of this type are no longer used in India but only in Nepal.
- 13. James Fergusson, History of Indian and Eastern Architecture, p. 279, S. Paranavitana, The Stūpa in Ceylon, Colombo, 1946, Gustav Ecke, "Once More Shen-t'ung Ssu and Ling-yen Ssu," Monumenta Serica, Vol. 7 (1942), pp. 295-311. Jean Buhot, "Notes d'architecture bouddhique, I. Stūpa et pagode: une hypothese." Revue des Arts Asiatiques, Vol. II, No. 4 (December 1937), pp. 235-39, and Gisbert Combaz, L'evolution dus stūpa en Asia, 2 Vols., Bruges, 1937.

- 14. George N. Roerich, Trails to Inmost Asia, New Haven, 1931, plate facing p. 161.
- 15. James Fergusson, History of Indian and Eastern Architecture, Vol. I, figs. 106 and 110.
 - 16. Gisbert Combaz, L'Inde et l'Orient Classique.
 - 17. Louis Frederic, Indian Temples and Sculptures, London, 1959, pl. 97.
- 18. Percy Brown, "The Arts of Nepal," The Journal of the Bihar and Orissa Research Society, Vol. 31 (1945), pp. 18-27.
- 19. The temples of Brahmor and Chatrarhi retain their original images with inscriptions upon them belonging to Rājā Meruvarman who is referred to in the Chamba vamsāvalī as a ruler of the Varman dynasty, thus making the sculptures attributable to the late 7th century (Herman Goetz, The Early Wooden Temples of Chamge, p. 6).
 - 20. Herman Goetz, The Early Wooden Temples of Chamba, p. 73.
 - 21. Ibid., p. 63.
 - 22. Ibid.
 - 23. Ibid.
- 24. J. Ph. Vogel, "Ancient Monuments of Kangra Ruined in the Earthquake," Archaeological Survey of India, Annual Report, 1905-06, Calcutta, 1909, p. 26.
- 25. The lower door frame at Dhungri, for example, is occupied by images of Durgā Mahisāsuramardinī rather than the river goddesses Gangā and Yamunā that might be expected in Nepal. Ganesa is represented at the center of the lintel.
- 26. If this filling is in fact a later addition to the temple, its original form would have more closely resembled that of Śaktī Devi at Chatrarhi, which was originally bordered at its lower level by an open colonnade rather than a solid wall of wood and fill.
- 27. Largest and best known among the stone temples is that of Bajaura, which is carved with major images of large size in the niches at its cardinal points. Its plan is that of the four-sided mandala and its stylistic and symbolic roots are in the art of the Indian plains. Like the major temples in stone at Panchavakta and Triloknātha in Mandi, the shrine of Bajaura and its miniature counterpart that stands behind the temple of Sandhya Devī at Jagatsukh satisfy the structural and symbolic requirements of the classical Indian sikhara, covered over by the lantern roof and āmalaka. Unlike most sikharas in Chamba town, and more remote examples in Naggar, these are not covered by additive structures of wood, yet they do not appear to have been much damaged by rain or snow.
- 28. This is in no way meant to imply that there is no architecture of importance in western Nepal. The opposite is shown by the research of Giuseppe Tucci in the region and by other scholars who have worked in the field, including Barry Bishop of the University of Washington and National Geographic Society, and by some photographic evidence that is catalogued in the Kaiser Library in Kathmandu. A great many important monuments, mainly of Tibetan orientation, have been studied by David L. Snellgrove as well (Buddhist Himalaya, Oxford, 1957, Himalayan Pilgrimage, Oxford, 1961).
 - 29. Benjamin Rowland, The Art and Architecture of India, p. 120.
- 30. Well-known examples of temples in the early Hindu design include the Temple of the Sun at Martand, built by King Lalitaditya in the 8th century, and the remote temple of Buniar that dates perhaps from the 5th century, having been

spared, probably because of its location, from destruction by the Muslim invaders (Pandit Anand Koul, Archaeological Remains in Kashmir, p. 1).

- 31. The interior of the main shrine is more "irregular" because the funerary chapel that honors the saint is located deep inside a natural cave in the mountainside. The shrine room, which is itself very small, is approached by means of a long and low cavern hallway that continues into the mountain from the main floor of the outer building. The inner room is dominated by a large sarcophagus and a kind of altar bearing relics of the saint. It is a much more intimate space than are most such funerary shrines, including that of Chrari-Sheriff.
- 32. The author admits to having no extensive experience in the field as Assam and Burma are concerned, but certainly the all-important temple of Kamakhya of Gauhati, a Tāntric temple dedicated to Kālī, reveals nothing in its formal organization that would suggest a debt owed to Nepalese accomplishments.
- 33. As discussed by Giuseppe Tucci, the earliest shrines (*Iha khang*) of Tibet were of modest proportions and rectangular in plan, with a covered verandah or portico at the front. The form is illustrated today by certain village shrines and in the oldest of temples, such as those founded by Rinchen-sangpo in western Tibet (Giuseppe Tucci, *Tibet—Land of Snows*, New York, 1967, p. 112).
- 34. This basic form is revealed in the 8th century chapel of Kva-chu located near the monastery of bSam-yas, Tibet's first, which was founded during the same century (David L. Snellgrove and Hugh Richardson, A Cultural History of Tibet, New York, 1968, p. 36).
- 35. David Snellgrove and Hugh Richardson, A Cultural History of Tibet, New York, 1968, p. 46.
 - 36. Ibid., p. 141.
 - 37. *Ibid.*, p. 46.
 - 38. Ibid., p. 141.
 - 39. Giuseppe Tucci, Tibet—Land of Snows, p. 104.

Bibliography

- Acharya, K. Indian Architecture According to the Manasara Silpasastra. London, (n.d.).
- Acharya, Prasanna Kumar. An Encyclopedia of Indian Architecture. Bombay, (1946).
- "The All-Seeing Eyes of Buddha Represented in Newar Art; in the Glorious Stupa of Svayambhunatha in Nepal." *Illustrated London News*, Vol. 226 (Apr. 30, 1955), p. 785.
- Amatya, Jagdish Man Singh. Picturesque Nepal—A Handbook for Tourists. Kathmandu, 1956.
- Anand, Mulk Raj. The Hindu View of Art. Bombay, 1957.
- Ancient Nepal—Journal of the Department of Archaeology, Vol. 1, No. 1— (Oct., 1967).
- "Architecture in the Himalayas" in Transactions of the Royal Institute of Architects, Session 1882-1883, p. 65.
- The Arts of India and Nepal: The, Nasli and Alice Heeramaneck Collection. Boston, 1966.
- Auboyer, Jeannine. "The Symbolism of Sovereignty in India According to Iconography (Parasols—Thrones)." *Indian Arts and Letters*, Vol. 12, No. 1, pp. 26-36.
- Auden, J.B. and Ghosh, A.M.N. "Preliminary Account of the Earthquake of the 15th January, 1934, in Bihar and Nepal." *Records of the Geological Survey of India*, Vol. 68, Part 2 (1934), pp. 177-239.
- Bagchi, P.C. "A Note on a Painted Banner." Journal of the Indian Society of Oriental Art, Vol. 1, No. 1 (June, 1933), pp. 1-4.
- Bahadur, Jaya Chamarajendra Wadiyar. Dattatreya—The Way and the Goal London, 1957.
- Bahadur, Kaiser. "The Mystery of the Bas-relief of Tribikrum and Accompanying Inscription of Tri-ganga Near the Temple of Pasupati in Kathmandu, Nepal." *The Nepal Guardian*. Vol. 1 (Summer, 1954), pp. 11-21.
- Bajracharya, Bhakta Nanda. Kathmandu—Architecture and Environment. Kathmandu, 1969.
- Bamzai, Prithvi Nath Kaul. A History of Kashmir. Delhi, 1962.
- Bancijea, J.N. The Development of Hindu Iconography, Revised ed. Calcutta, 1956.
- Banerjee, N.R. Nepalese Art (An Introduction). Kathmandu, 1966.
- "Parvati's Penance as Revealed by the Eloquent Stones of Nepal."

 Ancient Nepal, No. ff jianuary, 1968), pp. 27-38.

- Banerjee, Priyatosh. "A Mediaeval Bronze Sculpture of Arapachana from Nepal." The Journal of the Bihar Research Society, Vol. 33 (Sept.-Dec., 1947), pp. 164-69.
- Banerji, Amiya K. "Art of the Newars; Skill of Newar Craftsmen." Statesman, August 18, 1957.
- Banerji, R.D. Eastern Indian School on Mediaeval Sculpture. Delhi, 1933.
- Barrett, Douglas. "The Buddhist Art of Tibet and Nepal." Oriental Art, Vol. 3, No. 2 (Autumn, 1957), pp. 90-95.
- Beal, Samuel. The Life of Hiuen-Tsiang. London, 1911.
- _____. The Travels of Fa-hian and Sung-Yun. London, 1869.
- Bendall, Cecil. Catalogue of the Buddhist Sanskrit Manuscripts in University Library. Cambridge, 1933.
- - _____. "The History of Nepal and Surrounding Kingdoms (A.D. 1000-1600)."

 Journal of the Asiatic Society of Bengal, N.S. Vol. 72, Part 1 (1903), pp. 1-32.
- ______. A Journey of Literary and Archeological Research in Nepal and Northern India During the Winter of 1884-85. Cambridge, 1886.
- Bernier, Ronald M. "Bhairavas of Nepal." Swatantra Vishwa, Kathmandu— U.S.I.S., Vol. 8, No. 5 (January, 1971), pp. 40-46.
- _____. A Bibliography of Nepalese Art. Kathmandu, 1970.
- "The Development of Nepalese Sculpture." Nepal Review, Vol. 2, Nos. 8, 9 (June, July, 1970), pp. 394-04, 413-23.
- . "The Nepalese Pagoda." Swatantra Vishwa, Vol. 8, No. 6 (February, 1971), pp. 40-46.
- ———— "Sikhara, Gönpa, and Mandir: Sacred Structures of the Himalaya," Bulletin of the Assam State Museum, No. 1 (1975), pp. 1-11.
- _____. "Temples on the Bagmati—A Walk through Pachali." Rising Nepal, Vol. 5, Nos. 178, 182 (June 11, 15, 1970), pp. 4-5, 4-5.
 - "Wooden Windows of Nepal," Artibus Asia, Vol. 40 (1978).
- Bhattacharya, Benoytosh. The Indian Buddhist Iconography, mainly based on the Sādhanamālā and Cognate Tāntric Texts of Rituals. Calcutta, 1958.
- "Three Buddhist Metal Images in the Baroda Museum." Bulletin of the Baroda Museum and Picture Gallery. Vol. 2, Part 1 (Aug., 1944-Jan., 1945), pp. 39-44.
- Bhattacharyya, Tarapada. The Canons of Indian Art; or, A study on Vāstuvidyā. Calcutta, 1963.
- Bhattasāli, N.K. Iconography of Buddhist and Brahmanical Sculptures, Dacca Museum. Dacca, (n.d.).
- Bishop, Raymond Norman Wear. Unknown Nepal. London, 1952.

- Boeck, Kurt. Aux Indes et au Nepal. Paris, 1907.
- Boisselier, Jean. Le Cambodge. Paris, 1966.
- Boner, Alice. Principles of Composition in, Hindu Scuplture—Cave Temple Period. Leiden, 1962.
- Bosch, F.D.K. The Golden Germ. The Hague, 1960.
- Bose, Nirmal Kumar. Canons of Orissan Architecture. Calcutta, 1932.
- Brook Northey, W. The Gurkhas—Their Manner, Customs, and Country. London, 1928.
- Brough, John. "Nepalese Buddhist Rituals." Bulletin of the School of Oriental and African Studies, Vol. 12, pp. 668-76.
- Brown, Percy. "The Arts of Nepal." Asiatic Review, Vol. 34 (Jan. 1938), pp. 1-8.
- _____. "The Arts of Nepal." Journal of the Bihar and Orissa Research Society, Vol. 31 (1945), pp. 18-27.
- _____. "Buildings in Nepal." Journal of the Indian Society of Oriental Art, Vol. 3, No. 2 (Dec., 1935), pp. 85-87.
- _____. Indian Architecture (Buddhist and Hindu Periods). Bombay, (n.d.). (Islamic Period). Bombay, (n.d.).
- Tours in Sikkim and Darjeeling District. Calcutta, 1922.
- Buhler, Jean. Népal. Lausanne, 1964.
- Buhot, Jean. "Notes d'architecture bouddhique, I. Stūpa et pagoda: une hypothese." Revue des Arts Asiatiques, Vol. 11, No. 4 (Dec., 1937), pp. 235-39.
- Cammann, Schuyler. Trade through the Himalaya. Princeton, 1951.
- Campbell, A. "Account of the Earthquake at Kathmandu." The Journal of the Asiatic Society of Bengal, Vol. 2 (Aug., Nov., Dec., 1883), pp. 438-39, 564-67, 636-39.
- "On the Nepalese Method of Refining Gold." Journal of the Asiatic Society of Bengal, Vol. 3 (Dec. 1834), p. 622.
- Chatteyi, S.C. Magadha—Architecture and Culture. Calcutta, 1942.
- Chattopadhyay, K.P. "An Essay on the History of Newar Culture." Journal of the Asiatic Society of Bengal, N.S. Vol. 19 (1923), pp. 465-560.
- Chinese Buddhist Association, ed. Buddhists in New China. Peking, 1956.
- Clark, T.W. "The Rānī Pokharī Inscription, Kāthmāndu." Bulletin of the Oriental and African Studies, Vol. 20 (1957), pp. 167-87.
- Coedes, George. The Making of Southeast Asia. Berkeley, 1967.
- Cole, H.H. Illustrations of Ancient Buildings in Kashmir. London. 1969.
- Combaz, Gisbert. L'evolution du stūpa en Asie. 2 Vols. Bruges, Belgium, 1937.
- _____. L'Inde et l'Orient Classique. 2 Vols. Paris, 1937.
- Coomaraswamy, Ananda K. Elements of Buddhist Iconography. Cambridge, 1935.
- _____. Viśvakarmā. London, 1914.
- Dar, S.L. Kashmir Guide. Srinagar, (n.d.).
- David-Neel, Alexandra. Au Coeur des Himalayas, Le Nepal. Paris, 1949.
- Davis, Hassoldt. Nepal-Land of Mystery. London, 1959.
- Deo, Shantaram Bhalchandra. "Glimpses of Nepal Woodwork," The Journal of the Indian Society of Oriental Art, No. 5, Vol. 3 (1968-69), pp. 1-67.
- "Durbar in Nepal." Asia, Vol. 37, No. 7 (July, 1937), pp. 485-86.
- Dutt, Sukumar. Buddhist Monks and Monasteries of India. London, 1962.
- Ecke, Gustav. "Once More Shen-t'ung Ssu and Ling-yen Ssu." Monumenta Serica—Journal of Oriental Studies of the Catholic University of Peking. Vol. 7 (1942), pp. 295-311.

- Egerton, Francis. Journal of a Winter's Tour in India: with a Visit to the Court of Nepaul. London, 1852.
- Fabri, Charles. An Introduction to Indian Architecture. New York, 1963.
- Fr. Giuseppe. "The Kingdom of Nepal." Asiatic Researches, Vol. 2, 1799.
- Fergusson, James. History of Indian and Eastern Architecture. 2 Vols. London, 1910.
- _____. Tree and Serpent Worship. London, 1868.
- Fergusson, James and James Burgess. Cave Temples of India. London, 1880.
- Fisher, Margaret W. A Selected Bibliography of Source Materials for Nepal Berkelev, 1956.
- Fleming, John, Hugh Honour, and Nikolaus Pevsner. The Penguin Dictionary of Architecture. Middlesex, 1966.
- Foucher, A. Etude sur L'Iconographique de l'Inde. Paris, 1900.
- Fouchet, Max-Pol. L'art amoureaux des Indes. Lausanne, 1957.
- Frédéric, Louis. Indian Temples and Sculpture. London, 1959.
- French, J.C. Himalayan Art. London, 1931.
- Fürer-Haimendorf, C. von. An Anthropological Bibliography of South Asia, Together with a Directory of Recent Anthropological Field Research. The Hague, 1958.
- Getty, Alice. The Gods of Northern Buddhism. 2nd ed. Rutland, Vermont, 1962.
- Goetz, Hermann. The Art of India—Five Thousand Years of Indian Art. New York, 1964.
- _____ "A Nepalese Chessboard." Bulletin of the Baroda Museum and Picture Gallery, Vol. 12 (1955-1956), pp. 25-28.
- _____ The Early Wooden Temples of Chamba. Leiden, 1955.
- Gordon, Antoinette K. The Iconography of Tibetan Lamaism. 2nd ed. Rutland, Vermont, 1959.
- Grierson, George Abraham, ed. Linguistic Survey of India, Vol. IX, Indo-Aryan Family, Part IV, Specimens of the Pahārī Languages and Gujuri. Calcutta, 1916.
- Griswold, A.B., Chikim, and P.H. Pott. The Art of Burma, Korea, Tibet. New York. 1964.
- Grunwedel, Albert. Buddhist Art in India. London, 1965.
- Gupte, Ramesh Shankar. The Iconography of the Buddhist Sculpture (Caves) of Ellora. Aurangabad, 1964.
- Hagen, Toni. Nepal—The Kingdom of the Himalaya. New York, 1961.
- Hallade, Madeleine. Gandharan Art in North India. New York, 1968.
- Hamilton, Francis. An Account of the Kingdom of Nepal. Edinburgh, 1819.
- Harcourt, Francis. The Himalayan Districts of Kooloo, Lahoul, and Spiti. London, 1871.
- Havell, Ernest Binfield. The Ancient and Medieval Architecture of India: A Study of Indo-Aryan Civilization. London, 1915.
- _____ A Handbook of Indian Art. London; 1921.
- The Himalayas in Indian Art. London, 1924.
- Hedin. Sven. The Silk Road. London, 1938.
- _____ Trans-Himālaya. 3 Vols. London, 1909-1912.
- Herdig, Klaus. Formal Structure in Indian Architecture. Ithaca, New York, 1967.
- Himachal Heritage, a special issue of Marg, Vol. 23, No. 2 (March, 1970).
- His Majesty's Government of Nepal, The Physical Development Plan for the Kathmandu Valley. Kathmandu, 1969.

- Hodgson, Brian Houghton. Essays on the Language, Literature, and Religion of Nepal and Tibet, with Further Papers on the Geography, Ethnology, and Commerce of those Countries. Calcutta, 1874.
- Hodgson, Brian Houghton. "Notices of the Languages, Literature, and Religion of the Bauddhas of Nepal and Bhot." Journal of the Asiatic Society of Bengal. Vol. 16 (1847), pp. 409-49.
- ———— "Remarks on an inscription in the Ranja and Tibetan (Uchhen) Characters, taken from a temple on the confines of the valley of Nepal."

 Journal of the Asiatic Society of Bengal, Vol. 4 (1835), pp. 196-98.
- Imbault-Huart, M. Camille. "Histoire de la conquête du Népâl par les Chinois, sons le règne de Te'ien-Long (1792)." *Journal Asiatique*, Vol. 12, Series 7 (1878), pp. 348-77.
- Indraji, Bhagvanlal. "Some Considerations on the History of Nepal." Indian Antiquary, Vol. 13 (1884), pp. 411-28.
- _____. Twenty-three Inscriptions from Nepal; Together with Some Considerations of the Chronology of Nepal. Bombay, 1885.
- Indraji, Bhagvanlal and Buhler, G. "Inscriptions from Nepal." Indian Antiquary, Vol. 9 (June-Aug., 1880), pp. 168-94.
- Ishida, M. "Gendai no Kōgeika Nepāru no ōzoku Anika no den ni tsuite" Mōko Gakuhō, Vol. 2 (1941), pp. 244-60.
- Itihās-Samsodhanko Pramāna-Prameya (Studies of Historical Revisions). Kathmandu, V.S. 2016.
- Jayaswal, K.P. Chronology and History of Nepal from 600 B.C. to 880 A.D. Patna, 1937.
- Joshi, Hariprasad Shivaprasad. Origin and Development of Dattatreya Worship in India. Baroda, 1965.
- Jouveau-Dubreuil, Gabriel. Iconography of Southern India. Paris, 1937.
- Kak, R.C. Ancient Monuments of Kashmir. London, 1938.
- Kambara, Tatsu. Nepal Bibliography. Tokyo, 1959.
- Karan, Pradyumna P. Nepal—A Cultural and Physical Geography. Lexington, Kentucky, 1960.
- Kaulācāra, Rāmachandra, Silpa Prakāśa: Medieval Orissan Sanskrit Text on Temple Architecture, translated and annotated by Alice Boner and Sadāśiva Rath Śarmā. Leiden, 1966.
- Khandalawala, Karl. "A Note on Two Nepalese Wood Sculptures." Marg, Vol. 4, No. 1 (1950), pp. 50-52.
- Kirkpatrick, William J. An Account of the Kingdom of Nepal. Edinburgh, 1819.
- Korn, Wolfgang. Traditional Architecture of the Kathmandu Valley. Kathmandu, 1977.
- Kostinski, D.N. Nepal. Leipzig, 1955.
- Koul, Pandit Anand. Archaeological Remains in Kashmir. Lahore, 1935.
- Kramrisch, Stella. The Art of India. London, 1954.
- _____ The Art of Nepal. New York, 1964.
- "Art of Nepal and Tibet." Philadelphia Museum Bulletin, Vol. 55, No. 265 (Spring, 1965), pp. 65-76.
- _____. Dravida and Kerala in the Art of Travancore. Ascona, Switzerland, 1953.
- The Hindu Temple. Calcutta, 1946.
- Kramrisch, Stella, J.H. Cousins, and R. Vasudeva Poduval. The Arts and Crafts of Travancore. Oxford, 1952.

- Krishnamurti, Y.G. His Majesty King Mahendra Bir Bikram Shaha Deva (An Analytical Biography). Bombay, (n.d.).
- Landon, Percival. Nepal. 2 Vols. London, 1928.
- Legge, James. A Record of Buddhistic Kingdoms. Oxford, 1886.
- Levi, Sylvain. "The Art of Nepal." *Indian Art and Letters*, Vol. 1, No. 2 (November, 1925), pp. 49-67.
- _____. Le Népal. 3 Vols. Paris, 1905-1908.
- Le Népal. Paris, 1905-1908. Unpublished translation in English by Rishikesh Shaha in the University of Hawaii Library.
- Located in the Library of Maharajah Chundra Shum Shere Jung Rana Bahadur. Kathmandu, (n.d.).
 - "Note on the Chronology of Nepal." Journal Asiatique, Vol. 2 (1894), p. 65.
- Lobsiger-Dellenbash, Marguerite, "Artisanat Népalaise: Construction d'une Fenêtre." Archives Suisses d'Anthropologie Générale, Vol. 19 (1954), pp. 90-06.
- _____. Népal—Catalogue de la Collection d'ethographie Népalaise du Musee d'ethnographie de la ville de Genève. Geneva, 1954.
- Loehr, Max. Buddhist Thought and Imagry. Cambridge, 1961.
- De Lorenzo, Giuseppe. "The Himālaya in Art and Science." East and West, Vol. 8, No. 2 (July, 1957), pp. 136-46.
- MacDonell, Arthur Anthony. A Practical Sanskrit Dictionary. London, 1929.
- Macleod, E. "Exploring Eye—Valley of Nepal." Architectural Review, Vol. 134 (August, 1963), pp. 91-93.
- Majumdar, R.C. "The Eras of Nepal." Journal of the Asiatic Society of Bengal, Fourth Series Vol. 1, No. 1 (1959), pp. 47-49.
- de Mallmann, Marie-Therese. Étude Iconographique sur Manjuśri. Paris, 1964.
- Maskay, Purander. Guide to Bhaktapur—The Town of Devotees. Kathmandu, 1962.
- Massieu, Isabelle. Nepal et pays Himalayens. Paris, 1914.
- McGovern, William Montgomery. An Introduction of Mahayana Buddhism. London, 1922.
- Mitra, R. The Sanskrit and Buddhist Literature of Nepal. Calcutta, 1882.
- Mookerjee, Ajit. Tantra Art—Its Philosophy and Physics. New Delhi, 1966.
- Mookerji, Radhakumud. Asoka. London, 1928.
- _____. The Gupta Empire. Bombay, 1947.
- Morris, C.J. "A Bibliography of Nepal." Journal of the Royal Central Asian Society, Vol. 18 (1931), pp. 547-59.
- Mukerjee, Radhakamal. The Culture and Art of India. New York, 1959.
- Mukhopadhyaya, Purnachandra. Report on Antiquities in Terai, Nepal, Kapilavastu. Archaeological Survey of India, Annual Reports, New Imperial Series No. 26. Calcutta, 1901.
- Muller, Max, ed., Julius Eggerling, tr. The Satapatha-Brāhmana. The Sacred Books of the East, Vol. 12. Oxford, 1882.
- Munshi, K.M. Indian Temple Sculpture. Calcutta, 1956.
- Mus, Paul. "Un cinema solide. L'integration du temps dans l'art de l'Inde et dans l'art contemporain." Arts Asiatiques, Vol. 10, No. 1 (1964), pp. 21-34.
- Nepal Review—An English Monthly. Vol. 1, No. 1, Kathmandu.
- Nepali, Gopal Singh. The Newars. Bombay, 1965.

- Newark Museum. Catalogue of Tibetan and Other Lamaist Articles in the Newark Museum. Newark, (n.d.).
- Okada, Ferdinand E. "The Newars of Nepal." Natural History, Vol. 66 (April, 1957), pp. 196-200.
- Oldfield, Henry Ambrose. Sketches from Nepal. 2 Vols. London, 1880.
- Oliphant, Laurence. A Journey to Kathmandu, the Capital of Nepal. London, 1852.
- "On Some Nepalese Incense Burners." Rupam, No. 7 (July, 1921), pp. 13-15.
- Pal, Pratyapaditya. Umā-Maheśvara Theme in Nepali Sculpture." Boston Museum Bulletin, Vol. 66, No. 345 (1968), pp. 85-100.
- _____Nepal: Where the Gods are Young, New York, 1975.
- The Arts of Nepal, pt. I, Sculpture. Leiden, 1974.
- _____ Vaisnava Iconology in Nepal, Calcutta, 1970.
- Pallis, Marco. Peaks and Lamas. London, 1940.
- Paranavitana, S. The Stūpa in Ceylon, Archaeological Survey of Ceylon, Memoirs, No. 5. Colombo, 1947.
- Petech, Luciano. "The Chronology of the Early Inscriptions of Nepal." East and West. N.S. Vol. 12, No. 4 (Dec., 1961), pp. 227-32.
- ____, ed. I Missionari Italiani nel Tibet e nel Nepal. 7 Vols. Rome, 1952-1956.
- _____. The Mediaeval History of Nepal (c. 750-1480). Rome, 1958.
- Northern India According to the Shui-ching-chu. Serie Orientale Roma, II. Rome, 1950.
- _____ A Study of the Chronicles of Ladakh (Indian Tibet). Calcutta, 1939.
- Peterson, Susan. "Folk Art of Nepal." Craft Horizons, Vol. 27 (March, 1967), pp. 36-39.
- Pott, Peter. Introduction to the Tibetan Collection of the National Museum of Ethnology, Leiden. Leiden, 1951.
- Prasad, Durga. "A Silver Coin Struck in Nepal in the Name of Ala-ud-din Muhammad Shah Khilji." Journal of the Asiatic Society of Bengal (Letters), Numismatic Supplement, N.S. Vol. 25 (1929), pp. N. 37-N. 38.
- Pūrnimā—Itihās-Pradhān Traimāsik Patrikā (A Quarterly Journal of Major History). Nepālī language. Vol. 1, No. 1, 1964.
- Rajvamsi, Sankarmāna. "Panauti Indreśvarako tāmrapatrābhilekh" ("A Copperplate inscription of the Panauti Indreśvara temple"). *Pūrnimā*, No. 14 (Summer, 1967), pp. 140-43.
- Ramachandran, T.N. "The Nāgapattinam and other Buddhist Bronzes in the Madras Museum." Bulletin of the Madras Government Museum, N.S.—General Section, Vol. 7, No. 1 (1954), pp. 13-16.
- Rao, T.A.G. Elements of Hindu Iconography. 2 Vols. Madras, 1914-1916.
- Rawson, Philip. "An Exhalted Theory of Ornament; a study in Indian aesthetics," in Harold Osborn, ed., Aesthetics in the Modern World. New York, 1968.
- Ray, Amita. "House-Building Rituals in Ancient India" in University of Calcutta Alumni Association, ed., J.N. Banerjea Volume. Calcutta, 1960.
- Ray, S.C. Early History and Culture of Kashmir. Calcutta, 1957.
- Reeves, Ruth. Cire Perdue Bronze Casting in India. New Delhi, 1962.
- Regmi, Delli Raman. Ancient Nepal. Calcutta, 1960.
- "The Antiquity of the Newars of Kathmandu," Journal of the Bihar and Orissa Research Society, Vol. 34 (1948), pp. 49-58.

- Rhys. Davids, T.W. Buddhism. London, 1894
- Roerich, George N. Trails to Inmost Asia. New Haven, 1931.
- Rosser, K.C. "Building a House in a Himalayan Village. March of India, Vol. 5, No. 2 (1952), pp. 52-55; 60.
- Rowland, Benjamin. The Art and Architecture of India—Buddhist, Hindu, Jain. Baltimore, 1967.
- Rybot, N.V.L. "Groups of Menhirs in Kashmir." Man, Vol. 31, No. 115 (June, 1931), pp. 108-10.
- Sakya, Hemarāja. Nepāl Bouddha Vihāra Vagrantha Sūchi (List of Buddhist Monasteries and Texts). Lalitpur, Nepal, 1956.
- Salmony, Alfred. "Exhibit of Nepalese Art at the Ethnographical Museum, Geneva." Artibus Asiae, Vol. 16, No. 3 (1953), p. 238.
- Sama, Balkrishna. Nepāli Lalitkalā (Arts of Nepal). Calcutta, 2022 V.S.
- Sharma, Janak Lal. "Nepal's Sculptural Art." East and West, Vol. 5, No. 2 (July, 1954), pp. 112-13.
- Sharma, P.R. "Visnu in Viśvarūpa from Nepal." Bulletin of the Deccan College Research Institute. Vol. 24 (1963-64), pp. 28-30.
- Shrestha, Chandra Bahadur. Buddhist Geography of Ancient Nepal. Kathmandu, 1958.
- _____ Kathmandu Guide. Kathmandu, 1956.
- Shukla, D.N. Vastu-śastra. 2 Vols. Gorakhpur, (1958?)
- Sierksma, F. Tibet's Terrifying Deities. The Hague. 1966.
- Singh, Madanjeet. Himalayan Art. Greenwich, Connecticut, 1968.
- Sivaramamurti, C. "Geographical and Chronological Factors in Indian Iconography." Ancient India, No. 6 (January, 1950), pp. 21-63.
- Slusser, Mary. "Guladharma—The Sacred Month of Buddhism." American Women's Organization of Nepal (AWON) Bulletin, August 20, 1969.
 - "The Rani Pokhari." American Women's Organization of Nepal (AWON) Bulletin, February 17, 1969.
 - Irdreśvara of Panauti: A Medieval Nepalese Temple. Resume. 9th International Congress of Anthropological and Ethnological Sciences, Chicago, 1973.
- ______, Jogini of the Sword: A visit to Her Shrine. Vasudha, Vol. 15, No. 2 (April-May, 1974), pp. 20-27.
- "Nepali Sculptures—New Discoveries" in Pal (ed.) Aspects of Indian Art.
 Los Angeles, 1972.
- _____and G. Vajracarya. "Some Nepalese Stone Sculptures," Artibus Asiae, Vol. 35, No. 3 (1973), pp. 269-72.
- and G. Vajracarya. "Two Medieval Nepalese Buildings: An Architectural and Cultural Study, *Arbitus Asiae*, Vol. 36, No. 3, pp. 169-218.
- Smith, Vincent A. The Oxford History of India. 3rd ed. Oxford, 1958.
- _____. "Tibetan Affinities of the Lichchhavis." Indian Antiquary, Vol. 32 (1903), p. 238.
- Snellgrove, David L. Buddhist Himalaya, Oxford, 1957.

- "Shrines and Temples of Nepal." Arts Asiatiques, Vol. 8, Nos. 1-2 (1961), pp. 3-10, 93-120.
- Snellgrove, David and Hugh Richardson. A Cultural History of Tibet. New York, 1968, p. 46.
- Spear, Percival. India—A Modern History. Ann Arbor, 1961.
- Srī Hamsa, Bhagvan. The Holy Mountain, being the story of a Pilgrimage to Lake Mānas and of Initiation on Mount Kailās in Tibet. London, 1933.
- Stern, Philippe and Mireille Bénisti. Evolution du style Indien d'Amaravati. Paris, 1961.
- de Terra, Helmut. "Prehistoric Megaliths of Kashmir." Proceedings of the American Philosophical Society, Vol. 85 (1942), pp. 489-05.
- Thapa, Ramesh Jung. "Kasthamandapa." Ancient Nepal, No. 3 (April, 1968), pp. 41-43.
- Tibetan An, a special issue of Marg, Vol. 16 No. 4 (September, 1963).
- Tilman, Harold William. Nepal Himalaya. Cambridge, 1952.
- Toth, Edit. The Art of Nepal in the Francis Hopp Museum of Eastern Asiatic Arts. Budapest, 1963.
- Tucci, Giuseppe. Nepal: The Discovery of the Malla. New York, 1962.
- Tucci, Giuseppe. Preliminary Report on Two Scientific Expeditions in Nepal. Rome, 1956.
- _____. The Theory and Practice of the Mandala. London, 1961.
 _____. Tibet—Land of Snows. New York, 1967.
 _____. Tibetan Painted Scrolls. 3 Vols. Rome, 1949.
- Vajrāchārya, Dhanvajra, ed. Abhilekha-Sangraha, an anthology of stone inscriptions. Nepālī language. Vol. 1, No. 1.
- Vogel, J.Ph. "Ancient Monuments of Kangra Ruined in the Earthquake." Archaeological Survey of India, Annual Report, 1905-1906, Calcutta, 1909.
- Antiquities of Chamba State, Archaeological Survey of India, Annual Reports, New Imperial Series Vol. 36. Calcutta, 1911.
- Volwahsen, Andreas. Living Architecture: Indian. New York, 1969.
- Waddell, L.A. The Buddhism of Tibet. 2nd ed. London, 1934.
- Wheeler, J. Talboys. A Short History of India and the Frontier States of Afghanistan, Nepal, and Burma. London, 1880.
- Wheeler, Mortimer, ed. Splendours of the East. New York, 1965.
- Wood, Hugh B. Nepal Bibliography. Eugene, Oregon, 1959.
- Wright, Daniel. "History of Nepal." Indian Antiquary, Vol. 9 (1880).
- ed. Vamsavālī—History of Nepal. Translated from the Parbatiya by Munshi Shew Shanker Singh and Pandit Sri Gunanand. Cambridge, 1877.
- Wu, Nelson I. Chinese and Indian Architecture. New York, 1963.
- Zimmer, Heinrich. The Art of Indian Asia. 2 Vols. New York, 1955.

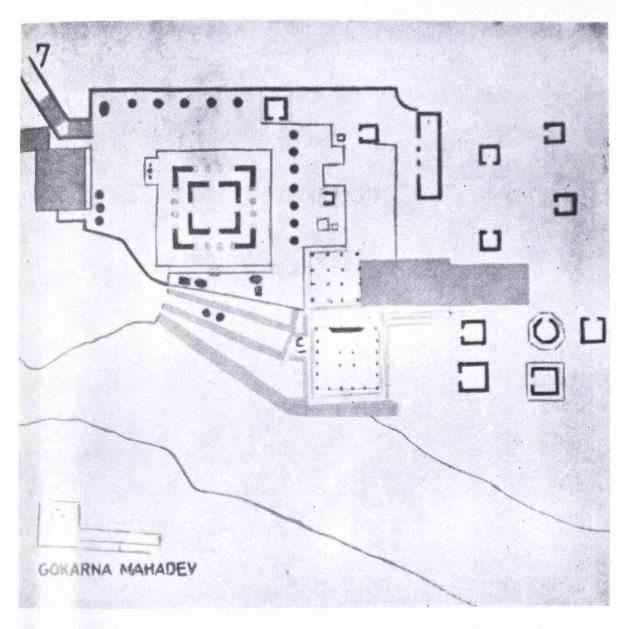


PLATE 1 Sketch plan of Gokarna Mahādeva

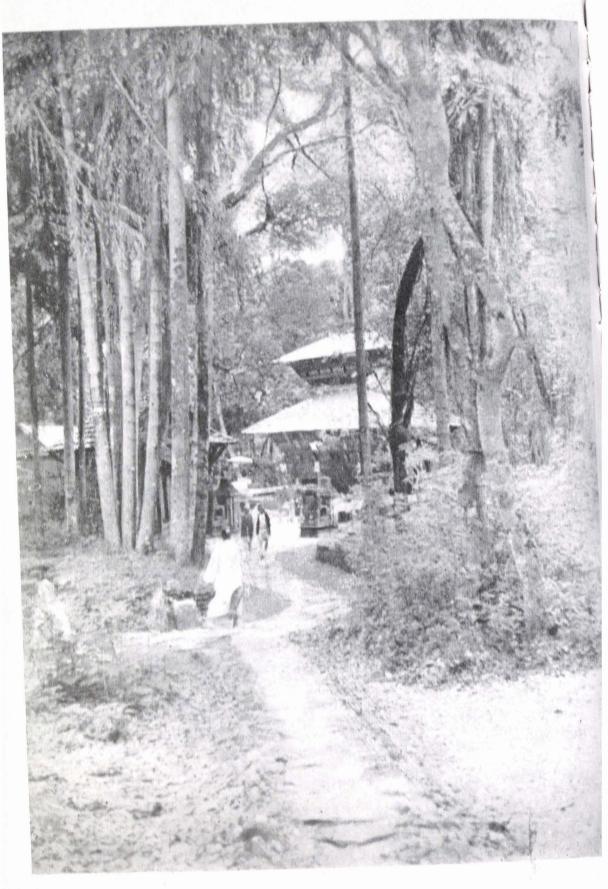


PLATE 2
Vajra Vārahī Mandir, Chapagaon



PLATE 3
Setting of the Mai shrine at Sundarijhel

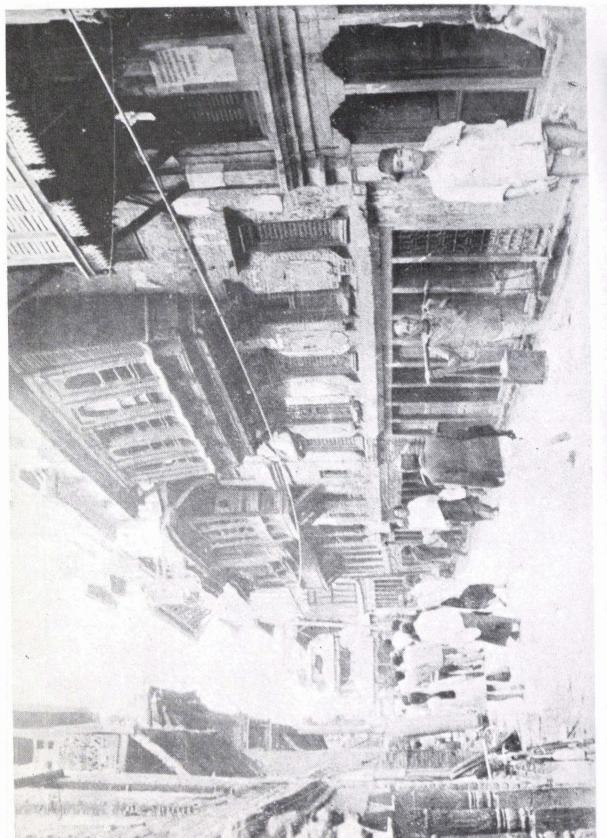


PLATE 4

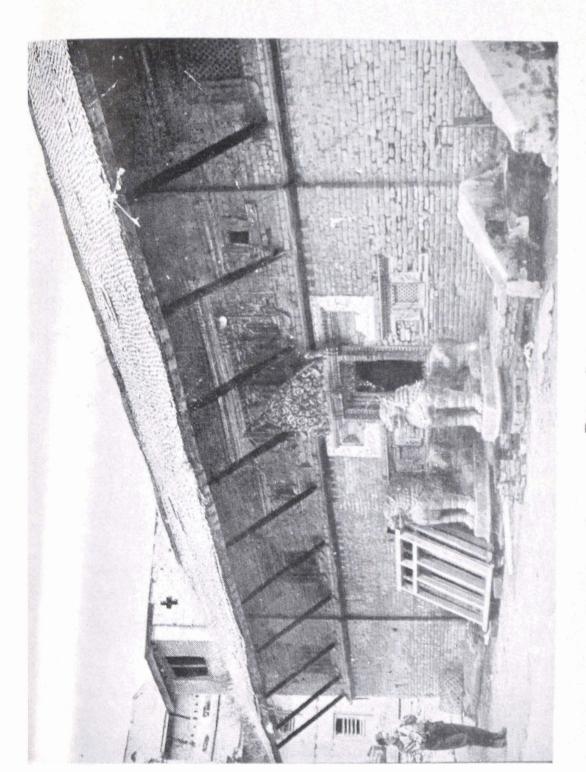


PLATE 5 Exterior of Chusya Bahāl, Kathmandu

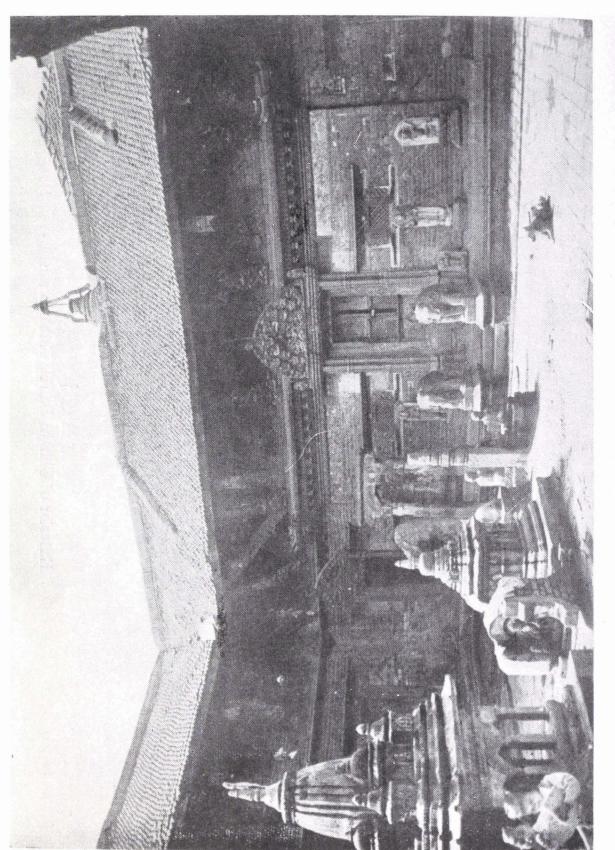


PLATE 6
Monastery enclosure at Chusya Bahāl, Kathmandu

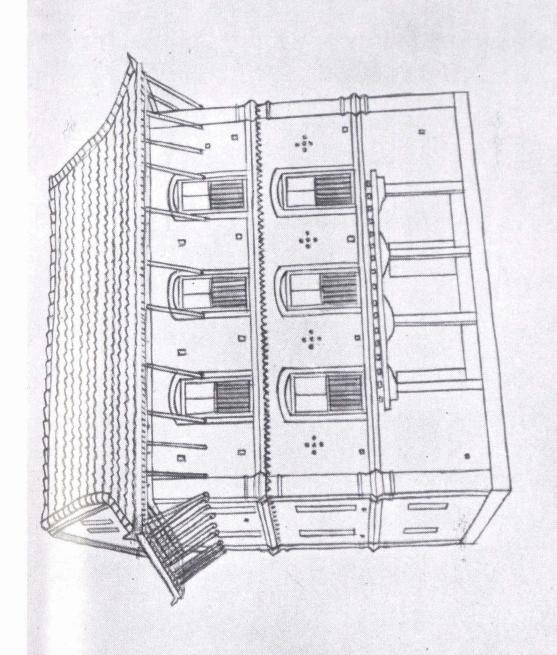


PLATE 7 Sketch diagram of a Newār House



PLATE 9
The palace of Nawakot

PLATE 10

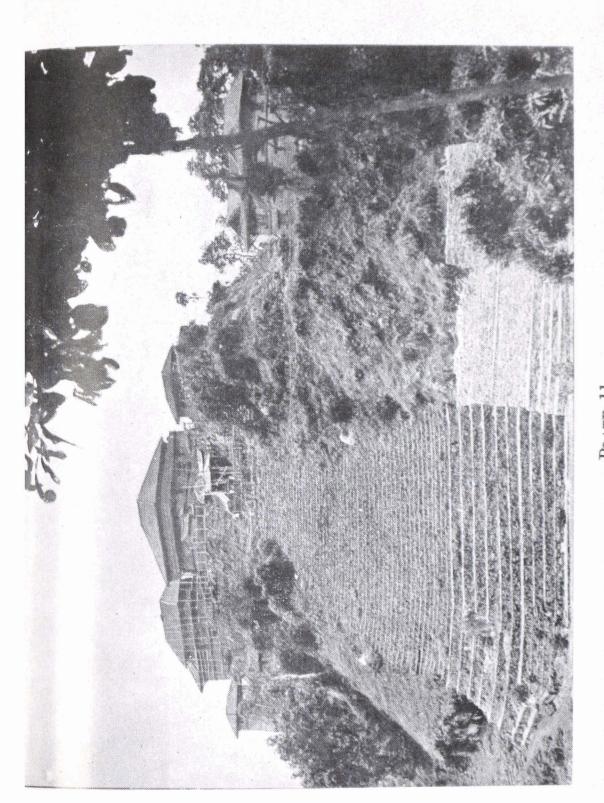
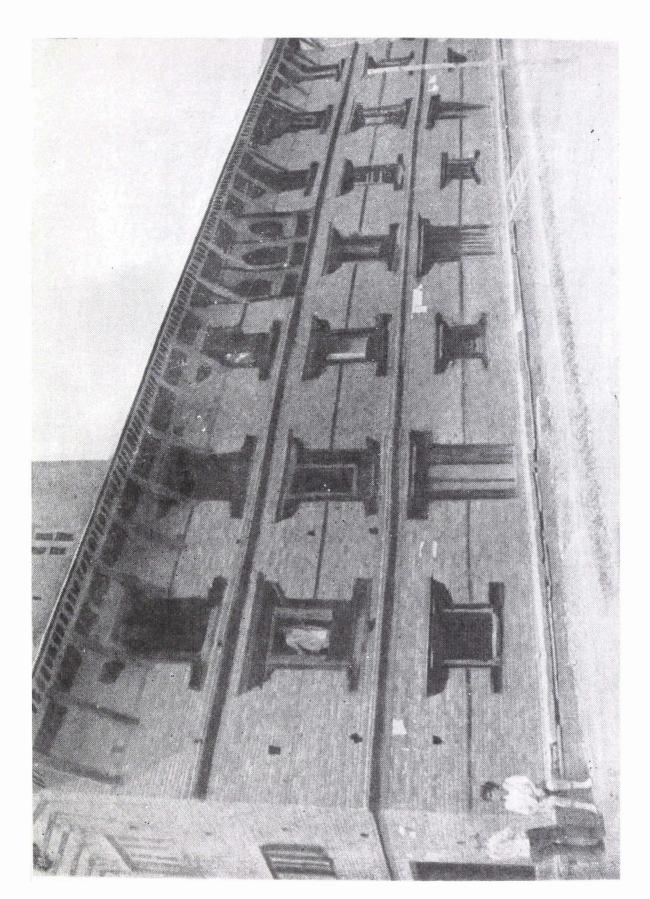


PLATE 11 Distant view of the palace complex at Gorkhā



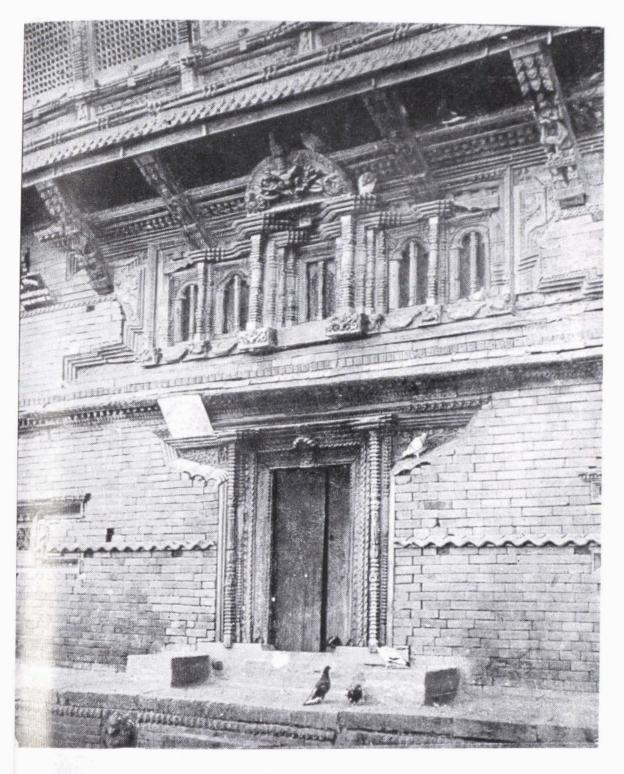
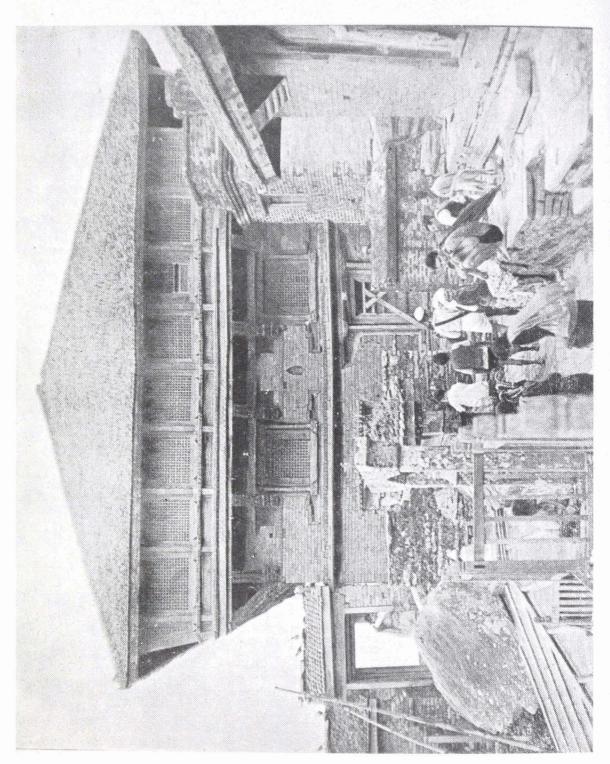


PLATE 13
The palace of Gorkhā, main entrance-



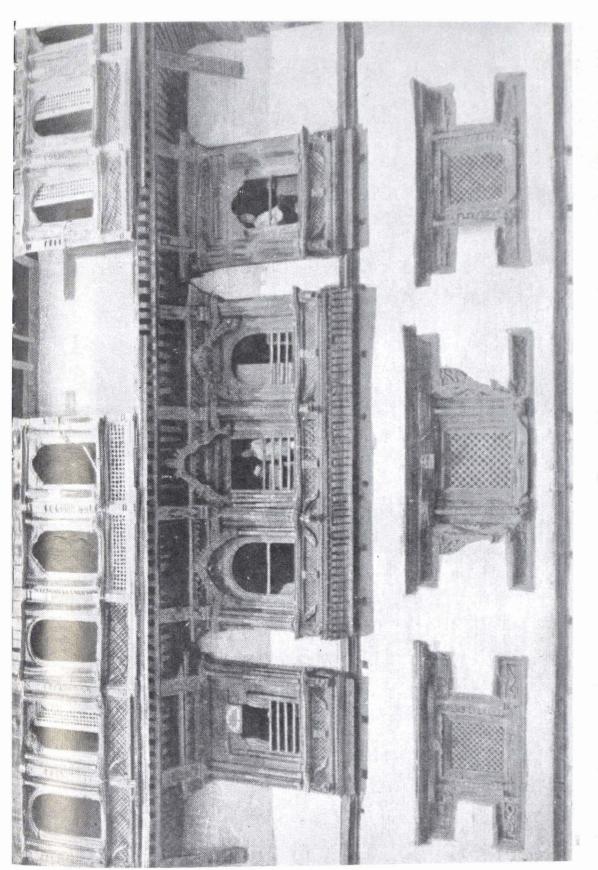


PLATE 15
Part of the facade of the Nawakot palace

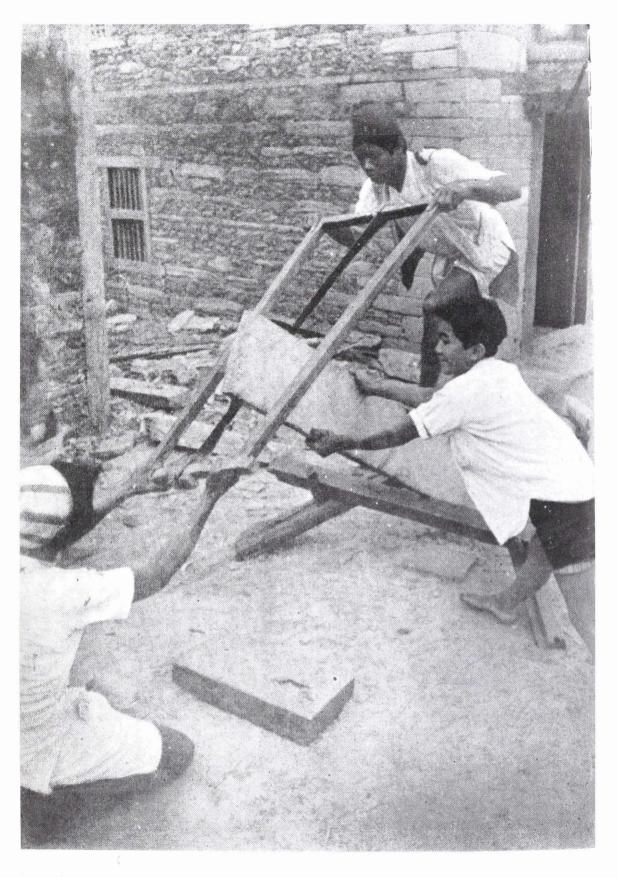


PLATE 16
Workmen sawing lumber in Gorkhā



PLATE 17 Šiva Mandir, Kathmandu

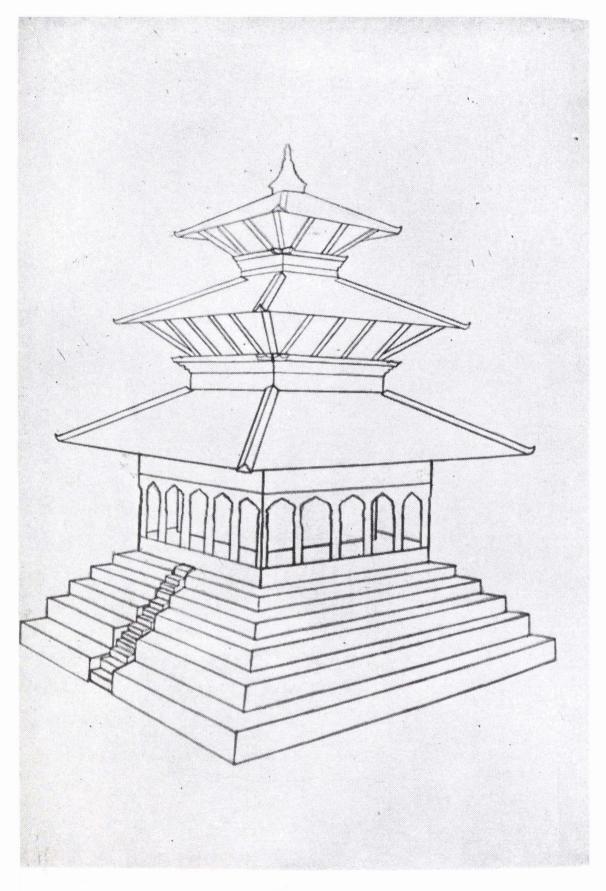


PLATE 18 Śiva Mandir, sketch diagram

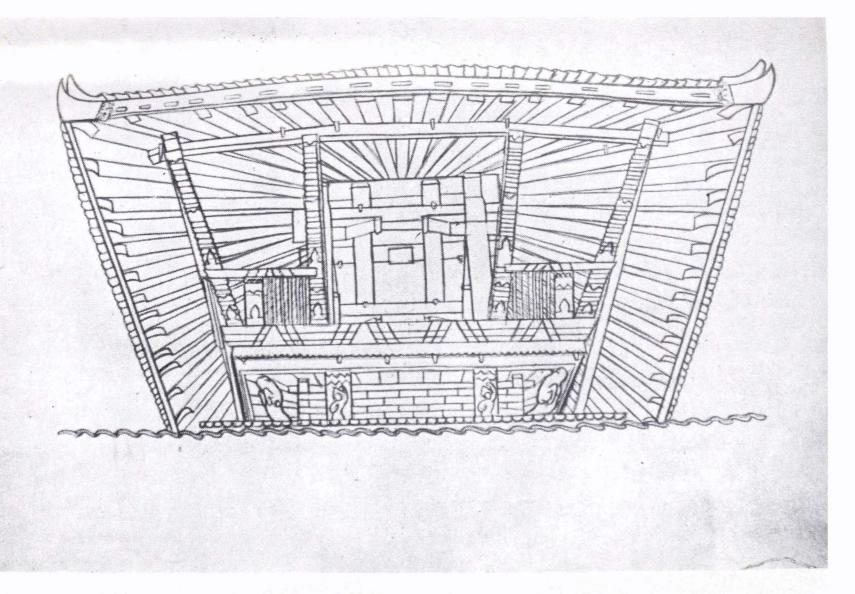


PLATE 19 Sketch diagram of roof structure



PLATE 20 Collapsing minor shrine near Indreśvara Mandir, Panauti ; sketch diagram



PLATE 21
Collapsing minor shrine near Indreśvara Mahādeva Mandir, Panauti



PLATE 22
Taleju Mandir, Kathmandu

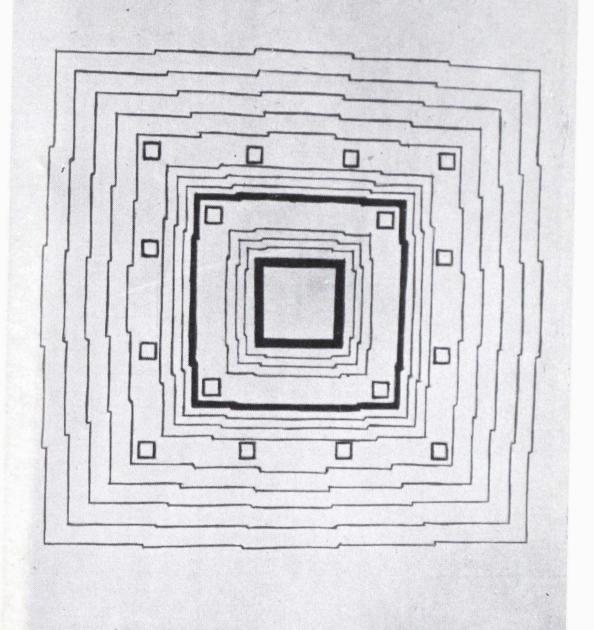


PLATE 23 Sketch plan of eleven-stage plinth of Taleju Mandir

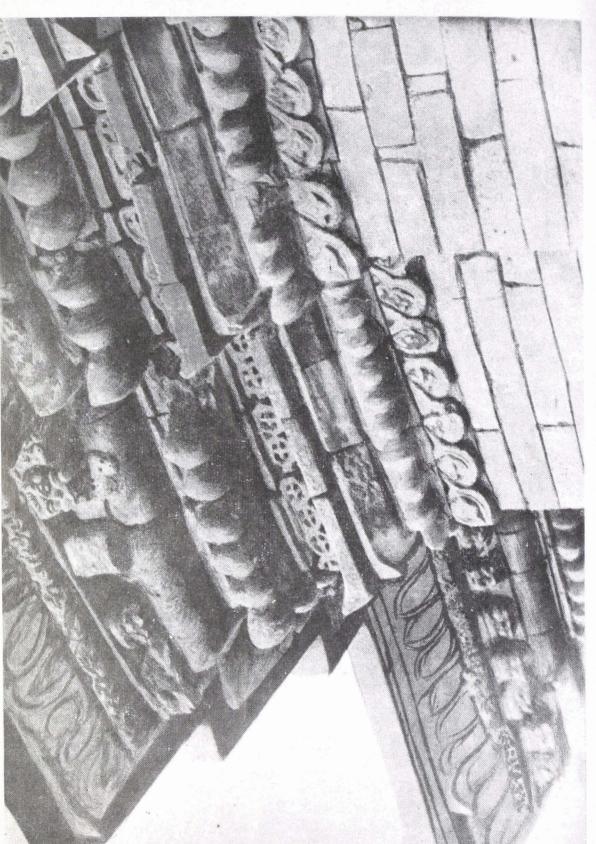


PLATE 24

Monlded brick at cornice



PLATE 25
Interior structure of the Hanumat Dhoka Palace, Kathmandu

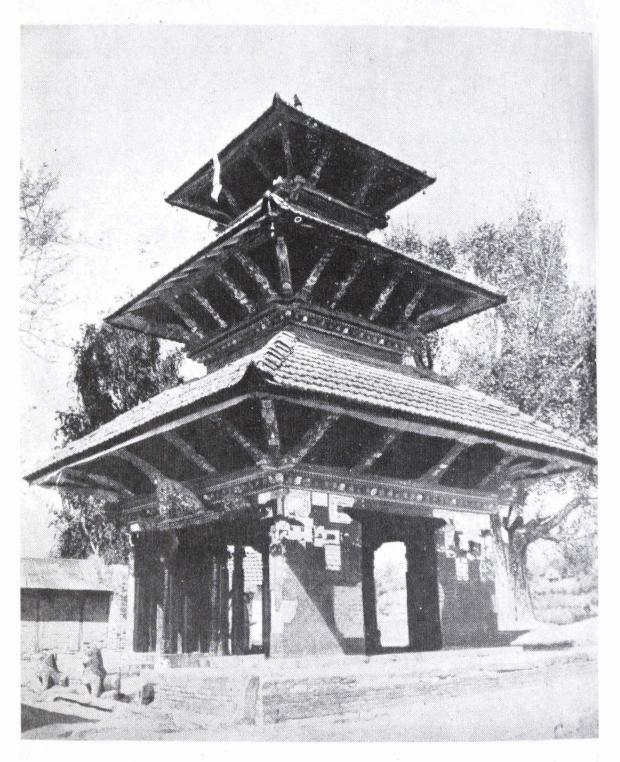


PLATE 26
The very open structure of Tunāldeva Mandir

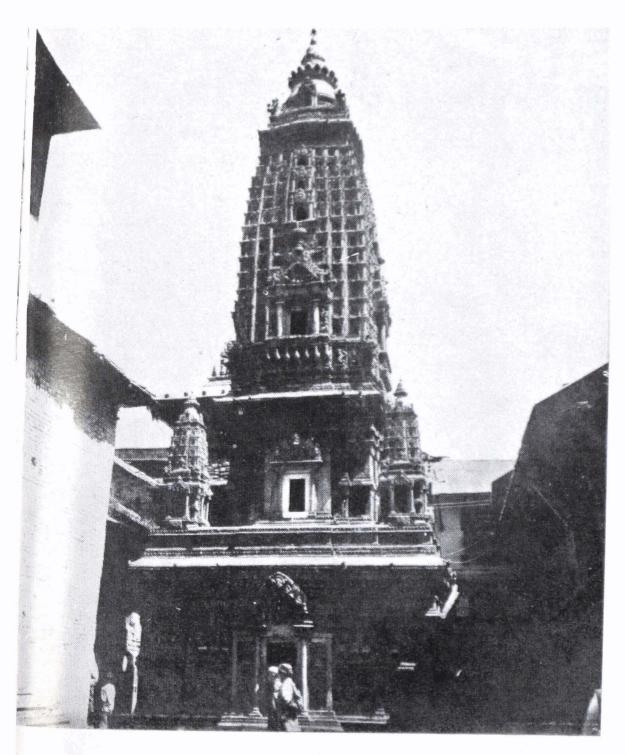


PLATE 27 The temple of Mahābauddha in Patan

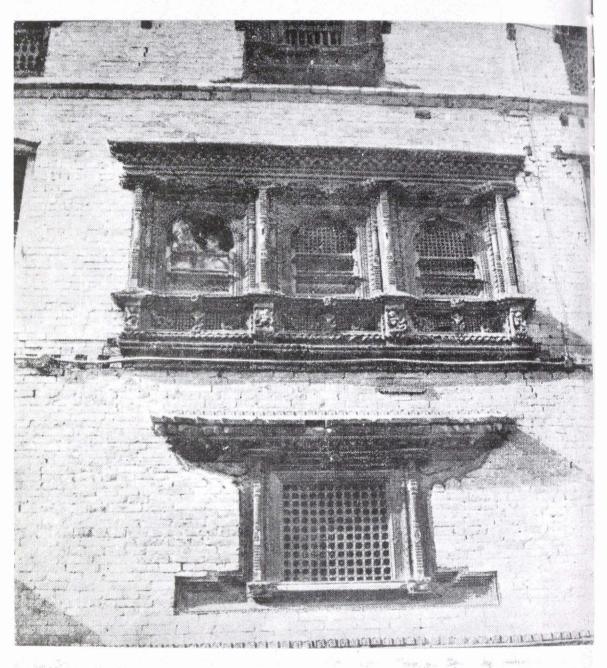


PLATE 28
Domestic windows with wooden screens, Kathmandu

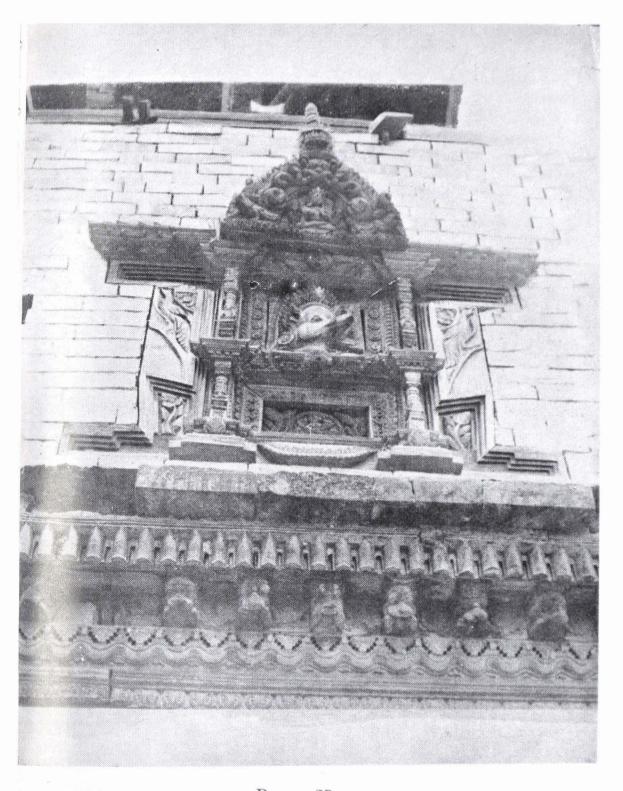


PLATE 29
A false window with face of Varāha mounted into the walls of a temple in Panauti

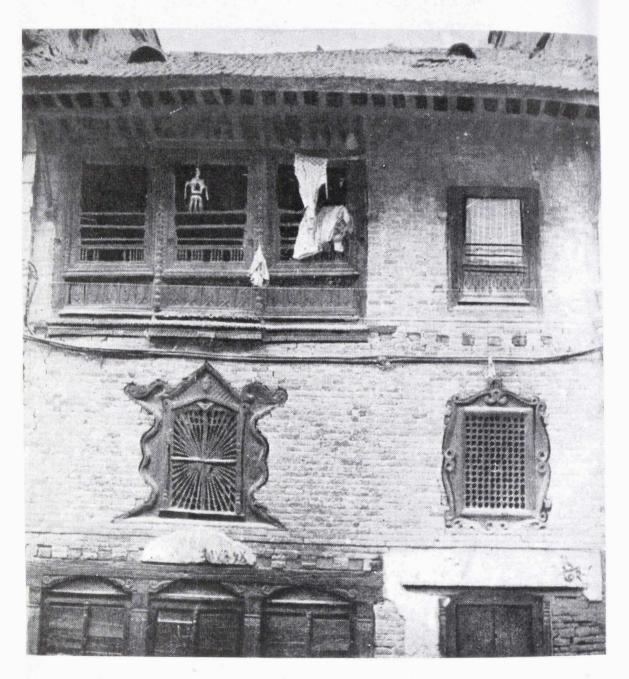


Plate 30
Domestic window complex in Kathmandu

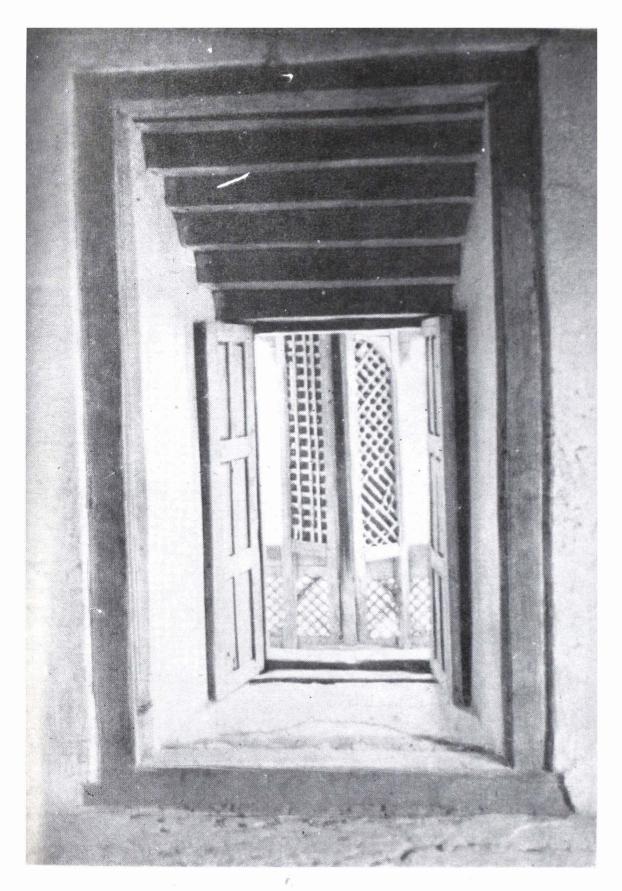


PLATE 31
Window frame from the interior of the palace at Nawakot

PLATE 32

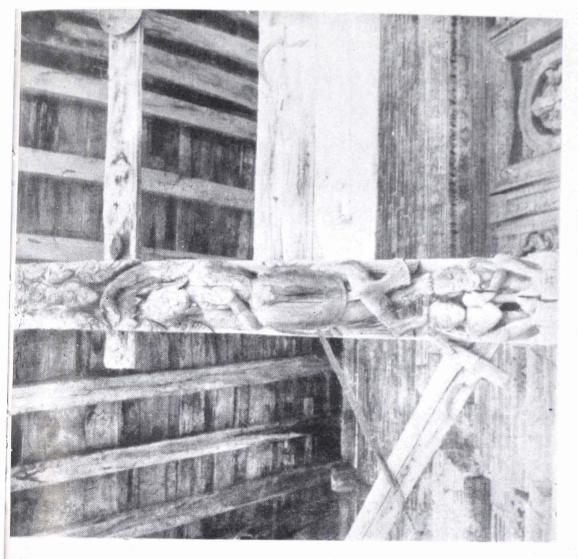


PLATE 33 Guardian beast at Woku Bahāl, Patan

PLATE 34 Strut figure of Indrešvara Mahādeva Mandir, Panauti

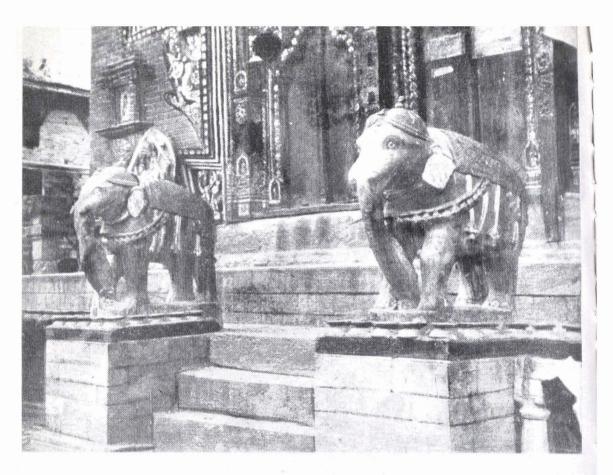


PLATE 35
Guardian elephants at the entrance of Cangu Nārāyaṇa Mandir

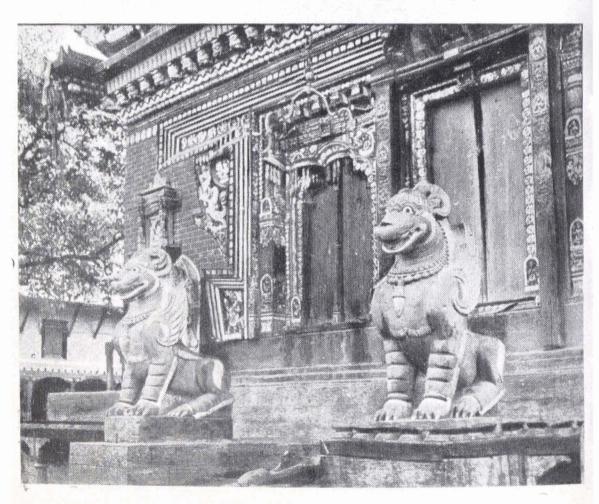


PLATE 36
Guardian leogryphs at the entrance of Cangu Nārāyaṇa Mandir



PLATE 37
Eyes painted on the doorway of a Hanumat Dhoka area shrine



PLATE 38
Entrance to the shrine room at Chusya Bahāl, Kathmandu

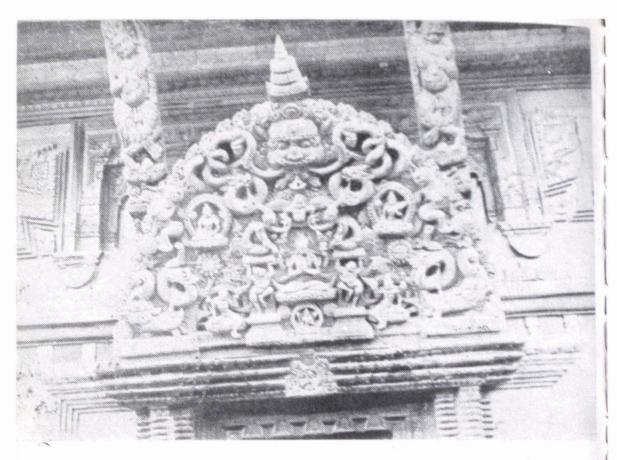


Plate 39 Toraṇa of Chusya Bahāl, Kathmandu

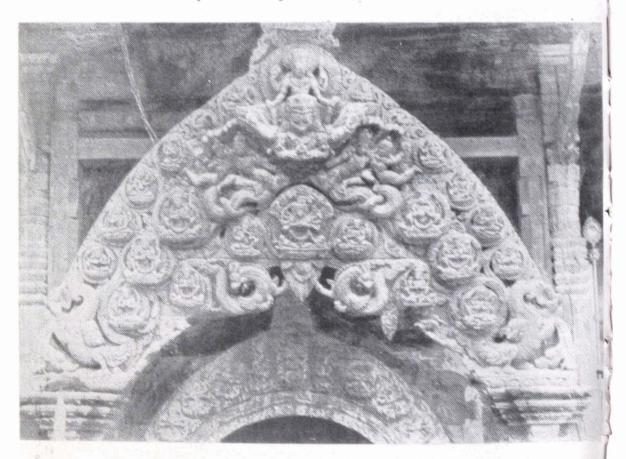


PLATE 40
Older of two toranas at Bagh Bhairava temple, Kirtipur



PLATE 41
Metal torana of
Matsyendranātha
temple, Kathmandu

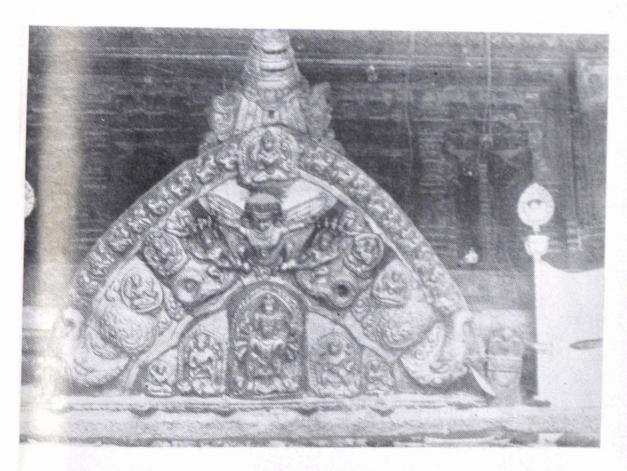


PLATE 42 Newer (1671 A.D.) of two toranas at Bagh Bhairava temple, Kirtipur



PLATE 43 $Toraṇa \ {\rm of} \ {\rm Yatkha} \ {\rm Bah\bar{a}l,} \ {\rm Kathmandu}$

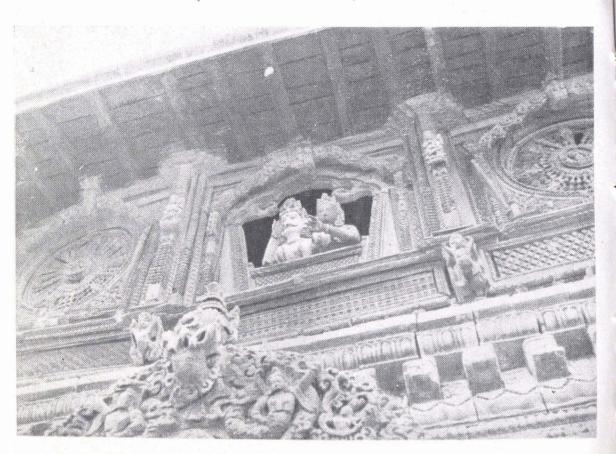


PLATE 44

Śiva and Pāravatī in the window of their temple in Kathmandu

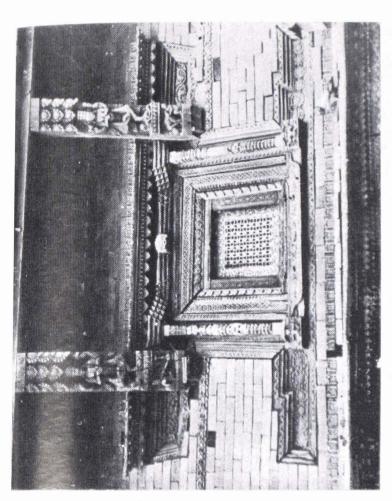


PLATE 46
Window in resthouse
courtyard below the
old palace of Gorkhā

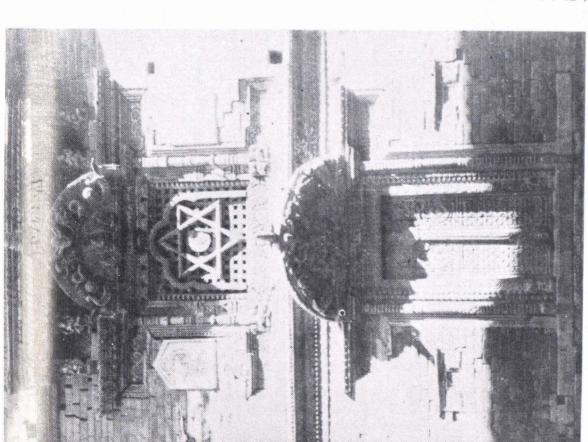
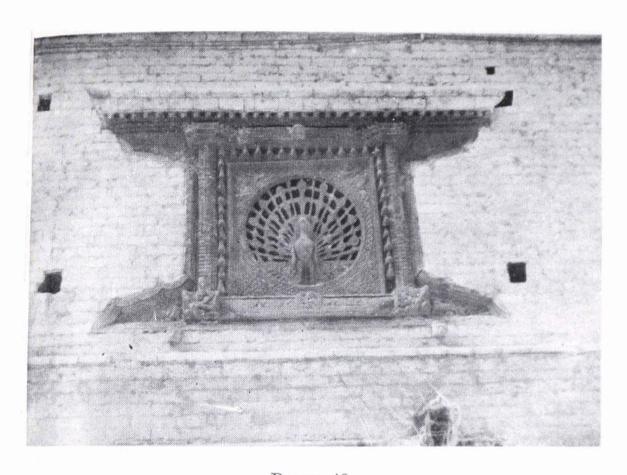


PLATE 45 Shrine with carved doors near Yatkha Bahāl, Kathmandu



Pachali, Kathmandu

PLATE 47
Window of shrine near Yatkha
Rahal Kathmandu



 $\begin{array}{c} \textbf{Plate 49} \\ \textbf{Peacock window of Pujari Matha monastery structure, Bhaktapur} \end{array}$

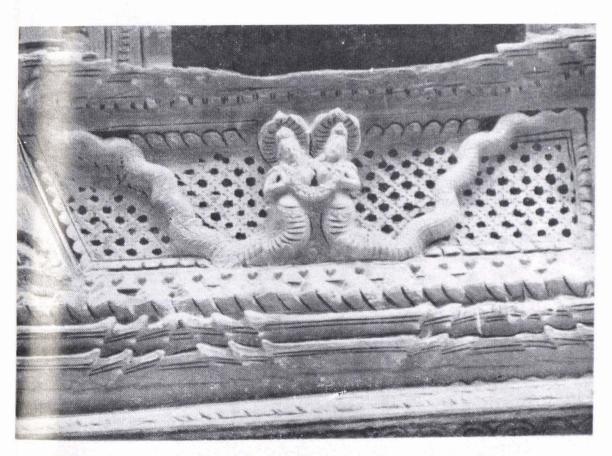


PLATE 50
Border of window with naga royalty, Tengal Tol

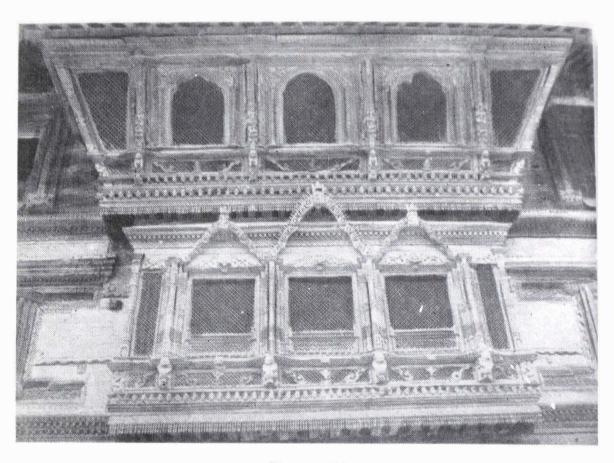


Plate 51
Window with projecting arches on a school near Chikanmugal, Kathmandu

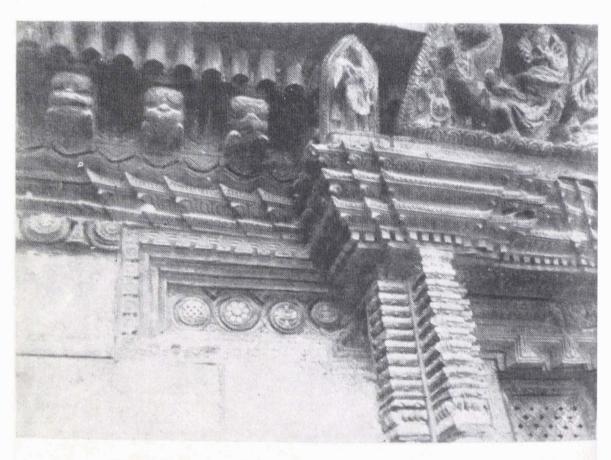


PLATE 52
Cornice details at Chusya Bahāl, Kathmandu

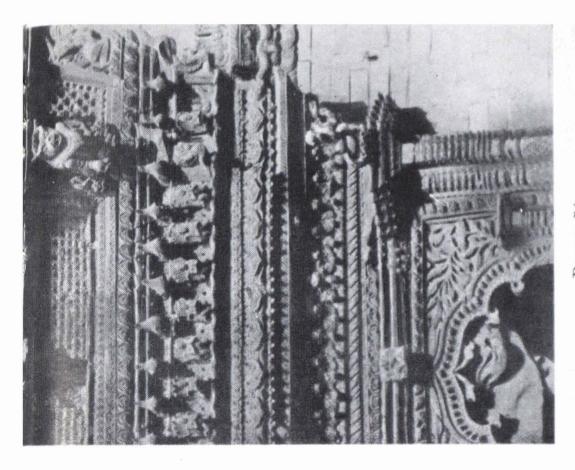
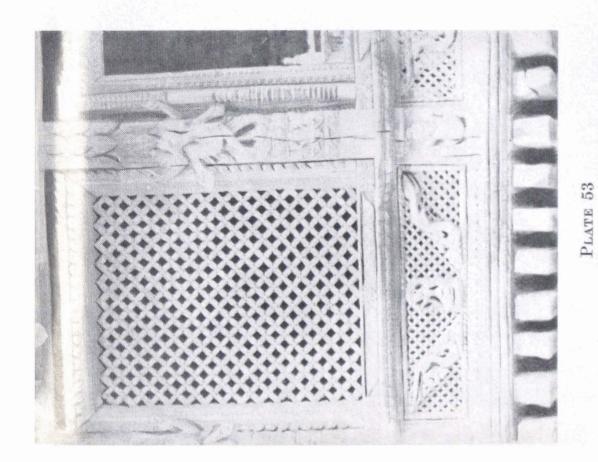


PLATE 54
Detail of window at 14/42 Tengal Tol,
Kathmandu

Rectangular window complex of the old palace,

Kathmandu





 $\begin{array}{c} \textbf{Plate 55} \\ \textbf{Exterior walls of 14/42 Tengal Tol, Kathmandu} \end{array}$

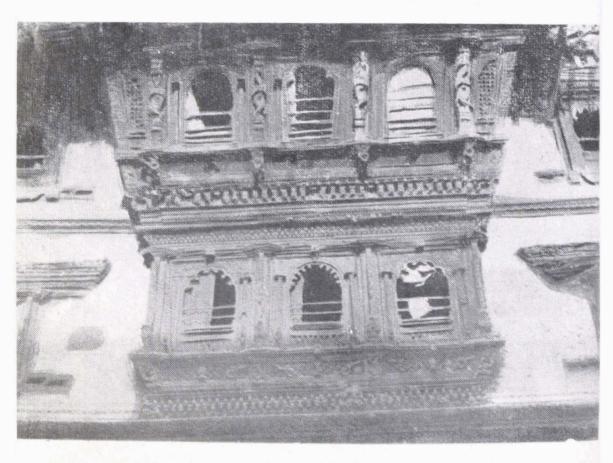


PLATE 56
Window of the western wall at 14/42 Tengal Tol, Kathmandu

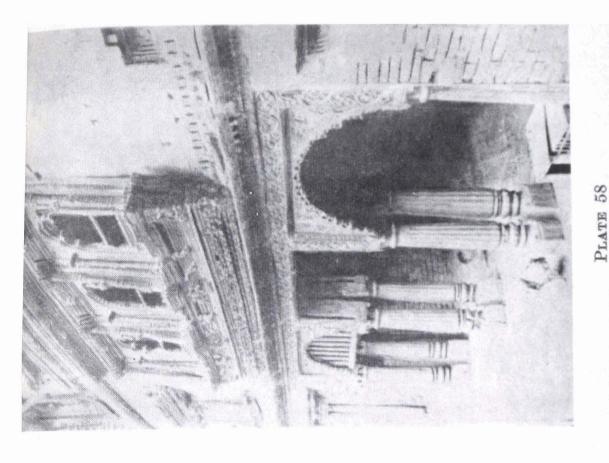
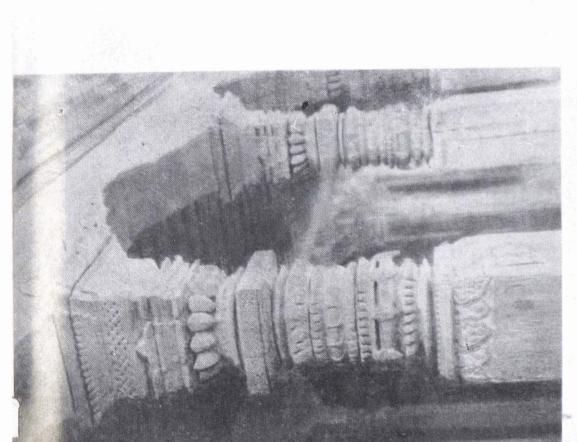
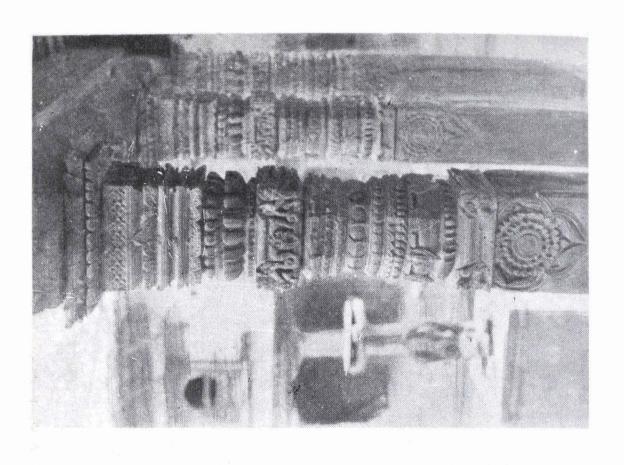
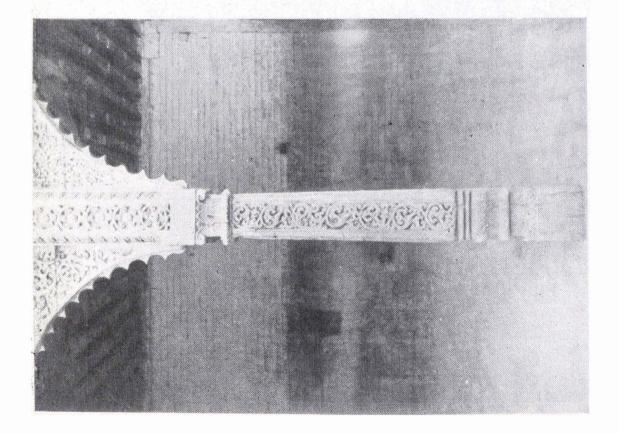


PLATE 57
Detail of columns of resthouse at Kumbheśvara
Mandir, Patan



Arched colonnade at the side of the courtyard at 14/42 Tengal Tol





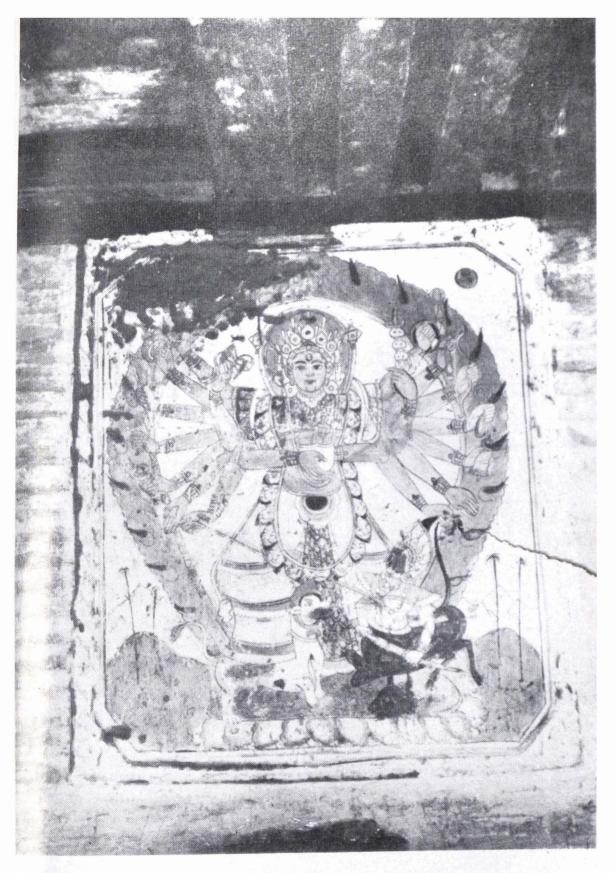


PLATE 61
Wall painting at Candesvarī Mandir, Banepa

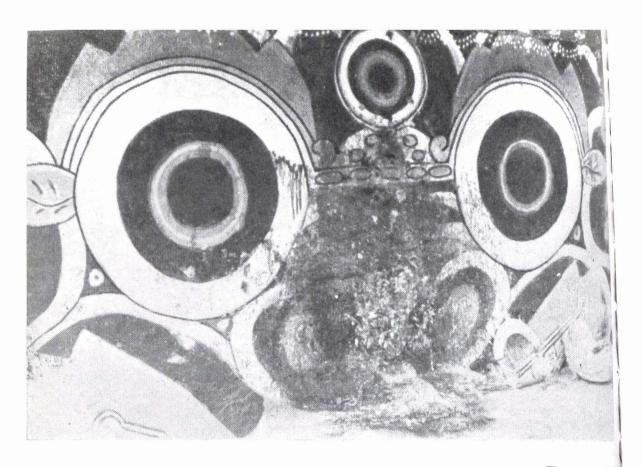


PLATE 62
The great face of Bhairava
at Tika Bhairava shrine, Lele

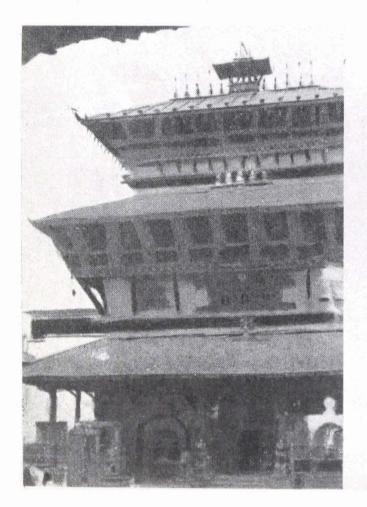


PLATE 63
Bagh Bhairava Mandir, Kirtipur

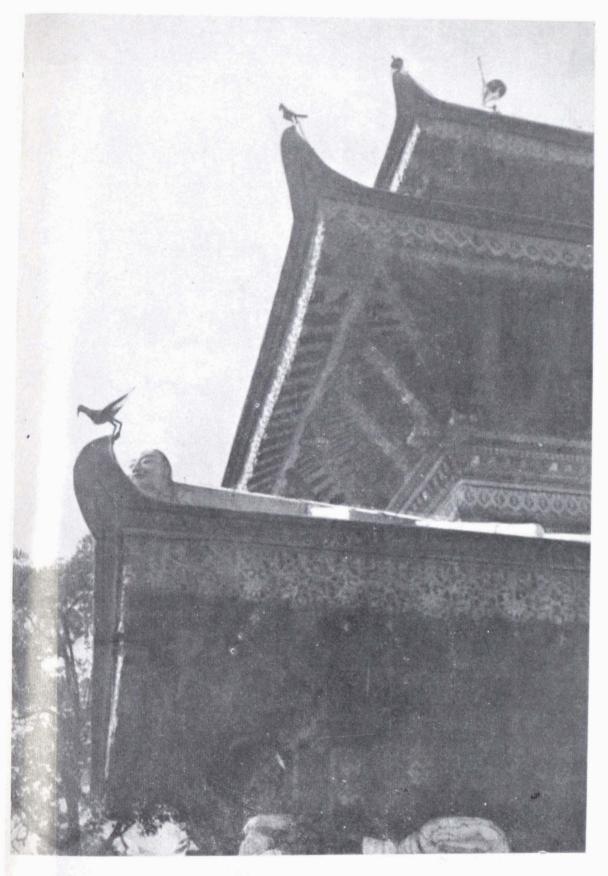
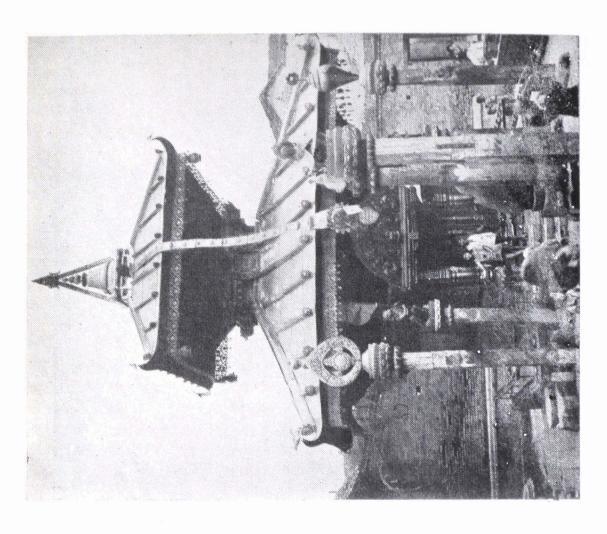


PLATE 64 Roof detail of Kankeśvari Mandir, Kathmandu



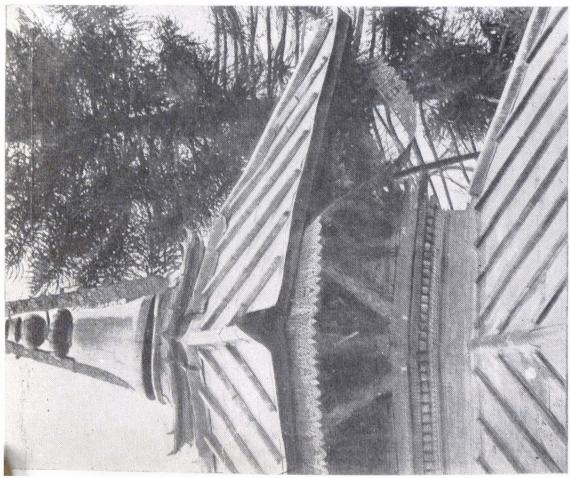




PLATE 67
Multiple pinnacle of Bhagavatī Mandir beside the temple of Taleju in Kathmandu

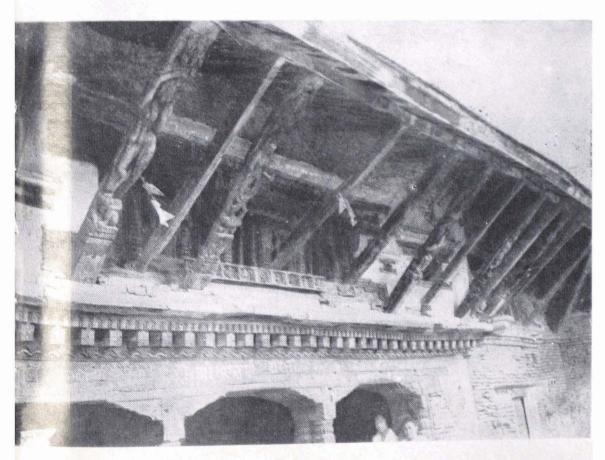
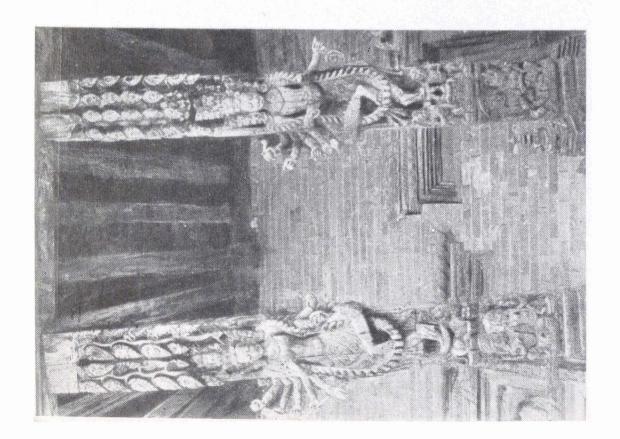


PLATE 68

Roof struts at Itum Bahāl, Kathmandu





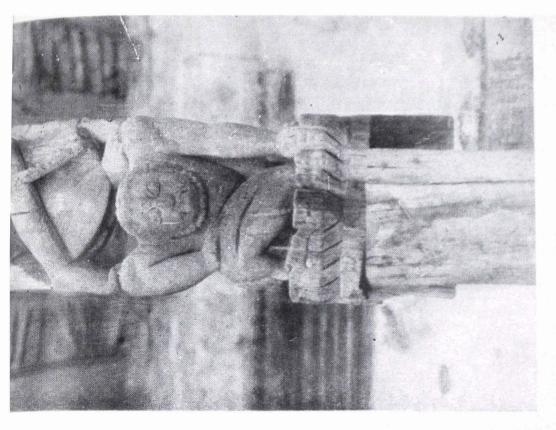


PLATE 71
Schematic kumsala strut on a resthouse near
Tika Bhairava, Lele

Atlante protector at the feet of a female strut figure at Itum Bahāl, Kathmandu

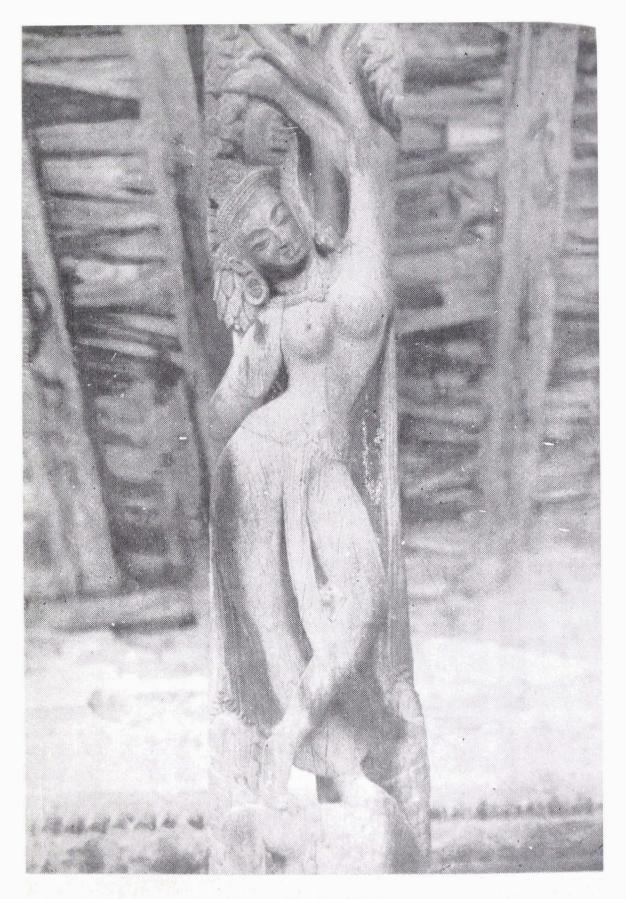


PLATE 73 Detail of a female image at Iṭum Bahāl, Kathmandu

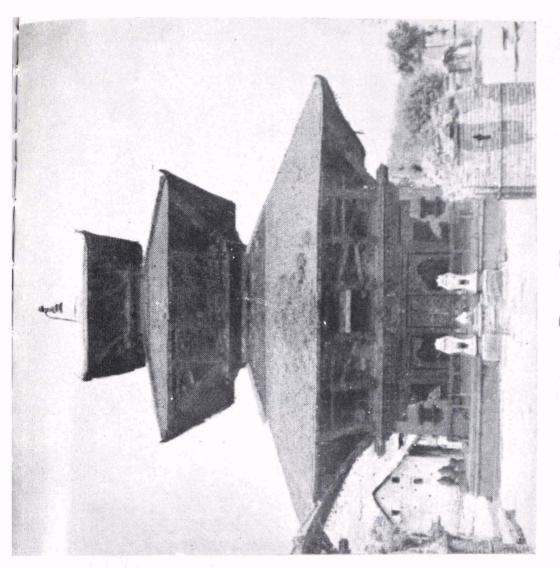


PLATE 75 Indresvara Mahādeva Mandir, Panauti

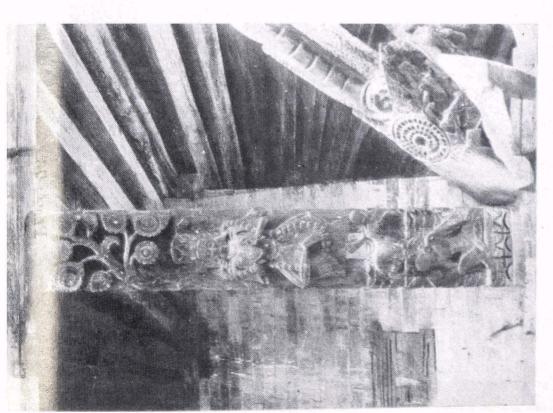
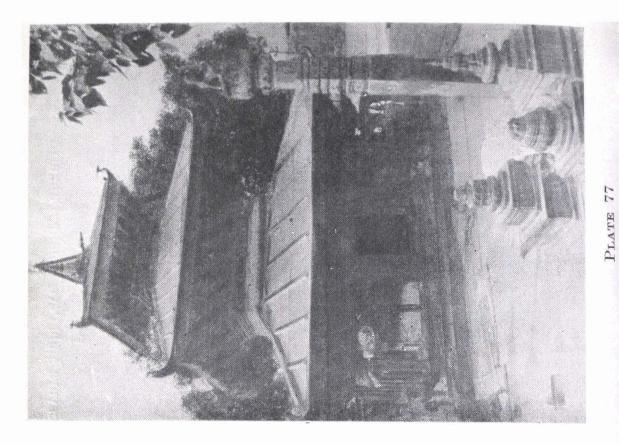
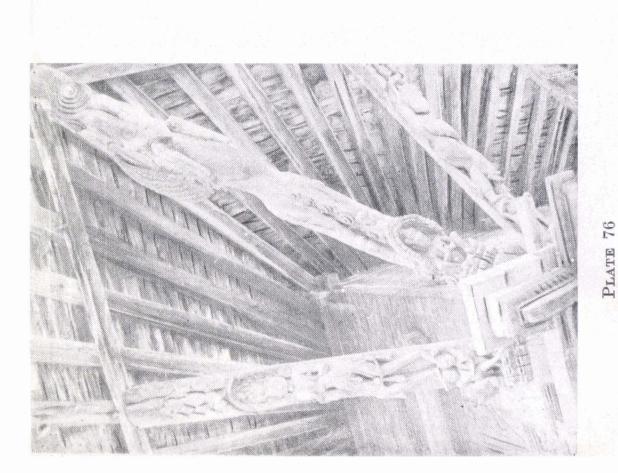


PLATE 74 Kālī image from Tamrešvara Mahādeva Mandir, Devapatan



Kankesvari Mandir, Kathmandu



Strut detail of Indresvara Mahādeva Mandir,

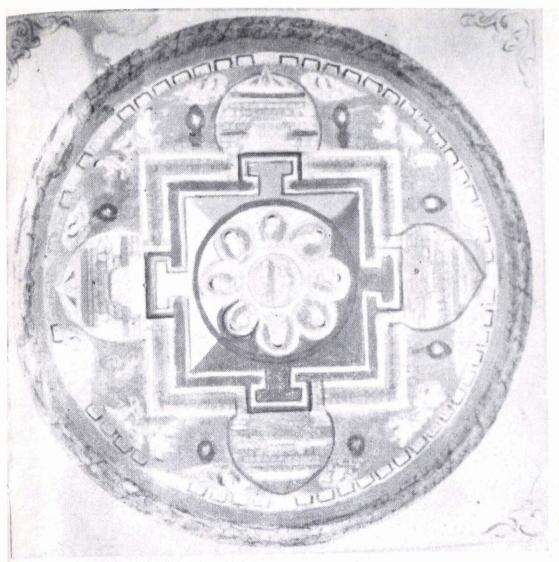


PLATE 79
Detail of painted mandala

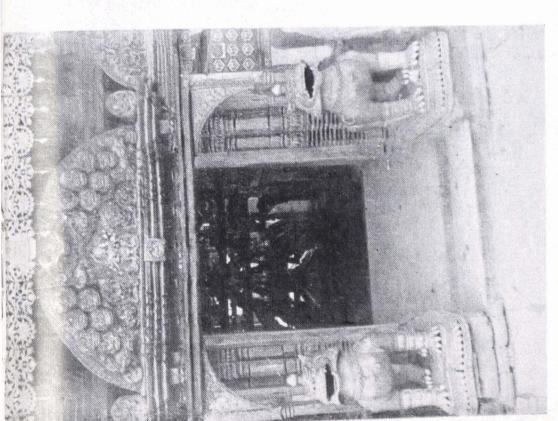


PLATE 78
Entrance to Kankeśvari Mandir, Kathmandu

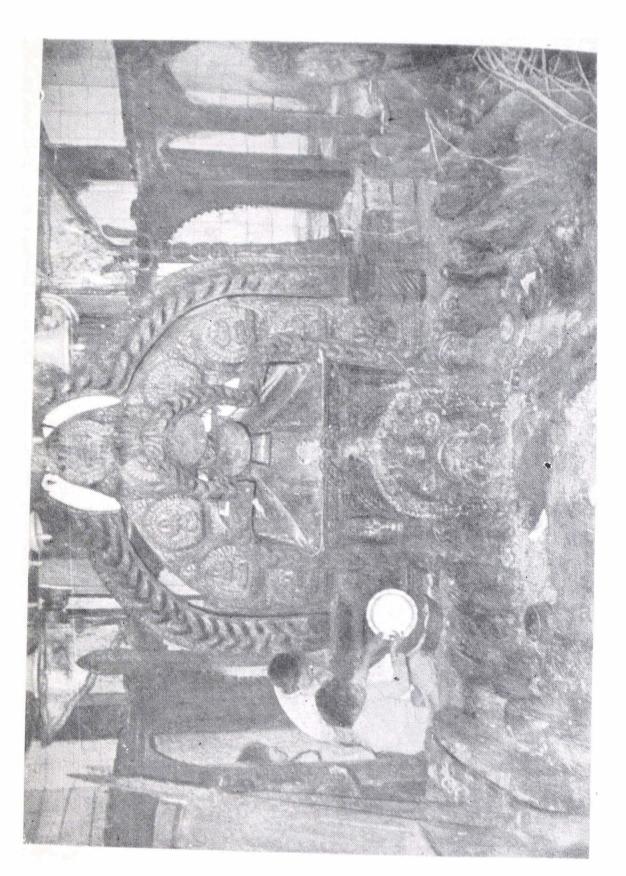




PLATE 81

Detail of alter complex, Kankeśvari Mandir, Kathmandu





PLATE 83

Maṇḍala construction with strings at the riverside near

Kankeśvarī Mandir, Kathmandu

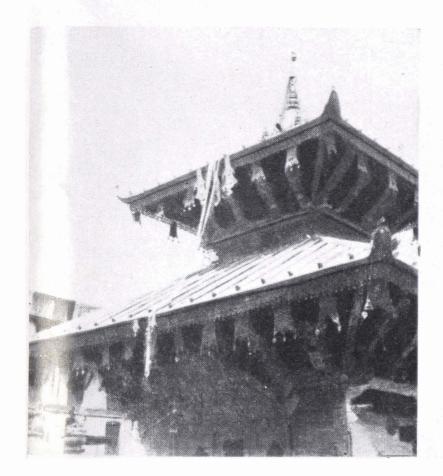


PLATE 84
Freestanding pagoda
of Matsyendranātha,
Kathmandu



PLATE 85
A painted mandala diagram on a Buddhist monastery wall



PLATE 87
Inner shrine of Matsyendranatha, Kathmandu

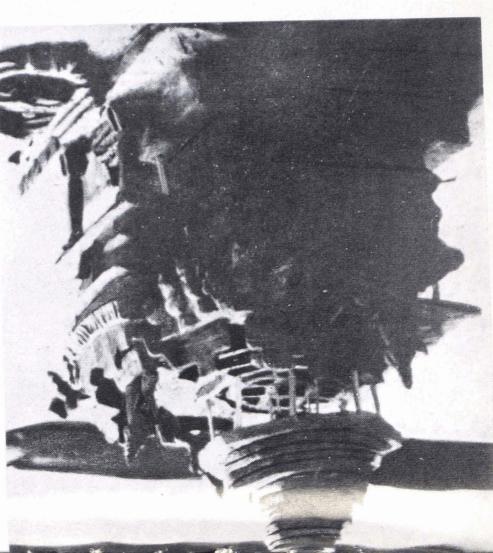
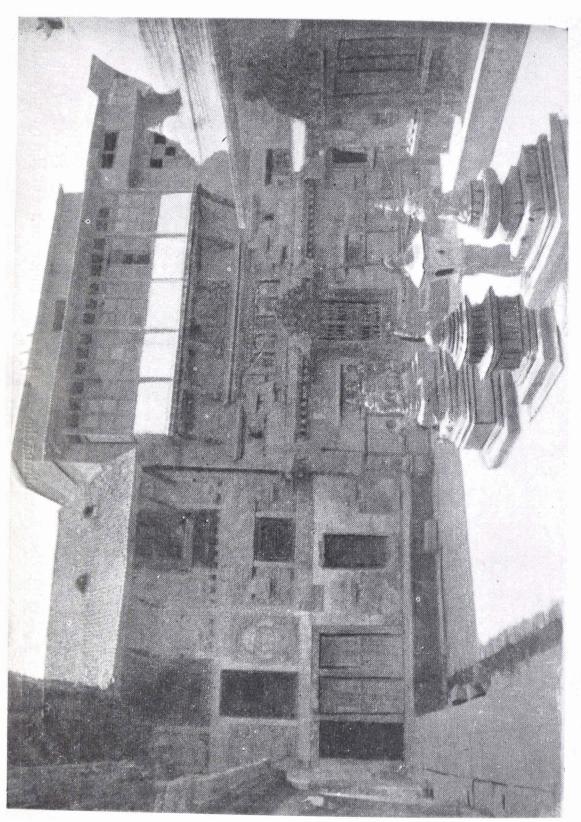


PLATE 86
A three-dimensional manidala built by monks at Svayambhunātha
at the request of Dr Christopher George



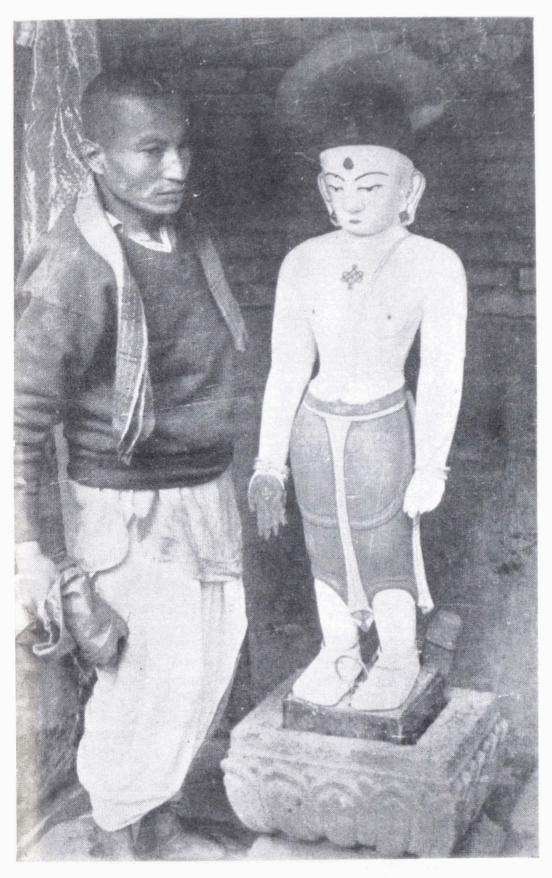


PLATE 89
The wooden image of Matsyendranātha being repainted,
Kathmandu



PLATE 90 Kumbheśvara Mandir, Patan



PLATE 91 Brahmāyanī Mandir, Panauti

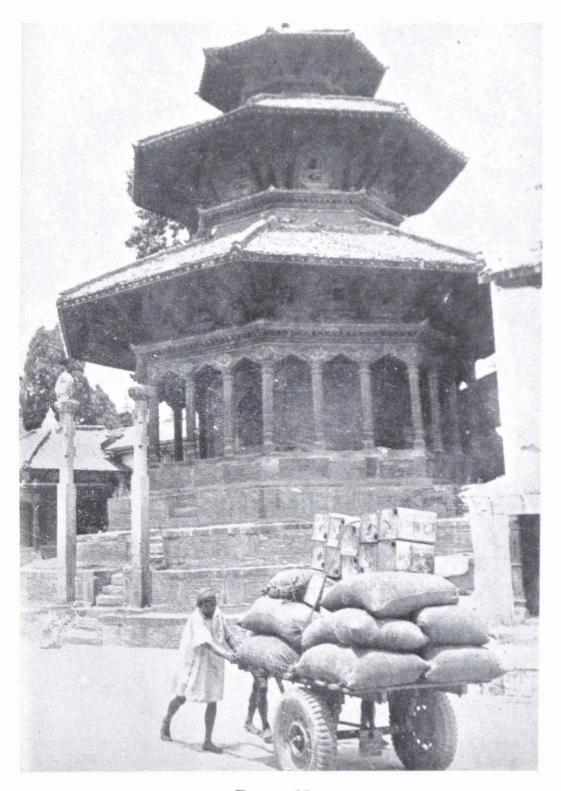


PLATE 93
Octagonal temple of Kṛṣṇa, Hanumat Dhoka palace square, Kathmandu



PLATE 94
Shrine towers of the old palace, Kathmandu

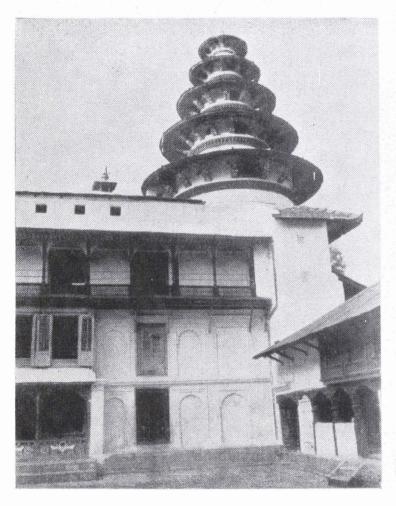


PLATE 95
Circular tower of
Hanumat attached
to the old palace,
Kathmandu



PLATE 96
Vajra Yogini temple
with upstairs prayer
hall and balcony,
Pharping



PLATE 97 Kaṣṭhamaṇḍapa temple Kathmandu

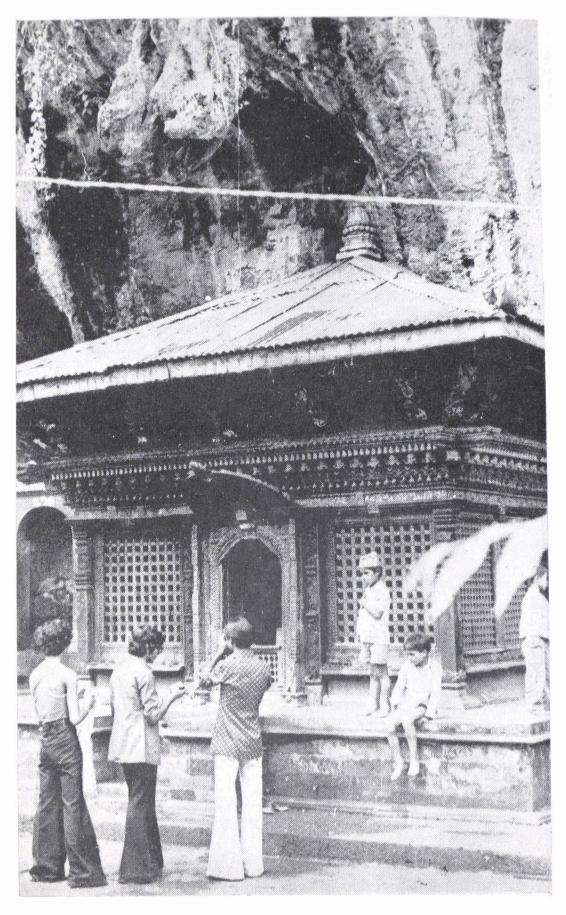


PLATE 98
The cliffside temple of Sekhara Nārāyaṇa near Pharping

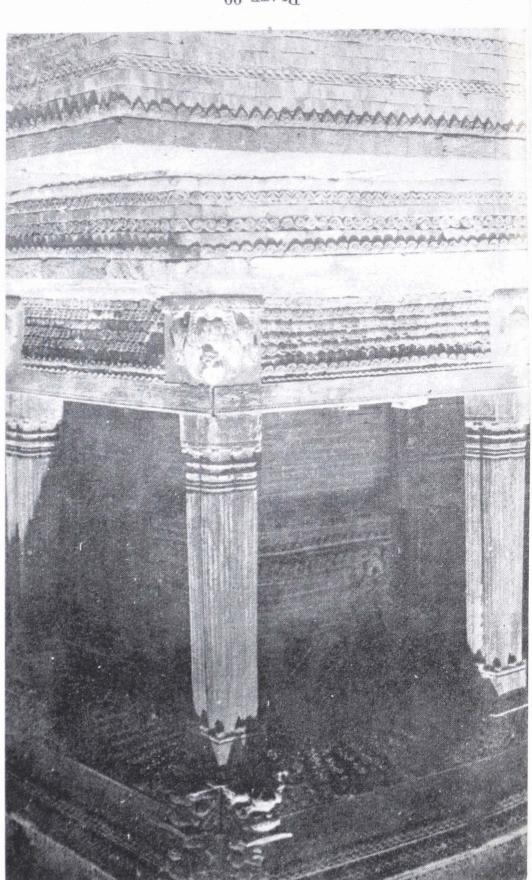


PLATE 99 Śiva Mandir in Pachali (detail)

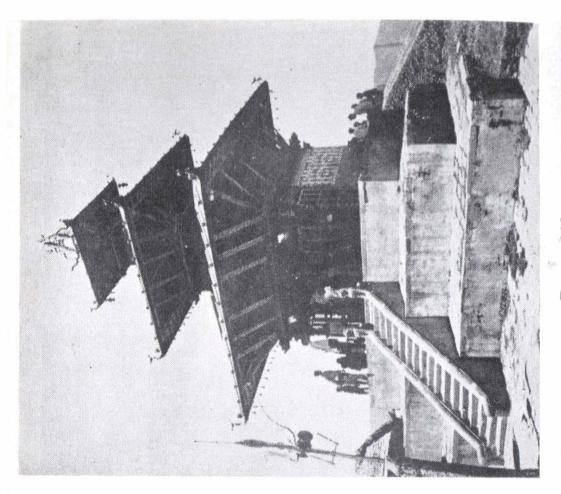


PLATE 101 Bhagavati Mandir, Dhulikhel

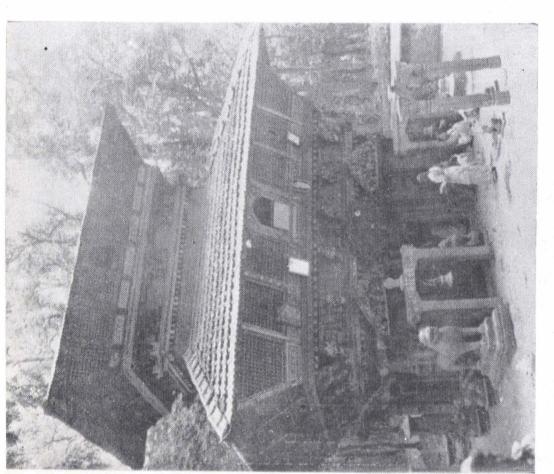
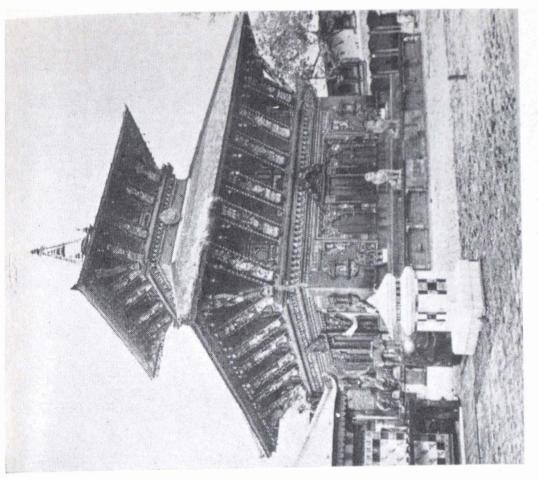


PLATE 100 The forest temple of Vajravarāhī, Chapagaon



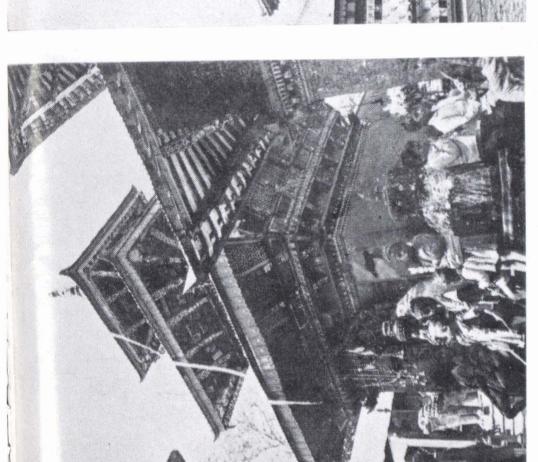


PLATE 102
The mountainside temple of Vajrayogini, Sankhu

PLATE 103 Cangu Nārāyana Mandir

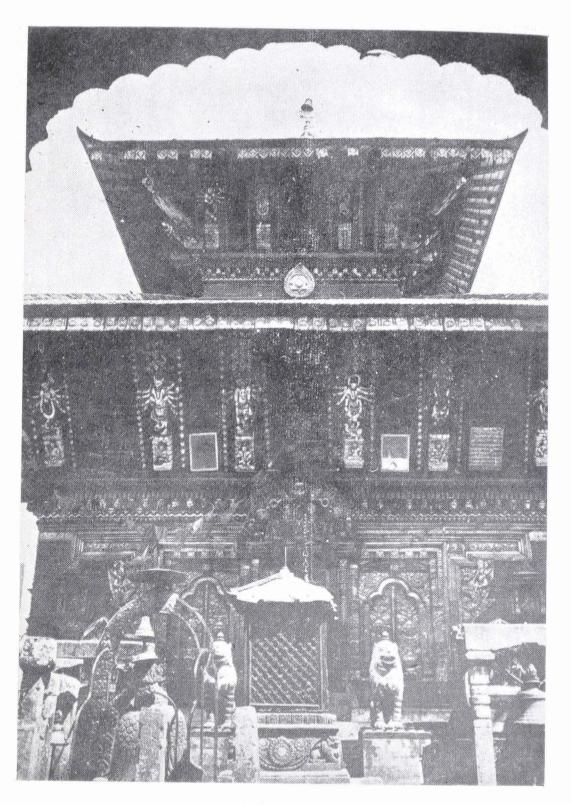


Plate 104 Cangu Nārāyaṇa Mandir (detail)

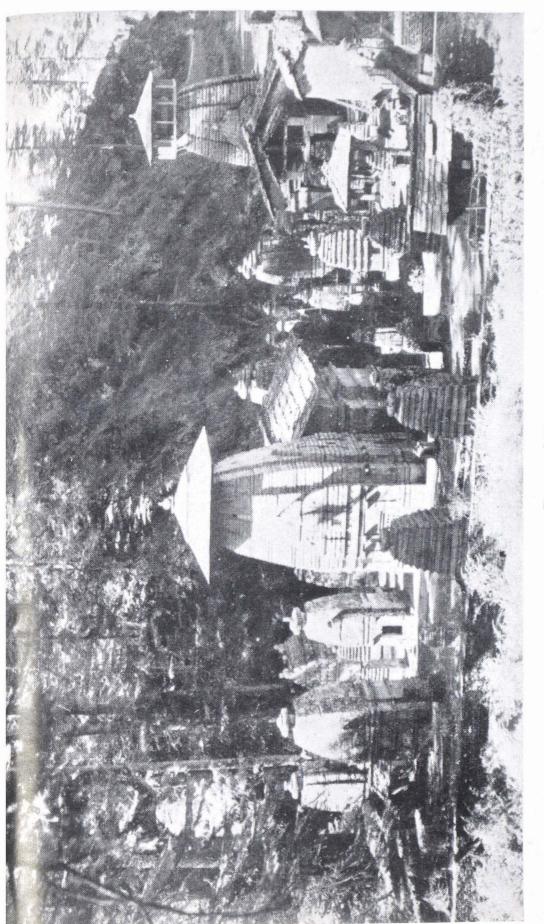


PLATE 105 Temple of Jagesvara, Almorah

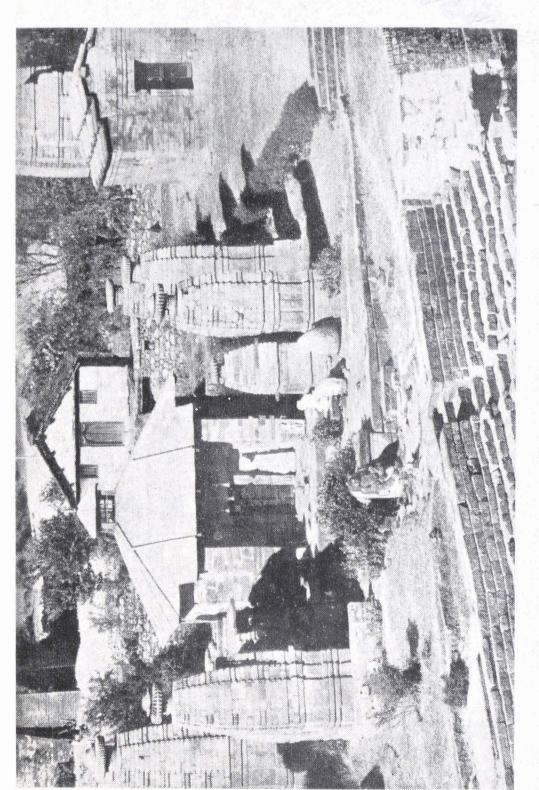


PLATE 106
Temple of Pārvatī, Baijnātha, Almorah

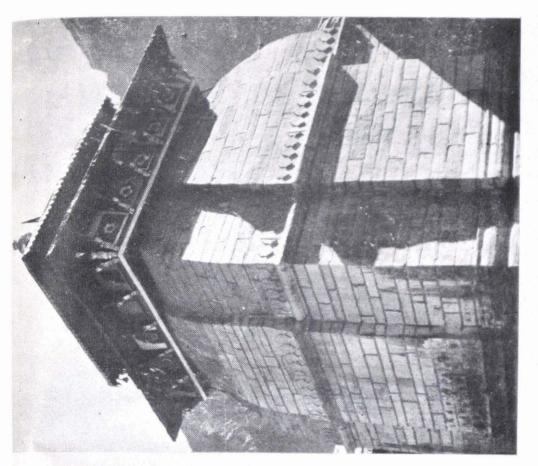


PLATE 108 Temple of Badrinātha (detail)

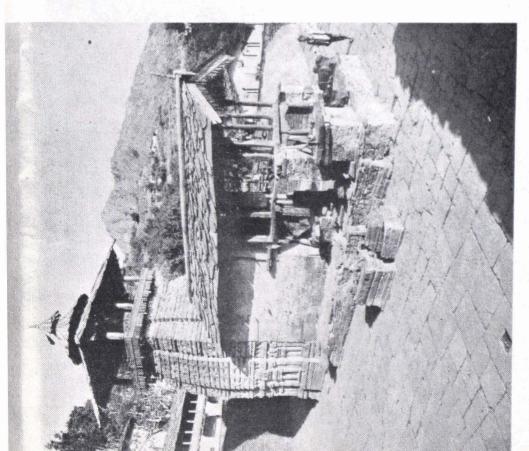


PLATE 107
Temple of Siva, Lakhamandal

PLATE 109

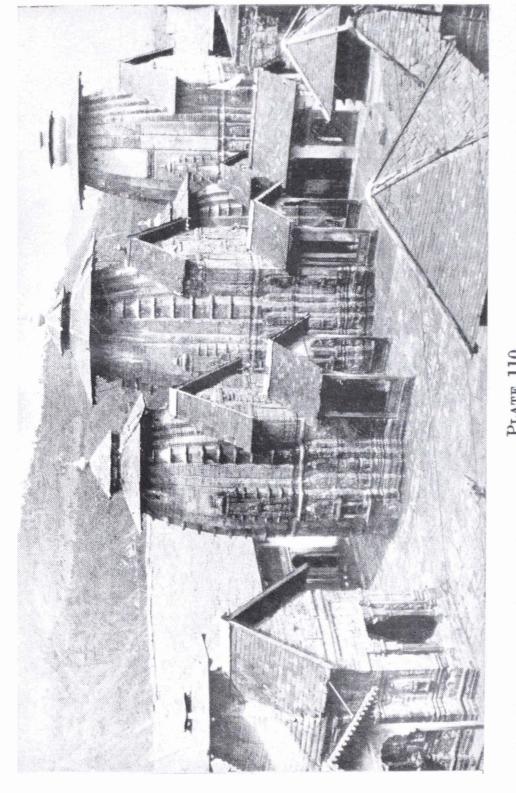


PLATE 110
Temples of Chamba town, Himachal Pradesh



 $\begin{array}{c} {\rm PLATE} \ \ 111 \\ {\rm Temple} \ {\rm of} \ {\rm Dev}\bar{{\rm i}} \ {\rm near} \ {\rm Bhandal} \ {\rm village}, \ {\rm Chamba} \end{array}$

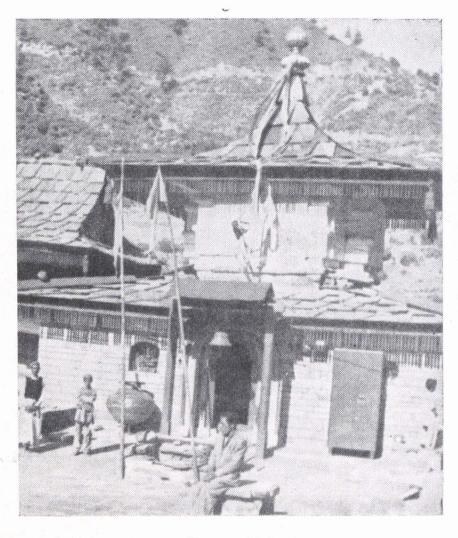


PLATE 112
Temple of Devi, Hat Koti village, Chamba



PLATE 113
Temple of **Ś**aktī Devī, Chatrarhi, Chamba

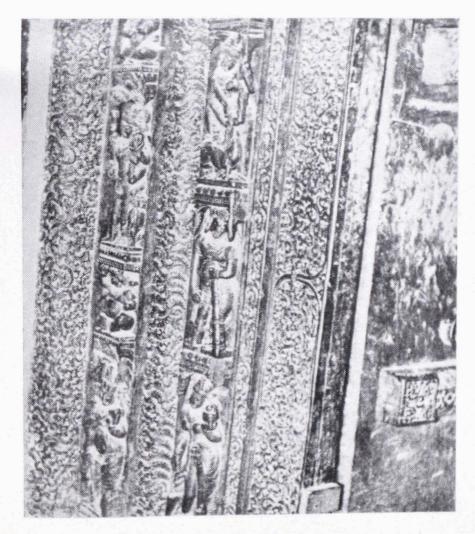


PLATE 114
Entrance of Śakti Devi temple, Chatrarhi (detail)

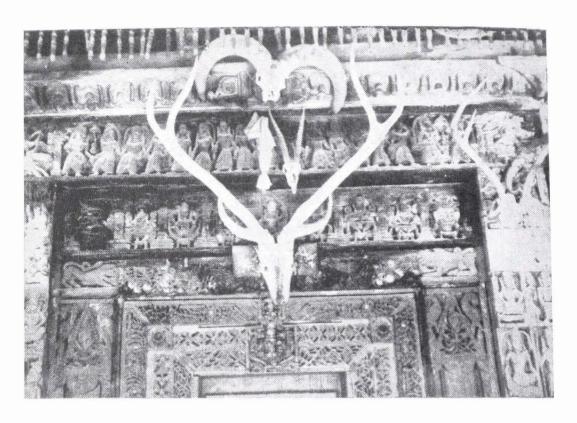


PLATE 115
Temple of Hidimbā (Hirma) Devī, Dhungri, Kulu (detail)

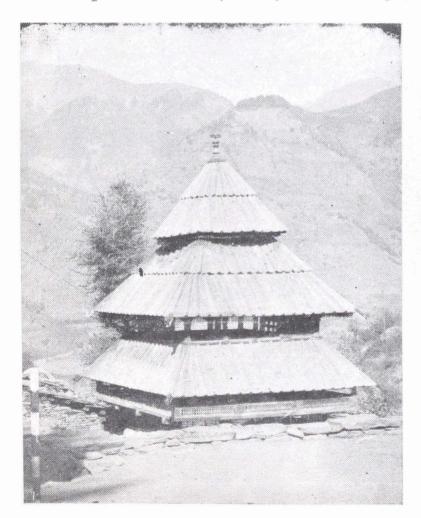


PLATE 116
Temple of
Tripura-sundari
or Śakti Devi,
Naggar, Kulu

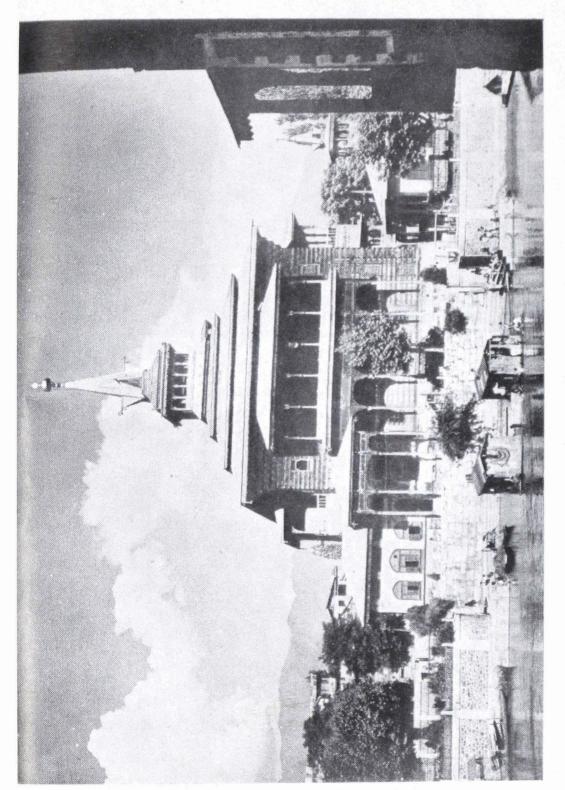


PLATE 117 Mosque of Shah Hamadan, Srinagar, Kashmir

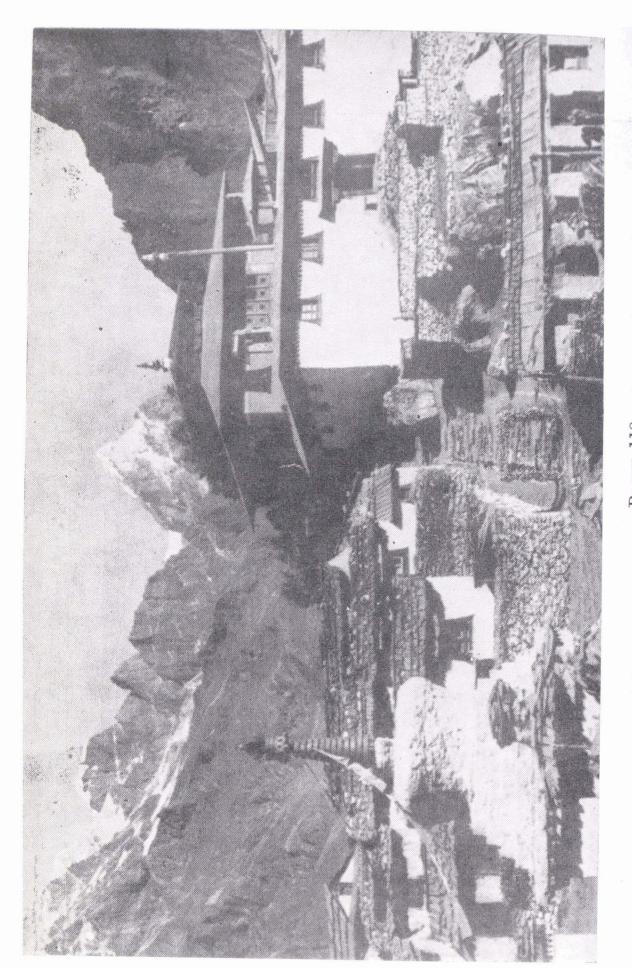
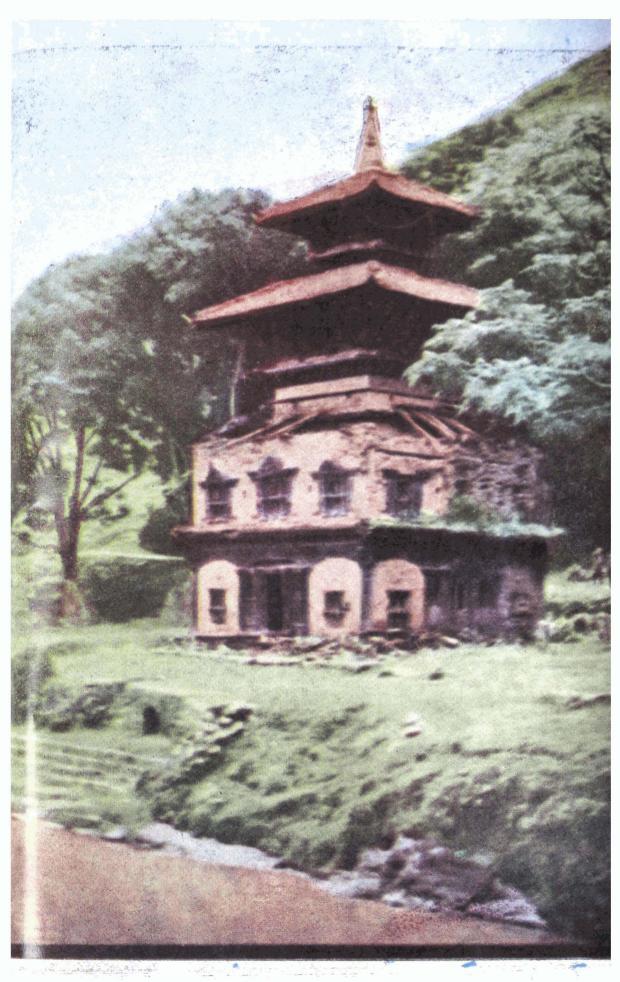
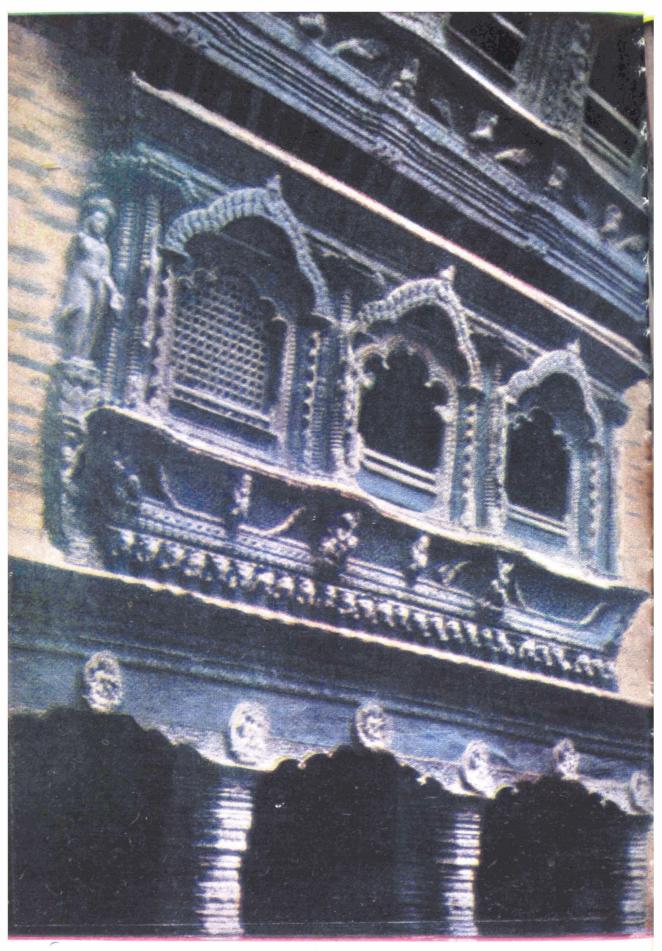


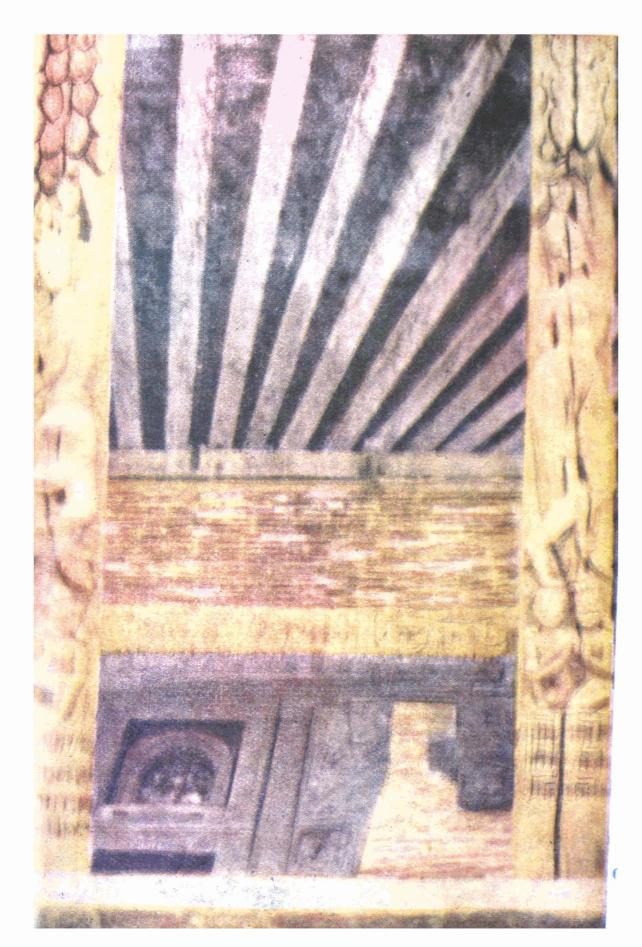
PLATE 118
The monastery complex of Thyangboche, Khumbu, Nepal

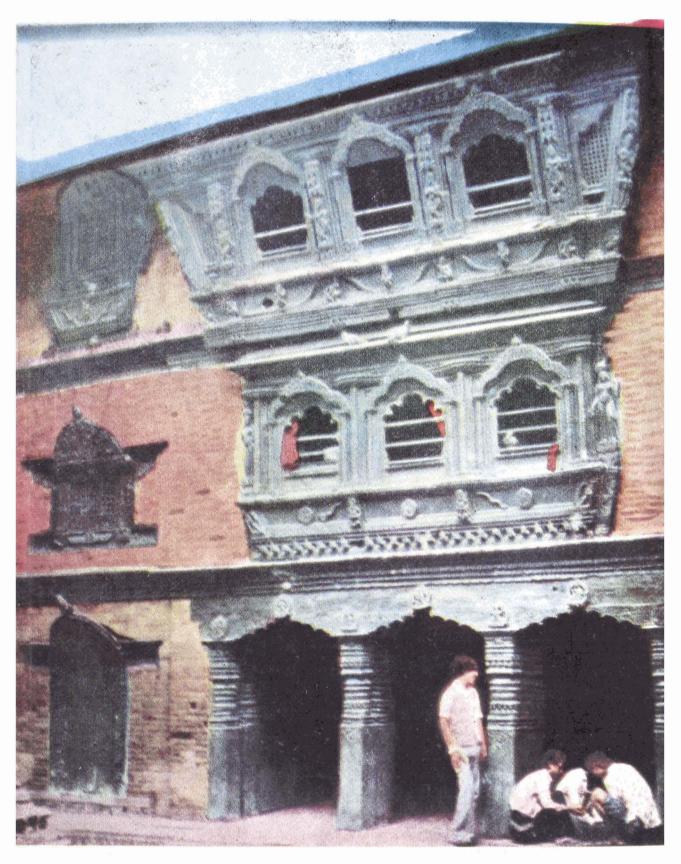


Ruined temple of Brahmāyani, Panauti.

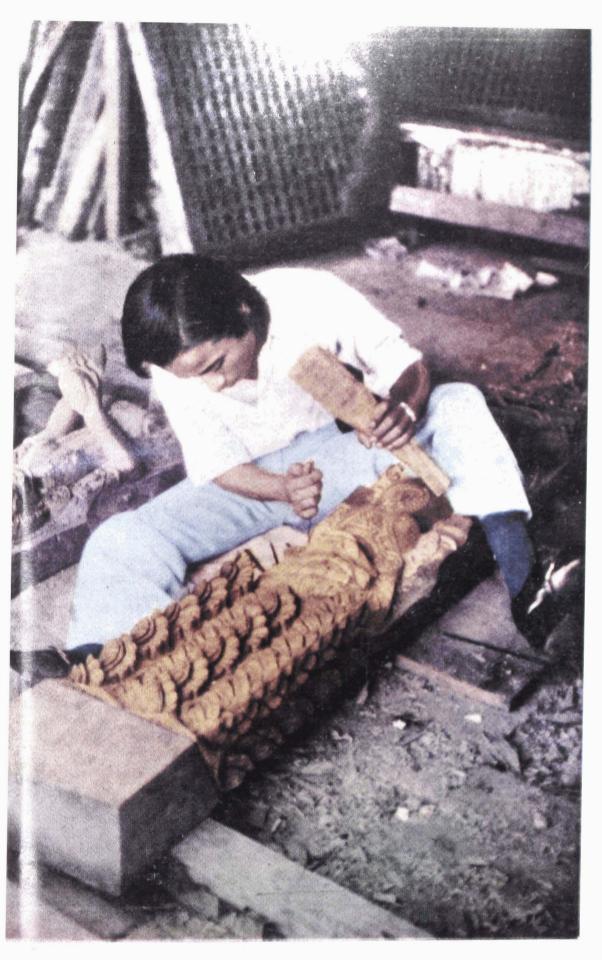


Windows of Kumāri Bahāl, Kathmandu.

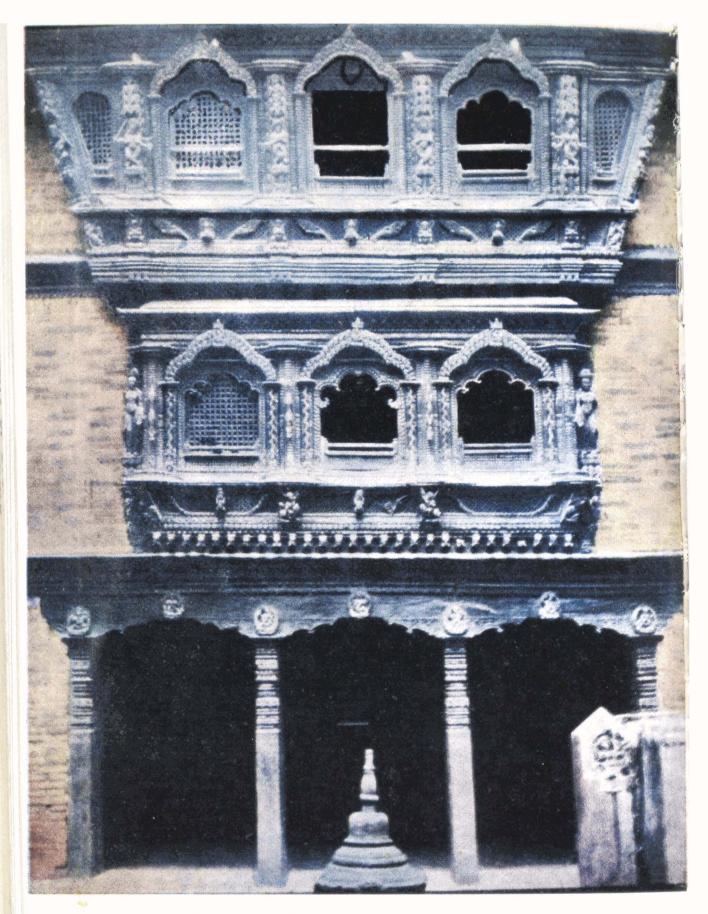




Courtyard of Kumāri temple, Kathmandu.



 $Palace\ restoration\ work\,,\ Kathmandu.$



Carvings at Kumāri Bahāl, Kathmandu.

217 812