



Towns and cities offer opportunities for sale of produce and commodities. Yoruba markets reflect the needs of both rural and urban people and are mainly organized by the women. Western Nigeria.

areas; more than three-quarters of the population live in slum conditions.²⁶ Yet the life of the residents is not uncongenial. Bascom found that kinship bonds were strong, and that the instability and social fragmentation that Wirth identified with the city, did not apply. Though size and density were certainly manifest, the Yoruba city was homogenous rather than heterogeneous, and more recent studies by Schwerdtfeger confirm Bascom's view. This is not to minimize Ibadan's physical problems which are shared by many of the world's expanding cities and which are in some, vastly inflated.

Calcutta for example, defies description: every definition of the city is to be found within it, every characteristic is present in its vast size, high densities, heterogeneous population, diversified structure, social stratifications and sheer numbers of people. It has fine administrative buildings and museums, large public spaces, light and heavy industry, and many citizens with considerable wealth. It also has for hundreds of thousands of people probably the worst living conditions in the world: the teeming popu-

lation of slum dwellers and squatters whose number increase by literally hundreds every day. 'Hooghly-side', the metropolis of greater Calcutta which spreads west and north along the Hooghly river for 40 miles (65 km), provides a tenth of India's total industry and mining, and employment for a million workers—a third in Calcutta itself. Power for the large jute industry and numerous engineering works comes from the hydro-electric plants on the Damodar River and from the coal and gas-fuelled power stations of Duragapur that were built to serve the iron and steel works. India is the tenth industrial nation in the world, with its greatest concentration of industry in the north-east. 'Growth corridors' along the railroad and canals mark the expansion of the cities and the linking of the centre in an increasingly vast conurbation, between which are the farms and villages of West Bengal.²⁷

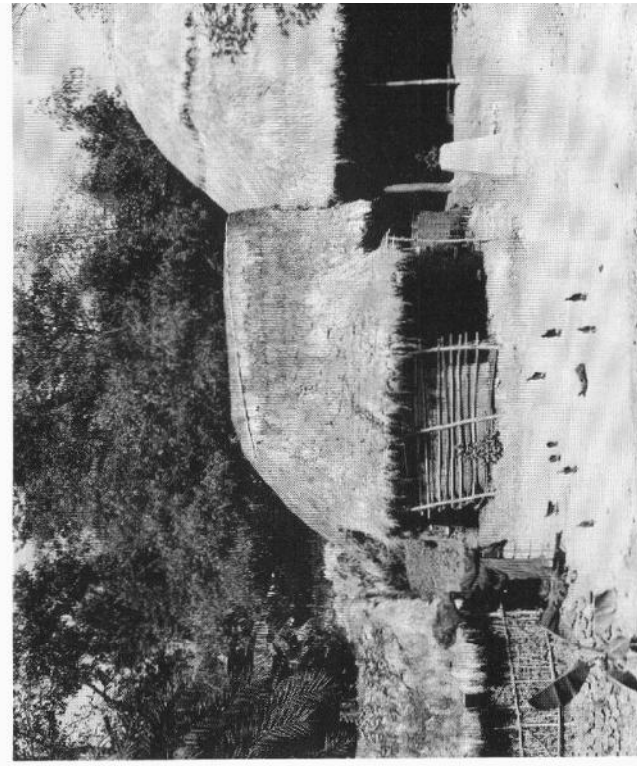
Of the Calcutta Urban Agglomeration's population of nine million, well over four million (of whom more than half are migrants) are in the Metropolitan Howrah-Calcutta twin cities area. Since its role as administrative centre for the British East India Company began and, until 1912, as the capital of India, Calcutta has always attracted large numbers from rural areas. Lying in the swamp-lands at the head of the Ganges Delta its physical location is scarcely healthy. But the sacred river gave trading access to the Indian hinterland, from which many migrants came. Rural West Bengal remains under-developed there are still caste-ridden villages with strictly applied rules of ritual purity and pollution. Landowners, including the Brahmans and other high caste households within thirty miles of Howrah and Calcutta, may have educated members who work daily in the city, commuting by the unbelievably overcrowded trains. *Muchis* and *Santals* at the bottom of the caste structure, often landless and desperately poor, work as sharecroppers and day-labourers in their villages. Frequently, work is only obtainable for four or five months in the year and starvation threatens most of West Bengal's eleven million.²⁸

Thousands of young men leave for the city when their lives may be less constrained by stifling



Above Squatter housing on the banks of the Calcutta canal. Rural techniques of building have been used. Most of the squatters are outcaste *harijans* who collect large quantities of dung to sell as fuel.

Right Houses in a West Bengal village, with the typical deep verandah, earth plinth and high thatched roof. A small shrine stands in the yard.



traditions and where they may gain some pittance from the spin-offs of industry and commerce. Land reforms in 1955 limited holdings to 25 acres and a homestead but in the small, fragmented farms there are too many people living on too little, and unproductive, land. Many of Calcutta's immigrants are therefore seasonal, returning to the farms when work is available, especially for harvest. More migrants are male than female—employees in the jute mills live with fellow males from the same village leaving their wives and children behind. This results in a serious

the others to refugees. Such bustees have been eligible for slum improvement. Unregistered refugee colonies also sprang up, sometimes with larger plots and perhaps some access to services such as a standpipe or public latrine. Immense numbers of people live in squatter settlements, illegally built and with no direct access to services whatever. These squatter dwellings, built of sticks and mud, covered in jute wrappings, cardboard or waste materials held down with old tyres usually enclosing a single space, stand in the filth of excreta and mud; squalid in the heat, unimaginably unpleasant in the monsoons. Every vacant lot is filled, huts line the railroads, perch on the edge of the Calcutta canal, and sprawl in a limitless, heaving sea of grey-brown detritus beyond the station at Howrah.

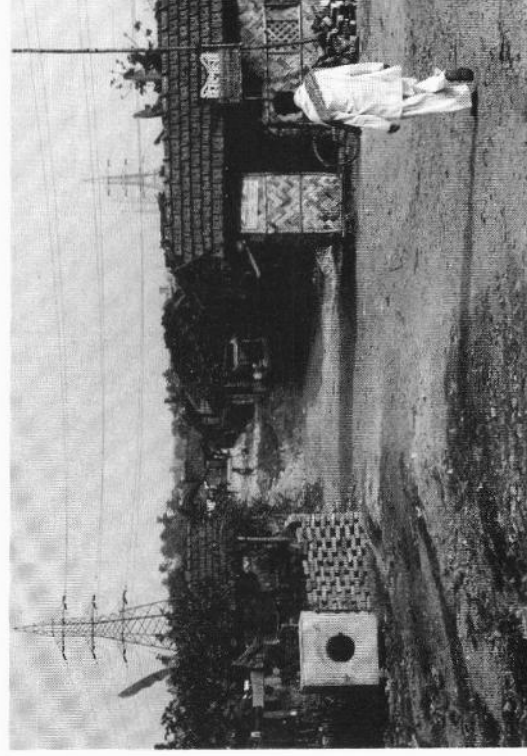
But the dwellers of the squatter settlements are not the most disadvantaged of the residents of Calcutta; half a million people, perhaps more, live without a dwelling of any kind; the pavement dwellers of the city who sleep on the steps of shops, in the station precincts, on rooftops, on traffic islands, on the sidewalks. With no cover but a cloth in which to wrap themselves at night, whole families live and somehow raise their children. Squatters and pavement dwellers have set up enterprises selling matches or pencils, cleaning shoes, or, with bathroom scales, weighing passers-by. Others live by scavenging, turning over piles of refuse and waste for recycling materials or, if they are near water, as *dhobis*, or washermen. Many collect dung from the old cattle turned loose in the streets, to make and sell dung-cakes for squatter houses—of which at least one in ten is a workshop—families work on contract, making the cups for railroad *chai* (tea) from playing cards, and paper bags from magazines or computer print-outs.³⁰

With little or no sanitation, and with water tanks that are used for washing, drinking, washing clothes, and even excretion, disease is rife. An infrastructure appropriate for two million people now has to support a population of more than four times that. Yet the squatter settlements and the bustees provide a foothold for the low-caste or *harijan* migrant and the conditions of living are often little worse than in his

village. The city offers opportunities for making some kind of living, however marginal, even of establishing a small business. The Thika tenant system encourages small-scale enterprise, as Colin Rosser has argued, while the bustees afford basic living accommodation close to places of work. Faced with the reality that the bustees will not be replaced this century (the city managed to build only 9,000 replacement housing units over a fifteen-year period), ambitious Bustee Improvement Schemes were initiated. Between 1971 and 1979 over 1.5 million slum dwellers benefited from better sewerage and services. But the communities were not involved in the decision-making and subsequent maintenance has been poor. Meanwhile, even more migrants flock to the improved locations.³¹

If conditions of homelessness appear in sharpest relief in Calcutta the problems of Bombay are no less massive, nor the housing any better. In countries throughout the developing world, and increasingly, on the doorsteps of Europe, squatter camps and illegal settlements have developed around the cities. In a rapidly urbanizing world the dwellings of the new migrants, as much as those of the underprivileged rural poor and the problems of the homeless, present an unprecedented challenge.

An improved *bustee* in East Calcutta. Electricity, a fitful water supply, and some sewerage disposal have been introduced. Roofs have been tiled, brick will replace woven mat walls, and the road is being stabilized.

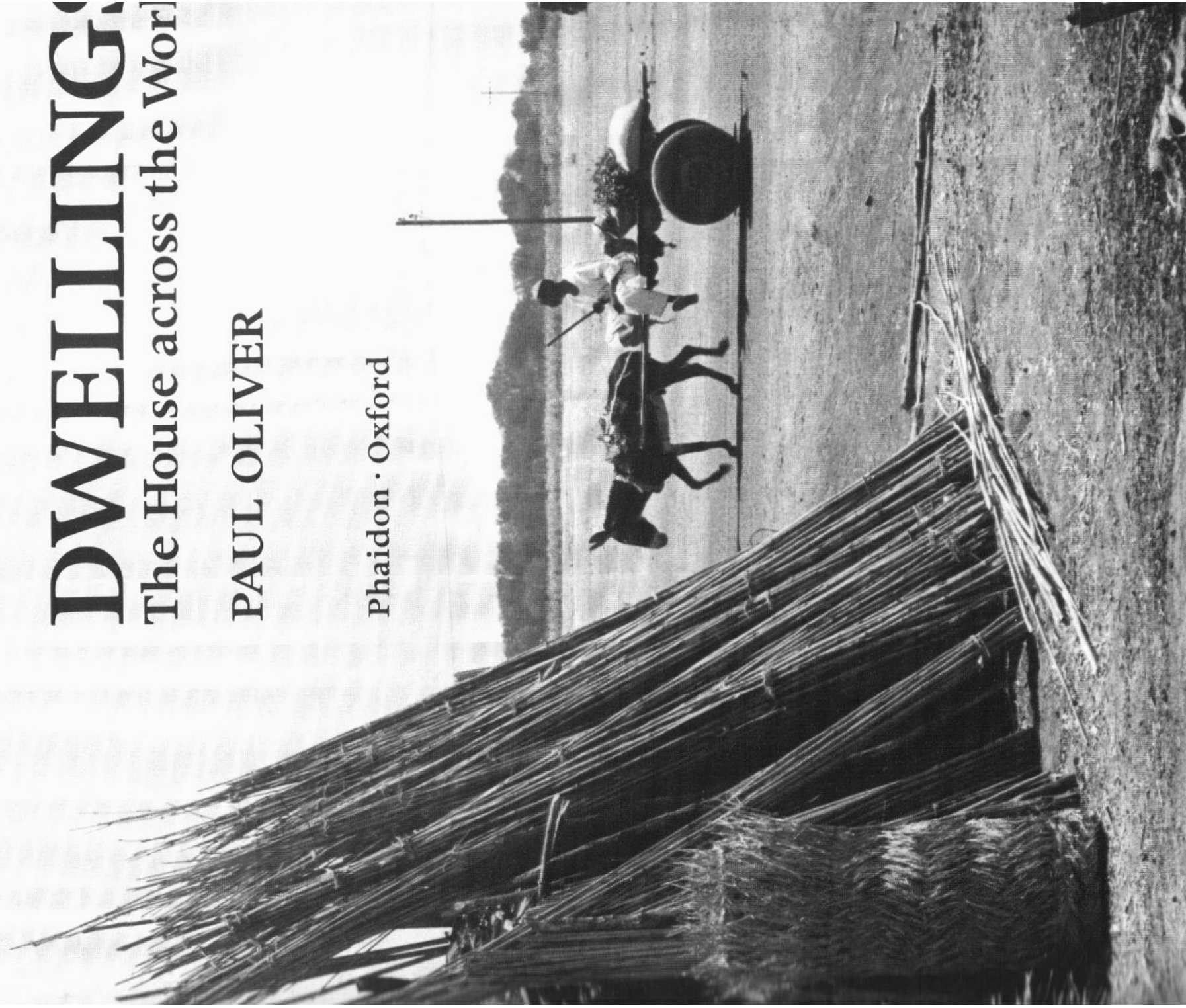


DWELLING

The House across the World

PAUL OLIVER

Phaidon · Oxford



VALUES, SYMBOLS, AND MEANINGS

It is the sign of the intruder that awakens in many of us in the West an awareness of the values we place on dwellings. But the pleasurable satisfaction of being at home after a vacation or period away is also a reminder of how we identify with our houses. Conversely, the inhibitions that we experience at a friend's house in going into certain parts without specific invitation, are indications of our recognition of the close association between dwelling and occupier. Of course, such inhibitions can rightly be ascribed to the persistence of parental training and formalized polite behaviour.

We have here a number of closely related aspects of the dwelling: as symbol of the self, as physical encoding of many of the values of a society, and as an indication of the processes by which these have been assimilated. In a sense the latter is the most significant, for it is by the socializing of succeeding generations that society perpetuates and inculcates its value systems. Through guidance and correction, children acquire the domestic behaviour patterns appropriate to their culture.

Training in living under adult guidance may be customary, but the values of society are deeply implanted in children through their own creative play. By mimicry of their parents and kin children act out relationships, imitate work and social activities, and learn the values of the home. 'Playing house' may well be a universal phenomenon; it allows, within the perceptions and understanding of children, the first essays in the patterns of behaviour, the first attempts at the explorations of domestic rituals, of spatial relationships, or of recognizing the values of their parents with regard to the dwelling.

In the process of learning through play the children

enlarge their vocabulary and learn the spatial concepts important to the community. Words are symbols, and language is a symbolizing process; ideas of space are wholly symbolic. Observed over an extended period Amer-Indian children at New Oraibi, one of the Hopi pueblo villages of the northern Arizona desert, repeatedly made play houses out of compacted sand; interestingly, these were excavated rather than constructed and in the process the children would have had to communicate their spatial intentions, even though the Hopi have no words for specific building types, rooms or spatial concepts.¹

SUNWISE PATHS

Diamond-shaped, the Hopi Indian reservation is situated within, and surrounded by, the vast 25,000 square mile Navajo reservation which is mainly in the high, desertic north-east of Arizona and spills over into adjacent states. Navajo residential patterns and lifeways are very different from those of the pueblo desert farmers; they are mainly sheep-herders and small ranchers. Largest by far of the Amer-Indian nations (over 125,000) they are dispersed over the reservation. The majority live in modest 'outfits', with a loose grouping of habitations, smallholdings, and corrals. While not being strictly-speaking, nomadic, they may move to another habitation for part of the year when taking their animals to winter grazing. Some log cabins and single-storey houses are to be seen on the reservation, but the fundamental dwelling which is the focus of Navajo family life is the *hogan*. It is present in every homestead, even if other buildings are erected nearby, and is the centre of family and spiritual life. Like their counterparts in other societies



Navajo 'forked stick' *hogan*. A smoke hole above the fireplace is partially protected against rain. The entrance faces east. Near Betatakin, Arizona, USA.

Interior of 'forked stick' *hogan* with store made from oil drum, and sheepskin bedcovers.



Navajo children build 'play-house' hogans, often on a toy scale and with *ramadas* or unwalled shade shelters of sticks, grass corrals, and clay sheep and horses. But though the play hogan helps reinforce the behaviour patterns and values that they are acquiring, the Navajo children learn most from being within the single-celled hogan itself and through being the centre of important elements in the religious life.²

Oldest of the hogan types is the 'forked stick' structure constructed from a tripod of forked poles against which others are laid. A porch extension to the entrance with smoke-hole opening facing forwards above it, is not uncommon. The pole frame was thickly plastered over with mud. Though rarely made now, the basic form of the type is still used to make the small 'sweat-house' in which ritual cleansing sweat baths or hot-stone saunas, are taken. A large number of other hogan types has been noted built of horizontal logs, or planks, vertical poles, coursed and uncoursed sandstone, and more recently, cinder blocks. To the observer the structure often seems crudely made, especially when compared with the fine quality of Navajo woven blankets and rugs, and turquoise and silver jewellery.³

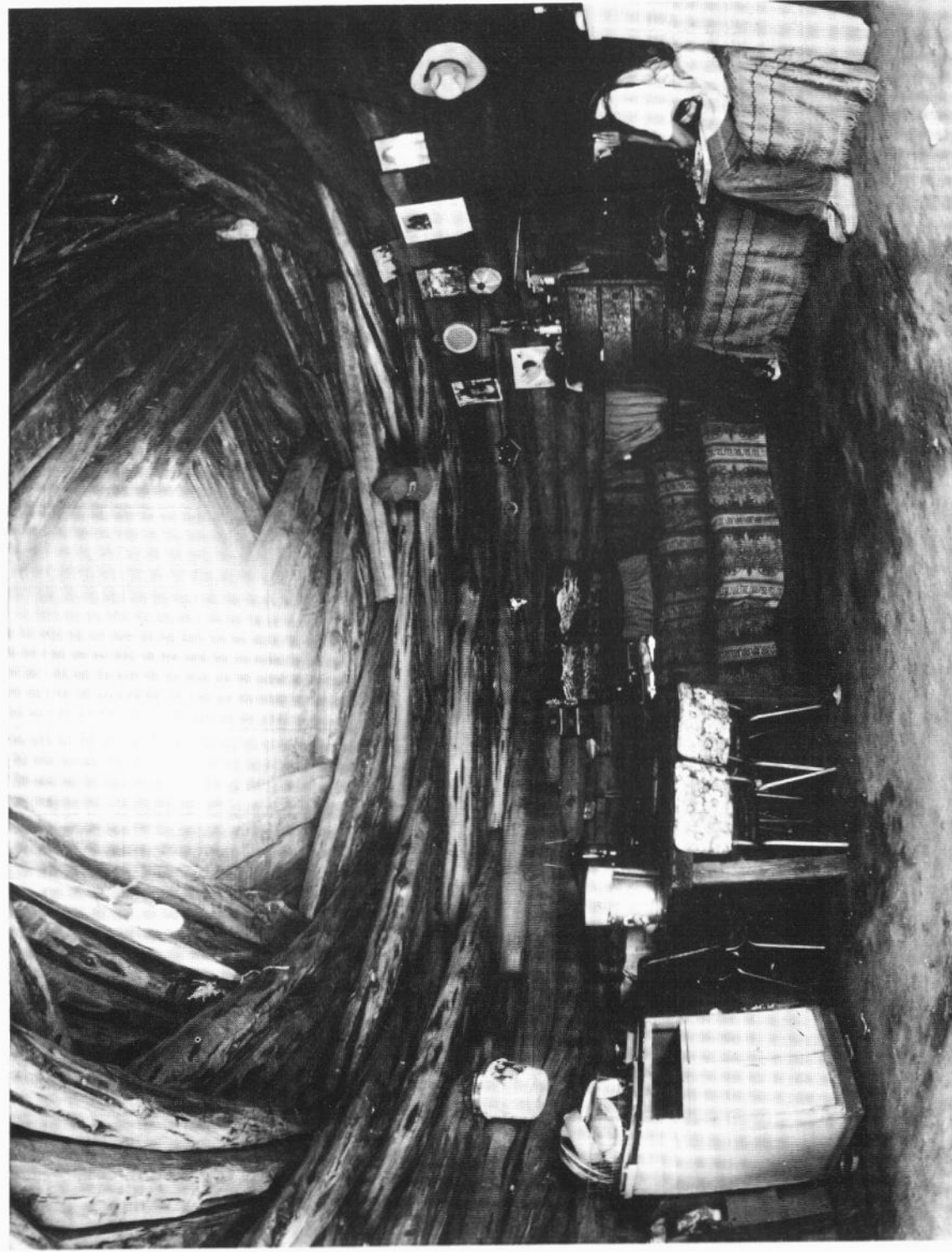
When the hogan is built it is consecrated with the Blessingway Chant which evokes the first hogans built by the Holy People Hastyeyalti and Hastyehogan, gods of Sunrise and Sunset, the words indicating that the symbolic connotations are very different from the physical reality:

Built of afterglow
Standeth his hogan
The hogan blessed

Built of yellow corn
Standeth his hogan
The hogan blessed

Built of gems and shining shells
Standeth his hogan
The hogan blessed

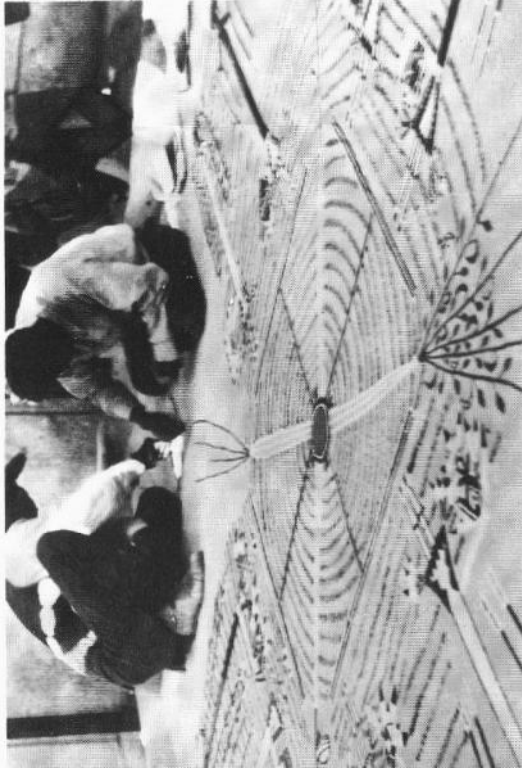
Built of holy pollen . . .
Evermore enduring . . .



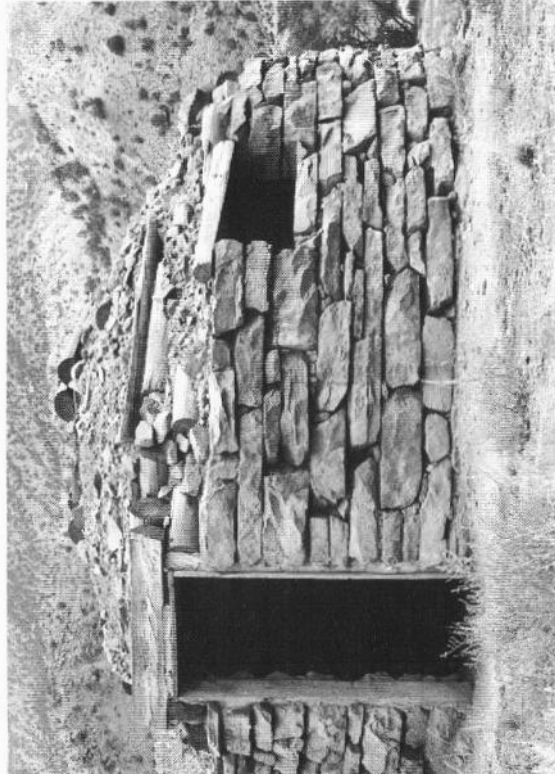
Interior of a contemporary *hogan* showing a small number of traded, store-bought, or donated articles. Traditionally, the north side is used by the women. Arizona.

Blessingway rites occur at least twice a year in most hogans, and often more frequently, as for example, when a member of the family leaves for a long period. Within the hogan the space is physically undivided, but to the Navajo it is symbolically an interpretation of the world as he perceives it: the floor, slightly dished, represents the earth (female), the roof, slightly concave, the sky which is male. Sacred pollen is smeared on the house posts which symbolize the four

poles that support the sky. The entrance pole is always to the East, and the east post is dedicated to the Earth Woman deity; that to the west to Water Woman, divinity of the Water World. Corn Woman's pole lies to the north; the south hogan pole is dedicated to Mountain Woman. Many Navajo divinities are women, and even though the household head is male the people are matrilineal and matrilocal. On entering the hogan men are expected to sit on the north side, facing south, and women on the south side. The woman's loom and her cooking utensils are kept on the south side. Belongings are hung on pegs and notches or are placed in crevices and ledges in the



Navajo *hosteen* (medicine men) make a 'dry-painting' with coloured sands for a curing ceremony. The sick person will sit within it and absorb its power. (*Pitt Rivers Museum, Oxford*)



Hogans are built of any available materials. The roof of this stone hogan is of diagonally-placed logs, covered with earth. On the north side an opening has been made for the removal of the body of the deceased owner. Near Holbrook, Arizona.

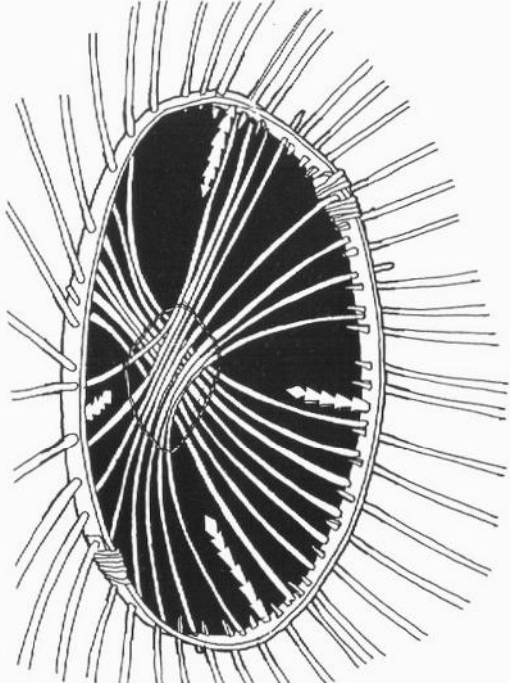
structure. In the middle is the hearth, which symbolizes the nadir and the centre of the world. To the west of the hogan is the place of honour for the patriarch or matriarch, and for visiting medicine men, or *hosteen*. Movement through the hogan must follow the 'sunwise path'. On entering, one encircles the hearth on the south side in a clockwise direction and exits by the north. Behaviour within is marked by prohibitions—one may speak loudly or vociferously

outside the hogan, but not inside; one must not look into the hogan without permission, but once invited may inspect every detail. No matter how crowded the hogan is with sleepers the reclining bodies must never be stepped over, nor the hearth crossed.⁴

When a curing ceremonial takes place such as the Beauty Way or Mountain Way Chant a smooth sand floor in the centre of the hogan (normally the hearth is prepared for the rituals and the making of *likaah*, a symbolic 'dry-painting', in coloured earths. Lasting several days it culminates with the sick person, often a child, sitting in the centre and infusing the healing powers of the Holy People invoked. It is possible that children have a psychosomatic disposition to be ill, in order to experience the unity of kinship among the witnesses of the chant, and are similarly disposed to get better after. But in any event the hogan is the centre of the ceremonial and the place from which a good emanates to counter the hostile spirits that exist in the desert. Solidly built and lacking any apparatus aesthetic merit, the hogan is at the heart of much of the people's spiritual and behavioural values. As the symbol of life it is also witness to death; when a occupant dies the body is taken out through an opening made in the north wall, and the hogan is abandoned and allowed to collapse; with death the spirit and material of the hogan rejoin the earth.

Like other single-cell dwellings the hogan is spatially differentiated through custom by gender, hierarchy, by ritual and by symbolic association, and not by physical partitions. Spatial organization of similar kind is not only to be found among many other Amer-Indian nations, but also among peoples of Asia.⁵

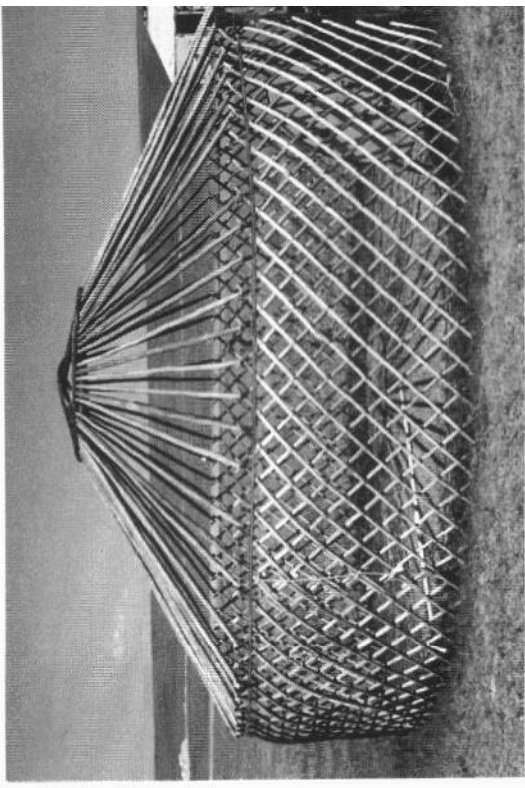
Spread over a vast territory stretching east more than two thousand miles from the Caspian Sea to central Mongolia, the *yurt*-dwelling peoples include the Turkomen, Uzbeks and Kirghiz of Afghanistan, the Russian Kazaks, and numerous Mongol tribes. Some herd Bactrian camels, and in the mountain yaks, but all are fine horsemen. They depend largely on sheep for milk, wool, and to some extent meat owned either by themselves or by wealthy families. Their ties to lineage and clan are strong, and waste



bove and top right Yurt and ger built from diagonal lattices, sed in sections to make the walls. The centre 'crown' is raised n poles, its opening symbolizing the eye of heaven.

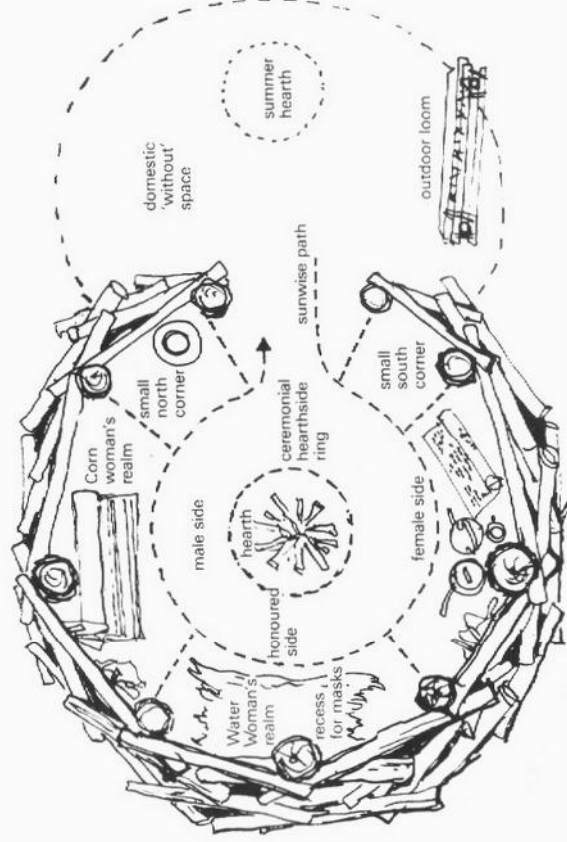
peoples being formerly politically organized in hordes'. Adapting the yurt to the harsh climatic onditions of steppe, gravel desert, or mountains everal million people still follow the traditional iomadic pastoral way of life in spite of governmental ttempts at implementing resettlement schemes.⁶

The yurt—a Turkish word for 'dwelling'—is known to Afghan peoples as the *kherga*, in Russia as *abitka*, in Mongolia, where it achieves its most remarkable forms, as the *ger*. Among all these peoples he structural principles underlying the yurt are basically the same: the dwelling is circular in plan with walls made of an open, loose lattice frame of willow wands which may be expanded to build the house and contracted for carrying to the next site. The lattice is lashed at the cross-overs of the wands which are lightly thonged with rawhide. Each lattice or *khana* is made up of some 33 wands, and half a dozen *khana* will produce a yurt about 16 feet (5 m) in diameter. Light poles that have been preformed into an arc by steaming are lashed to the frame, which is further stabilized by webbing tension bands, and the poles inserted into a centre ring or crown. In Mongolia the poles are straight and the crown is a heavy structure with mortice and tenon joints, but elsewhere lighter crown hoops are used. Juniper wood



Though all yurts are structurally similar they differ in their details. Most are covered with felt or reed mats which may be decorated with appliqué. Kirghiz near Urumchi, Djungaria, China.

door frames provide a secure fixing for the *khana*; the door may be a felt mat which can be rolled up, or a solid carved wooden door, or a pair of doors with leather hinges. Once the frame is in place the yurt is covered with thick woollen felt mats made by the women, which are secured with webbing bands or ropes. Kirghiz yurts of white felts may be decorated with appliqué designs in brown felt, while Turkomen yurt walls are covered with reed mats, held in place

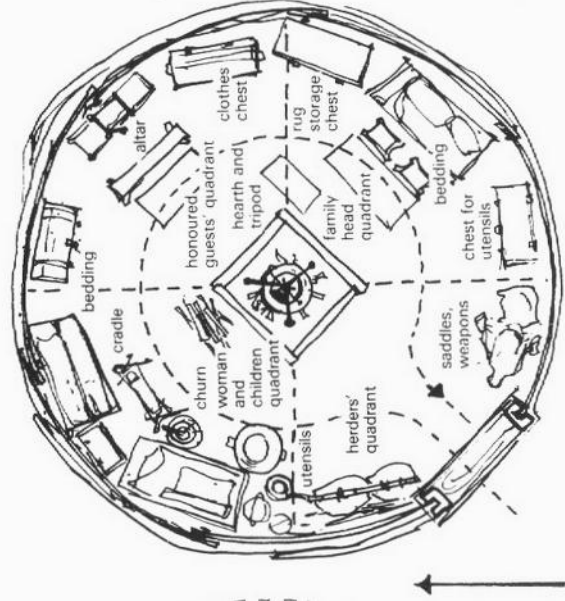


The spatial organization of the *hogan* and the *ger* compared. Differentiation by gender, symbolism of internal spaces, and movement around the central hearth have many points in common. Other arrangements have been recorded.

and enriched with a broad, patterned tension band.

Spatially, yurts are strictly divided by systems which strongly recall the Navajo organization, though sometimes with different orientation; Turkomen entrances, like hogans, face east, but other yurts customarily face south-west. The transition from exterior to interior of the yurt is also symbolically important and inside a sunwise path must again be taken. The interior is divided in quadrants, the south-west entrance zone being that of the herders, of lowest status, the position opposite on the north-east quadrant being for a shrine and distinguished guests. The quadrant on the right-hand side from the entrance is the male domain of the family head, with saddles, weapons, and hunting gear, the women and children sleeping opposite with cradle and churns. Chests for rugs and clothing, boxes for valuables and utensils, small tables and vessels for food and mare's milk have their assigned positions.⁷

In the centre of the yurt is the fire, regarded by many Mongols as a protective deity who must not be disturbed. The 'square of the hearth' within the circle of the yurt follows the Buddhist principles of male and female symbolism of square and circle; the five eastern elements of Earth, Wood, Metal, Water and Fire are symbolized respectively by the earth floor, the wood hearth frame, the iron tripod, and the kettle



of water over the fire in the hearth. As with the Navajo the roof of the dwelling symbolizes the sky, the open smoke hole being seen as the Eye of Heaven.⁸ Yet the *ger* embraces other values as these extracts of a song collected from a nomad woman in the Central Gobi desert illustrate:

... Although the lucky thread-shaped lattice
was made of criss-crossed willow wood.

Happiness and joy are in it.

Although the firm smoke hole of the tent was
made with many gaps

It looks like shining precious stones ...

... The felt is beautiful, it looks like a white
sunflower,

Printed letters are decorated, creation of a
Goddess.

I am holding a long pair of scissors in my skilful
hand;

I was taught by my mother and directed by my
elder sisters.

Regarding my skill and knowledge, I was
educated by the Nation;

Regarding the structure and shape, I have built
it better than anyone.

Heart and mind have been satisfied with the
structure,

Covered it with the best felt which flaps like the

King Bird,

The Tent is protecting the people from the
world's powerful winds.

The hair rope was made of the mane of the wild
chestnut horse,

And the long hair of the mating bull camel.

The hair ropes were nicely reinforced and tied
down firmly;

The twelve leather ropes are like the People's
Hero's bow strings.⁹

Chanted in a wild, strained voice the song was
edolent of pride of workmanship, joy in the creation
of the dwelling, and an appreciation of its beauty of
form and fabric. Her song is a window on the
esthetic of a nomadic people, and an indication of the
significance of myth and legend in confirming indige-
nous values.

Though the time-spans implied are immense in
terms of human history, the correspondences
between the symbolism of the hogan and that of the
yurt, let alone those of many other types of Asian and
Amer-Indian dwelling are at least, highly provoca-
tive. But we may note that Navajos speak an Athapas-
can language, having broken away from the main
cluster of Athapaskan speaking peoples who inhabit
northern Canada, Yukon, and Alaska, close to the
Aleutian 'land-bridge' by which the Mongol peoples
many millennia ago are believed to have crossed into
the Americas.

SYMBOLIC OPPOSITIONS

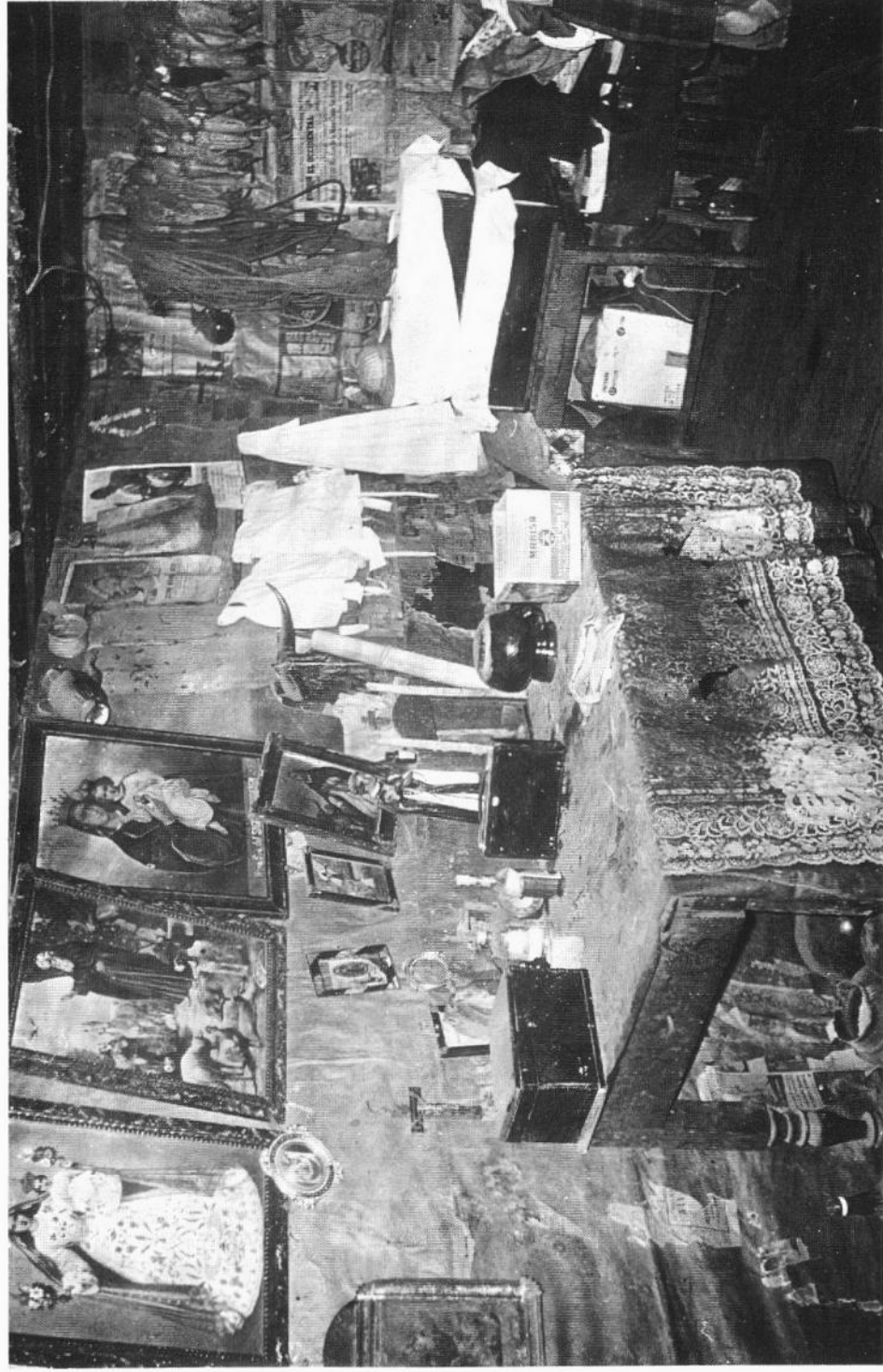
Societies of all kinds and in every part of the world
need to account for the evidence of the nature of their
environment and their perceived place in the scheme
of things, in order to give meaning, purpose, and
structure to living. The origin of sun, moon, rain, and
earth, of animals and plants; the mysteries of concep-
tion, birth, life, and the destiny of the souls of the
departed, are commonly at the centre of man's
religious beliefs and practices. Fearing the unknown,



Interior of a yurt showing the lattice structure of the *khana*, the placing of domestic items and traditional seating positions. Inner Mongolia.

mastering the known, the world is made somewhat
more comprehensible by bringing such observed phe-
nomena within a system. Correspondences are per-
ceived, influences deduced and similarities made
apparent. Forms are modelled or carved in ancestral
likenesses, dances are patterned on the movements of
animals and birds, devices are painted and masks
worn to tap the spiritual essence; voices are masked
and hallucinogens taken, rituals are performed, trials
endured, and ceremonials observed to make contact
with the supernatural. And the contexts for so much
of these are man's constructed symbols of the cosmos,
the foci of ritual and reverence in the stupa, the
temple, the shrine, the mosque, the church, the cha-
pel—or, in its human-scale simulation of his universe,
the dwelling.¹⁰

Signs are used to *denote* something—an object, a
situation, an event, specifically and unequivocally,
and they do not under such circumstances carry any
additional associations. Symbols are used to *connote*
meanings in addition to those which they may depict;
they have associative meanings. In this kind of usage
signs are distinct from symbols, but it should be
noted that a sign may be a symbol as well. As the



Bull's horns hang with popular religious prints in a mixture of superstition and Catholicism above the altar in a peasant home. Tarasco, Oaxaca, Mexico.

doorway denotes the entrance it is a sign, but it is also a symbol of entry or privacy, and may have many additional symbolic meanings of, say, sexual penetration or birth. As a sign it has only one specific meaning; as a symbol it may have a much larger sphere of associations. Both sign and symbol, to be recognized and understood, must exist within systems. The doorway exists within the sign system of door denoting entrance, window denoting opening, roof shape denoting house. But as symbols the windows may connote release, broadening perceptions, eyes of the spirits; the roof may connote protection, the sky, the deities in their celestial abode. Again, signs exist effectively in the present: they denote here and now. Symbols exist in the past, the present, and may imply the future. In a sense symbols are timeless, though being non-specific over time their meaning may change, gaining or losing in force or effectiveness,

and taking on new levels of connotation.¹¹

It can be seen, therefore, that a people may develop a symbol system which includes virtually all their experience of the present and embraces their history: myths are symbols of their unknowable past. Through the myths and legends, lore, and customs of a society its values may be transmitted, communicated, repeated, and learned. As the roof under which so much of this is acted and re-enacted in the daily, yearly, and life cycles, the dwelling readily becomes the symbolic model of the greater universe of time and space in which they are seen to exist.

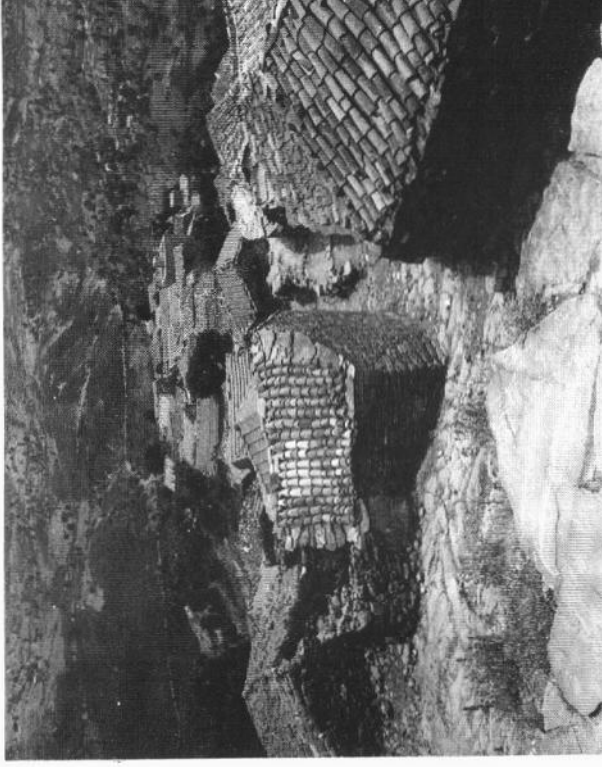
A number of studies have been made of the religious concepts of different peoples which have revealed the importance of the dwelling as microcosm, such as Lebeuf's research on the Fali of the highlands of Cameroon. Better known and frequently cited is the work of Marcel Griaule and Germaine Dieterlen and their colleagues concerning the culture of the Dogon people who live on, or near to, the Bandiagara escarpment in Mali. This work is remarkable for



The profound symbolism of Dogon dwellings is seldom explicit. These granaries contain chambers for the eight seed types given by God, each also symbolizing the organs of the Spirit of Water. Beyond, men sit in the *togu na*, its columns carved with female symbols. Near Bandiagara, Mali.

having been conducted over more than three decades; even so it was some fifteen years before the Dogon revealed the essence of their cosmological ideas.¹²

In the complex Dogon mythology the Creator God Amma generated within infinite space a primordial egg with a double placenta in which were the Twin Nommo, sons of God. One being broke from the egg, Yurugu the fox, bringing with him as he fell a piece of the placenta which became Earth. Eventually in the creation myth Yurugu came to stand for the dry, the uncultivated, the uninhabited, the night, and disorder, while his counterpart Nommo became the symbol of the ordered world, of the day, the sky, fertility, the cultivated, and the inhabitable. The con-

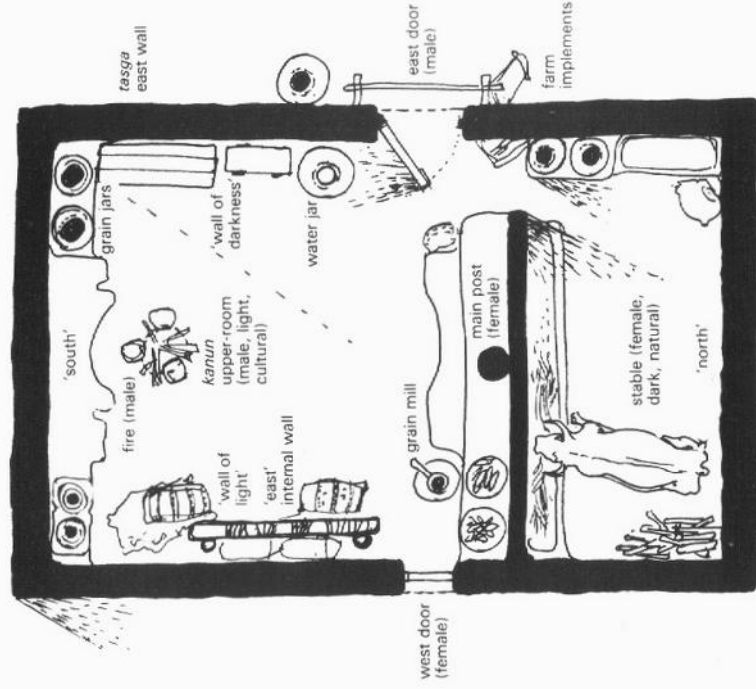


Kabylie dwellings are simple stone buildings with low-pitched tiled roofs. Theoretically, the east wall is male, the west, female; in practice the terrain necessitates a variety of orientations.

cept of twin-ness, essential to Dogon mythology is a recognition of the duality of so much in the world of experience, which in many other societies, has become a fundamental ordering principle in their created world, including their dwellings.¹³

Male and female, left-hand and right-hand parts of the house have been noted in several examples in preceding pages. Sun and Moon, night and day, good and evil, life and death are dualities within the experience of all of us. So too are the spatial dichotomies of earth and sky, above and below, front and back, inside and outside and, as we have seen, these are often related symbolically.¹⁴ This 'binary principle' may be extended in numerous ways: by comparisons, contrasts, antinomies, homologies, parallels and polar oppositions which are nonetheless on the same metaphoric 'axes'. How such dualism is manifest in the dwelling was demonstrated by Pierre Bourdieu in his analysis of the Berber houses in Kabylia, Algeria.

A simple structure, the Berber house consists of one rectangular room divided a third of the way along its length by a cross wall to make a dark, flagstoned stable at a lower level and a higher, better-lit, living space with a floor polished with black clay and cow dung. A main ridge beam which spans both spaces is supported at the dividing wall by a pillar; in Berber



Plan of the Kabylie Berber house. The woman's loom stands by the 'Wall of Light' illuminated by the 'male' door in the east. Interior benches and details are moulded in clay and richly decorated in white and terracotta. (After Bourdieu)

symbolism the protecting, strong beam is male, the pillar is female. The dark end of the house is where the water vessels are placed and, in the stable, where the animals are kept; it is associated with sexual relationships, birth, sleep, and death—with what is 'animal'. In contrast, the higher living space is associated with all that is noble: the honour of the household head, his protection of his wife's virtue. As a symbol of his patrilineal kin his rifle is by the hearth at the north gable wall, where there are recesses to take household utensils and grain vessels.

In the long wall on the east facade is the main entrance, which is male: opposite is the female entrance, smaller but set in the wall and illuminated by the main entrance. Called 'the Wall of Light' it is where the loom is situated, the symbol of woman's creative and domestic activity and of the values that her husband protects. It is before the loom that a bride is presented, behind the loom where she sits after marriage, there where the umbilical cord of her child is buried. Opposite her is the front wall, dark against the light of the open east door, and literally



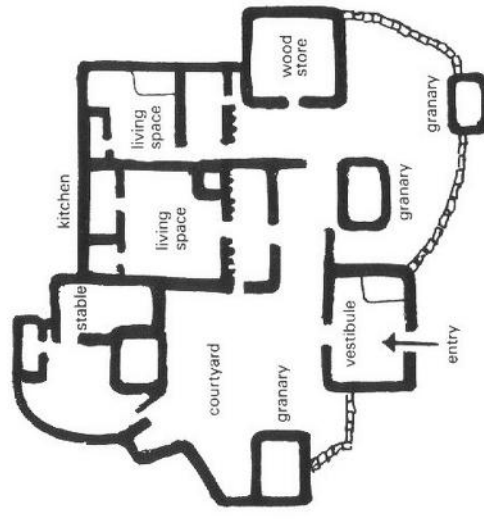
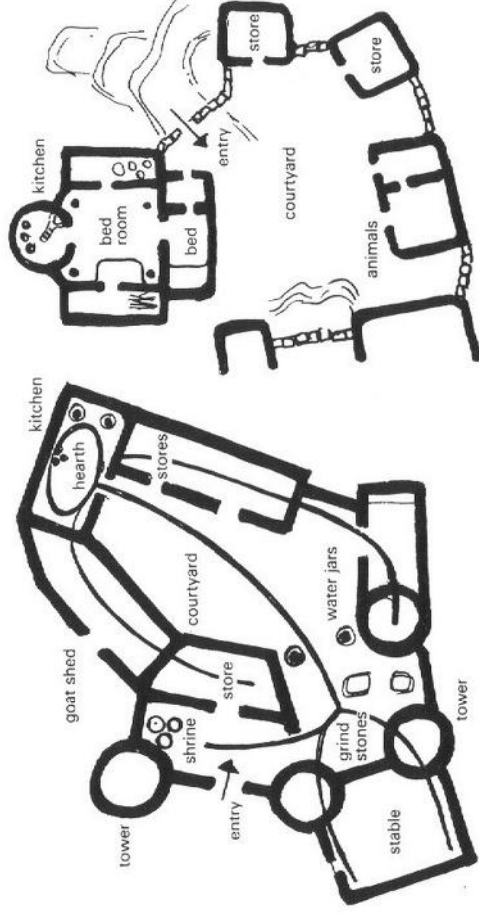
Corner of a Kabylie room where the 'Wall of Light' (left) meets the hearth wall. Grain jars with quern below, to the right of the upright post of the woman's loom. Maatka, near Tizi Ouzou, Algeria.

termed the 'wall of darkness', which is associated therefore with the dark end of the house, the stable. The interior of the house is the woman's domain and men are expected to leave it at first light. Man, the Kabylie say, is the light of the outside (the true light) and women the light of the inside. It will be seen that the light, illuminated end of the house and the 'wall of light' are linked with all that is 'cultural', transformed, created; it is where the meals are cooked, the cloths are woven. *Haram*, that which is forbidden or taboo, is the sacred aspect of the interior, the secret and the female. As the dark, lower, animal, 'natural' end of the house is female, so the light exterior, the world proper, is male.¹⁵ The dark side of the room and the dark end of the house are symbolically connected with all that is natural but also secret, so that the



Entrance to the Kabylie house. The stable entrance (right) is to the dark, lower, symbolically female and 'natural' end of the dwelling. Maatka.

Idealized plans of the Dogon homestead having symbolic parallels with the human body. (After Griaule, *Dieterlen*) compared with actual plans of homes, Lower Ogol Village. (After Parin *et al.*)

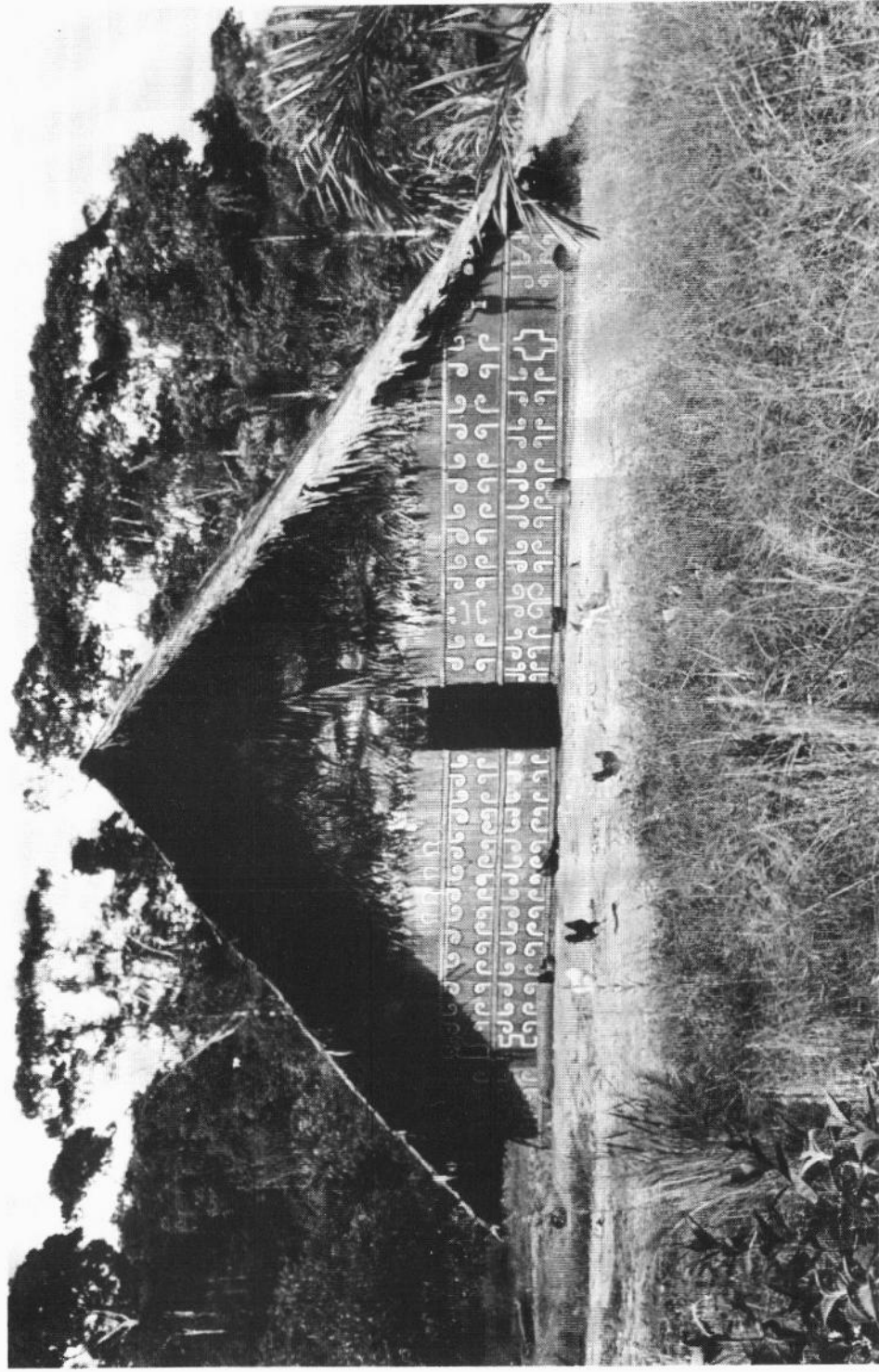


house represents a natural/cultural dichotomy,¹⁶ the 'raw and the cooked' in Claude Levi-Strauss's memorable phrase.

THE COSMIC DWELLING

Part of the appeal of the Dogon conception of both village and dwelling was its anthropomorphism. The parts of the *ginu da*, the big house of a lineage cluster are related to those of the human body. So the head is associated with the kitchen, with the hearth stones as the eyes, the *dembere* or central room with the belly and the flanking goat houses and stores culminating in towers, with the limbs. The breasts are symbolized by jars of water, the sexual organs by grinding stones, and the whole, graphically expressed by Griaule, represents a man lying on his right side in the act of procreation.¹⁷ Dogon compounds do not correspond in plan to Griaule's much reprinted drawing, it is the anthropomorphic symbolism of the entities that matters and not their placement in figurative terms.

Zoomorphism, or the employment of animal forms and metaphors may also be found, even in combination, as is the case with the Tukanoans, one of the Amer-Indian peoples of South America. Though many tribes have been assimilated into the new Latin societies of mixed race, in Amazonia and the remoter regions of South America tribes of Indians retain their identities, their lifeways, and beliefs. A territory that



The east, male end of the Tukanoan *malocca* or community house. The decorations depict patterns perceived under the influence of an hallucinatory infusion. Vaupés region, Colombia.

stretches between Brazil and Colombia is the home of many Indian tribes, among them the Tukanoans, manioc cultivators who live in patrilineal and exogamous groups on the banks of the Pirá-paraná river. The complex ritual and spiritual life of a group of these Indians has been examined in detail by Stephen and Christine Hugh-Jones.

Tukanoan community houses are of considerable dimensions, thatched with palm leaves on palm slats, with eaves that sweep close to the ground. Each roof-frame is supported on eight major house posts placed on either side of a central male/female axis. The male end of the house, which is also where visitors are received, faces east and is clad with bark paintings; the female end is apsidal with a central door and faces west. Inside, nuclear families of the male lineage occupy walled-off rooms on either side and towards the rear, female, end. In each compartment hammocks

are slung around cooking hearths and doors open both to the central space and to the manioc gardens outside. In the centre of the longhouse is the main social area which is embraced by a ceremonial dance path. Here, the men gather nightly, young male initiates sleep and ceremonials are held. When major ceremonials, such as the initiation rituals *He wi*, take place, they are hidden from the women by a rattan screen.¹⁸

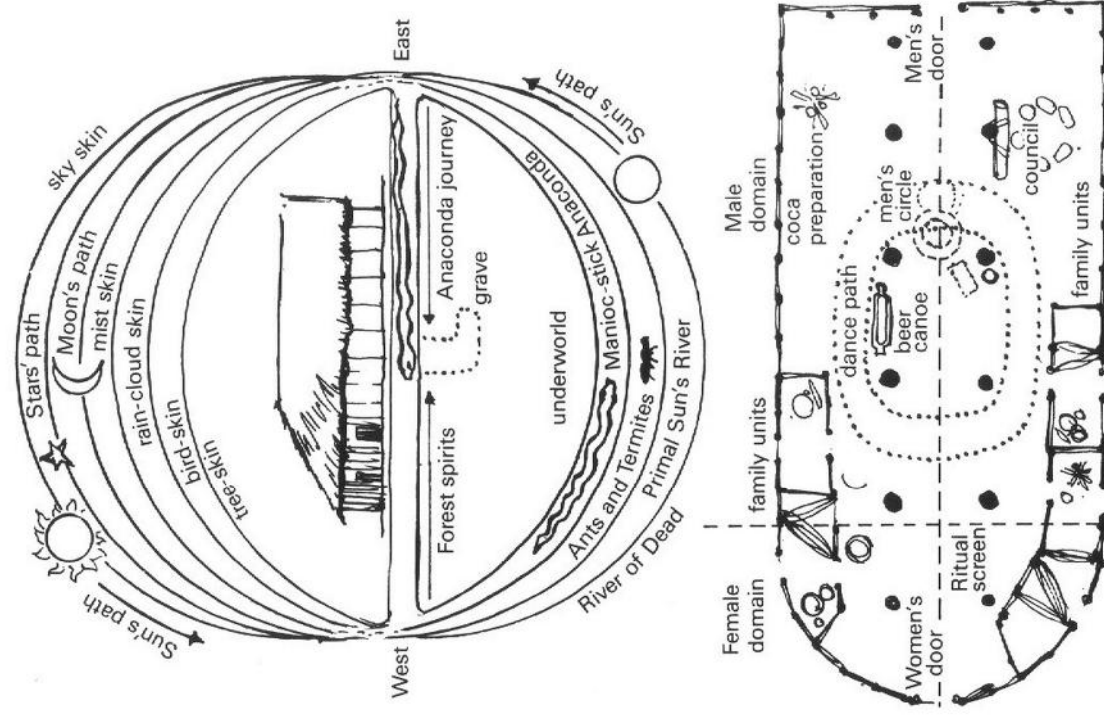
All Tukanoans believe themselves to be the children of the Primal Sun, but each group traces its origin to a mythical ancestor, one or other of the largest species of snakes, the anaconda. In mythical time Anacondas swam west up the rivers from the Water Door of the Milk River (the Amazon) stopping at the 'waking up places' where the ancestors of the Tukanoans danced and their homesites were established. The Anaconda journey east to west, corresponded to the path of the Sun, and accordingly, the male entrance, facing east, represents the Water Door by which the ancestral Anacondas entered. The house

the creative power of women. The practice and locations of ritual and ceremonial, the rectilinear structure of the front of the house, the phallic form of the Anaconda, the men's door as Water Door and symbol of sexual penetration, the river landing and the path that links it with the dwelling are all male and associated with the origin of the patrilineal group.

Vertically the dwelling is also perceived symbolically; the roof as sky, the house-pots as mountains, the floor as the Earth and the grave the Underworld. The upper half of the multi-layered cosmic gourd with its arboreal 'tree-skin' and successive 'skins' of birds, rainclouds, mist, moon, sun, stars, and 'sky-skin' of the First Being, which the shamans, priest-healers, pass through on their trance-travels to the supernatural world, lies above the plane of the Earth. Below it is the Underworld of negative forces, of the River of Death, but also of the Sun's River by which it travels to its daily regeneration in the East, and of other mythological associations. When a member of the group dies the body is placed in a coffin made from the halves of a canoe and is interred in a chamber off a deep hole below the floor of the house. While the spirit of the ancestor remains in the house, the body decays in its grave, but the soul enters a beautifully painted ancestral longhouse, visible only to the shamans and the dead, where the ancestors perpetually dance. When the name of the deceased is given to a newborn child the spirit is happy for it lives again, the soul thriving in the continuing ritual of the ancestral house.¹⁹

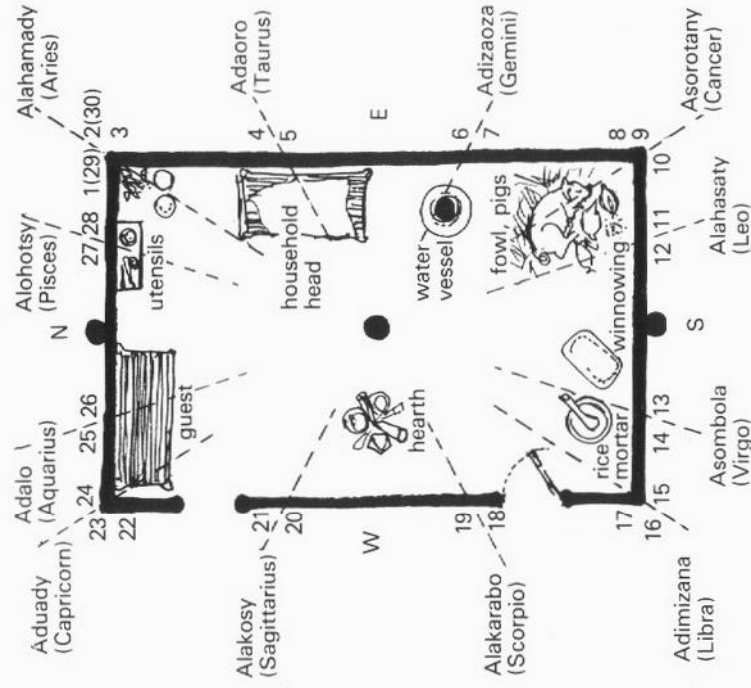
ORIENTAL ORIENTATION

Many other kinds of symbolic system related to the house exist, some peculiar to one culture, others borrowed or assimilated. Among the Sakalava, a tribe on the west coast of Madagascar who, like other Malagasy tribes may be of Indonesian descent, use the plan of the house as an astrological calendar—which is of Chaldean origin. The terms used are of Arabic extraction but to confuse the issue of its source further, connections have been noted with some aspects of the



The Tukanooan concept of the multi-layered 'cosmic gourd', and the plan of the Tukanooan community house showing spatial differentiation. (After Hugh-Jones)

as body has the entrance as mouth, but it is also perceived as the entrance to the womb; the rear doorway is regarded as the anus. Birth is associated, as might be expected, with the ancestral 'waking-up houses' but also with the manioc gardens where birth literally takes place. The gardens are reached through the family doors and the woman's door, but the womb interior of the house, the family apartments, the heat of the cooking fires (which is associated with female sexuality), the nourishment of the gardens and of the forest beyond, are all seen as female and the source of



The dwelling as calendar and zodiac: plan of the Sakalava, Madagascar house with zones of activity, defined by their astrological associations. (After Dahl)

Houses at Waltair. The short ridge is supported by a central pole and the corner posts are placed according to the rules of the ancient sastras. The doorway, hidden by the deep caves, is central. Andhra Pradesh.



Japanese house. A simple rectangular plan house with a central pole supporting the ridge, the Sakalava dwelling is oriented north-south. The months are identified with the corners and two points on each side of the house, commencing at the north-east with *Alahamady*, or Aries. Each corner has three days associated with it; each wall point has two, (twenty-eight in all) so that the zodiacal calendar is also a daily one. The points of the zodiac determine the position of household articles: *Adaoro* for example (Taurus) is the household head's sleeping place; *Asombola* (Virgo) is related to the Arabic *as-sumbula* (grain) and is the site of rice mortar and winnowing pan.²⁰

We can only guess how old such symbolic associations with the building may be in these and other societies; there is reason to believe that many may link with the remote past of tribal peoples, and have been passed on orally by successive generations. In societies where a literate tradition developed, and where mystic rites and observances became increasingly esoteric and the province of a learned priesthood, traditional customs were written down. In the process some may have become less flexible, entering the canons of religious doctrine, and by application of building. This appears to have been the case with Hindu architecture, where ancient practices were noted, especially from the members of the guilds, as early as the sixth century AD recorded in the *sastras*, or manuals of the *silpina*, the temple craftsmen. One of the *Vastu Sastras*, the *Manasara*, laid down the proportions for temples and towns and the rules of building in the finest detail.

The *silpina* sastras gave rules governing the plan of the house, recommending positions for the courtyard, the respective rooms of men and women, the room for receiving guests and storerooms, the kitchen and cooking space, and the bathing place. The house was interpreted anthropomorphically, conceptualized in human terms as the organs of the *Purusha* or the Primal Being, whose head, arms, legs, stomach, and sexual organs had their parallel in the organization of the dwelling.²¹ Such treatises were directed mainly at the temple priests and at the wealthy and literate, often being passed on, many times removed, through the

assimilated knowledge of the craftsmen and the propitiatory practices of the village priests, to influence the dwellings of ordinary people.²²

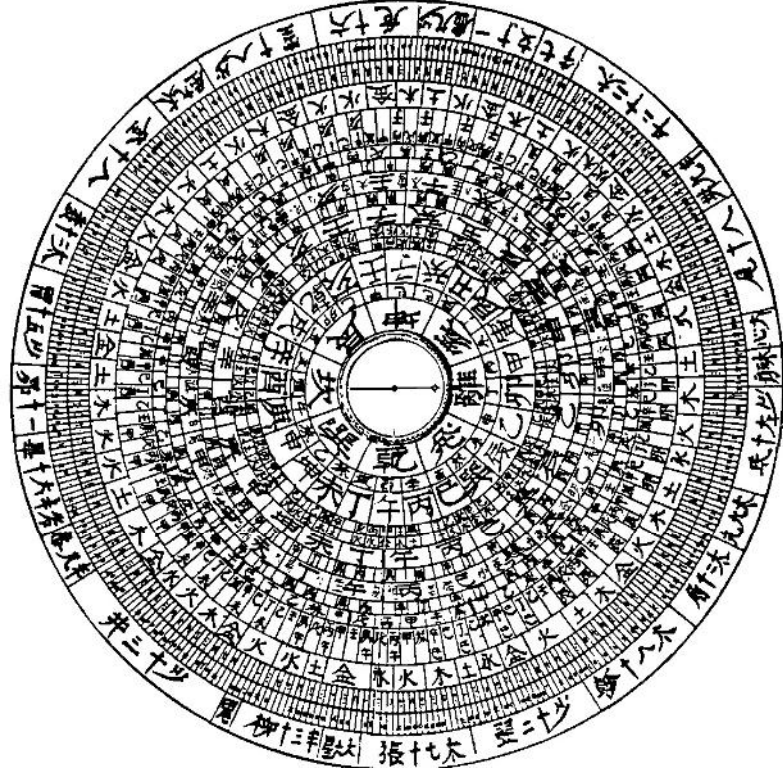
Building a house in Andhra Pradesh today involves religious observances which commence with the election of the site. Having divined the most auspicious time and day for building, which is generally considered to be between February and April, the *mundit*, a Hindu priest, enjoins the family in prayers at the site. There he marks the positions of the corner poles and coconuts are broken in a ritual intended to ensure the safety of the building. The householder liges the hole for the centre post and the coconut milk is poured into it. Nine coloured bean seeds, signifying the planets, are buried in the hole, invoking the protection of Vishnu, Lord of the Universe. Evil spirits are warded off with bunches of sacred mango leaves tied to the top of the house post, so that they protect the dwelling and ensure the prosperity of its occupants. The rules of the sastras are followed by the unlettered village craftsmen who build the houses and raise the steeply pyramidal bamboo roof frames. A house is required to be symmetrical with a central doorway and well-made door. From one to three poles should support the ridge, and the plan must theoretically conform to specific measurements: 12 feet (4 m) square, 12 feet by 19 feet (4 m by 6 m), and so on. Village craftsmen generally adhere to the canon of the sastra, though with variations that conform with local preferences as to the choice of proportions used. Daily, the women decorate the ground in front of the houses with *alponas*, complex patterns of rice powder, as an offering to Laxshmi, the Goddess of Wealth, and other deities.²³

Of the systems for identifying the most auspicious sites for building and for the location of the parts of the dwelling, the most complex is the Chinese form of geomancy, *Feng-Shui* (Wind-Water). It was developed as a consistent theory in the tenth century AD, when different forms of geomancy were brought together in a complicated multi-plate and subdivided site compass. The Chinese binary principle of Yang (male) and Yin (female) pervades all concepts of the universe. Nevertheless they are not equal for this would imply



Alponas, patterns freely drawn in rice powder by the housewife as an offering to the gods, on the front step and in the roadway before her house. Mysore, India.

opposition; Yang is dominant in the ideal state. Astrology is closely linked with Feng-Shui—the constellations, the Chinese Zodiac, the calendar of days and months, the Four Seasons, the Five Elements, the Ten Heavenly Stems, the Twelve Earthly Branches, and the Trigrams and Hexagrams of the *I Ching*, the 'Book of Changes', all have Yang and Yin attributes which interact, wax, and wane. Important in the practice of Feng-Shui is the conducting of *Ch'i*, the Vital Breath, to the dwelling, and the avoidance of *Sha* or Noxious Vapours. *Ch'i* follows rivers and meandering routes and straight lines are abhorrent for they permit the entry of the 'secret arrows' of demons. *Ch'i* emanates from the Dragon Kings whose lairs are in the mountains. Mountains are Yang, and are also the abodes of the Gods; the complementary undulating hills are associated with the Tigers and are Yin; an ideal site is where the 'White Tiger of the East' and the 'Blue Dragon of the West' are symbolically united.



The Feng-Shui compass bearing astrological signs on a number of 'plates'. These are aligned to correspond with natural features, to determine the most propitious location for building.

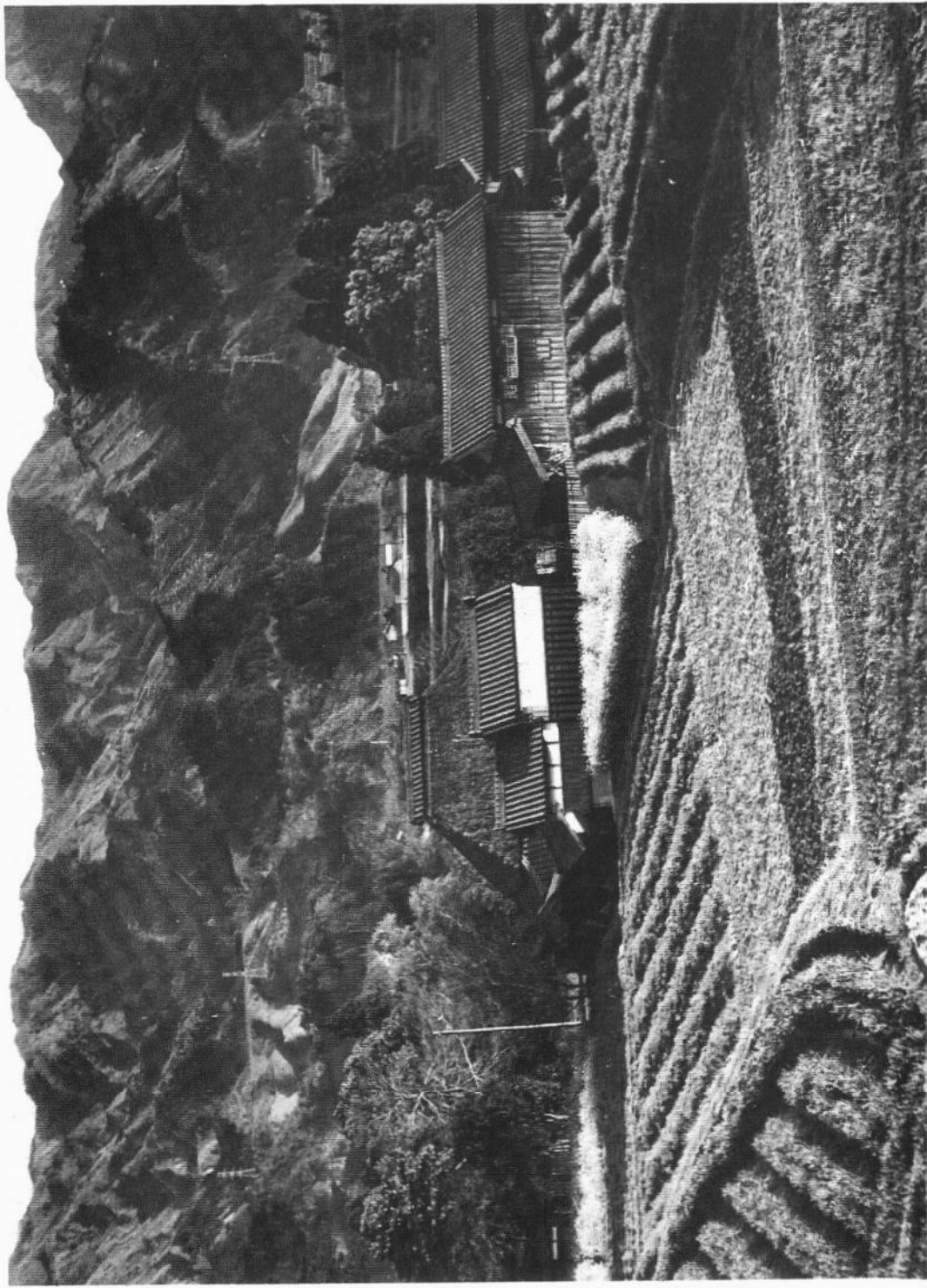
With the Feng-Shui compass, on whose many plates astrological signs are inscribed, the Hsien-Sheng, or Feng-Shui master, ascertains the strength or weakness of Ch'i flow, the Dragon's pulse, the influence of Heaven, and the 'health' of the Earth. Geomancy is used both for the dwellings of the living and those of the dead, for the contentment of the ancestors in their tombs will cause them to be well-disposed to the living.

Baffling in its complexity to all but a master, Feng-Shui in application is often extremely practical, informed by centuries of accumulated wisdom. A desirable dwelling site is south facing, protected from the north, on well-drained and sloping land, served by gently flowing water, and accommodating breezes. When there is no rising ground behind the house to the north, the Hsien-Sheng may recommend the planting of a screen of trees. One is advised not to build over buried wells or dead trees, and to locate

toilets with pig-sties on the south-east corner above the slope. Windows, door openings, and furniture, not to mention trees and garden features should be positioned so that the Ch'i, the flow of the life force and of air, is neither permitted to stagnate nor so vented that the breezes disperse it. Bedrooms should not connect or be located over empty spaces and principal rooms should face south. Obviously, not all conditions can be met, especially in the location of houses of the poor. Propitiatory offerings and auspicious colours may be used to counter adverse forces and mirrors placed to deflect 'secret arrows'. To retain a Hsien-Sheng may be beyond the resources of many families, but popular manuals, illustrated with cartoon-like drawings and in virtual comic-strip form are available which give good advice in the context of Feng-Shui symbolism.²⁴

A related system, similar in some aspects and very different in others has long been in use in Japan. *Hogaku* (Direction-Angle) is an orientation method also based on the use of the compass and linked with astrology. Directions are associated with *Go gyo* the five elements, and with the Zodiac; together they are employed in determining house orientation, or *Kaso*. The Yin/Yang principles, known as *Imyo* (*In* female, *Yo* male) also apply and the birth elements of the owner, the shape of the site, the location of the house centre are all considerations related to the positive and negative, beneficent and malignant forces which influence the precise determination of the form and situation of the house. Generally, *Hogaku* is site-focused, while Feng-Shui places greater emphasis on the environment.²⁵

Each of the basic twenty-four divisions of the compass offered certain axioms which advised on dwelling form and plan. So, a Shinto shrine or a gate situated at the inpropitious north-east would bring misfortune, but a hillock, which acted as a screen, would be lucky. Correspondingly, a pond to the south-west could mean intemperance of the household head, a lavatory sited there would bring constant disease but a garden or trees planted would be benign. But a Shinto shrine to the north-west would bring divine protection, while a storeroom would be



The layout of a Japanese farmstead including dwelling, barns, stores, shrine, and tree planting, is determined by the principles of *Hogaku*, the 'Direction-Angle' orientation system. Near Kyoto.

beneficial because prosperity flows north-west along this axis. However, a number of the *Hogaku* rules could conflict with good practice—if a lavatory was sited in the most propitious position (approximately north-west by north) with a hill-slope rising to the north, then a well sited to the west of the building in a position which could bring domestic peace would nevertheless be prone to seepage from it. Perhaps because of a growing awareness of such problems some details of *Hogaku* have declined in use, but its broad principles are still observed in rural districts and an expert in the system is capable of weighing up the relative merits of different locations to the satisfaction of house-builders.²⁶

While the cosmological meaning of the *dwelling* is

our concern here it is very frequently situated in a village or town that may have its own expanding spheres of meaning, in which the mosque, church, shrine or temple is the spiritual focus. Bali, one of the many islands of Indonesia, is a mere 80 miles in length. With the only Hindu people in a predominantly Muslim nation, it is famous for the beauty of its landscape, its people, their music, dancing, and ceremonials. But much is screened from the eyes of the casual visitor. Straight and blank brick walls edge the *karang*, the houseyard or compound, with a narrow entrance on the seaward side beyond which a screen wall effectively hides the domestic life within. A Balinese dwelling comprises a number of buildings with a *karang*. Its form is laid down in the *lontar*, the palm-leaf book of rules which determines the size, proportions, different kinds of construction and spatial relationships which, as we may expect, reflect



Member of the *sastria* caste presenting offerings at the *sanggah*, or household shrine for the festival of Galungan, held every 210 days, when the ancestral spirits return to the houses of their descendants. Ubud, Bali.

cosmological concepts; it also specifies the appropriate ceremonies that have to be periodically performed. A houseyard will consist of the *meten*, a simple windowless building with woven palm leaf walls, which is the sleeping place for parents, small children, and adolescent girls, and where valuable articles are kept, a kitchen shelter, a rice store, and an open-sided thatched pavilion which is the main covered living space, the site for specific rituals, and the sleeping place of the boys and young men.²⁷ But the most important structure is the *sanggah*, the family temple-shrine, situated on the highest point and facing the east and the sacred volcano, Gunung Agung. A karang will generally be a part of a cluster of houseyards or *dadia* occupied by members of the same clan or kinship group. One of these is the 'origin' compound, and will have the principal ancestral temple of the related families.²⁸

Within the private domain of their dwellings they may feel secure and intimate with their family, but Balinese villagers are intricately bound into the structure of their communities in complex ways, that

involve the recognition of status and, within their class, manifold time-consuming duties and responsibilities. Each household must be represented by both a man and a woman (usually the wife) on the *banjar* (hamlet) council, which establishes rules of behaviour and ritual observances and determines the location of new dwellings. Each banjar has mutual aid groups, and a *sabak*, or irrigation society, which maintains the provision of water for the rice terraces.

Many other groups, clubs and societies exist and Balinese commoner may be a participating member of a dozen of them. All are ultimately linked through the temple system, to which every Balinese owes allegiance.²⁹ It is estimated that there are some 20,000 temples, one for every hundred of the population (not to mention 300,000 household—and innumerable wayside—shrines). All the temples require ceremonial and duties including ritual cock-fights, the music of the *gamelan* orchestras of tuned gongs, and the beautiful and elegantly costumed stylized dancing of the girl-child temple dancers, whose every finger or eye movement, let alone pose and step, has symbolic significance.³⁰

Many of the symbolic aspects of the buildings discussed here are reinforced through myths and legend which encapsulate the values of the societies concerned. They are mysteries, encoded in culturally determined symbols, which are only read through the acquisition of knowledge which is frequently inaccessible to all but the privileged élite: to shamans, medicine men, or priests. At successive stages in life some of the veils over these mysteries are unfolded with hallucinogen-induced visions and dreams through the traumas of circumcision and initiation to manhood. Such 'rites of passage' may be followed by others in successive phases of life until the elders with their accumulated age and wisdom pass on their understanding to succeeding generations. But the remain symbols that help to explain the inexplicable: their meanings still implicit rather than explicit; their dwelling as living space is still a model of the cosmos though its connotations are more profound than ever made visible through shape, form, or sometime decoration.

10.

VILLAGE, TOWN, AND CITY

From the floor of a valley edged by red sandstone *mesas*, or table-lands, in the desert regions of western New Mexico rises a rock with perpendicular cliffs almost 400 feet high. On it is situated, like an outcrop, the Amer-Indian *pueblo* (village) of Acoma. Pueblos are scattered along the Rio Grande valley in the central part of the state, and as far west as the Hopi settlements of the Arizona desert; Acoma, the 'Sky City', is poised between them. Occupied for a thousand years, it is rivalled only by the Hopi pueblo of Oraibi for the honour of being the oldest continually-inhabited settlement in the United States. Its breaching defensive site was breached in 1598 by a Spanish punitive expedition which massacred 800 inhabitants and mutilated hundreds more. Much of the town was destroyed but the survivors rebuilt it, and apart from the massive twin-towered adobe Mission church of San Estevan, built by forced Indian labour, it is probably little changed from its appearance eight centuries ago.¹

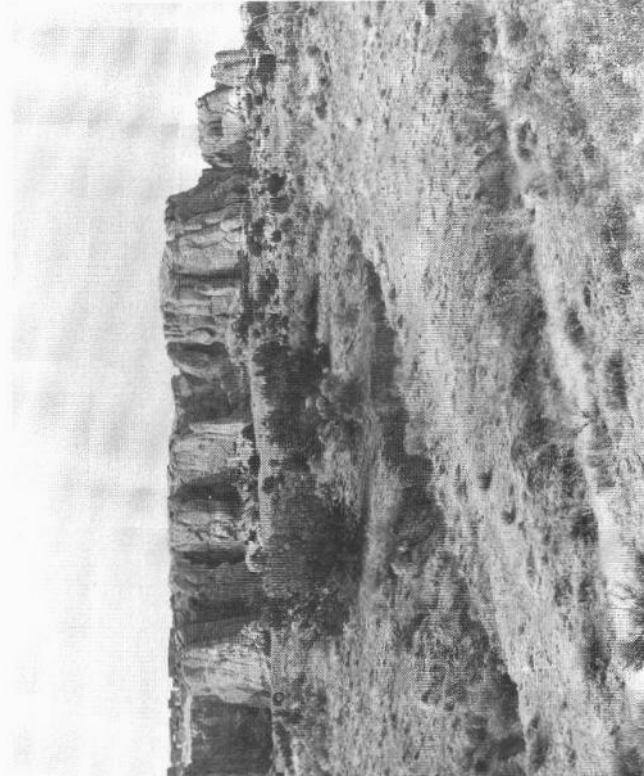
THE 'SKY CITY' VILLAGE

As dry farmers of the south-western desert, pueblo peoples skillfully cultivate many varieties of corn, squashes, and other staples. In their belief system, successful cultivation directly corresponds to the precise observance of a cycle of dances and other rituals related to the agricultural year. Essential to this cycle are the sacred and exclusive *kivas*, or ceremonial (frequently underground) chambers, where fertility rituals take place and from which emerge the *kachinas*, the beneficent deities who are impersonated by dancers. Many archeological sites have revealed similar *kivas* which link these customs to Amer-

Indian rituals of pre-historic times.² Acoma pottery of a curvilinear, and sometimes figurative, design is amongst the finest of the pueblos', but all other aesthetic activity goes into the making of costumes and kachina masks for the ceremonial dances that are closed to Anglos (white-Americans) and even to other Amer-Indians.

Acoma rock on plan, showing the access routes and trails, water cisterns, and south facing terraces of dwellings and *kivas*. (After Yellott)

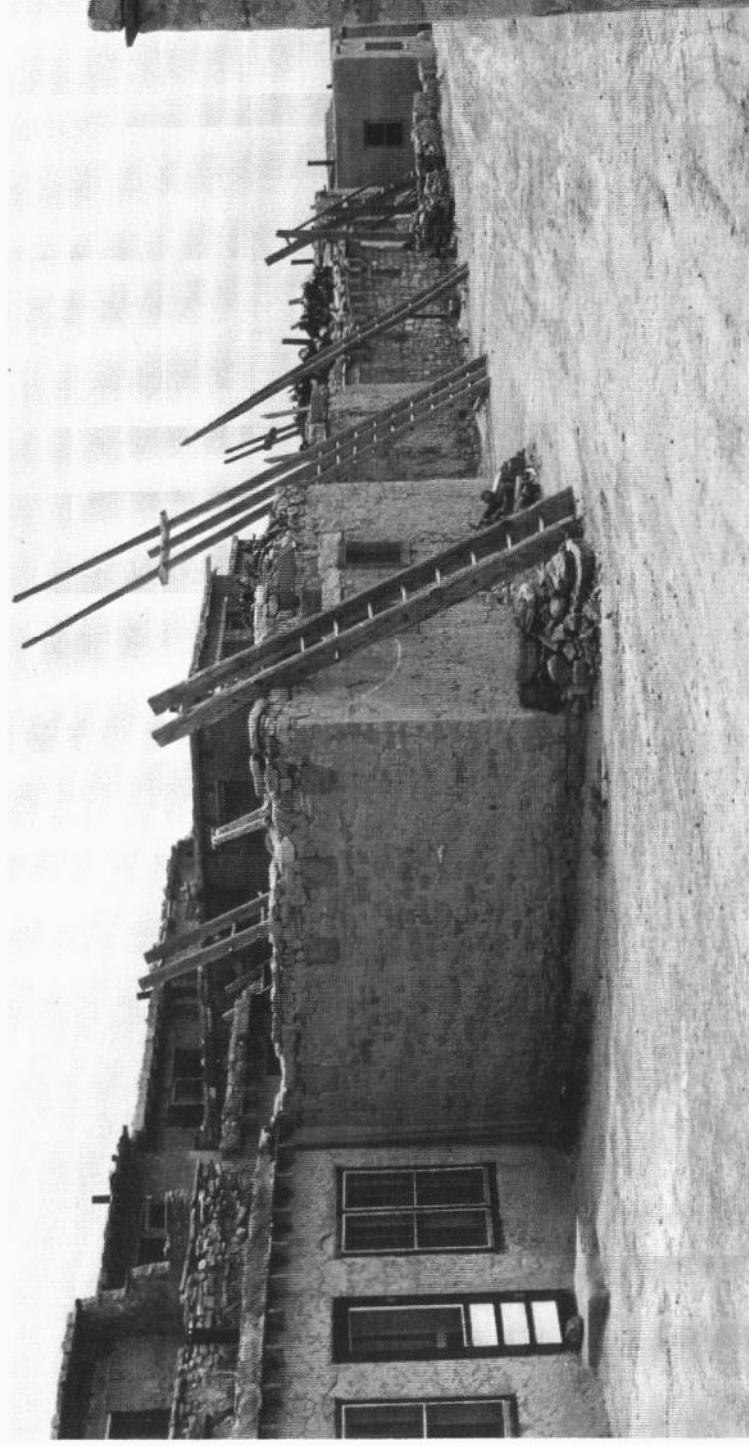




Mesa (tableland) with the Amer-Indian pueblo of Acoma to the left. Desert scrub and dried-up water-courses in the foreground. New Mexico.

It is possible to ascend the mesa by the narrow clefts with ancient hewn foot-, and hand-holds which are still in use when water has to be obtained from the mesa-top pool, though there is now an easier main trail to the top. Acoma houses are ranged on long terraces with dividing walls between the dwellings, which are stepped back to upper storeys at the rear of each block. Traditionally, the houses were built of mesa stone bonded with a cement of sagbrush ash mixed with earth and water. As there was no timber to hand, pine logs had to be obtained from considerable distance and manhandled up the trail. The roof timbers projected from the walls, not only to secure a better purchase but also because the logs were never cut: when re-used they might be required to span a wider void. At one time the only access was by ladder to the roof of the front storey, where a trap door led to the interior. The six kivas are still entered solely by this means, the notched symbols on the ladders distinguishing them from outside. Under Anglo influence perhaps, a few windows were incorporated in some of the walls, made from sheets of mica; some dwellings now have glazed windows and

Three-storeyed row houses, Acoma. Access to most houses is by ladder, but the tall double ladder is for entry to a *kiva*. The nearest and furthest dwellings have been recently 'improved' with modern windows.

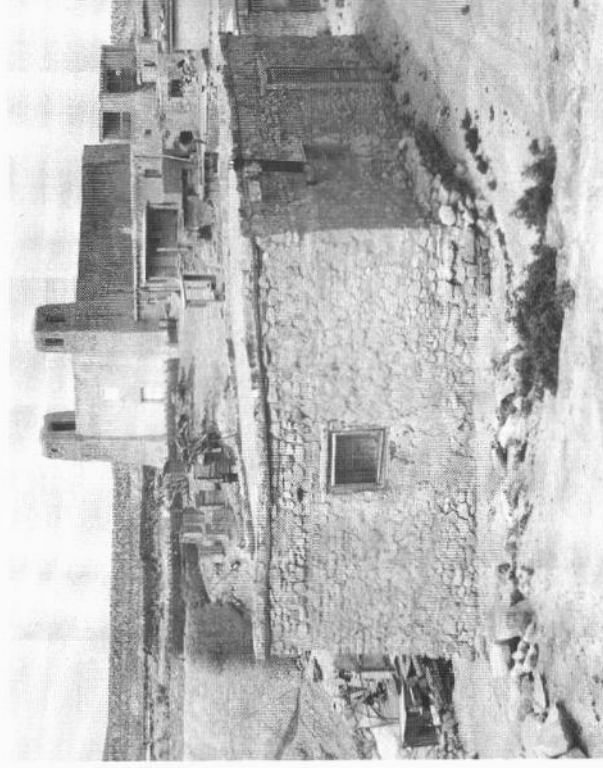


doors off the street, the latter having been inserted recently. Inside, the furniture is limited; there are one or two tables and chairs, but spaces are hardly differentiated in their functions and heavy furniture is rare.

For some of the year many of the inhabitants move to the valley settlements of Acomita or McCarty's a dozen miles to the north, close to the river and fertile land. In these satellite villages 'modern' furniture and utensils are meagre, but common. But though they house much of the population, Acoma remains the ceremonial centre, the spiritual and physical home to which all return. Theirs is a conservative society which is under the theocratic rule of the *cacique*, his war-chiefs and governor, and they adhere to the customs, values, and beliefs of their clans and associations. Change comes very slowly to Acoma, though for the past century the Keresan-speaking inhabitants have bought their clothes, tools and utensils at the trading post. They send their children to school at Acomita, own a few pick-up trucks and warily accept the visits of strangers.³

Of course, Acoma is a small community—there are perhaps 2,500 'people of the White Rock' on a reservation of a quarter of a million acres. Their lands are large enough to support them; their modest expansion in McCarty's and Acomita has absorbed such natural growth in their population as has occurred. But not without problems. Some men were employed by the Anaconda Copper Mining Company at the Jackpile uranium mine in the 1950s until they were laid off in 1962. Soon after, the Indian Unemployment Survey of the House Committee on Interior and Insular Affairs reported that unemployment among potential wage-earners at Acoma was 89.6 per cent. Its people shared the statistics of other Indian nations in cases of pneumonia, hepatitis, and dysentery many times higher than that of the American population as a whole: today, wooden privies are still perched over clefts in the Acoma rock.⁴

Yet Acoma remains on its mesa-top with its culture remarkably intact and its terraces of houses substantially unchanged. This could be because of its introverted nature or because of its relative isolation, some



The Mission church of San Estevan at Acoma. Between the church and the foreground house, private privies balance on the cliff edge.

fifty miles west of Albuquerque, though it is not far from the railroad and the pueblo of Laguna. No one joins Acoma; even the Rio Grande valley pueblos that are Keresan-speaking have difficulty in understanding the speech of its people. There are few texts about Acoma; less is known of its people than of the more distant yet more persistently-studied Hopi. It is the epitome of the closed society, a cultural island but one that is by no means divorced from the influence of what is arguably the most powerful industrialized and wealthy nation of the world. The Mission has done its work, though it is a moot point whether the people have been converted to Catholicism or have assimilated its teachings into their belief system. While Acoma has been self-sufficient for centuries, Anglo contact, especially since the late nineteenth century has been persistent and continual, with effects on the spiritual, educational, and material welfare of the pueblo. In spite of this, urban life does not seem to have attracted its inhabitants—which is not the case with village dwellers everywhere.

Increasingly, urban centres exert their fascination for villages that are not as self-sustaining as Acoma; there are strong inducements to move to the towns. And millions of people are doing so.

MARKET TOWN

For the villager who is attracted to it, the town contrasts with the village by the duplication of services and resources that are to be found within it and the greater measure of choice that it affords: instead of one baker possibly half a dozen bakers, a selection of butchers, meeting perhaps the special needs of religious groups, several merchants of textiles and clothes, tailors, shoemakers and seamstresses. In the village, the potter or the basket-maker may satisfy local demand, but in the town there will be metal bowls and plastic vessels imported from the city. Feed and seed merchants, makers of implements and repairers of tools, smiths and the garage workers that have succeeded them offer services; packed foods and other goods from the central city are on display and available for purchase. For the peasant farmer there are opportunities to purchase new livestock and to sell his own; the process of bargaining and haggling may be long as points are compared, teeth examined,

and fowl weighed at the markets, *souqs*, and fairs in hundreds of thousands of centres throughout the world.

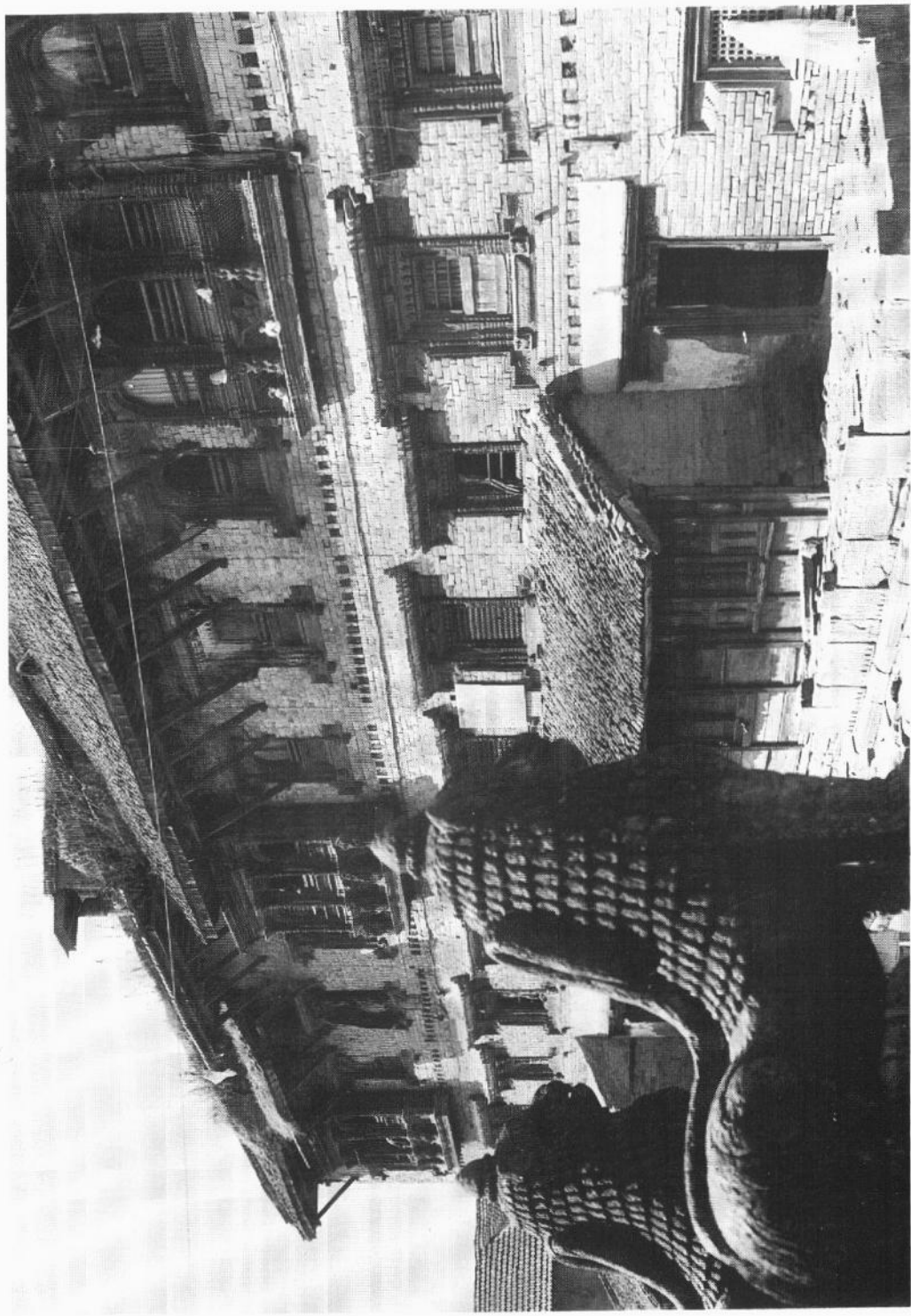
Though the focus of the market town is basically commercial, the concentration of activities and people offers far more to a rural populace with the opportunities that it affords for the exchange of prices, stories, and gossip. The attractions of social exchange and discourse are evident in the saloons and bars, the *cantinas*, *caikanas*, and cafes of countless centres. They are frequently, one is tempted to say almost invariably, male preserves; in the traditional settlements women have gathered at the wells, fountains, and wash-houses for the daily news and in the living-room, harem, or salon for domestic exchange.

This is the case with the half million Newars of the Kathmandu Valley in the kingdom of Nepal. Formerly Buddhist, they have a syncretic religion which combines Hindu elements with Buddhism: Buddha is recognized as the seventh incarnation of Vishnu. Essentially the Newars are farmers who have been blessed with rich and productive phosphatic blue clays and peat deposits, or *ko*, which were used as fertilizer. The landscape is intensively cultivated and terraced, producing two crops a year—of rice and grain. Because the population is considerable, Newar villages often have more than 2,000 residents and towns like Kirtipur more than 10,000, with densities of 500 per hectare not uncommon. Situated on a long hilltop site, Kirtipur is lozenge-shaped within its protective mandala of many temples and stupas. Within their plazas, or *chowks*, these are important social centres within the community. Narrow streets follow the contours and wind over the hilltop, linked by steep lanes and flights of steps. To the southern edge of the town is the Kasi market, another, the recent Nayaa market, is disengaged from the town to the east but is close to the University.⁵

Clustered in *tols* or enclaves, the density of the houses is relieved by the traditional custom of maintaining a *kheba*, or kitchen garden, close to the household which provides staples and also, if necessary, room for further building. Whether they are in the villages or the towns Newar houses are similar, their

Women gather to wash and collect water at a brick-built village well, Kathmandu valley, Nepal. The deep eaves, large upper level windows, and roof terraces are typical of rural Newar houses.





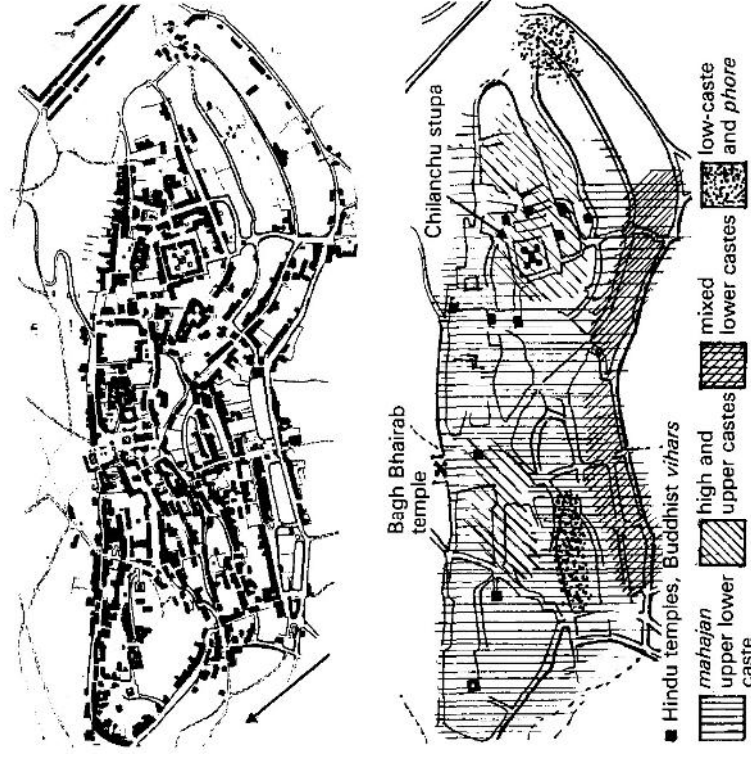
Mwane Tol, Kirtipur. Guardian lions overlook a row of old houses. The main living floor is beneath the eaves; the kitchen area is in the roof. A stone podium extends in front of the nearest house; others have ground floor extensions. Nepal.

generally constructed on three or four floors, to conserve land and to permit extended families to live in close proximity. In Kirtipur they are some 20 feet (6 m) deep with a spine wall, and are frequently built in rows though they retain their symmetrical facades. Often the rear is extended around a small courtyard to make an enclosed dwelling complex shared by the *fukée*, a household often of several families comprising members of the same caste and clan and acknowledging one head.

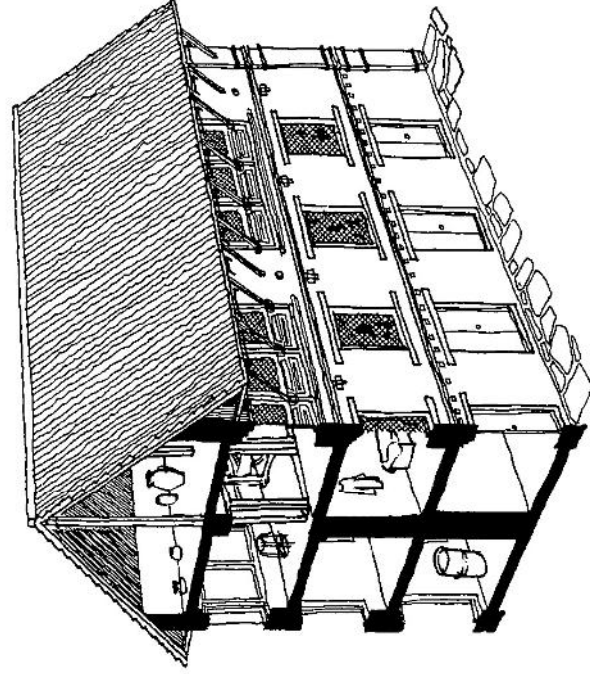
Built on deep and solid foundations of stone, the main facade is of fired brick but for the internal cross and spine walls sun-dried, unfired bricks are used. As they are affected by rising damp, the ground floors are used as byres or, when opened up and benefiting from better ventilation, as shops. Steep, open-tread

stairs, each step dedicated to a god, rise tightly at one side and can be closed off at the landings with heavy doors. The *matan*, or first floor, is used for sleeping and storage, its windows fitted with carved lattices to repel malignant spirits. Above is the *chota*, the main living floor, which has columns instead of the spine wall, giving considerable space. Well-illuminated with large windows which give good cross-ventilation and through which the *good* spirits can pass, it is where weaving and household craft activities take place. In the loft, nearest to the gods, are the kitchen and the household shrine. This area, which is restricted to the *fukée*, sometimes has a secluded roof terrace of sacred significance open to the sky. Roof tiles, bedded on sterile clay, sweep upwards to the ridge.⁶

A new house is built on the advice of an astrologer-priest who consults the *Vastu-vidya* for guidance on siting, the timing of construction, and the necessary



Map of Kirtipur, Nepal, showing the protective 'mandala' of temples and the residential areas of specific castes. The 'untouchable' *phore* live in a settlement on the periphery. (Developed from Davies *et al.*)



Section through a typical Newar house row. Lower floors have a spine wall, upper floors are open and cross-ventilated. The kitchen is nearest the roof.

sacrifices that will ensure the health, wealth, and long life of the occupants, provided they maintain their ritual *puja*. Each day commences with the women taking offerings to the nearest temple or shrine of Ganesh, the protector of their *tol*. Household gods are also worshipped, with appropriate offerings and burning of incense.⁷ Acoma and Kirtipur, each in its own way, represent as village and town many of the aspects of dwelling and living, custom and community which I have discussed in previous chapters. Each too, has its problems.

In Kirtipur, all residents of the town are subject to the strict rules of the caste system. People in the same *tol* are generally of the same caste, though in Kirtipur the *kahajan*, the farmers of the upper low caste, predominate and are dispersed through the town. Other clean castes live in specific *tols* but the unclean castes and particularly, the untouchable *phore*, the sweepers, live in a sector of thatched earth dwellings outside the town limits. It is their job to collect the manure and sweep the streets, for Kirtipur has almost no sanitation apart from a few toilets owned by Brahmins, and the streets and alleyways are used for defecation. Side 'latrine alleys' become extremely unpleasant and it is not surprising to find that dysentery, worms, and other diseases are rife among the children who play in them. The poor conditions are exacerbated by the fact that the town's 10,000 inhabitants have to depend for their water-supply on a score of unreliable stand-pipes which are prone to breaks and pollution. Some *phore* work for specific wealthy families and do nothing to keep the latrine alleys clean, while others attempt to escape their 'untouchable' outcaste status by seeking other kinds of work.⁸

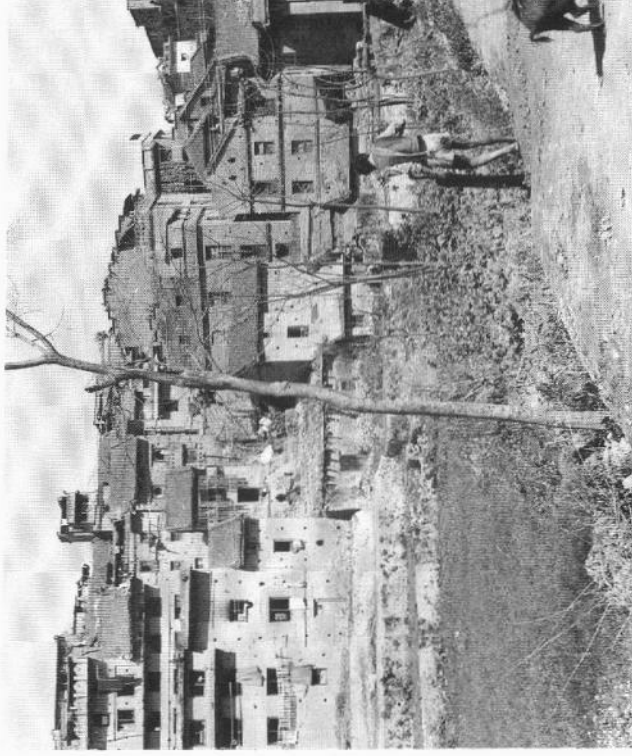
Under increasing pressures on land and resources, particularly those caused by the appropriation of a third of its lands by the University, many people have migrated from Kirtipur (and other towns) to the big cities of Bhaktapur, Patan, and Kathmandu—the smallest of these, Bhaktapur, has grown from an estimated 36,000 in 1977 to more than 100,000 in less than a decade. This qualifies it for city recognition in United Nations statistical terms which rate as a city a

place with above 100,000 people. But cities are not merely defined by numbers—some English cities (Ely or Truro, for instance) have only a few thousand population; the city is identified more by the kind of government, social structure, occupational differentiation, and the kind and quality of life experienced within it, than by its size.⁹ Size anyway, is relative: a 'great' city in the distant past when national populations were a tenth of their present numbers, was correspondingly smaller in size, though it supported a large population.

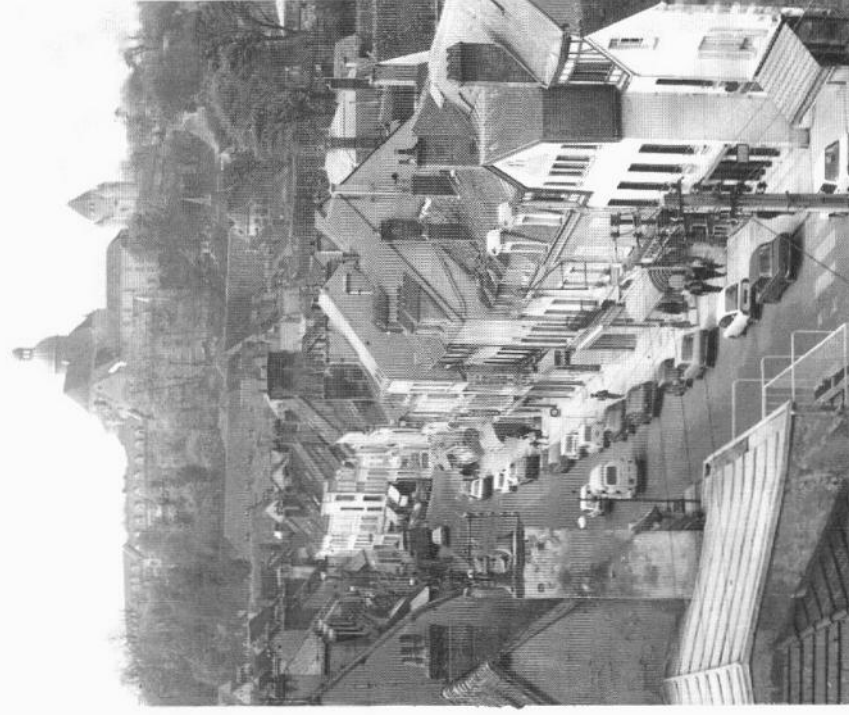
MEDIEVAL CITIES

With their high densities of both inhabitants and their dwellings, 'pre-industrial cities' (in Sjoberg's terms) depend for their existence on many factors, from a constant supply of fresh water and food to the maintenance of trade and communication routes for the transport of essentials that the city cannot provide, and to the technology for the transformation of raw materials into products. These necessitate the protection of territory, property, supplies, and life and they have implications which are reflected in the relative values of commodities, a system of laws and the means for enforcing them, the authority to impose them, and the consequent stratification of society.¹⁰

We might consider Provins, a French city—today perhaps a 'town'—in the Department of Seine-et-Marne on the eastern edge of the Brie Plateau. A promontory overlooks a well-wooded valley through which flow the Durteint and the Voulzie, tributaries of the Seine. In Carolingian times a fortress was established on the bluff, the origins of the Ville Haute (Upper Town) of Provins (probably Celtic, *pro*, *win*: high, between). But in AD 996 the remains of Saint Ayoul were miraculously recovered in the chestnut groves of the marshy ground below, and soon after a church and monastery were built and dedicated to the Saint in a new Ville Basse. Provins was chosen by the rulers of Champagne for their capital, and its situation on the trade route from Italy to the Low Countries brought Italian commercial systems, including banking. With the great commercial fairs initiated in the



Though densely packed with houses, Bhaktapur is a city with a predominately rural Newar population. Fields are close by and many dwellings have the traditional *kheba* or kitchen garden.



The ancient French city of Provins, looking from the 'Ville Basse' to the 'Ville Haute', which is dominated by the medieval *donjon*, or fortress tower, and the church of Saint Quiriace.

eleventh century Provins became the third city in France, exceeded only by Rouen and Paris.

Local industries developed, among them textiles, leather-tanning, dyeing, and pottery, including the making of roofing tiles. Famous for its vineyards, and its red roses which were made into preserves, the city was also an important manufacturing base, evident in the massive thirteenth century cellars and warehouses in much of the city. They were constructed when Count Thibault IV built the great rampart walls, embracing an area large enough to contain several farms which could sustain the city under siege. The church of Saint Quiriace and other major ecclesiastical buildings date from this time. Provins enjoyed its fame for a brief period but a royal marriage brought it into the Kingdom of France, and losing its independence, it was heavily taxed by the Crown. Plague and pillage, flood and famine, sacking by the British and again during the Religious Wars, were valiantly succeeded by periods of regeneration.¹¹ After further pillaging during the French Revolution Provins recovered somewhat in the nineteenth century with the reinstatement of its markets. But the transfer of

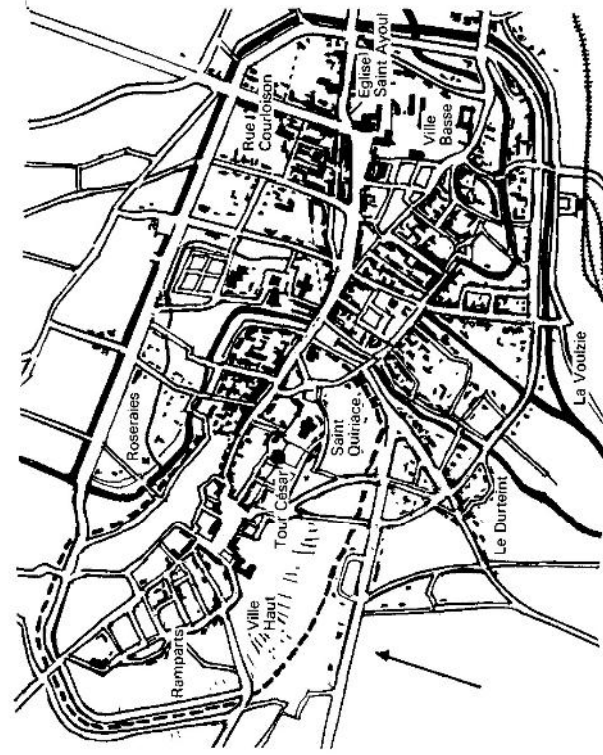
the Department capital to Melun and the bypassing of the city altogether by the railway between Paris and Basle, effectively terminated its function as a major entrepôt.

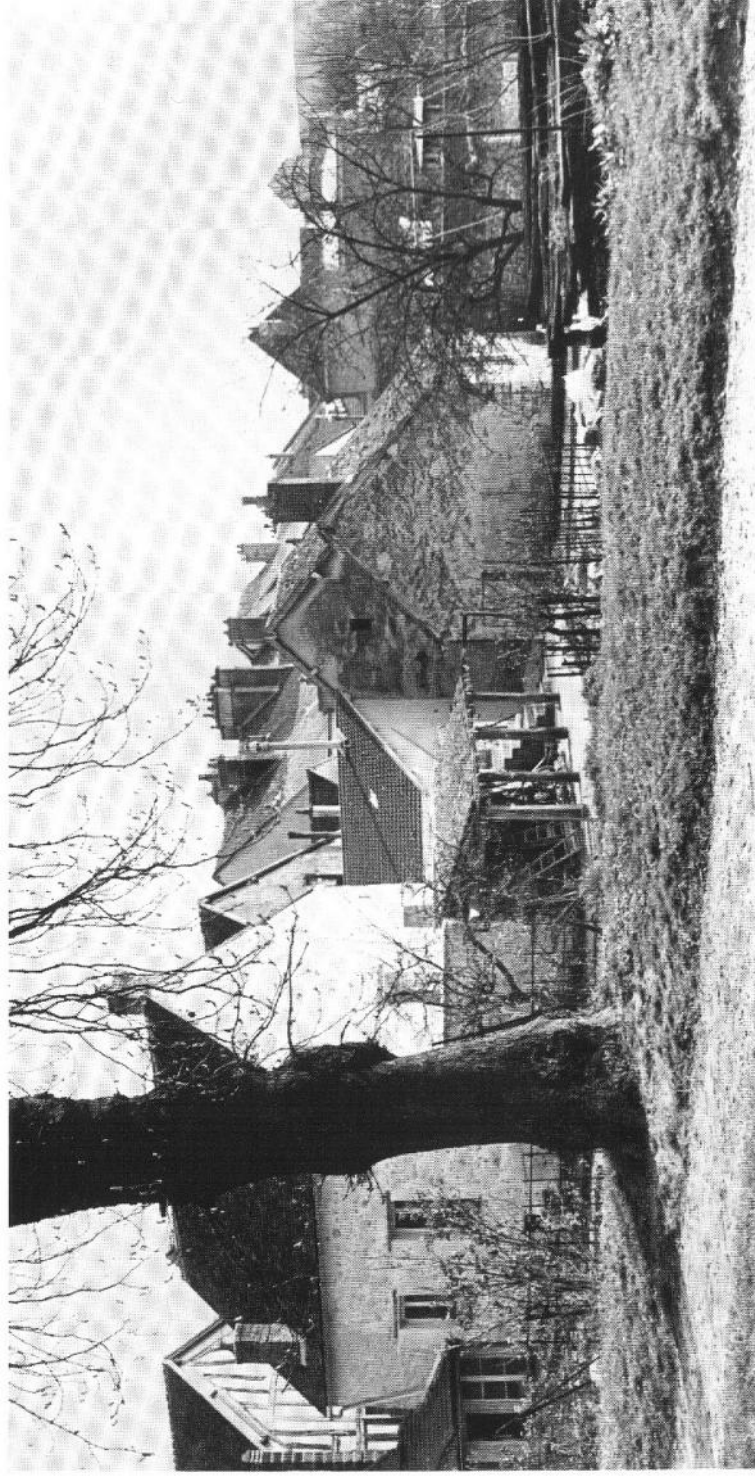
In more than its ramparts, its underground labyrinth of tunnels, and the 'Fosse rivière' along its moat, Provins retains the evidence of its medieval past. Many houses are of a very early date, and even one medieval shop still stands. Beyond narrow frontages, houses with narrow courtyards and wooden balconies extend back from the road, often with an extension or rear house with huge fireplaces built for rent to visiting merchants and pilgrims coming to the church of Saint Ayoul. Houses on the Ville Haute are entirely of stone, but those in the Ville Basse may be timber-framed at first-floor level under fine, massively built timber-trussed and tiled roofs. Modernization in the eighteenth and nineteenth centuries involved symmetrical re-fenestration, the use of stucco render, and plaster details which often hide the medieval building behind. Throughout the Ville Basse the rivers provided movement of offal, faeces, dyes from tanning; wash-houses and one or two *garderobes* (or long-drop latrines) still stand as witness to the conditions of living in the medieval city which persisted until a century ago.¹²

A desire for privacy, common in French towns, is taken to considerable lengths in Provins, houses of all types present blank walls or heavily shuttered windows to the street and have uninhabited rooms on the ground floor; the effect is to emphasize the public and private dichotomy and make corridors of the streets. This introverted nature of the house, which is almost obsessional in Provins, may reflect its vulnerability in the past. In consequence, even the wealthier houses may be in poor condition externally, though immaculate and well-furnished inside. While few people are in dire poverty, some of the elderly live in poor circumstances, without adequate water supply or drainage.

A transverse section across the city would reveal a familiar profile of high and prestigious buildings near the centre, with tall merchant houses (now often with shops beneath them), the *gendarmérie*, water-powered

Map of Provins, France. The 'Ville Haute' lies to the west, below is the 'Ville Basse' centred on L'Eglise Saint Ayoul. Rue Courloison gives access from the north.





Rue Courloison runs across the town of Provins. Behind the houses fronting on the road are smaller buildings originally let to pilgrims. Farm plots within the city wall, beyond.

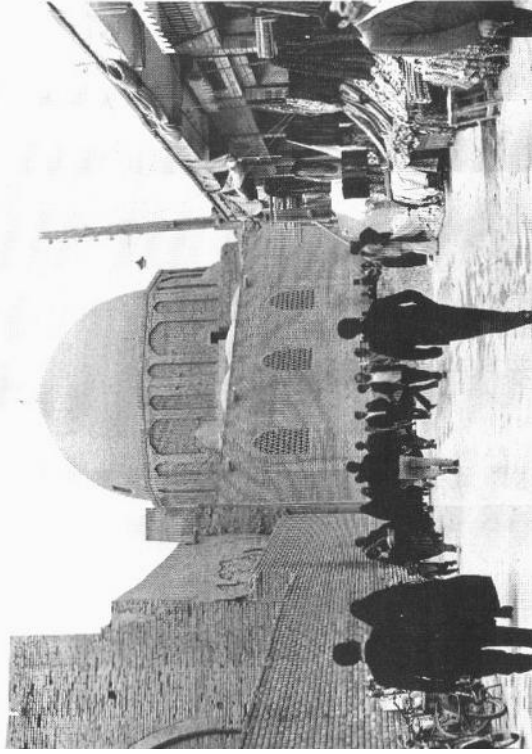
grain mills, and warehouses nearby. The level drops away from the centre with three-, two- and some single-storeyed buildings stretching to the town limits.¹³ The profile rises a little with the suburban houses of the middle-class and on the valley slopes beyond the line of the town walls rise the ungainly slabs of Champbenoit, a recent housing project, providing few amenities for the workers in local industries who reside there.

Ceramics is still an important industry—and preserves are still made from rose petals. But Provins has seen both fame and decline, the growth of craft industries and their redundancy. Today it survives as a bustling provincial town supporting a considerable military base in the Ville Basse, and as a ghost town in the conserved Ville Haute, still largely surrounded by its ancient ramparts. With a population in 1980 of around 13,000 it is smaller now than it was in medieval times, but the townspeople's concern about the prospect of accommodating 400 new inhabitants anticipated with the building of a nuclear plant at Nogent-sur-Seine nearby, partly occasioned the field study on which this account is based.¹⁴ Accepting its

backwater provincial status has been difficult for its inhabitants, but it has avoided the pressures of population growth and gross unemployment that have afflicted bigger and dominant cities. In spite of its small size its long history encapsulates much of the past of many European traditional towns and cities—the pilgrimage site and the rise of secular power groups, prosperous trade and harsh exploitation, dependence on effective communications and subordination to the rising power centre of the capital.

It has been argued by Paul Wheatley that if the origins of urban morphology are traced in such primary regions as Egypt, the Indus Valley, the North China plain, or Mesoamerica among others, one finds that the settlements are dominated not by market or defensive system but ultimately by a 'ceremonial complex'.¹⁵ Here the key word is 'dominated', since to some degree they will *all* be present in any coherent and permanent settlement, irrespective of scale.

Acknowledged by many European travellers from the seventeenth to the twentieth century as being one of the most beautiful and cultivated cities in the world, Isfahan, 'the place of horses' is situated on the relatively arid central Iranian plateau. There a fertile plain is fed by a river, the Zayendeh-Rud, which flows for some two hundred miles before dispersing



Bazaar shops cluster around the eleventh-century mosque, the Masjid-i-Jame at Isfahan. The mosque faces internally and there is no facade.

in salt marshes. Midway between the Caspian Sea and the Gulf, and on the trans-middle-Eastern route which brought goods from China to the Mediterranean ports of the Roman Empire it attracted early settlements. Over a thousand years the bazaars and caravanserais were clustered in a dozen villages and towns which gained strength from their strategic importance. In the tenth century AD the Buyyids brought them together in a circling wall, and established a city which had as its focus the great Masjid-i-Jame mosque and, nearby, the shrine of Harun-i-Vilayet.¹⁶

During the ensuing centuries a network of covered bazaar routes was woven, tying the scattered serais, *timches* (display arcades), the mosques and *madressehs* (theological schools) into the urban fabric. The requirement that the *kibla* wall of a mosque should face Mecca was the generator of much of the urban form. Apart from having its own workshops and serais, which were served by caravan routes that were kept distinct from the pedestrian lanes, each guild of craftsmen worshipped at its own local mosque, and bathed at the *hammam*, the public baths.

Its strategic position made Isfahan an irresistible prize for successive dynasties and conquering armies,

and the catalogue of wars, massacres and destruction makes distressing reading. But in the late sixteenth century the Safavid Shah Abbas defeated the Turks and the Uzbeks and made Isfahan his capital, instituting in 1597 a programme of building and development that continued for thirty years. With his planner Sheikh Behai he shifted the centre of the city outside its former limits to a polo ground which he made into a new *maidan*, still one of the largest public spaces in the world. Beside it a Timurid gatehouse became the entrance to his palace gardens; opposite he built a mosque to the memory of his father-in-law Sheikh Lutfullah and at one end of the maidan a mosque to himself, the Masjid-i-Shah, both remarkable for their beauty and skilful, eccentric orientation. To bring merchants to the new city he threw two bridges across the Zayendeh-Rud and built a boulevard, the Chahar-Bagh, lined with gardens, fountains, and *jubs* or watercourses, which brought fresh water through the city. At the far end of the maidan the Kaiserich gate denoted the entrance to a new Bazaar-i-Shah, formally planned but ingeniously linked with the meandering route of the old bazaar.¹⁷

These were the greatest years of Isfahan's history, when literature, poetry, learning, scholarship, religious thought, judicial systems, architecture, and the visual arts flourished alongside its commercial activity. Some 1,600 caravanserais and 300 hammams were in use besides numerous mosques and madressehs and the network of routes and lanes which made the Isfahan bazaar the largest in the world. Between them were the houses of the merchants, with great garden courts, *talars* (loggias), and winter rooms, and separate smaller secluded *anderun*, the courts for the women, and blood or marriage kin.¹⁸ In the remaining spaces the houses of the artisans were ingeniously sited, with small rooms and stores taking up the irregularities so that the courtyards, though small, could be square with a central pool and tree. Though many of the merchant houses are in disrepair today, the artisan dwellings are still in use. Approached by twisting narrow lanes between the high blank walls, an unobtrusive doorway opens on to a small reception chamber from which access to the entertaining area

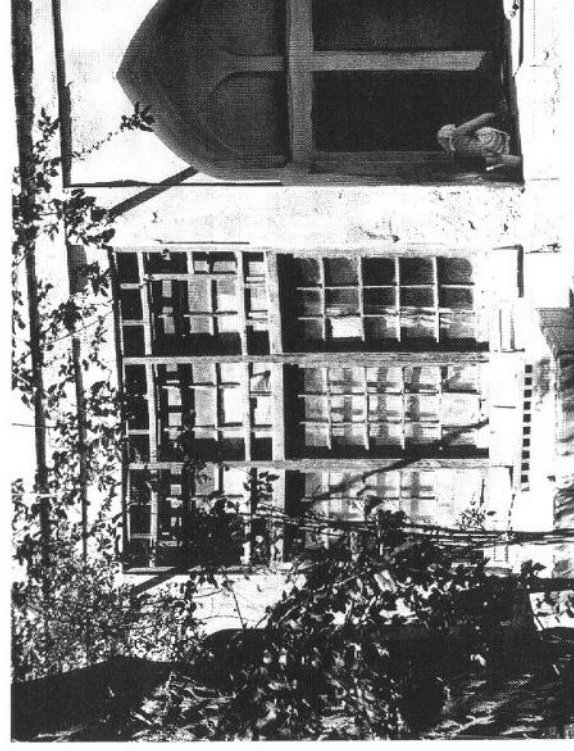


Houses take up the spaces in the oldest part of Isfahan, the site of the Maidan-i-Qadim. Roofs are used for drying dyed wools; a standpipe serves the community of guild members and their families.

for male non-relatives may be gained. Beyond, a modest dwelling may have a kitchen, latrine, several personal rooms, and a joint family room opening on a single court. Service lanes facilitate the evacuation of the latrines.

Lanes that were built to take camel trains and donkeys cannot take vehicles; when a major serai burned down in the 1970s there was no access for a fire tender.¹⁹ Under the late Shah's programme of modernization the city suffered draconian measures which introduced modern thoroughfares that sliced across its grain and severed the link between the Masjid-i-Jame and the bazaar, violating rather than complementing its organic structure. The city has continued to attract newcomers, of whom many were domiciled in old serais of the bazaar area that had lost their former function. Others were joined by their families and moved to the slowly expanding low-rise suburbs.

In spite of its turbulent history, Isfahan has weathered the tempest of its past, maintaining the essence of the city as a complex of communication systems



Interior courtyard of a small house in the Isfahan Bazaar. The angled entrance to the street is to the right of the arch; a woman prepares food before the entrance to the guest and reception room. In the court a tree and garden pool help to keep the courtyard cool.

through which are channelled the exchange of concepts, creativity, and commerce on which it thrives, and within the pattern of its culture enhances the quality of life of its inhabitants.²⁰

URBAN CRISIS

Much time and paper has been spent on defining the city. Louis Wirth attempted a sociological definition, concluding that it was distinguished by the great size of the population aggregate, its high density, and the heterogeneity of its population. He noted the greater secularization of the community and the growth of voluntary organizations through which the urbanite acquires status and satisfaction, and he commented upon the segmented social roles of the urban population. He believed that contacts within the city were impersonal and transitory and that competition and formal control had been substituted for the bonds of kinship and neighbourliness that exist within the 'folk' community. Wirth's theories were based on a western concept of the city and some of his conclusions were challenged by William Bascom when, in 1955, he compared them with the urbanization patterns of the Yoruba in Nigeria.²¹

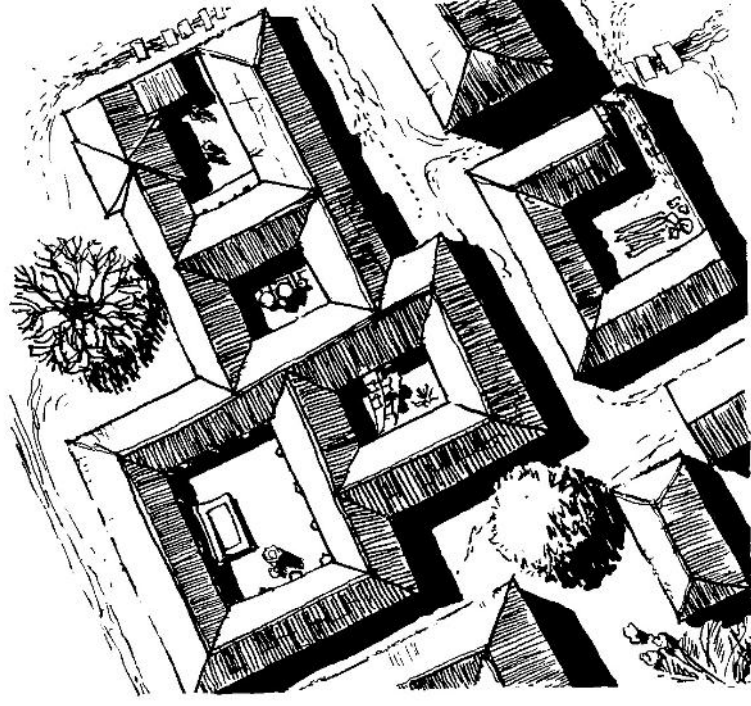
Before the 'Scramble for Africa' and its partition at the close of the nineteenth century into colonies of the European Imperial countries, the continent south of the Sahara had very few cities. Most African peoples lived in villages, or sometimes within somewhat larger settlements from which the chiefs ruled their peoples and territories. But there were some, as we have seen, in the savannah regions, and there were significant early exceptions even in the forest areas such as the Ashanti capital of Kumasi. The Yoruba, one of the most influential people in Africa, who occupy a large territory of Western Nigeria, were inclined to form towns and cities under the direct authority of a ruling élite claiming descent from a common ancestor or king. As they were largely an agricultural people, this necessitated frequent contact with the farmlands even when residing in cities, so the reasons why the Yoruba favoured town-dwellings are not altogether clear; some urban geographers contend that they were not essentially *urban* because of their rural dependency and nature, viewing the Yoruba towns including Ibadan as large agglomerates of villages.²²

Historically the largest indigenous city in Africa, Ibadan is well situated in hilly and once wooded country at a confluence of rivers. Its site was formerly

occupied by the Egba who, in a war between the Yoruba factions, were defeated in 1829 and the hill made a base for the armies of the Ife, Ijebu, and Oyo. In the ensuing struggle for supremacy the Oyo and Yoruba emerged as victors and Ibadan came to dominate the other Oyo settlements. As families clustered around the military leaders the city assumed over a few generations a complex, but bewilderingly unplanned, character.²³

Yoruba compounds are usually square in plan, surrounded by a continuous and walled enclosure of rooms with an internal loggia, under a thatched, or later sheet iron, roof. Rooms opened on to the central courtyard where kitchens and community activities and craft industries were conducted. Typically a man might have more than one wife, each of whom would have her own room while he would occupy another. Several families shared a compound, which might have as few as a couple of dozen inhabitants or, in some large examples, even a few hundred. In the

A large traditional Yoruba compound providing accommodation for over a score of families. Under pressure of population growth such compounds were divided and built over.



raditional compound therefore, children grew up in a highly social environment, though often a dirty one. The lack of latrines, or the money to pay for night soil to be removed, the deteriorating conditions of drainage channels, laterite earth courtyards, and anes, all made for difficult living conditions in the rainy seasons as the population increased.²⁴

In part, the population grew by natural increase for large families are common even among the educated urban élite. But the craft industries and the markets also attracted numbers of people from other Yoruba villages and towns and from further afield. Ibos took administrative posts, Hausa secured their position as intermediaries in trade, living in the *sabon gari* or *zongo* areas, the divisions of the city to the north-west where non-indigenous people lived (even so, today 95 per cent of the city is Yoruba, and largely Ibadan-born), contributing to Ibadan's high population densities. The attractions of the growing cash economy, combined with the greater social freedom of the city continued to attract migrants. Ibadan had an estimated population of 70,000 in 1856 which had grown to 200,000 by the end of the century.

With European colonization the railroad came to Ibadan shifting the city's focus from the markets as its business and administrative districts developed close to the station on land leased by the Council of Chiefs. Land is owned by the descent groups and the settler who wishes to build must seek permission and a lease. Few traditional compounds remained intact by the late 1960s; most had been built over or replaced by later housing in which rows of narrow rooms flank a corridor or covered hall, which performs some of the functions of the earlier open courtyard; at the rear a small courtyard may contain a kitchen, a bathing space, and a pit latrine. Even so, at least a third of the houses do not have these facilities and more than half do not even have electricity.²⁵ By 1963 the population had grown to 600,000 and it had topped a million by the end of the decade. To a great extent Ibadan's expansion depended on crafts and services. Its business and its industrial sector grew in importance, though relatively few people are employed in the city's small number of machine-powered industries,



The old city of Ibadan. Single-storeyed buildings give way to larger, axial houses divided into several apartments. Western Region, Nigeria.

which include tobacco, plastics, and soft-drinks bottling factories.

Unemployment in Ibadan is a serious problem, and the majority of the self-employed males live by petty trading which demands small capital but also produces little profit. There are two periodic 8-day markets, and many daily and night markets with complex channels of distribution. The role of women in market trading is vital; spare cash after basic needs are met may be invested in the *esusu*, the traditional Yoruba savings associations, which help finance building on a cyclic basis.

Half of the city's dwellings and the majority within the walled town, are in a seriously deteriorated condition. Though there is some planning legislation it is applied to the newer, middle-class residential