

BHUTANESE ARCHITECTURE

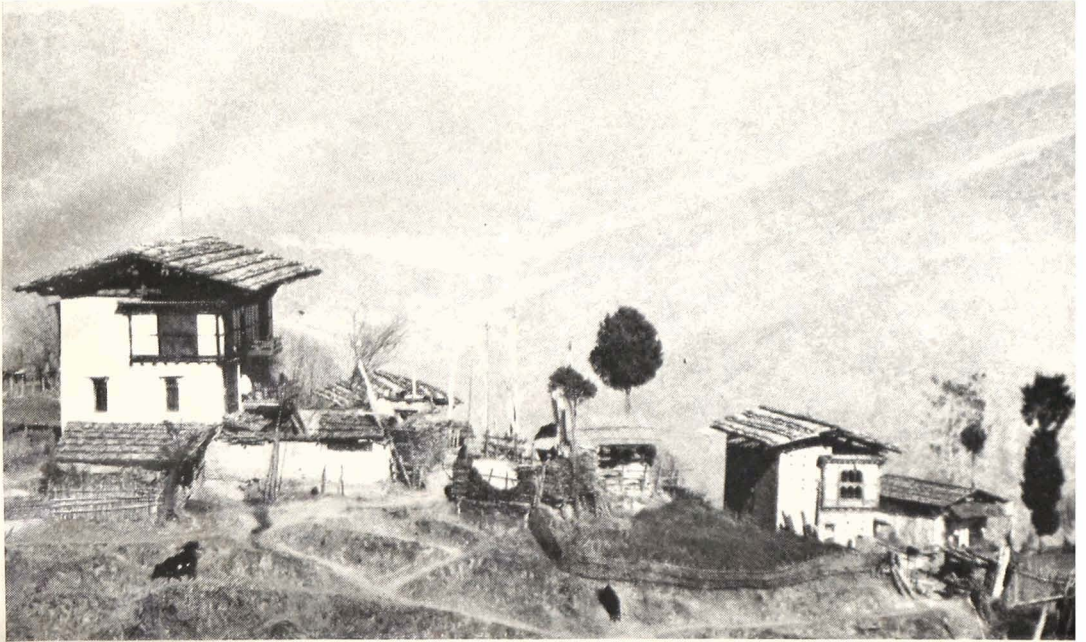
PHILIP DENWOOD

Mr. Denwood's illustrated lecture to the Royal Central Asian Society on October 7, 1970, was suggested by this article, which had already been accepted for publication. He is Lecturer in Tibetan at the School of Oriental and African Studies, London; and in 1968 he spent a study year in Bhutan and Nepal.

THE Himalayas and their foothills, like some other mountainous parts of the world, have become the refuge for ways of life now swept away from the more accessible plains and plateaux on either side. Such cultural watersheds as the Muslim advance across northern India in the twelfth century and the Chinese advance into Tibet in the 1950s left communities in the Himalayas untouched, though cut off from the wider worlds of which they had been part. Thus western scholars have long been aware of the survival of Indian Buddhism in a much-modified form in the Nepal Valley, though it is not so widely realized that the tiered-roof temples used by both Hindus and Buddhists there and in other parts of the Himalayas are a survival of a type of building once widespread in India. Sir Aurel Stein, Giuseppe Tucci and Hermann Goetz have remarked on the persistence of ancient Indian and Central Asian techniques of building, woodcarving, dress and textile weaving in Kunawar, Chamba and even Muslim Chitral, where motifs used in woodcarvings are identical with those of ancient Buddhist sites. A long series of peoples, from the Kafirs of northern West Pakistan to the little-known groups in Assam and eastern Bhutan, provide an almost untapped mine of linguistic and ethnological information. Now that Buddhism in modern Tibet seems to be no longer a living tradition, the presence of pockets of people throughout the length of the Himalayas who have practised Tibetan Buddhism for centuries gives the area added cultural importance.

The largest and probably the most active of these pockets of Tibetan Buddhism is the kingdom of Bhutan. Buddhism was imported into Tibet between the eighth and thirteenth centuries AD, mainly from northern India and Nepal, and as far as is known Bhutan played no part in this importation. The southern part of the country is a zone of steep hills covered with dense jungle, still largely uninhabited, and it was to the north that the Bhutanese looked for new forms of religion. Between the fourteenth and seventeenth centuries a number of monasteries were founded in the central belt of the country where most of the people still live. These monasteries belonged to several established orders of Tibetan Buddhism, mainly the Nyingmapa, Sakyapa and various Kargyupa sub-orders, as well as to the Bonpos who founded monasteries in eastern Bhutan; but the rise of Bhutan as a self-contained state which managed to stave off Tibetan attempts at control was associated with the hierarchs of the Drukpa Kargyupa order.

The name *druk*, primarily meaning dragon, was given to a small monastery in Central Tibet from which the Drukpa Kargyupa sub-order sprang.



1. Farmhouses in a typical landscape.



2. Large farmhouse.



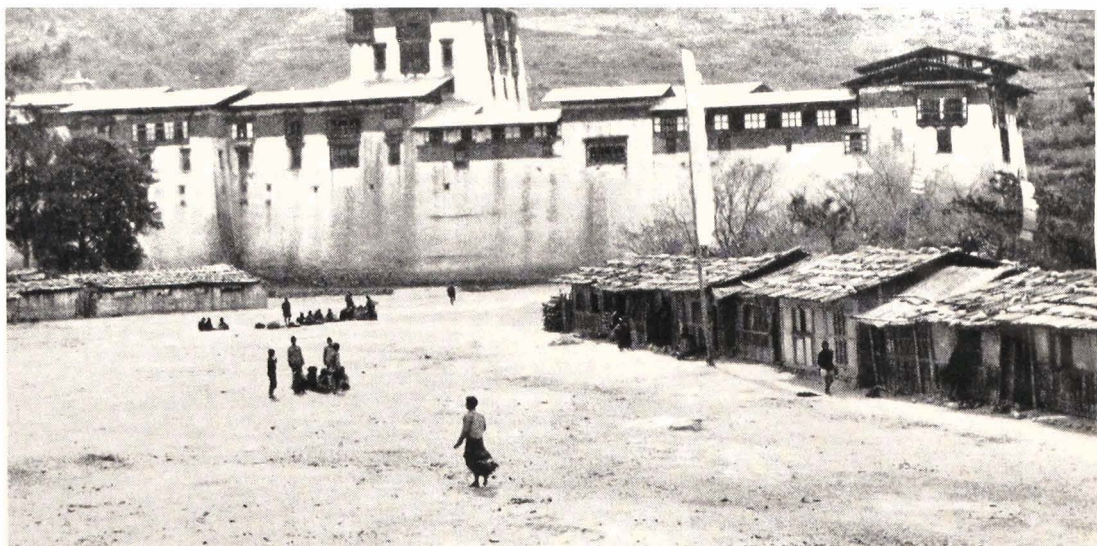
3. Roof details of a farmhouse.

4. Small farmhouse built for Tibetan refugees; traditional style adapted to one storey.



5. Shops under construction, farmhouse behind. The earth wall is being rammed by women.

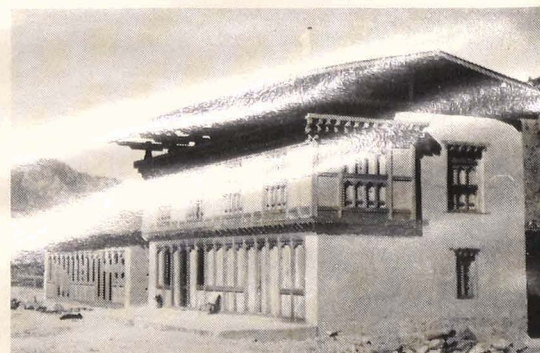
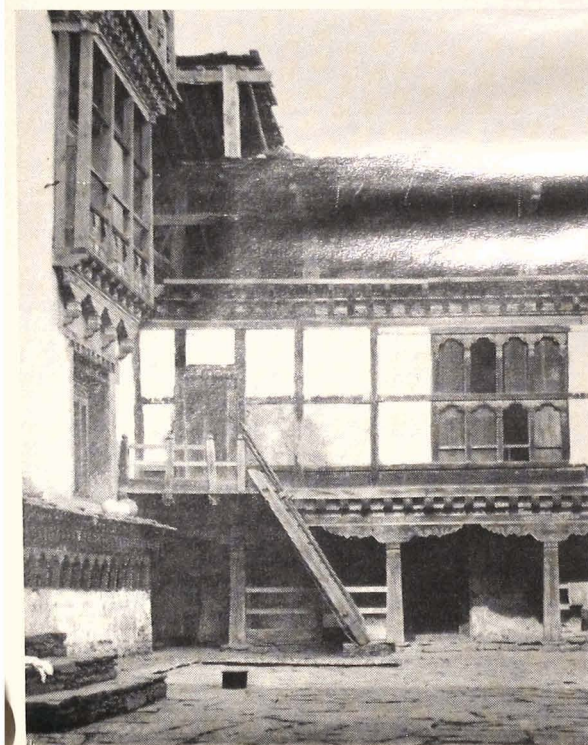




6. Punakha Dzong.
Many of the small shops
in the foreground are
owned by Tibetans.



7. Norbugang: typical
small temple with central
balcony.



8. Thimpu: New shops
under construction by
traditional methods.

9. Courtyard of Talo monastery.
Note the Tibetan-type capitals
and the line of prayer wheels
(left).

As the result of an internal dispute, the Lama Ngawang Namgyel fled with his supporters from Tibet in 1616 and settled in the upper Thim Chu valley where he began to carve out the state of Bhutan, also known as "Druk" in Tibetan and Bhutanese. He became known as the *Shapdrung*, and his successive reincarnations continued to rule the country, nominally or actually, until 1907 when the present royal family gained effective power and was recognized by the British Government of India. Although the Drukpas are the dominant Buddhist group in Bhutan, and their monasteries and temples proliferate everywhere, powerful aristocratic families have usually dominated political life and the church as an institution has not attained the superior position of the Gelugpas in Tibet.

As they appear today, the Bhutanese people, as distinct from the Nepalese settlers and various little-known ethnic groups in eastern Bhutan, are clearly a part of the Tibetan cultural world. Their main language is a dialect of Tibetan, and their social organization, material goods, building styles, folklore and music all seem to be variants of what can be found in southern and eastern Tibet, although blended to produce a distinctive ensemble. Casual impressions suggest that the Bhutanese are racially more diverse than the Tibetans, who are themselves made up of a number of physical types. The Bhutanese are settled in a central zone about fifty miles wide which lies at an altitude of five to twelve thousand feet above sea level. South of this zone, the jungly hills are cultivated on their southern fringe by settlers of Nepalese origin, and north of the zone the treeless mountains and plateaux bordering on Tibet support only a few nomads. The Bhutanese proper live in small hamlets or villages amid terraced rice-fields in the valley bottoms, or higher up on grassy spurs. Pigs and cattle are the main livestock, rice the main crop, and a good deal of petty trading in the Tibetan manner brings extra income to many of the farmers who form the bulk of the population.

It is not known where and when the techniques of house-building were learned by the Tibetans (among whom I include the Bhutanese for the moment). They may of course have invented these techniques for themselves, but a simple comparison of constructional methods strongly suggests an origin to the west of Tibet, in the areas occupied in early historical times by speakers of Iranian languages. The techniques themselves go back to remotest antiquity and seem to have been developed in the Middle East in the first place. The basic idea is very simple: straight, solid, vertical walls, usually in conjunction with wooden columns, support the horizontal wooden beams of the flat roof or upper storey, to produce a rectangular box-like room which may be repeated upwards or sideways as desired. The idea is very familiar to us because since the "classical revival" of the seventeenth and eighteenth centuries it has been responsible for most buildings in Western Europe, but it is very different from the ideas behind, for instance, Chinese buildings, Indian farm buildings on the Indo-Gangetic Plain, or for that matter medieval European buildings. In China, India and Europe, farm buildings have often been built around jointed wooden frames of various types which incorporate a pitched roof into their structures. Whatever their origins – and much research needs to be done before we can be sure – Tibetan buildings in general rely mainly on massive

walls of stone, earth or mud-brick, built into heavy rectangular structures with flat roofs. They have often been compared idly to Egyptian, Assyrian and even Greek buildings, and indeed there may be some connection.

Whether or not most of the Bhutanese moved into their country from Tibet, they certainly adopted a thoroughly Tibetan type of farmhouse. These houses make a very striking impression on the visitor and are constructed on the same lines throughout western Bhutan and apparently in the east as well. The house depicted in Fig. 1 is one in which I stayed for two nights in 1968 and is typical of the general run of Bhutanese farmhouses. It stands together with a few others in a small hamlet like the one shown in Pl. 1, just above the rice-fields which occupy the lower slopes and floor of the valley. Thick jungle covers the slopes above the hamlet – a source of firewood and leaves for fodder – though over most of the inhabited area of Bhutan the jungle would be replaced by scrubland or pine forest. The main walls of the house are about three feet thick at the base where they rest on stone foundations, and they taper slightly upwards. They are made of rammed earth (sometimes called *pisé de terre* and known as *gyang* in Tibetan). It is a common sight to see these walls being built. Two lines of planks are set on edge on top of the foundations and held in place by wooden bars. Teams of women and girls then pour earth between the planks and ram it hard with long rammers to the rhythm of special songs. After some hours' pounding and lusty singing, the planks are raised to rest on pegs driven into the completed layer, and the next layer of some two to three feet is pounded. The junction between the layers, and the holes for the pegs, can usually be seen on the finished building, helping to break up the effect of the large expanses of blank, light brown-coloured wall. Meanwhile the men are hewing and trimming the timbers for the floors, roof and upper storeys, using long straight knives and axes. Huge tree trunks (usually of the so-called Bhutanese Pine, apparently the same as the Blue Pine of Kashmir) are transformed into square-sectioned timbers and floor-planks by what is essentially a process of carving, rather wasteful of wood which is fortunately in plentiful supply.

To return to the farmhouse where I stayed: it had a walled yard in front, where a few cattle were browsing on leaves collected in the jungle. The cattle also had possession of the ground floor of the building. We entered the house by a ladder cut from a single piece of wood which led to a platform of bamboo rods laid on some of the ground-floor ceiling joists which projected from the wall. A doorway led from this platform into the windowless first floor whose rooms were used for storing grain, beer and other produce. Another ladder led up to the top store through a trapdoor, and we were now in the living quarters proper. These were surprisingly spacious, providing ample room for a married couple and their ten children, as well as my Tibetan companion and myself.

The main living-room was furnished with a hearth for cooking, a few carpets and low cupboards, and domestic utensils hanging from the walls. We ate the evening meal sitting round the hearth, and after an impromptu dancing display by the mother and two children, the whole family bedded down on the floor. The main inconvenience of the evening was the clouds of smoke rising from the hearth and filling the room whose walls were al-

ready encrusted with soot. This smoke I escaped by retiring to a small guest room where I slept on several carpets piled on the wooden floor. From this room I could look through to the chapel on the other side of a framework of pillars which helped to support the main roof beam.

The outer walls of the guest room and much of the main living room were made not of rammed earth but of a framework of wood, jutting slightly outwards and filled in with thin wooden panels broken in places by narrow window-lights with trefoil-shaped tops. These windows could be closed off with sliding wooden shutters on the inside. The rest of the walls on this floor were just continuations of the rammed-earth walls below.

The roof of the house, perhaps its most striking feature when viewed from afar, proved on closer inspection to be structurally the most interesting part of the whole building. On the flat top of the main body of the house, four trusses of heavy timbers rested, held together solely by the ingenious way in which their vertical and horizontal members were slotted into one another, and kept from falling sideways by further rods running from one truss to the next. The surfaces of this pitched roof were covered with layers of thin wooden strips weighted down with rows of stones, and the whole space so roofed formed an open-sided and open-ended loft used for stacking firewood and fodder.

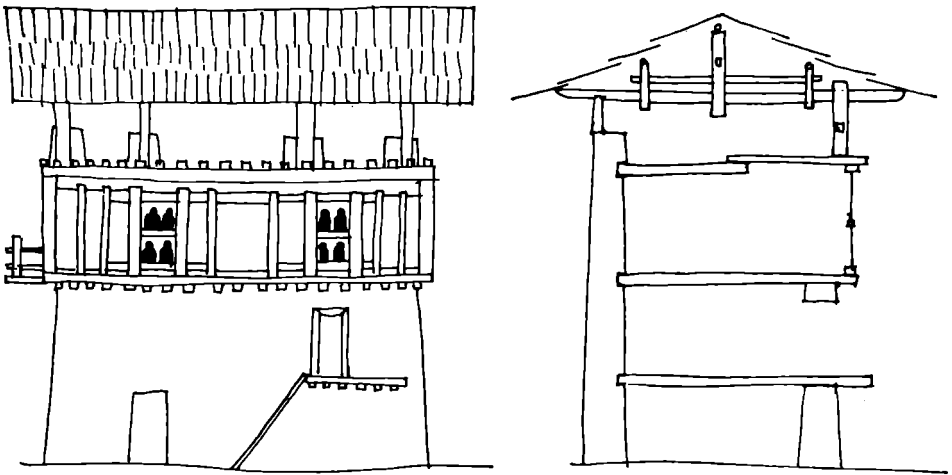
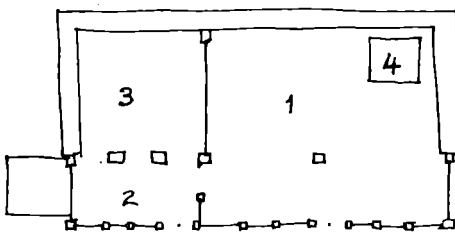


Fig. 1: Typical Farmhouse. Elevation and section



Plan of Upper floor.
 1: Living Quarters.
 2: Guest Room.
 3: Chapel.
 4: Hole for access from below.

Comparison with the houses of Tibet proper confirms the view that the Bhutanese are part of the wider Tibetan world. There are four characteristics which declare the Bhutanese house to be of the general Tibetan type. The first is the reliance on heavy, load-bearing walls already mentioned. The second is the multi-storey arrangement in which people live above their animals. The third is the flat roof (in the Bhutanese case, covered by an extra pitched roof) used for storage and as an extension of the living space. The fourth is the poor provision for heating. An internal hearth is the sole means of cooking, heating and often lighting after dark – its smoke must find its way out as best it can, which in Bhutan means by the windows, in other parts of Tibet by a hole in the roof. Of course these four characteristics may be found individually or in combination of two or three in the houses of many other areas around Tibet and elsewhere, but the presence of all four together stamps a house as Tibetan in its wider sense. Other features are worth noting: the generous size of the house and its rooms, the lack of furniture, and, despite an air of grubbiness often mentioned (and often exaggerated) by foreigners, the evident pride and care taken in the construction and often the decoration of the house. A Bhutanese house is certainly an impressive and beautiful structure, with its large, well proportioned masses enlivened by the white-painted panels of the upper storey and the brightly painted window frames and mouldings.

Individual features of the house can be traced in other parts of Tibet also. The rammed-earth construction is common throughout eastern and southeastern Tibet, and the peculiar pitched roof is to be seen in parts of the Gyarong area of eastern Tibet. The origin of this roof may well lie outside Tibet altogether, this time in the east. It is added as an afterthought to a complete house with a normal flat roof, since the rainfall of Bhutan is far heavier than over most of Tibet proper. The slotting together of horizontal and vertical timbers is common in Chinese roofs of all ages, although in China proper a complex system of bracketing usually supports such a roof. The first people to develop these roofs may have been early non-Chinese groups in what is now southern and western China. It is possible that the wood-framed walls of the upper storeys of Bhutanese houses also owe something to Chinese carpentry. A study of the systems of joinery, which make use of complex mortice-and-tenon joints, might establish this point. The trefoil-shaped windows in groups of two or three, on the other hand, must ultimately be borrowed from India, presumably via Tibet, for they are well known in Nepal and parts of India.

When the first Shapdrung arrived from Tibet he set about building monasteries and *dzongs* (castles) which consolidated and expanded his military and religious authority. The castle had its origins in the strongholds of local chiefs and petty kings of pre-Buddhist Tibet. These strongholds often incorporated towers and were placed on rocky eminences overlooking the cultivated valleys. Monasteries were first built in Tibet in the eighth century AD, at first on level valley land not too far from settlements. During the centuries of fighting, often provoked and led by the rival monastic orders, which lasted from the thirteenth century until after the first Shapdrung left for Bhutan, many Tibetan monasteries had been built with an eye to defence, sited on spurs or hills and provided with ramparts

and defensive walls. The castles, however, remained distinct from these monasteries and continued to concern themselves with military functions and eventually formed a network of military-administrative centres responsible to whatever government was in power in their particular area. In Bhutan the distinction between castle and monastery became blurred as far as the actual buildings were concerned. As will be seen in more detail later, the main dzongs from which the country is still administered incorporate large temples and monasteries which often dominate them physically, while on the other hand a number of monasteries which possess no administrative functions are always called 'dzongs'.

The core of any Bhutanese monastery and most dzongs is the temple or temple-block. Temples may exist alone – in fact the countryside is dotted with them either singly (as at Dechen Phodrang near Thimphu or Norbugang near Punakha) or in groups (as at Phajoding near Thimphu). A few small houses for monks will transform such a temple into a small monastery, but many established monasteries are built in a distinctive style in which a tall temple-block forms one side of a square courtyard whose other three sides are cloistered and serve as accommodation for monks (as at Tango near Thimphu and Talo near Punakha). Although such monasteries are often called dzongs by the local people, the dzongs which today carry out administrative tasks are a good deal larger and built on the pattern of a tall free-standing temple-block completely surrounded by a rectangle of buildings which present a continuous wall to the outside (as at Tashichodong in Thimpu, Punakha Dzong and Simtokha Dzong).

I was able to stay for two weeks at Talo monastery which was for a long time the seat of the Shapdrungs (see fig. 2). It is sited on a favourite location for temples and smaller monasteries – the top of a spur where there is a patch of comparatively level ground on which a small village has clustered, in this case a good thousand feet above the valley floors. It commands magnificent views and doubtless defensive possibilities were in mind when it was built. It is arranged on the "temple-block and courtyard" plan, and is essentially similar in design, layout and site to the monastery at the head of the Thim Chu Valley. The whole building faces southeast, that is to say the main entrances of both the courtyard and the temple-block face in that direction. The courtyard entrance is a pillared porch approached by a flight of steps and is in practice little used, entrance being normally gained via small doorways where the cloisters meet the temple-block and leave room for the circumambulation-way round the latter. This circumambulation-way is marked by a continuous row of prayer wheels set into the temple wall, and as in Tibet (and formerly in Buddhist India) it is customary to pay one's respects to the temple and its divinities by walking round in a clockwise direction. Before entering the courtyard, Bhutanese will often observe certain conventions of dress, just as they must do when entering one of the major dzongs. Thus men and women don a sash, in the case of men coloured according to their rank, and heads are bared and men's trousers rolled up above the knee.

Inside the courtyard the three sides not occupied by the temple-block are of two-storey construction. Above a pillared arcade behind which are living quarters, the upper storey is faced with the same wooden frame

and panelling observed on the upper storeys of farmhouses. This upper storey is largely given over to small chapels as well as the Shapdrung's personal quarters, now unoccupied. The main temple is entered by a further flight of steps since the whole block is raised on a kind of semi-basement storey. The temple is of three main floors, each floor being divided into three main rooms, a large central one with two smaller flanking chambers. On the ground floor the central space is occupied by an entrance hall with staircases and the side rooms are used for storage. The rooms on the upper floors are all chapels, with the largest and principal one at the top in the centre. This is occupied by images of most of the Shapdrungs, ranged round the back and side walls with the first, Ngawang Namgyel, in the centre. The temple-block, like the lower buildings round the rest of the courtyard, carries an extra pitched roof on top of its flat roof exactly like ordinary houses, though the roof itself is rather more elaborate. A very small turret or third roof has been added right at the top in the middle. The main windows of the temple block look to the front and the two sides, being constructed in the form of triple-bayed balconies, each one slightly wider than the one immediately below.

The entire building is sited on a gentle slope, and as the courtyard is level there is room for a basement storey round the three lower sides of the courtyard. This, accessible only from the outside, houses cattle and other livestock. The major part of the weight of the whole building is carried by the usual massive walls of beaten earth resting on stone foundations.

The analogy with the ordinary farmhouse is immediately apparent. From the pitched roof at the top, sheltering the "master of the house" on the top storey, to the cowsheds in the bottom storey, the arrangement is practically identical. In Tibet, too, this arrangement is sometimes found, but the Bhutanese seem to have specialized in it. The idea is quite logical, since a temple is essentially the house of a particular divinity (in this case, the deified first Shapdrung). In construction, too, the temple breaks no new ground. The temple is merely an overgrown house.

Apart from its size, the monastery is distinguished from the house by its decoration. The main areas of the outer walls are whitewashed, leaving a horizontal band of red towards the top. This band of red is never found on an ordinary farmhouse, although some people do whitewash their houses. Its origin is a curious one. In Tibet proper, the flat roof of the farmhouse is not topped by an extra pitched roof, and is used for sitting, working and threshing corn. It therefore proves convenient to stack brushwood and other fuel around the edge of the roof to form a parapet. Poorer people and those in outlying areas will use this brushwood regularly for burning, but especially in central Tibet the parapet becomes a semi-permanent or permanent feature, retained for its decorative effect and usefulness in preventing people from falling off the roof. Its outer face will be neatly trimmed and often painted black to contrast with the whitewashed walls beneath. The joists of the ceiling of the top storey are allowed to jut out a little way and support the ends of the brushwood via a strip of wood laid across them. A layer of clay may be plastered over the top of the brushwood to keep off the rain. The whole feature now becomes fossilised as a purely decorative motif, and on monastic buildings is elaborated in vari-

ous ways. A further set of false joist-ends may be added immediately below the clay capping, and the joist-ends may be made double, round-section and square-section joists alternating. The whole feature may be repeated vertically two or three times, with one of the levels painted red. The brushwood is often merely a thin layer let into a solid wall, and the lines of joist-ends need not correspond with actual ceiling levels inside the building. In Bhutan the whole motif has been simplified to the point of merely painting a red band on the wall to represent the brushwood and letting into the wall a thin strip of wood carved to imitate the joist-ends. This is understandable when we consider that the model for the motif (the layer of brushwood) is absent from Bhutanese farmhouses.

The roofs are ornamented with the usual Tibetan "victory banners" in the form of hanging cylinders of metal suspended from a central pole. The small turret at the very top of the building is also common in southern Tibet, and may well derive from the tiered roofs of early Indian temples. Since Bhutanese temples already possess height, it has not been necessary to emphasize them by piling up a tower of extra roofs as in Nepal, where the main image of a temple is placed on the ground floor of the building.

The system of columns and beams used to help hold up the ceilings in monastic buildings is purely Tibetan and rarely seen in Bhutanese farmhouses, though it is developed from the columns often used in Tibetan farmhouses. It has been standardized by the Tibetans into a regular "order" with a set arrangement of components, all of them borrowed ultimately from the Indo-Iranian world and imported into Tibet along with the rest of Buddhist culture. The columns taper slightly upwards and in Bhutan are commonly square in section, the faces slightly fluted. Near the upper end is always a constriction or "neck" which can be traced right back to Achaemenid Persian architecture if not farther. This neck is often ornamented with Indian hanging garland or vase-and-foilage motifs carved or painted on the surface. The column then swells out once more and is recessed to hold the capital. Unlike Greek and Roman capitals, which are normally square in plan, the Tibetan ones follow a common west and central Asiatic style in being elongated along the beam they support. The Tibetans have carried this elongation to extreme lengths – the capital of one column sometimes touches the next. The outer face is carved in a swirling cloud-like outline which is often tied into a design painted or carved on the flat faces.

The larger dzongs differ from such temples and monasteries as Talo mainly in layout. Simtokha Dzong is the smallest of the three to be described, and the simplest in layout. It was the earliest of the three to be built – around 1629. There is no means of proving that the present buildings date back to that time, but their appearance is entirely consistent with that date. The woodwork is simple and obviously old, being very worn in places, and the general scale is rather small. Nevertheless, it is very well and solidly built of dressed stone and the walls, which have a pronounced slope, tie the building securely into the irregular hillside. Since Bhutanese farmhouses are built of rammed earth, it may be conjectured that the dressed stone construction as well as the detailing was the work of craftsmen from Tibet itself. The main temple-block, square in plan, consists of a

central chamber rising from the ground to the roof, with three storeys of galleries and roofs around it. A tall standing image of the Buddha occupies this main chamber. The rooms in the outer wall of the dzong are arranged in two storeys, so that the main temple rises above them, and they are lined by columned arcades on the inside. They house the monks' and abbot's quarters and at present accommodate a small school.

Paro Dzong is built on the same lines on the same type of site, but is much larger and more ornate. The courtyard surrounding the central temple-block, instead of being on a single level throughout, is on different levels each side of the main temple, and many of its surrounding rooms, especially on the higher side nearer the entrance, are used as offices for the administration of the surrounding region.

Punakha Dzong is the largest of the three, and the only one built on level valley land, though the other two are only a short way above their respective valley bottoms. The central temple-block is of five storeys and towers well above the surrounding walls. The entrance courtyard is used solely for offices and storerooms, monastic quarters being set around two courtyards beyond the temple and in a large building at the far end.

Paro and Punakha Dzongs have certainly been subject to much rebuilding, but it is likely that they have retained their original layout, which keeps to the pattern established at Simtokha and found in other Bhutanese dzongs besides. Although in all three of these dzongs the main temple is square in plan, their surrounding buildings take on an elongated shape which leaves large courtyards in front of and behind the central block, with only narrow passages on either side. The entrance to the whole building is in all cases at one end, and the first courtyard entered is largely or entirely given over to non-monastic uses. The dzongs, although physically dominated by their temples and housing hundreds, even thousands, of monks to this day, were obviously built as defensive strongholds and most of them have been besieged a number of times.

The above analysis of Bhutanese monasteries and dzongs does not convey their amazing visual effects, both interior and exterior. From the outside, they share with Tibetan buildings the characteristic of seeming to float or soar, despite the fact of their extreme solidity. Punakha Dzong in particular looks like a huge ship riding at anchor in the valley. This soaring effect is perhaps partly due to the subtle inward taper of the walls as they rise, combined with the concentration of ornament towards the top and the jutting roofs. The huge white expanses of wall are set off by the narrow band of red, the brilliantly painted woodwork of the windows and the glitter of gold ornaments. The sudden glimpse of one of these vast white buildings, nearly always dramatically sited, as one rounds a corner is breathtaking. From the inside, the eye is caught by the brilliant colours painted on all the woodwork in vivid combinations, contrasting again with whitewashed walls and stone-paved courtyards.

Bhutan is now moving into the twentieth century, and after a few disastrous experiments with concrete huts is basing its building programme entirely on traditional lines. The outstanding example is the new Government headquarters and Royal Secretariat at Thimphu, the capital. A huge dzong had just been completed to house important government offices,

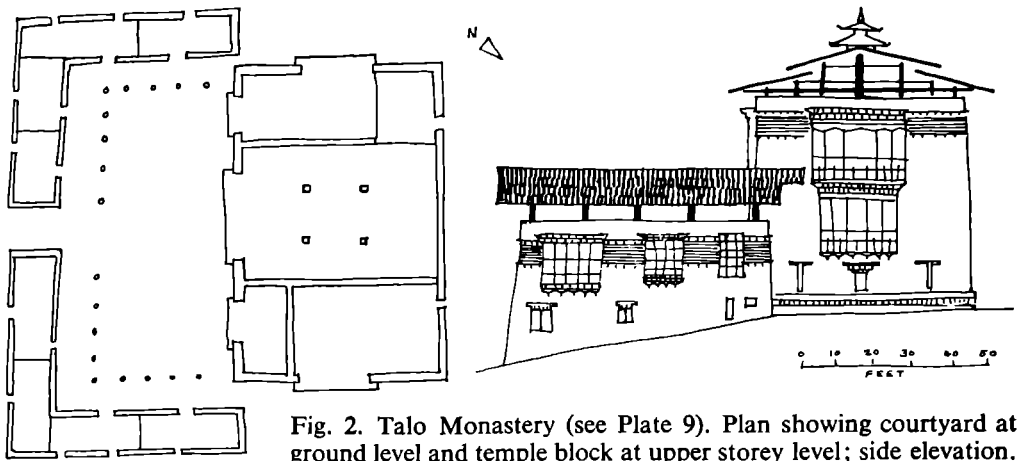


Fig. 2. Talo Monastery (see Plate 9). Plan showing courtyard at ground level and temple block at upper storey level; side elevation.

modelled around the pre-existing temple of Tashichodzong. Once the newness has worn off it will be hard to tell the age of this dzong except by its glazed windows and electric lighting. Every detail is traditional, and built by traditional methods by the normal craftsmen and labourers unaided by mechanical tools. The standard of woodcarving, stonemasonry and painting is as high as it ever was. Many other buildings are also being constructed, and great use is being made of a traditional though hitherto uncommon type of building, namely the wood-framed bungalow. This is a rectangular wooden construction using the same techniques as already observed in the upper storeys of farmhouses. The panels are generally filled in with a daub-and-wattle material, leaving the wooden framework visible and painted to contrast with it rather in the manner of some Japanese buildings. The usual pitched roof is perched on the flat top of the building. Such bungalows are rapidly erected by slotting the components together and resting the building on wooden piles driven into the ground, and the bungalow can later be dismantled if necessary. Great use is made of them for offices which are being built in large numbers especially around Thimphu. Their ancestors are perhaps the guest houses erected near some of the main dzongs.

Towns in Bhutan scarcely existed until a few years ago, the nearest thing to a town being the tents and huts of traders and market stall-holders near the larger dzongs. Thimphu is now a town of sorts, and a special type of shop building has been designed, again using native Bhutanese building elements in a new arrangement which provides a ground floor showroom. The remainder of the town is largely composed of single-storey wooden dwellings arranged in haphazard fashion into residential areas. These leave a good deal to be desired, and yet they are far superior to the precariously built shacks which cluster round the capitals of most developing nations. They are soundly built of good timber, even incorporating the traditional trefoil-shaped windows in many cases, and with the traditional timber roofs weighted down with stones.

Altogether, Bhutan is outstanding among developing countries in the use it is making of its own cultural heritage in the field of architecture. If the present trend continues, Bhutan will soon be the only country in Asia with a distinctive living tradition of building.