

# Common Features: Extended Roof Ridges

The most distinctive feature of Southeast Asian vernacular architectural forms is the extended line of the roof, often with outward-sloping gables. This style is not only ancient, but is often carried over into modernised forms, being made to stand as a visual symbol of local ethnic identities. The extended ridge, sometimes developing elegant curves, cannot be explained in functional terms, nor is it integral to a particular mode of construction. Its appeal is aesthetic, and it is achieved by a variety of different building techniques.



Detail from a Dong Son drum (above), showing a typical Austronesian-style habitation with a saddle-back roof similar to that of Toraja houses in south Sulawesi (below).

↗ The palace of Rajas of Simalungun in Pematang Parba on the northern shore of Lake Toba. Roof profile of Toraja rice barn (lower photograph) echoes that of the house.

(Below) Elevation of a Toraja origin-house.

## Evolution of a Style

The wide distribution of extended or curved roof ridges throughout the Indonesian Archipelago suggests that the form is a very ancient one. This kind of roof style is also found in Micronesia, and in pockets along the coasts of New Guinea, where it acquires the most fantastic elaboration in the men's houses of the Sepik river. Generally, the evidence indicates that it is almost certainly much older than the earliest surviving pictorial representations of such roof forms which first appear on Dong Son bronze drums of north Vietnam (c. 500 BC - AD 100). Although these drums were traded widely throughout island Southeast Asia, Dong Son influence never extended eastward beyond Indonesia, which suggests that this type of roof might have dated back to a much earlier Austronesian period. There is interesting archaeological material from Japan where it has been demonstrated how pile-built structures, with extended gables, could have evolved from prehistoric pit dwellings. Bronze artefacts from the 1st-4th centuries AD depict various structures of this type and Neolithic southern China has been suggested as a common point of origin for the architecture of both Indonesia and Japan.

## Variations on a Theme

The extended roof ridge has been elaborated in a number of different ways throughout the Archipelago. Karo Batak houses of northern Sumatra are sometimes topped by a cluster of smaller roofs with gable



ends (see p. 25), while among the Minangkabau of west Sumatra, the roof is swept up at either end to finish in elegant points like the horns of a buffalo. Among the Toraja of Sulawesi, the roof ridges of noble houses were extended so far and high beyond the gable ends that they required an extra free-standing post (*tulak somba*) to support them.

## Construction Methods

Although many Indonesian roofs have a similar form, construction techniques differ. In Toba Batak houses, the extended ridge line is achieved by a graduated angling of the rafters, to produce a fan shape, which is reinforced by diagonal ties. The Minangkabau however use a truss and cross-beam structure, with many small rafters and battens to build up the roof peaks. Then again, the Toraja roof has a straight ridge beam to which additional members are added at each end, angling upward and outward to produce a cantilevered framework for the eaves which require the additional support of free-standing *tulak somba*. But whatever form it takes, the roof is without





#### RICE BARN AND RAFTERS

The roof profile of a Toba Batak rice barn (*sopo*) (top), closely resembles that of a 9th-century structure depicted in relief at Borobudur (above). The roof of the *sopo* is mainly supported by the rafters, and this is also the case elsewhere in Indonesia, though larger structures may be reinforced by additional load-bearing elements.

#### HORNED HOUSES

Crossed gable finials, which are often elaborately carved, are a very characteristic feature of Southeast Asian roofs, derived, no doubt, from the solution to a technical problem of how to hold the rafters together at the ridge. Often there is a symbolic association of the house with the body of a buffalo in which case the gable finials are identified as the horns of the beast. This idea is quite explicit in southeast central Sulawesi (right) where the silhouette of buffalo horns can be clearly distinguished in the elaborate carvings that ornament the gable finials. Among the Karo Batak of north Sumatra, buffalo heads, fashioned from *ijuk* palm fibre complete with real horns, are placed at either end of the roof ridge as a protective measure (see p. 25), while in the case of the Minangkabau house (above), the roof as a whole is identified with the horns of the animal (see pp. 26-27).



doubt the dominant architectural element in Indonesian houses, with walls being either very low or even absent altogether — in Roti, Savu and Manggarai (west Flores), the house consists simply of a platform under an expansive roof.

#### Traditional Roofs in a Modern World

Indigenous roof forms have a continued appeal today as images of a local identity. One sees them everywhere, grafted onto hotels, airports, municipal buildings and even reproduced in miniature for tourists. As traditional images are lost or change their meaning in a modern context, archaic roof forms continue to persist as a convenient symbol of ethnic identity.

#### SACRED PEAKS

Not all Indonesian houses have extended roof ridges: in many areas of eastern Indonesia, the ridge piece is reduced in length, though the height of the roof may still be impressive. The most dramatic expression of this style may be seen in the Sumbanese clan house, with its tall peak known as *toko*, which resembles, both structurally and morphologically, the *joglo*-style roof found in Java (p. 35). In both instances, the space beneath the raised roof ridge is considered the most sacred part of the building, while the four columns supporting this central section are endowed with a special symbolic significance. In the case of the Sumba clan house, the attic is where seed rice, sacred heirlooms and other house treasures are stored. Some of these buildings become so sacred and taboo-ridden that their owners fear to live in them, preferring to reside in ordinary, profane houses elsewhere. In such instances, the clan house acquires the character more of a temple than a dwelling.



# Rumah Gadang: the Minangkabau Great House

The Minangkabau people of West Sumatra have developed one of the most distinctive and refined variations of the Austronesian saddle-back roof to be found in all of Indonesia. The traditional house, called rumah gadang, or 'great house', is still a striking feature of the Minangkabau highlands, though they are not as common now as in the past. Some of the older houses were really enormous, providing accommodation for several matrilineally related families under one roof.



## The Minangkabau

The roof of the Minangkabau house soars up to delicate points at the gable ends. Often the ridge line is broken into tiers, creating as many as six or more such pinnacles on the largest and finest buildings. The Minang compare these graceful spires to the horns of the legendary 'victorious buffalo' (*menang kerbau*) which prevailed in a tournament organised by Javanese rivals, and from which, according to popular etymology, they take their name. In 1990, the Minang numbered close to 4 million in their home province, but at least 1 million more live outside their homeland, having migrated (*merantau*) to other parts of Indonesia and beyond to work and trade. The migrant spirit is deeply embedded in Minangkabau culture and has been responsible for an exposure to many exotic influences. The practice of matriliney, in which descent is traced through women who inherit the house and all ancestral lands, is an important feature of the Minangkabau. The matrilineal system has survived several centuries of Islam — the religion has been thoroughly integrated into Minang culture since the 16th century — as well as the many changes of the colonial and modern eras.

## Great Houses

In the past, Minangkabau 'great houses' lived up to their name: a Dutch colonial officer in 1871 found over 100 people living in a single house in Alahan Panjang, and between 60 and 80 resident in another. The largest structure still standing measures 120 x 15 metres with 20 *bilik*, or family apartments. During

*Minangkabau society is sub-divided into matrilineal clans, which fall into two categories: the aristocratic (koto piliang), and the democratic (bodi caniago). This distinction has an architectural register: the living floor of aristocratic houses steps up towards the ends (below) while that of bodi caniago houses remains level throughout. Another distinction is the existence of the 'anjung' (raised area) which can only be found in koto piliang houses.*



this century, however, war and natural disasters have caused the destruction of many older houses. Some were toppled by a severe earthquake which hit Padang Panjang in 1926; thousands more were destroyed in the war for Indonesian Independence (1945-49), and during the unsuccessful PRRI Rebellion in the 1950s. Afterwards, it proved too expensive to rebuild these great houses and finance the rituals which must accompany their construction. Deforestation has also made it increasingly difficult to find trees large enough to furnish the central pillars of *rumah gadang*. Today, many people think it more prestigious to build modern homes in concrete. Nevertheless, the old houses still remain important as places of origin and as the proper sites for ceremonies.

## Construction Techniques

The Minangkabau house is put together without nails, the mortised post and beam framework being pegged or wedged in place. The central house post is set vertically, while in older houses the outer posts slope slightly outwards, to accentuate the roof line. The latter is built upward and outwards by means of internal crossbeams and trusses, the peaks being extended by an assembly of struts and battens. Thatching was traditionally made from tough, black sugar-palm fibre, capable of lasting a hundred years, though corrugated zinc became a popular alternative as early as 1907. Other building types, such as rice barns, prayer halls, and meeting-houses, echo the basic form of the house.



Rumah gadang are raised one or two metres off the ground on stilts. The space beneath the living floor is often closed in with plaited bamboo panels to create a buffalo pen. The roof is thatched with ijuk palm and the pinnacles are tipped with metal finials. The longitudinal elevation is unusual for Indonesia in that the walls are quite high in proportion to the roof. These surfaces are

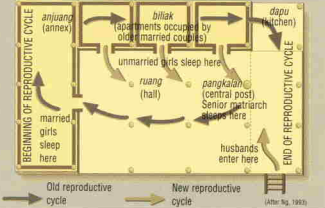
often elaborately carved and painted. Minangkabau wood carvings, like their textiles, make extensive use of plant motifs which are rich in symbolic significance.



(Above) A recently constructed Minangkabau house built in the traditional style. Unlike the rumah gadang, many houses hold only single families. Traditional houses are decorated by carving which are derived from plant and animal motifs.

#### HOUSE PLANS AND SPATIAL ARRANGEMENTS

Minangkabau houses are rectangular in plan, with the entrance in one of the longitudinal sides. This opens into a capacious hall (*ruang*), where meals are taken and social activities take place. At one end of the hall, there is a raised area called the *anjuang*. In matrilineal Minangkabau society, husbands live in their wives' houses, and traditionally, the *anjuang* is where the most recently married daughter of the house and her husband reside. Other married women and their spouses occupy apartments, or *biliak*, at the back of the house. As each girl gets married she moves into the *anjuang* while the other married women shift down one room towards the kitchen. Ideally, the oldest woman in the house should sleep in the *biliak* next to the kitchen. If there are no vacant *biliak* to accommodate her, she will move into the space called *pangkalan* (central post) reflecting her status as the senior matriarch. Nowadays, newly wedded women often prefer to move out and build a new dwelling in the house compound if they can afford it.



# Houses for the Dead

In a region where the house is such an important focus for the activities of the living, it is no surprise that many Indonesian peoples have a tradition of providing houses for the dead. It is a common feature of ancestor-based religions that the afterlife is perceived as an improved version of life on earth. Communities of the dead are conceived as being like the villages of the living, and tombs and mausoleums are often elaborately constructed in the form of miniature houses. In some places, the costly erection of stone tombs both ensures greater permanence, while enhancing the prestige of the deceased's descendants.



The dead are often buried in close proximity to the living: Christian graves in north Nias.

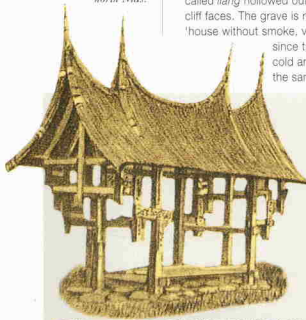
## Preserving the Bones of the Dead

Indonesian funerals may be expensive and prolonged affairs, but it is through celebrating these protracted rituals that the dead are transformed into ancestors, with the power to bless their descendants with health, prosperity and fertility. Great importance is hence attached to preserving ancestral remains. The Toraja of Sulawesi, for example, have lengthy, expensive funerals which, for high-ranking individuals, may be split into two distinct phases, sometimes separated by a year or more. The dead are traditionally placed in family tomb chambers called *liang* hollowed out of huge granite boulders or cliff faces. The grave is referred to in ritual verses as: 'house without smoke, village where no fire is lit',

since the afterlife is envisaged to be cold and fireless, though otherwise the same as this one.

## AS IN LIFE, SO IN DEATH

In west Sumatra, Minangkabau graves traditionally employed the distinctive roof form of the *rumah gadang*, or 'great house' (see pp 26-27), with its saddle-back profile and elegant spires (left). Further to the north, the Toba Batak, up until around the 1920s, used to construct miniature wooden tomb houses (*jora*) on piles, complete in every detail including carved decorations, a hearth and an entry ladder. Today, Toba Batak graves are usually constructed in concrete to create more permanent memorials for the dead. Although a variety of Art Deco and other Modernist examples exist, the traditional house form is still commonly adopted, despite 100 years of Christian fellowship (left bottom).



Secondary rites for the dead often have a collective character. Periodically, Toraja tombs may be opened to re-wrap the bones of all those inside, at which time additional sacrifices of pig or buffalo may be made for the benefit of the deceased in the afterlife. The Ma'anayan of Kalimantan celebrate secondary rites called *Idjambé*, at which the remains of a number of related persons are cremated in specially constructed coffins, and the ashes relocated in a collective mausoleum carved of ironwood, called *tambak*. In Sumatra, the Toba Batak continue to maintain an interest in secondary funeral rites in which the bones of several generations of patrilineally related ancestors will be exhumed and regrouped in a house-shaped concrete tomb, also called *tambak* or *parholian*. Even more expensive is a rite to commemorate the founding ancestors of an entire clan with the construction of an elaborate mausoleum (*tugu*). More effort nowadays seems to be spent on such monuments than on the maintenance or rebuilding of traditional houses.

## Dwellings for the Dead

House-shaped graves can be found all over the Archipelago. The Ngaju of Kalimantan traditionally raised finely carved mausoleums, on tall posts, which were shaped like houses with extended roof ridges, while the Mamasa Toraja build miniature houses over burial sites. The Rotinese incorporated the dead into the house by burying them beneath the house floor; when the Dutch prohibited this practice, they made separate graves beside the houses and constructed miniature houses on top of them. In Ngada, west central Flores, female ancestors are commemorated with miniature houses erected in the central plaza. These are paired with offering posts topped by conical thatched roofs, which are dedicated to male ancestors.

## Intimate Bonds

It is a feature of indigenous Indonesian religions that the living tend to maintain a relationship of some intimacy with the ancestors. Graves are often very close to houses, as in Sumba where they occupy prominent positions in the middle of the village, opposite to the houses. In both north and south Nias, tombs or stone monuments to the dead are also erected in front of houses. The shades of the ancestors may also be thought to visit the house itself. The Makassar of South Sulawesi traditionally kept an ancestral shrine in the attic; elsewhere, for example Sumba, precious and powerful heirloom objects stored in attics are closely associated with the power of the ancestors. Many peoples used to make a symbolic gesture of feeding the ancestors within the house at mealtimes, as was the case in Toraja, Toba and Timbar. In the latter instance, exquisitely carved ancestral altars, in stylised human form and often incorporating both male and female symbolic elements, were the centrepiece of the house. Offerings were made to the skulls of ancestors which were placed on a shelf at the top of it.

# Sources of Early Indonesian Stone Architecture

Architecture in permanent materials began to appear in Indonesia at about the same time as the first designs for stone structures were being formulated in India. In both areas the earliest buildings were intended for religious purposes, to house icons. These icons, either anthropomorphic statues or, in the case of temples dedicated to the god Siva, the lingga or phallus, were perceived as receptacles for the spirits of the gods, who were ritually invoked to descend into them by prayer and offerings. In both Indian and Indonesian cultures only religious specialists were allowed to enter the central sanctuaries.



## Stone Temples and Sacred Caves

The central requirement for Indonesian and Indian designers of temples was to furnish a space closed off from the outer world, in which the priests could present offerings, offer prayers, and communicate with the gods when they descended to earth and took up residence in their icons, undisturbed by profane influences. The temples were not intended as spaces to accommodate large groups of worshippers. In both India and Indonesia no traces of the wooden forebears which must have preceded the earliest stone buildings remain.

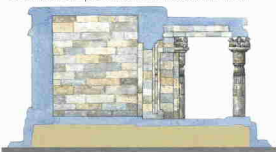
In India, natural caves were sometimes used as places of worship. In other instances, solid rock was carved into caves with ceilings replicating wooden structures. At Mahabalipuram, south India, complete three-dimensional replicas of structures traditionally built of perishable materials were carved from stone. In Indonesia, however, we have no such information to help us reconstruct the possible nature of the earliest sanctuaries built of perishable materials. A few cave sites were artificially excavated in Indonesia, but they were very simple structures. Artificial cave sites from the Classic period include Lawang, Silumbu, and Abang, near Purworejo; two caves at Ratu Boko; and a small cave nearby at Candi Abang.

The earliest stone edifices from India from about the 5th century comprise small sanctuaries probably intended to house lingga. They were essentially squat rectangles. One of their major definitive traits was the pillared front porch. The use of pillars and columns, usually highly decorated, has remained a typical element of Indian religious architecture ever since. Some have detected in this a connection with the art of Gandhara, in what is now northern Pakistan. Gandharan art preserves numerous elements of

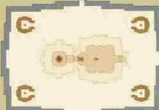


»A painting of the temple ruins of the Prambanan area by Dessin de Barclay.

(Below) Relief of a wooden structure with supporting 'caryatids' on Borobudur. (Below right) An Indian temple with external pillars.



Early Indian architecture: Orissa (above) Mahabalipuram (below)



Hellenistic art, which emphasises the use of columns and pillars.

Pillars and columns are not found in the earliest Indonesian stone temples, which date from the early 8th century. It is however possible that pillars did exist in earlier wooden buildings. The oldest surviving permanent structures in Indonesia are Hindu temple complexes on the Dieng Plateau and at Gedong Songo. At both sites the dominant architectural form is the *candi*, a stone-walled room surmounted by a tiered roof, and raised on a plinth or basement. The entrances are formed by small narrow vestibules with walls rather than pillared porches, an Indonesian trait perhaps based on prehistoric wooden structure, perhaps also connected with a greater emphasis on the secrecy of the rituals conducted inside the *candi*.

## Timber Antecedents

We can gain an impression of the early wooden architecture of Indonesia from one of the reliefs at Borobudur (first gallery, eastern face, northern wing, upper register). The building portrayed here seems to



*Candi Arjuna, Dieng, Central Java, relatively close to Indian models.*

*Gedong Songo VI: built 50 years after Candi Arjuna.*

## COMPARISON OF INDIAN AND INDOONESIAN TEMPLES

Early theories proposed that Indonesian kings employed architects from India to build the great monuments of central Java.

More recent theories of the development of Indonesian civilisation assume that the Javanese themselves were responsible for designing their own buildings. Javanese architects probably obtained their ideas from imported Indian manuals, and modified them to suit local traditions. Certain superficial features from India have been used but temples in Java remained distinct. The conduit system (a standard feature of modern Hindu temples) is found on Candi Arjuna, one of the oldest Javanese buildings, but was soon abandoned. When the group of temples named Gedong Songo 9 were built, they were already showing signs of innovation and divergence from India.

have employed an external load-bearing structure, with caryatid-like supports in the form of rampant animals. This design closely resembles similar structures in south India (4th to 9th centuries), but by the time the architects of Java began to build in stone, local architectural techniques had already begun to diverge from Indian models. While the Javanese continued to employ external load-bearing structures, they abandoned the use of animal figures as supports and replaced them with columns; this stage can also be identified in the reliefs. When the Javanese adopted stone as a building material, an external load-bearing structure became redundant, and the columns and supports were transformed into decorative elements on the external walls.

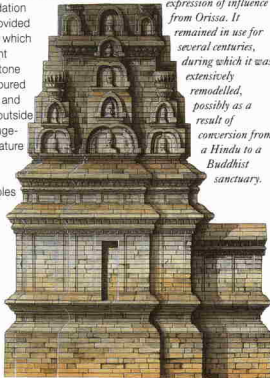
Thus, although the earliest Javanese temples seem to have employed columns, whether this was an indigenous or imported practice is still a matter for debate. Traditional dwellings in much of Indonesia were raised on columns. If the domestic dwellings shown on Borobudur's reliefs depict the Javanese landscape of about AD 800, it can be inferred that Javanese houses of that time were erected on columns and employed a stressed roofbeam technique now mainly associated with the Batak and Minangkabau of Sumatra, and the Toraja of Sulawesi. The use of columns on early religious structures may thus have stemmed from prehistoric Indonesian custom.

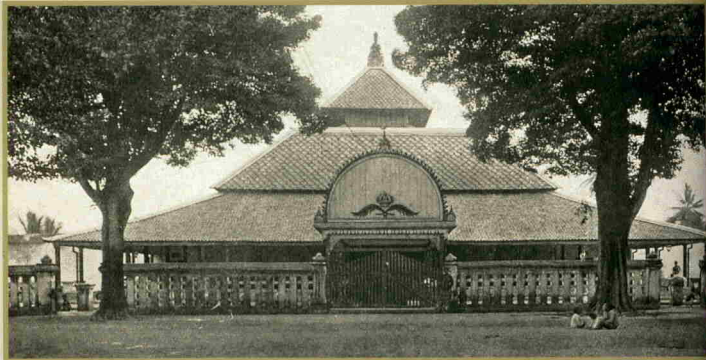
## Dieng Plateau

The earliest Javanese buildings, found on the Dieng Plateau, date from the early 8th century. The most important group of structures consists of four temples facing west, now called the Arjuna group. Archaeological excavations have established that Candi Arjuna and Candi Semar opposite it were built in an initial period of construction around AD 750. Candi Arjuna consists of a square chamber built over a pit containing a ritual foundation deposit. A short vestibule provided access to the inner chamber which once housed a *lingga*. A slight depression carved into the stone received libations of water poured over the *lingga* during rituals and conducted it to supplicants outside through a conduit. This arrangement, which is a standard feature of modern Hindu temples in India, was abandoned in subsequent Indonesian temples of the same type.

☞ *A brick temple at Bhitargaon, Orissa, India.*

(Centre and below) *The form of Candi Bima has sometimes been interpreted as the expression of influence from Orissa. It remained in use for several centuries, during which it was extensively remodelled, possibly as a result of conversion from a Hindu to a Buddhist sanctuary.*





*(Above) Masjid Agung, the Grand Mosque in Yogyakarta, Central Java.*



*(Left) A mosque in the Padang area, West Sumatra. The multi-tiered roof is a quintessential feature of Indonesian Islamic architecture. In front of the mosque stands a Minangkabau rice-barn — typically traditional building types continued to coexist alongside new architectural forms.*

*(Below) The Grand Mosque in Banda Aceh was designed by an Italian architect and built by the Dutch between 1879-1881 to replace the earlier Masjid Agung, which was destroyed during the Aceh Wars. Whereas the original structure featured a multi-tiered roof, the new version, with its onion-shaped domes, is clearly modelled on Mughal Indian architecture.*

*(Top right) Traditionally, graves were situated in close proximity to the houses of the living in many parts of the Archipelago.*

*(Middle right) The palace of the Raja of Goa, Makassar. In contrast to the kraton of Java, with their complexes of courtyards, gardens, and pavilions, palaces in some parts of Indonesia were often no more than enlarged and more opulent versions of ordinary houses.*

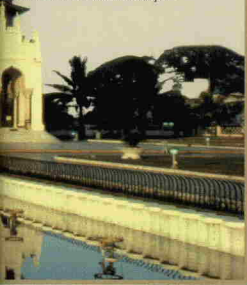




# CITIES, MOSQUES AND PALACES



(Above) The palace of the Sultan of Kutai, east Kalimantan. The Norwegian explorer and adventurer, Carl Bock, described the Sultan's palace in 1879 as "a large square, wooden building, approached through a long covered courtyard, with two openings for doorways and covered with corrugated galvanized iron roof". He added that it "looked for all the world like a Methodist chapel".



Our oldest concrete evidence for these three important architectural phenomena dates from the early Islamic period. The waning influence of Majapahit in the late 15th century was balanced by the ascendancy of Islamic polities in Indonesia, most notably the powerful Muslim state of Demak which gained control over many ports along the northern coastline of Java. The new religion introduced a novel building type, namely the mosque, and with it, the cemetery. Islam expressly forbids cremation which had been the principal means of disposing its dead during the Classic era. No doubt there were other architectural innovations at this time — for example, in the design of palaces and the layout of cities — but the scanty remains from the Majapahit capital at Trowulan makes it difficult to assess these changes.

Islam spread through the Archipelago by assimilation, trade and military conquest. Initially the coastal areas were the main centres of Islamic influence. It was not until the 17th century that the greater part of the Archipelago came under Muslim control. The gradual spread of Islam does not seem to have greatly affected the vernacular architecture of the region and traditional house types conforming to a basic Austronesian morphology continued to coexist alongside new architectural forms in much of the Archipelago.

Muslim trading ports formed the principal focus of architectural innovation and urban development at this time; elsewhere, agrarian communities continued to conform to the mandala-type spatial arrangement of the Hindu-Buddhist era. The extent to which the royal palaces, or *kraton*, of the early Islamic period followed the conventions of the Majapahit era is uncertain in that little historical evidence remains from this time — present-day palaces in Yogyakarta, Surakarta, Cirebon, Deli, Ternate and other parts of the Archipelago are not more than about 200 years old. Nevertheless, it seems likely that many traditional elements are preserved, even in these later structures, at least in terms of layout and the arrangement of space. While the mosque replaced the *candi* as the focal point of religious life, traditional construction techniques and design concepts continued to be employed. The location of the tomb of a founding father behind the mosque reveals the survival of an ancient Austronesian tradition of reverence for one's ancestors, as does the idea of placing a cemetery on top of a hill as at Imogiri in Java and also in Gorontalo. The enclosure of the mosque within a walled precinct, on the other hand, stems from Indonesia's Hindu-Buddhist past.

# Architecture of the Early Islamic Period

When Islam arrived in Indonesia, it did not cause a revolution in building styles. Instead, the architecture of the transitional period (14th-16th centuries) reflected new ideas and influences from a variety of sources but retained fundamental traits from previous eras. Just as Indian ideas had been filtered through an Indonesian screen, so too with Islam and its attendant architectural forms.



The Banten minaret has a gateway derived from the Classic candi from the Moghul Indian pattern.

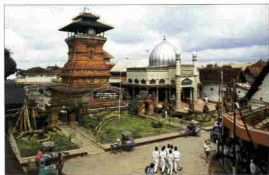
The menara at Kudus, a pre-Islamic brick temple, which has been converted into a drumtower.

## The Advent of Islam

Islam did not take Indonesia by storm, but spread gradually during the 14th and 15th centuries, and it was largely confined to ports in Aceh and northeast Sumatra and along the northern coastline of Java. Few Indic monuments had been built in this coastal zone, so there was little geographical overlap between old and new traditions in the earliest phase of Islamic architecture. However one prominent example of a structure which may have been built in the Classical style and then converted for use in the services of Islam is the Kudus Tower. Although it is unknown whether this building was originally erected by Hindus or early Muslims, the structure clearly incorporates a number of Indic elements such as niches for statues.

## Continuities of Form and Decoration

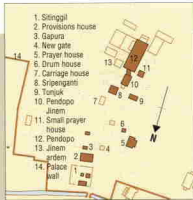
Examples of architectural forms developed in the Late Classic which strongly influenced early Islamic architecture include multi-tiered roofs, two types of ceremonial gateway — the split portal and the lintel gate — and a variety of decorative elements such as elaborate clay finials for roof peaks (usually termed *memola* or *mustoko*). The wing motif which appears on early Islamic gateways is probably derived both from late pre-Islamic references to Garuda, in connection with his search



for the elixir of immortality, and earlier Indic *makara* shapes. Similarly, the theme of a hermit's pavilion set on a mountain side, which appears in early Islamic palaces (the Kasepuhan at Cirebon) and tombs (Sendang Duwur), can readily be linked to the theme of Mount Meru as the home of the gods. No doubt many other continuities between the Hindu-Buddhist and early Islamic periods once existed, but much of the architecture of this period was executed in wood. No pre-Islamic examples have survived while only a few early Islamic structures are still extant.

## The Oldest Islamic Structures

Although the Great Mosque of Demak is generally considered the oldest mosque in Indonesia, it is by no means certain this is the most ancient structure in the region erected by a Muslim architect. The honour may belong instead to parts of the Kasepuhan, or 'Elder', royal palace in Cirebon. A chronogram on a gateway leading to the *sitinggil* (a raised area at the northern end of the palace complex where rulers held audiences) can be read as the Saka equivalent of AD 1454. Although there is some evidence that Sivaita Hindu statues were once associated with this structure, tradition asserts that the rulers of Cirebon had already converted to Islam by the mid-15th century. The early Islamic palaces retain many features of pre-Islamic architecture. The Kasepuhan palace is particularly interesting because it was probably begun in the late pre-Islamic period, and continued



## AN EARLY ISLAMIC PALACE

The layout of the Kasepuhan palace conforms to that of most other Javanese *kraton*: the palace faces a public square (*alun-alun*), with a great mosque on the west and a marketplace on the north. The Kasepuhan planners may have been the first to establish this configuration, although it might have already existed elsewhere in the pre-Islamic period. No pre-Islamic Indonesian palaces have yet been reconstructed.



(Extreme left) Gateway to the *sitinggil*, dated AD 1454 by a chronogram.

(Above) The megamendung (clouds and rain) motifs on Cirebonese batik reflect Chinese influence. Similar details can be found on the Kasepuhan gateway (left).

(Left) Gateway to Pendopo Jinem symbolising the entrance to a hermit cave.





(Left) A paduraksa gate leads to the front court of the Kasepuhan palace.



(Right) The gateway to the Great Mosque on the west side of the alun-alun of the Kasepuhan palace.

(Below) A candi bentar gateway with wings and candi-style tower provides access to the public audience pavilion at the entrance to Kasepuhan.



to grow during the entire transitional era. The complex thus contains clues to the stages of the process through which Islam gradually become incorporated into Indonesian architecture.

### Hermit Caves and Floating Pavilions

The history of the older parts of the Kasepuhan complex is not well documented, but the unique style of the main entrance to the residential part of the palace compound provides some clues that its probable date of construction was perhaps not long after the *sitinggil* in the mid-15th century. The entrance façade is covered with white plaster reminiscent of the *vajralepa* or 'diamond plaster' used on pre-Islamic Javanese temples. It is intended to represent a hermit's cave on a mountain side, an idea which is communicated by a combination of symbolic devices. The most striking of these is the motif called *megamendung* (lit. "clouds and rain") which also occurs in local batik. *Megamendung* motifs are found both above the doorway and next to its foot, indicating that the entire edifice should be conceived as floating on clouds or standing on the upper slopes of Mount Meru; the curved corners framing the gateway



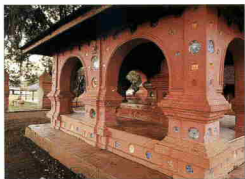
are a stylistic convention to symbolise that the door is the entrance to a cave. In front of the door stands a miniature mountain approximately 50 centimetres high, constructed of brick and covered with unpainted plaster. This medium is also used in the Cirebon palace gardens to represent a rocky mountainous landscape.

Like the cloud pattern, this decorative technique can be traced to Chinese antecedents. The doorway was probably constructed at some time during the Ming dynasty (1368-1643). Porcelain tiles inserted in the gate and other parts of the palace complex date from a later period, after the introduction of Dutch influence. These may have replaced older ceramics; most of the plates in the façade of the Kudus Tower date from Dutch times, except for one 15th-century Vietnamese plate which may be part of the original structure. Vietnamese wall tiles are also found on the front of the Masjid Demak.

Fragments of similar tiles have been discovered at Trowulan, probable site of the capital of Majapahit. Their use may reflect Islamic influence inspired by the decorative wall tiles used in many early Islamic structures in west and central Asia. Next to the Kasepuhan palace are the remains of an ornamental garden, the Pakungwati. One of the principal features of this unrestored garden is a Sumur Upas (poison well). A similarly-named well is found at the site of the Kedaton (Place of the Lord) at Trowulan. Although no firm evidence exists, it seems possible that in both instances, water drawn from the well was used for the Indonesian ritual of sealing oaths by drinking 'imprecation water'.

### GATEWAYS

Two types of gateways — the split portal (*candi bentar*) and the lintel gate (*paduraksa*) were adopted from Late Classic architecture by early Islamic architects.



(Above) Ceramic plates are inserted as decorations on the walls of the pavilion in the *sitinggil* of the Kanoman palace in Cirebon, West Java.

«Ceramic objects such as this blue and white colonial-period plate can be found on the walls of the menara of the mosque in Kudus. They served to emulate the Islamic tiles that can be found in central Asian mosques.