

# ISLAMIC INFLUENCE ON THE ARCHITECTURE OF THE MALAY WORLD

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# WELCOME TO VIRTUAL MALAYSIA

**'Selamat Datang'**

# Outline of Lecture

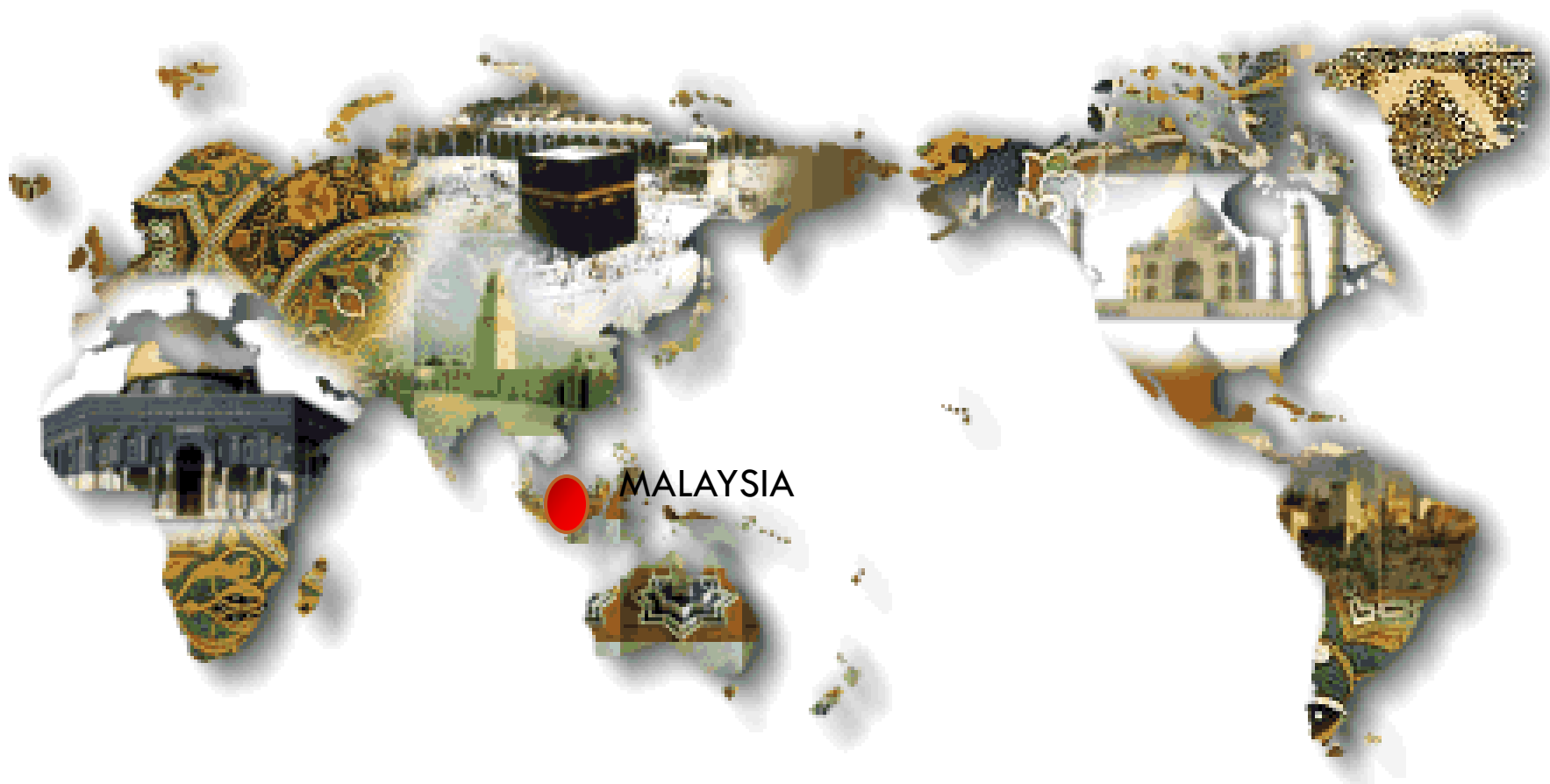
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- Introduction
- Definition of Islam, Muslim and Islamic
- What is 'Islamic or Islamicate Architecture'
- Background of the Malays of the Malay World
- The Salient features of Islamic Influence in the architecture of the Malay world then and the contemporary architecture
- Summary
- Q & A session

# Introduction

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- The lecture intends to introduce students of architecture to another aspect of architecture within a wider world – Architecture of the Muslim World.
- MALAYSIA



Ref: Islamic Architecture from Internet

## The World Map

# DEFINITION OF ISLAM, MUSLIM AND ISLAMIC

Islam, Islamic and Muslim

# What is Islam, Islamic and Muslim?

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- Islam is the name of the religion whose final Prophet was Muhammad
- Islam simply means a state of peace achieved through submission to God.
- *Islam* as the natural religion has been practice throughout the centuries by all the prophets i.e. Noah ,Ibrahim , Musa, Harun,Isa and others with the guide of books of taurah, zabur and engel. Muhammad being the final messenger of Allah has completed the revelation in the Al Quran for which Islam was named as the natural religion by Allah in the Quran ( see Al Maidah).

# What is Islam, Islamic and Muslim

- Muslim is a name used for an adherent of the Islamic faith.
- A Muslim is one who aspires to achieve this state of submission, as a lifelong quest.
- The term Islamic is accurately applied only to what pertains directly to the faith and its doctrines such as Islamic Law, Islamic celebrations, Islamic values, principles and beliefs.



# What is Islam, Islamic and Muslim?

- The term Islam belongs to the realm of the aspiration, the ideal, the pure.
- In other words, we may acquire knowledge from this realm from authentic Islamic sources, and we may examine its constructs, interpret its doctrines and describe what is required of adherents of Islamic faith; however, we may not describe a person or any historical phenomenon as Islamic.
- Hence not even 'Islamic Architecture , Islamic Art, Islamic countries, Islamic city, Islamic etc..

# What is Islam, Islamic and Muslim?

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- These incorrect usages are prime examples of the way in which writers have failed to distinguish between religion and its adherents' actions and cultural constructs.
- In other words it can be deduced that cultural phenomena that emerged from the Muslim regions under more or less direct influence by Islamic factors, which may or may not conform to the demands of the belief and value system, are called 'Islamicate'.

# What is Islamic Architecture?

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- “...or Muslim Architecture may be seen as the one great product of two streams of development, one in the Mediterranean and the other in south central Asia.”

Nu jie Mosque, Beijing,  
China

Ref: Sir Banister Fletcher, 1996, **A History of Architecture**

# What is Islamic Architecture?

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- “...Taken as whole, the architecture of the Islam must be seen primarily as a matter of arcuated masonry construction in which its artisans achieved the highest levels of finish and invention.”
- “....Muslim Vernacular building reflect the closely knit society and the climate of the regions in which they have evolved .”

Ref: Sir Banister Fletcher, 1996, **A History of Architecture- page 571**

Ref: Sir Banister Fletcher, 1996, **A History of Architecture -page 629**

# What is Islamic Architecture?

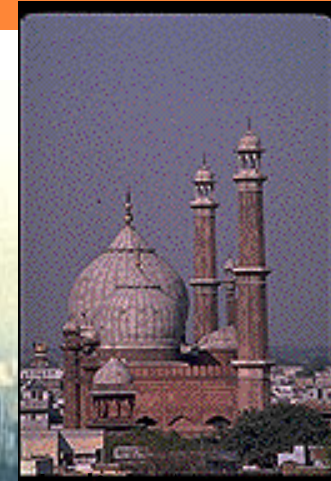
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- “...Is it a **word** that identifies a special kind of architecture, that of a civilisation reflecting, or determined by, special qualities inherent in Islam as a cultural phenomenon ?”

ref: Ersnt J.Grube in Architecture of the Islamic World



Malaysia  
Pilgrimage Fund



Indian Mosque



Mali Mosque, Africa

# What is Islamic Architecture?

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- “..is the focused towards enclosed space, on the inside as opposed to the outside, the façade or the general exterior articulation of the building.”
- “..... ‘*hidden architecture*’ that is architecture that truly exists, not when seen as monument or symbol visible to all and from all sides, but only when entered, penetrated and experienced from within.”

ref: Ersnt J.Grube in Architecture of the Islamic World

# What is Islamic Architecture

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- “Buildings which serve no Islamic purpose like mausoleums and statues, no matter how beautifully they may be constructed or decorated cannot be called Islamic.
- Islamic Architecture is determined primarily by *function or use* and not by form.
- The form of a building *must serve and enhance its function*”

Ref: Abdul Wahid Hamid, 1999, Islam the Natural Way, MELs

# What is Islamic Architecture

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- In its optimisation of the technology of the region ;
- In its embrace of the different cultures of the world with the common faith and regional Islamic architectural expression.



Kampung Laut Mosque  
Oldest timber mosque in Malaysia



# The Issue of “Islamic” architecture

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- For a long time, Islam and architecture of the Islamic World has not been placed in the framework of world architecture.
- It was taught in fragmentation as just a physical product of certain cultures and not its transient teachings that had embrace  $\frac{3}{4}$  of the world.

# The Issue of “Islamic” architecture

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- History of Architecture has been written by many in so many ways so as the history of man and other subjects.
- History written by the Westerners is almost always viewed by the eye that sees with a pre conceived ideas what the outcome will be.
- History of Islamic Architecture is no better.
- Some do try to understand how Islam and Muslims lives in the way of Architecture, however they are not able to comprehend them fully the whys and wherefores that is intrinsic in the Islamic Society.

# What is Islamic Architecture

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- “While studies of natural history and traditionally belong to the realm of science rather than history, the Qu’ran draws important connections between human society and the environment.....God tells mankind his role on earth..”

# What is Islamic Architecture

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- **Islamic Architecture** as it stands, differ from the period definition of the western architecture by the west, as its origin and legitimacy derived from the religious basis which at the same time is also political and social.
- It is supranational cultural connotation and extends over extremely vast area straddling 3 continents of the ancient world...

**Ref: Environmental Design**, ,page 64,  
journal of the Islamic environmental design  
research centre,Lito-Tipografia”Aurora”,Italy

# What is Islamic Architecture

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- **“Islamic Architecture** was a “functional architecture”, using local materials and free from artistic dogmas such as “symmetry” or the artificial and expensive Greek and Roman orders”.
- “The result was free elevations, free forms, and often exciting compositions that still stand as masterpieces of world architecture, reflecting *functions, simplicity, comfort and beauty*, which are major requirements of the Sharia

*Ref: Ahmed Farid Moustapha, August 1986, “Islamic Values in Contemporary Urbanism”, Paper presented at the First Australian International Islamic Conference.*

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# The approach to mapping Islamic architecture on world architectures

Chronology, geography, historical themes

# Islamic Civilisation in the World History - in brief

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- **Chronology**
- **Geography**
- **Historical Themes**



- “The most accurate and understandable chronological construct for the universal world History is the discussion of parallel cultures within broad bands of time, or eras.”

Ref. Susan L.Douglass,1994,Strategies and Structures For Presenting World History

# Chronology

The Traditional Western Scheme of History

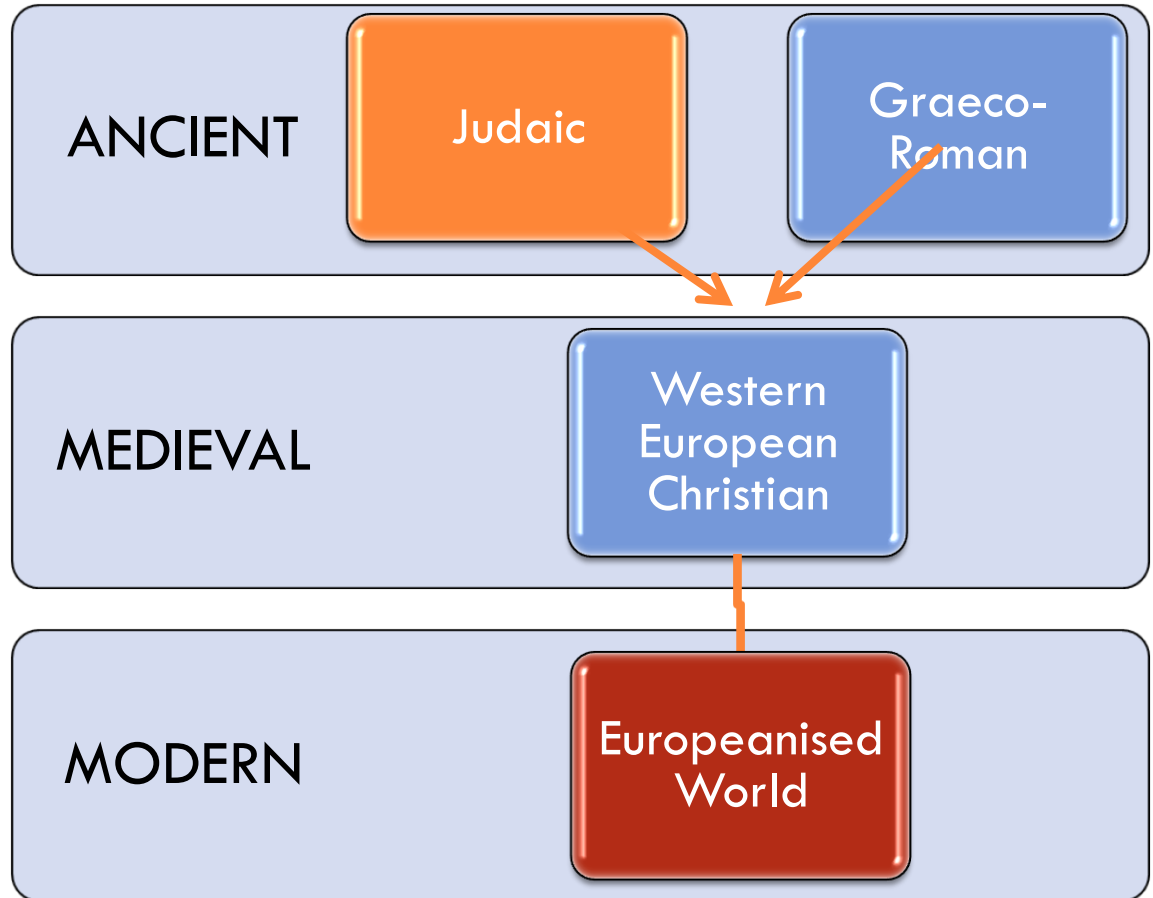
Reformed Western Scheme of History

A More Thoroughly Refined Scheme of History



# The Traditional Western Scheme of History

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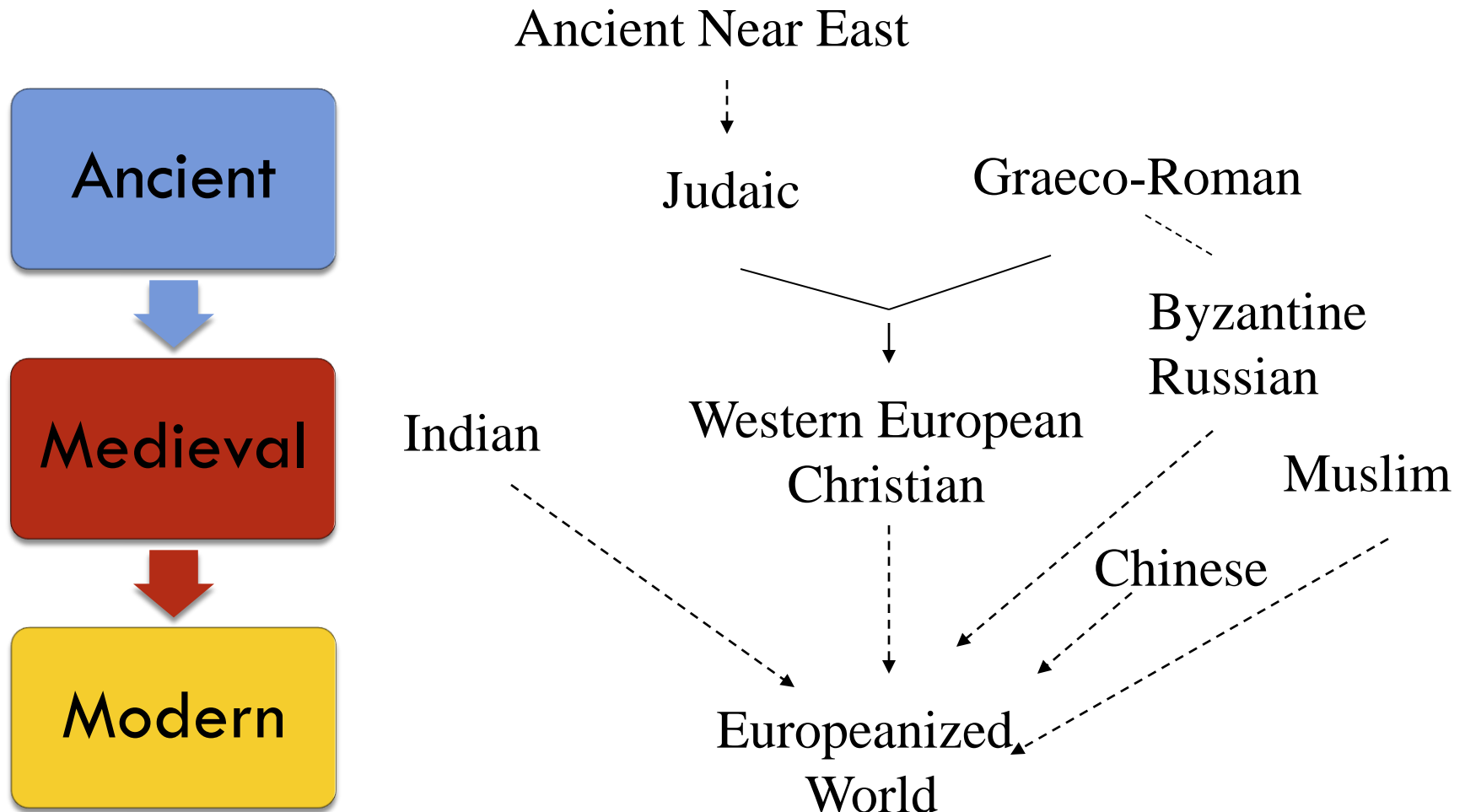


Ref. Susan  
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# Reformed Western Scheme of History

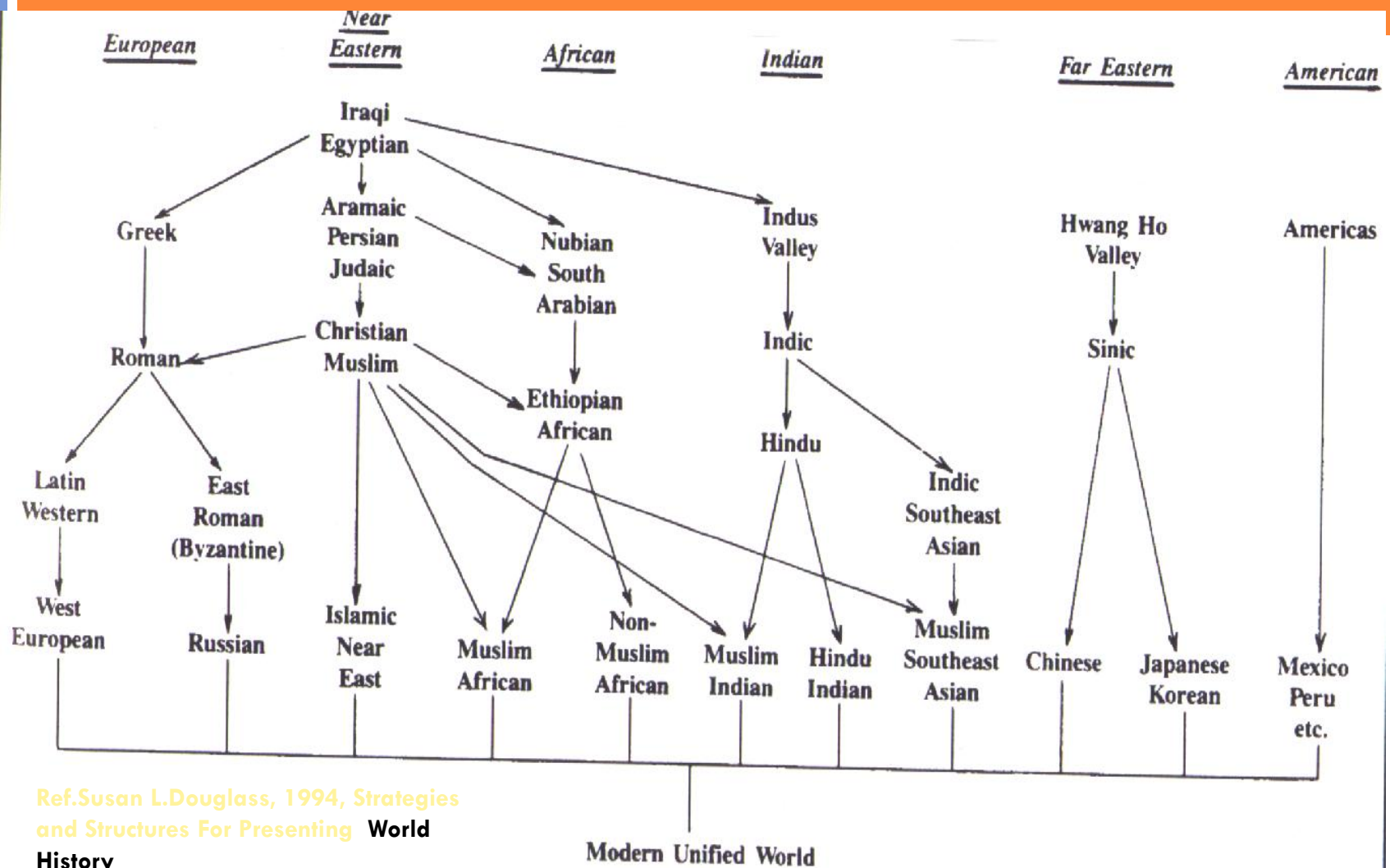
Ref. Susan L. Douglass, 1994, Strategies and Structures For

26 Presenting World History



# A More Thoroughly Refined Scheme of History

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Ref. Susan L. Douglass, 1994, *Strategies and Structures For Presenting World History*

# Geographical Influence

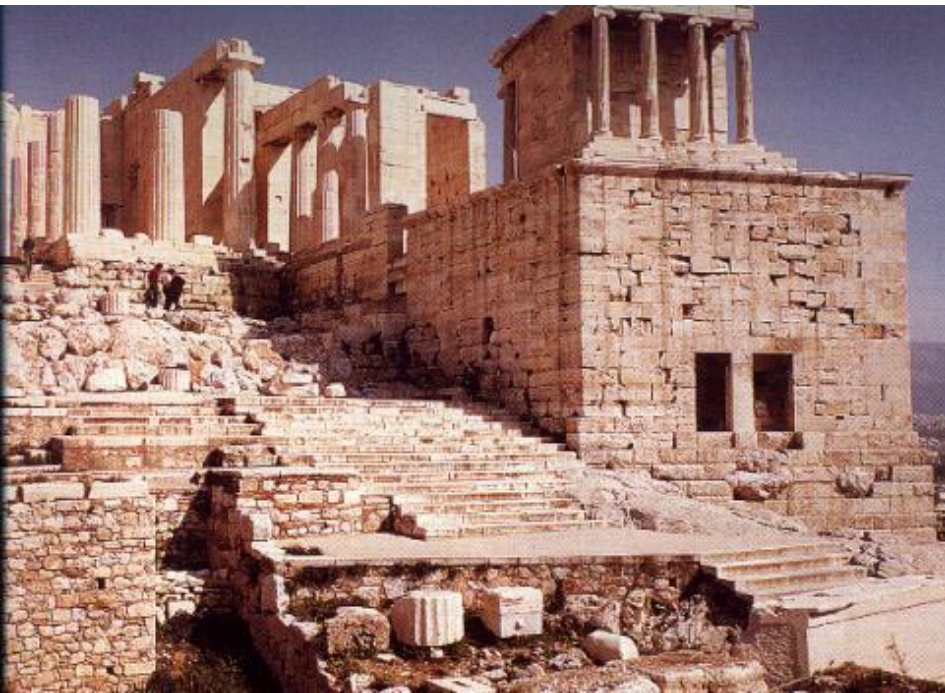
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- **Climates,**
- **landforms,**
- **bodies of water,**
- **culture**
- **development of technology**
- **economic,**
- **social progress**
- **environmental forces**
- **migration**



# Historical Themes

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- Milestone of development by historical theme include the classification of periods into Stone Age, Iron Age, Axial Age, Atomic Age, etc.
- In Architectural Theme of Ancient, Medieval and Modern, Islamic Architecture runs parallel to the Period of Western Architecture.



# Muslim's Holiest Architecture

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Makkah Al Mukarramah  
The Holiest



An Nabawi, Medina  
2<sup>nd</sup> Most important



Al Aqsa, Jerusalem  
3<sup>rd</sup> Most important

- In its fundamental knowledge that Man as a vicegerent of God on this earth has a duty to perform in seeking Allah's Pleasure.....that he treats other man, nature and environment with the guided knowledge and wisdom. With that understanding , Man can create development that enhances not only their lives but in harmony with the environment.

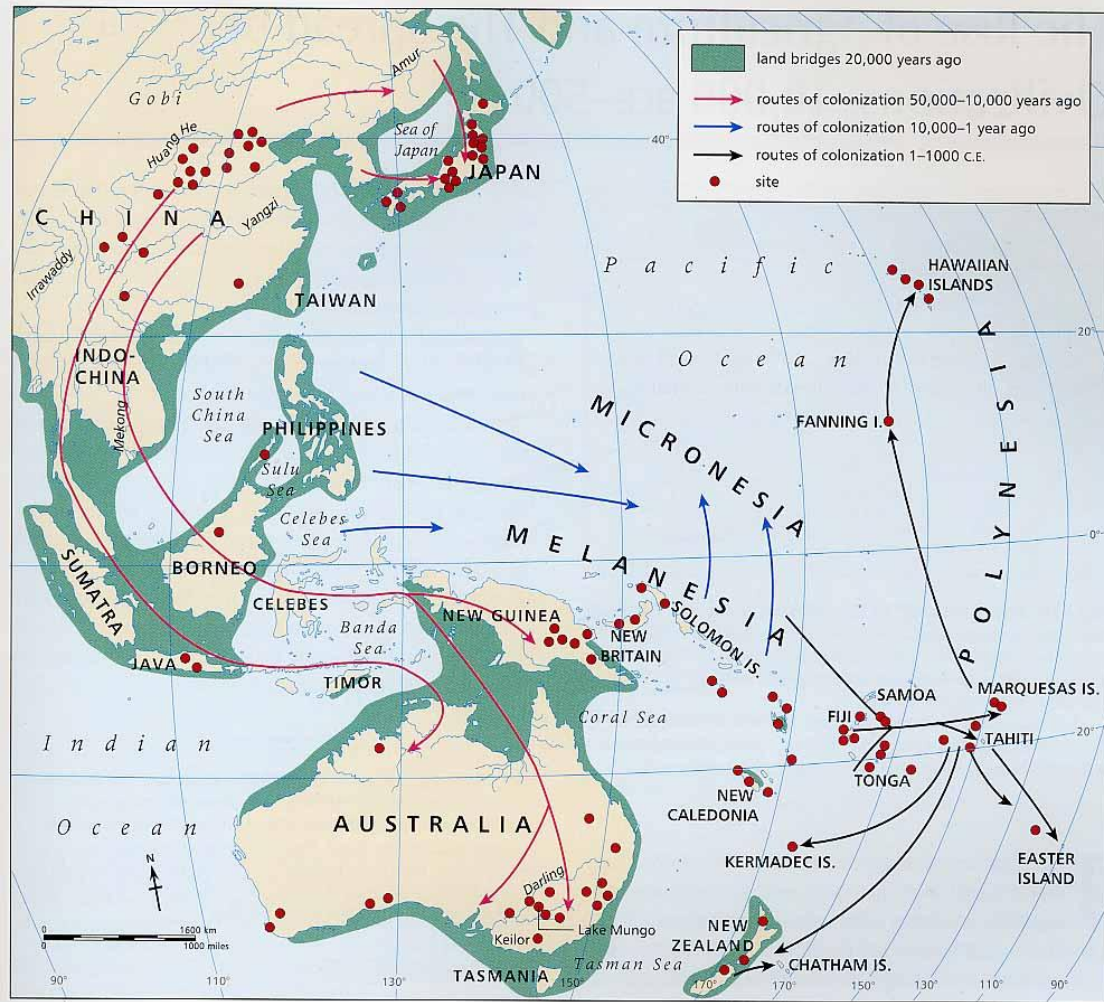
# BACKGROUND OF THE MALAYS OF THE MALAY WORLD

The land bridges, the Malays and the Malay Archipelago, the trade routes, Muslim traders and Islam



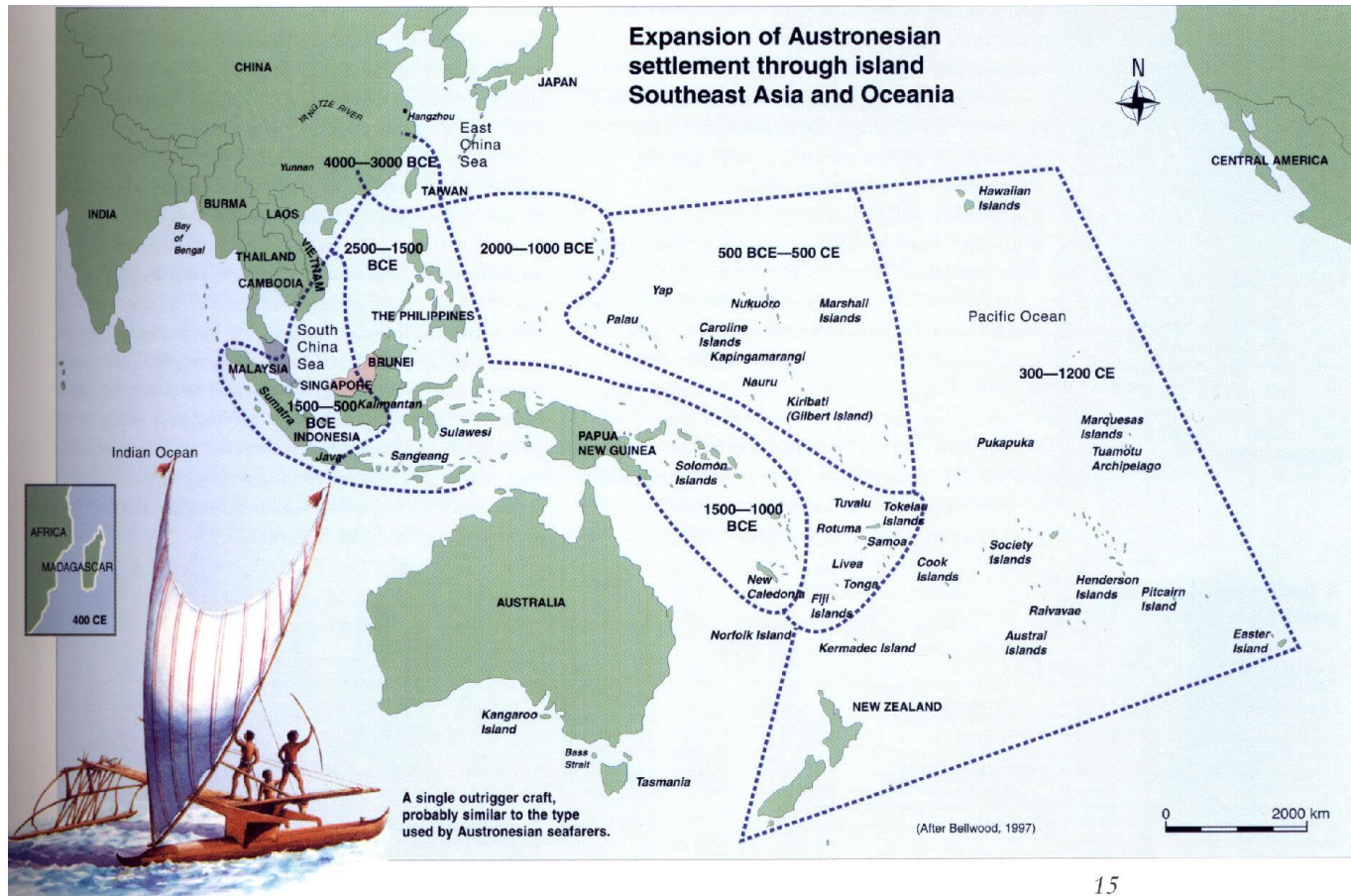
# Land bridge and Migration

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# Austronesian connections

34



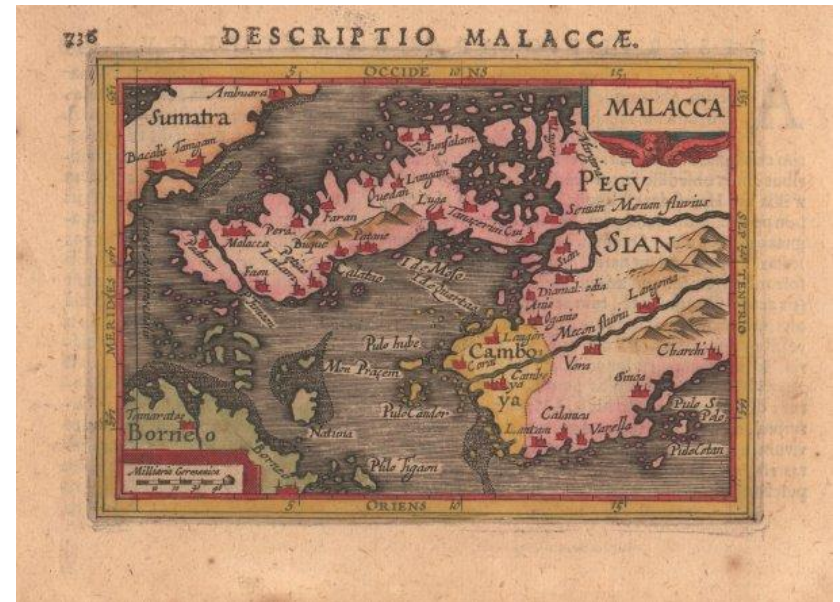
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# Beliefs and Customs

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- Malaysia is one the country in south east asia that had received the call for islam since the 13th century through trading and assimilation of culture from migrants as far as Persia, Yemen, India from the West and Cambodia, Champa (Vietnam) and China from the East.



Ancient A Bertuis map, dated 1618 of Malaya portraying prominence of Melaka

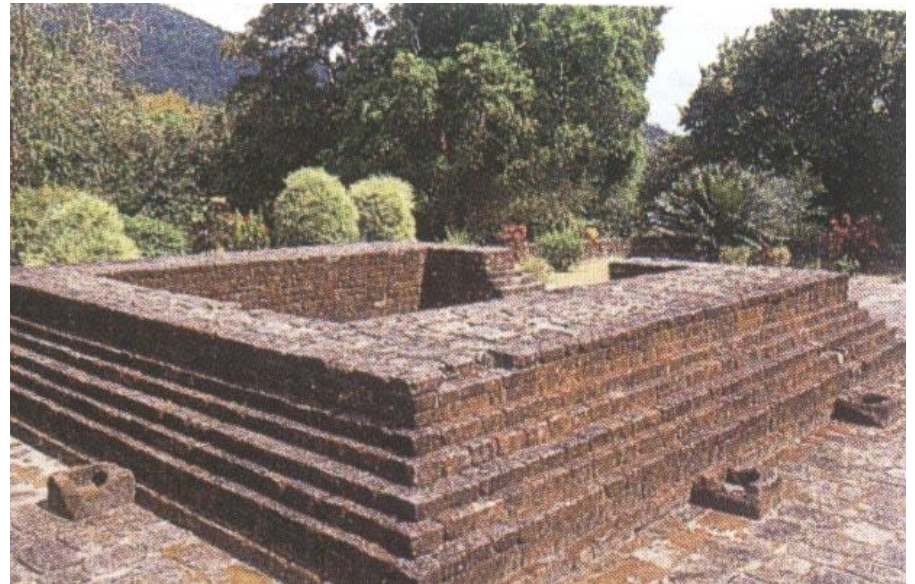
Ref: The Other Malaysia at <http://www.othermalaysia.org/2009/11/19/post-lecture-notes-for-students-of-as6011-state-society-and-politics-in-malaysia-week-2/>

# Beliefs and Customs

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- The Malays before Islam, believes in supernatural belief, animism and Hindu. Hindu or Indianised kingdom of Langkasuka and Srivijaya had governed Malaysia, Indonesia and Cambodia for a number of centuries.

Remnant of Hindu temple at Bujang valley, Kedah, Malaysia



# Beliefs and Customs

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- Although Malaysia's official religion is Islam, other religions are free to be practiced by others apart from the Malays. In Malaysia, Malays are Muslims.



Mosque



Chinese temple



Indian temple



Church



# The coming of Islam to the region

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Peta Nusantara  
Kedatangan  
Islam (Ihsan  
*Encyclopedia of  
Malaysia*)

THE SALIENT FEATURES OF  
ISLAMIC INFLUENCE IN THE  
ARCHITECTURE OF THE MALAY  
WORLD THEN AND THE  
CONTEMPORARY  
ARCHITECTURE

# Architecture

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- Thus the origin of ARCHITECTURE are best understood if one takes a wider view and considers social-cultural factors, in the broadest sense, to be more important than climate, technology, materials, and economy.
- In any situation, it is the interplay of all these factors that best explains the form of buildings.

**AMOS RAPOPORT**

Ref: Francis D.K Ching, 1997, A Visual Dictionary of Architecture, Van Nostrand Reinhold, USA

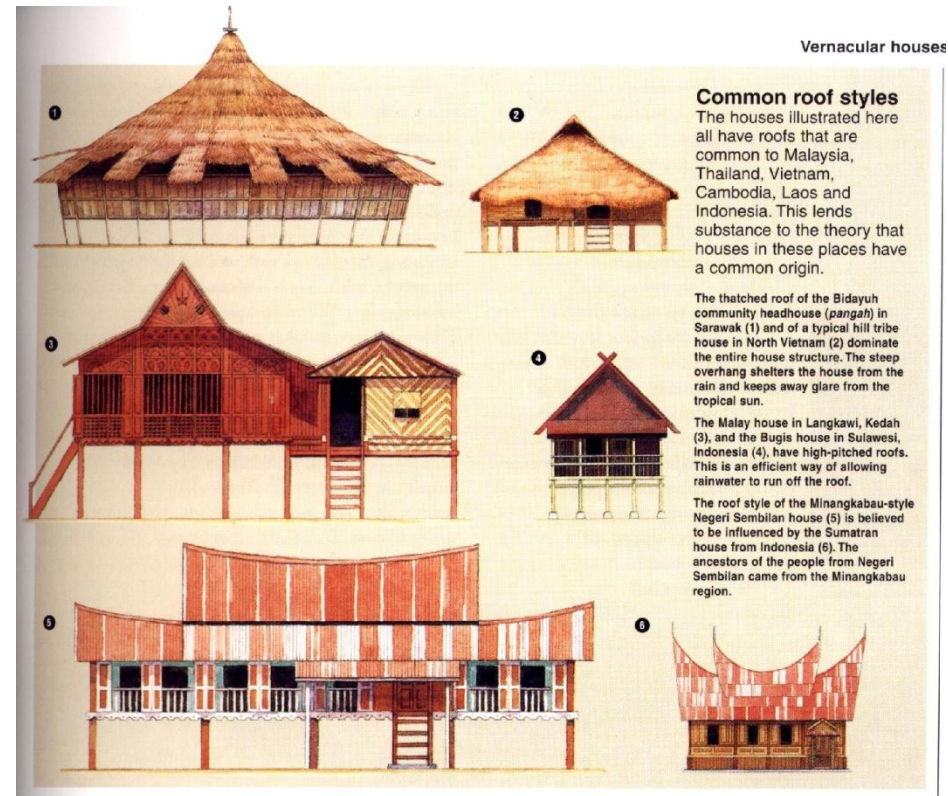
Malaysian Architecture History in brief



# The movement of people and place of origin

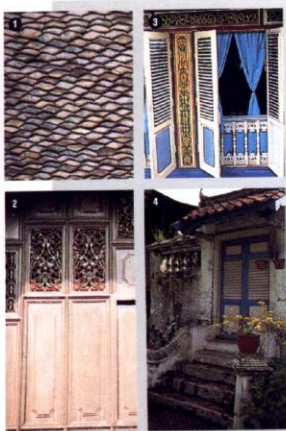
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- Movement of population and the consequent meeting and fusing of cultural traditions have been a constant feature of the region's history and prehistory.
- Architectural styles reveals startling similarities suggestive of distant but common origin.



## The Austronesian house: Contemporary models

*Parallel with the historical evidence linking Malaysian vernacular architecture with others in the region are the styles of houses and the methods of house construction. The post-and-beam method and the roof form, in particular, provide concrete evidence to connect the Malaysian house with those of neighbouring peoples.*



### Foreign influences on house design

Other sources of similarity between the architectures of Malaysian and neighbouring peoples may be the borrowing of certain elements originating elsewhere. In Kelantan, for example, the use of (1) Thai roof tiles and (2) heavier wood wall panels in the Thai style are common; (3) louvred shutters (*jendela*) may have been borrowed from the Portuguese whose historical presence in the region dates back several centuries; (4) the courtyard arrangement of some Melaka houses may also show Portuguese, or possibly Chinese, influence.

### Common features in Southeast Asian houses

Indigenous architectures of Southeast Asia share certain underlying principles of construction, to which Malaysian vernaculars are no exception. They are based on a post-and-beam method of construction, the posts running from the ground to the roof, while the beams supporting the floor platform are mortised through the posts and held firmly by wooden wedges (see 'The Malay house: Materials and construction'). In this system, the roof is the dominant aesthetic element, while walls are rarely load-bearing. They are often screens prepared separately—woven from split bamboo, for example—and then attached to the structure. All the parts of the house can be prefabricated and then assembled with relatively little labour. Even very large structures, such as the longhouses of Sarawak, are built according to the same principles and make extensive use of cooperative village labour.

In many Austronesian house styles, the roof is such a dominant element that it entirely encloses the house platform, making walls unnecessary. These houses are commonly windowless and dark inside, serving their occupants mainly as a place to sleep and store their heirloom valuables. But some peoples, especially in lowland areas, like the Bugis, Makassarese or Acehnese, have traditionally built their houses very similar to the Malay style, open and airy, with large, shuttered windows designed for maximum ventilation. Skilled woodcarving, from the beautiful carved shutters, friezes and panels of old houses in Terengganu, to the exuberance of carved beams and doorways in a Kayan longhouse, bear witness to

## □ Common Architectural Features in South East Asia

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# Traditional Architecture

Houses, Mosque, Halls

# Vernacular Architecture of the Malays

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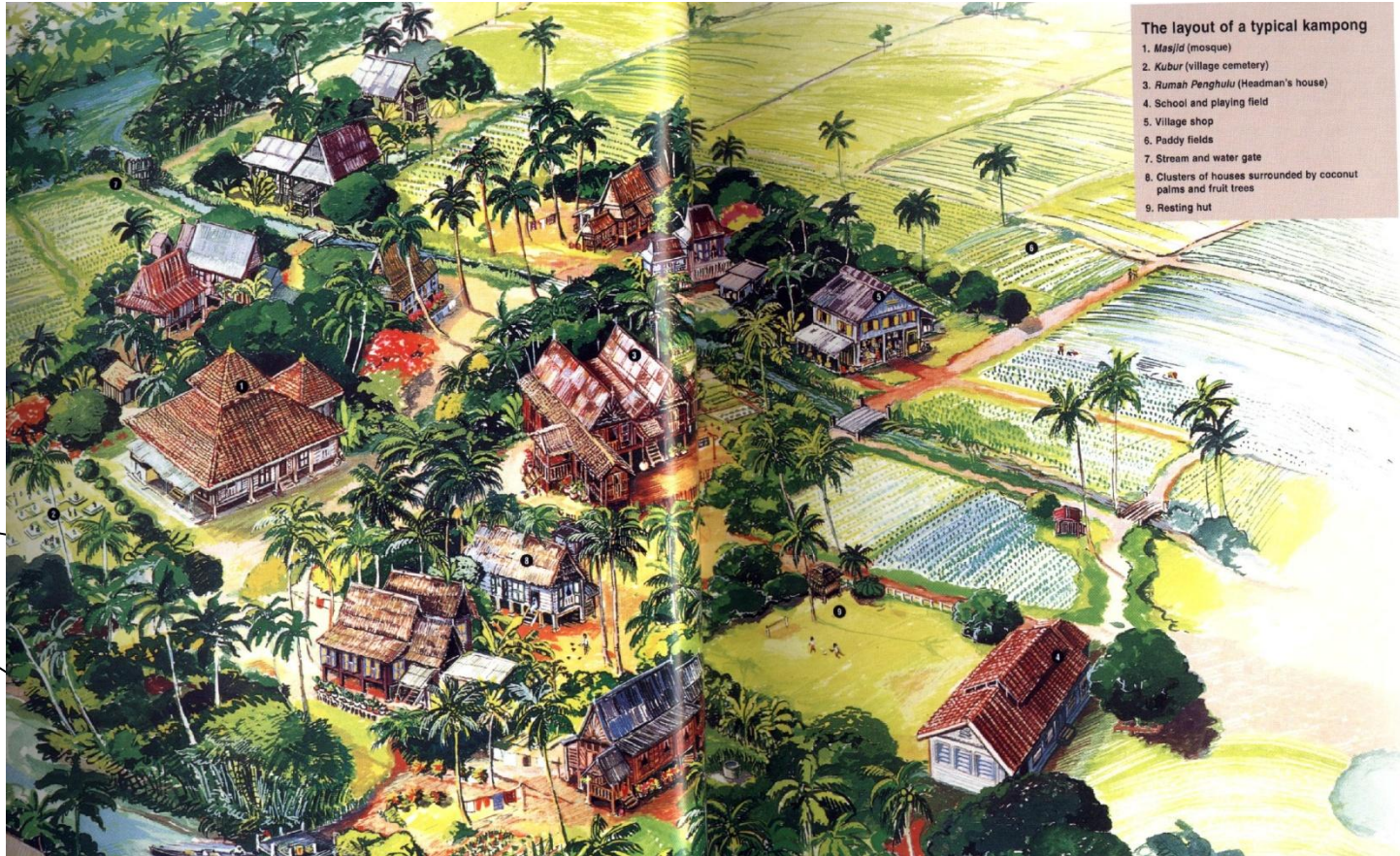
- Although the most developed of Malaysia's vernacular houses belong to the Malays-*reflected* in the range of construction methods and building materials employed.
- These vernacular house forms are result of long-term modification and adaptation, shared experience and innovations approved by the community.
- The design superiority and its relevance ensure their continued survival in modified form-Contemporary Vernacular.

Ref: The Encyclopedia of Malaysia:  
Architecture,1998, Archipelago Press.



# The Malay Kampong and the Malay Traditional Houses

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# Assimilation of values to traditions

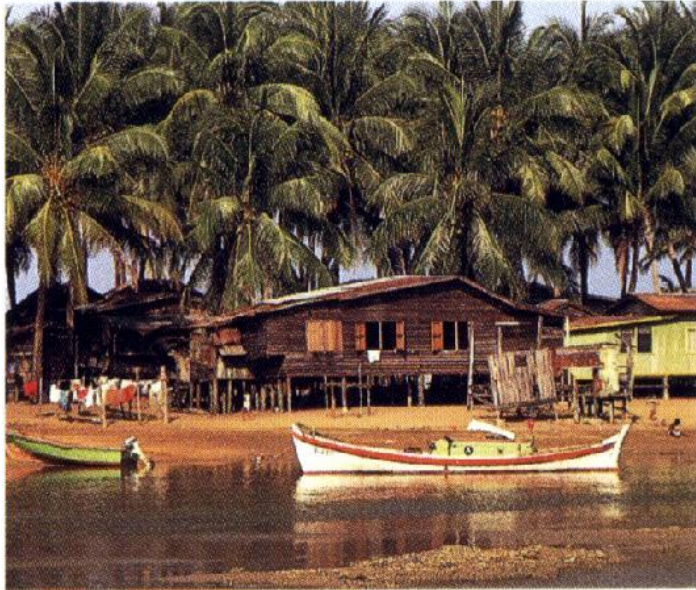
46

- Islam does not physically change the architecture of the Malay world in drastic forms. The belief in oneness of God-ALLAH as fundamental and Islam as way of life affects mostly the planning layout of homes as well as detail decorations. Others structures not contravening to the shariah remain as shown in the following traditional architecture:



# Village Scene

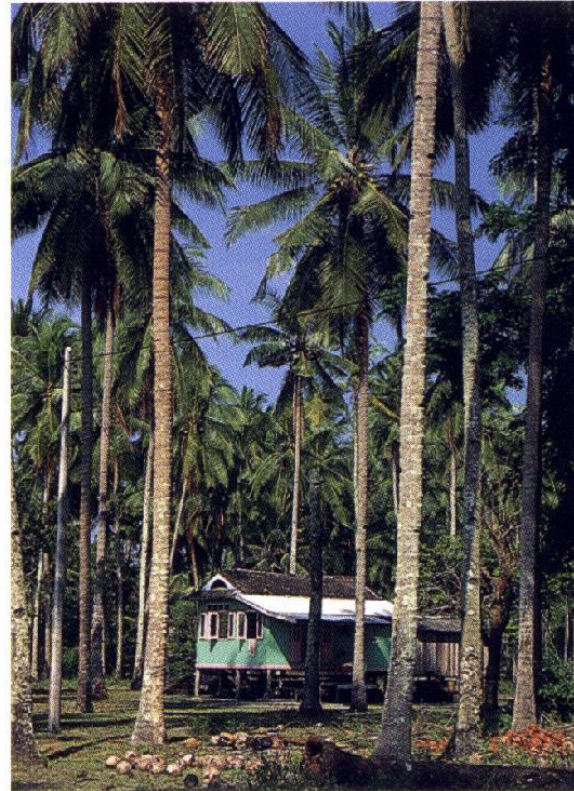
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Fishing villages, like this one at Marang, Kuala Terengganu, are located along the beaches and sandbanks. The houses are usually more densely grouped than in inland kampongs.

## Coastal Village

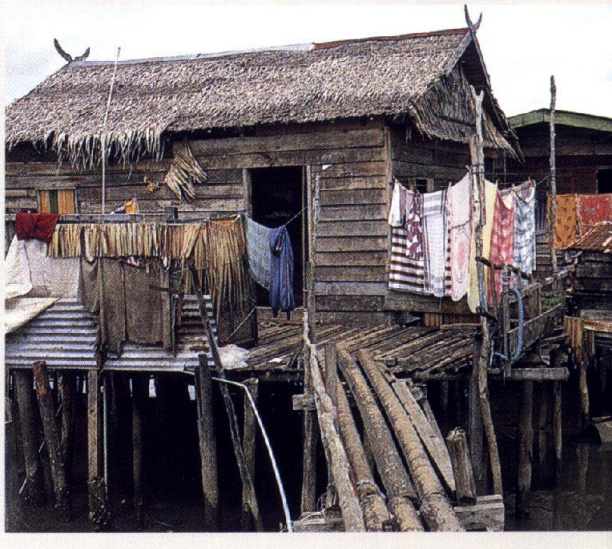
Vernacular houses: *THE KAMPONG*



In many kampongs, coconut palms not only provide an essential food item but also screen houses from the glare of the sun. Traditionally, the Malays plant a coconut palm after the birth of each of their children.

# Coastal and Riverine Settlements

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The earliest settlements in Malaysia developed along river basins because rivers were the only means of transportation into the interior of the country as well as their estuaries provide safe haven for seafarers and fishermen.

Major towns such as Melaka, Kota Bharu, Kuala Terengganu, Kota Kinabalu and Kuching all begin as a river settlements.

## Riverine Village

Advances in the modern transport systems, the importance of coastal and riverine settlements receded. Today the waterfront settlements are mostly fishing villages.

In Sabah and Sarawak, coastal villages or *kampung air* are still apparent at the coastline.



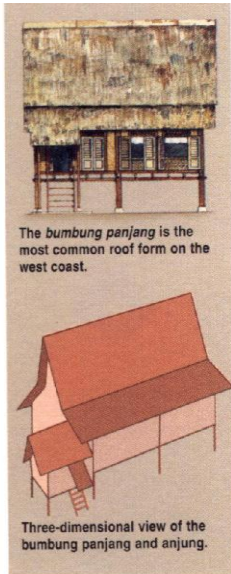
# Traditional Malay House



The bamboo walls and *atap* roof of the *rumah kutai* in the Kuala Kangsar district of Perak allow natural ventilation and reduce glare.

The Rumah Penghulu originally located in Sg.Kecil, Kedah, now restored and relocated at Badan Warisan in Kuala Lumpur

# The Malay House



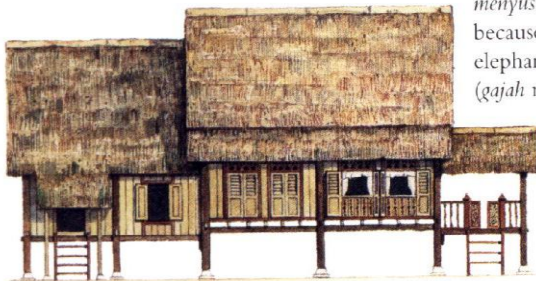
The *bumbung panjang* is the most common roof form on the west coast.

Three-dimensional view of the *bumbung panjang* and *anjung*.

## Regional variations of the *bumbung panjang* house

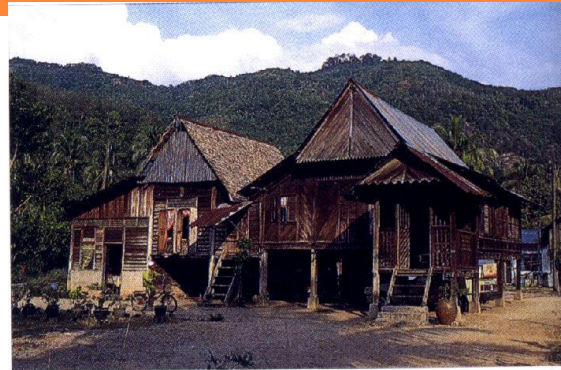
In the northern west coast states of Perlis, Kedah, Penang and Perak, the *bumbung panjang* house is plain and functional. It usually consists of either a basic rectangular *rumah ibu* with a front veranda with rows of shuttered openings and an enclosed rear veranda, or two structures separated by a *selang* (passageway), placed parallel to each other or at right angles or end-to-end. The *selang*, which has a dropped floor and a roof that fits under the eaves of the adjacent structures, not only provides a convenient way of adding to an existing form by avoiding merging roof forms, but serves to demarcate the 'living' and 'working' areas of the house. It also provides a private entrance for women and a place for them to socialize. This house style is commonly called *rumah selang*.

A variation of the two-structure form is the *gajah menyusu* house, so-called because it resembles a baby elephant suckling its mother (*gajah* means 'elephant' and *menyusu* 'to suckle'). The *rumah dapur* (kitchen), which is a smaller version of the main house, is placed end-to-end and the difference in their status is indicated by



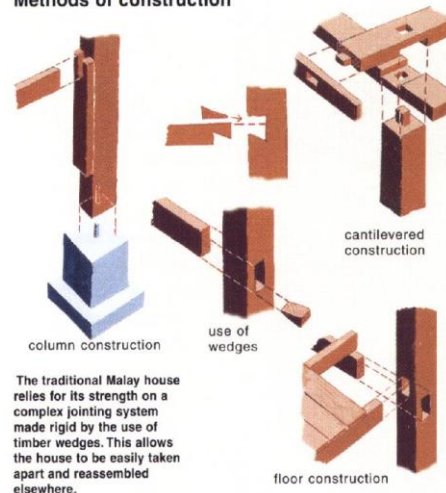
The *gajah menyusu* house, so-called because of its resemblance to a suckling elephant, is the easiest way of extending the basic house form.

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This house comprises two *bumbung panjang* structures joined by a covered passageway (*selang*). The stairs to the *selang* provide private access for women. In the front structure, the lower section of the roof covers the veranda.

## Methods of construction



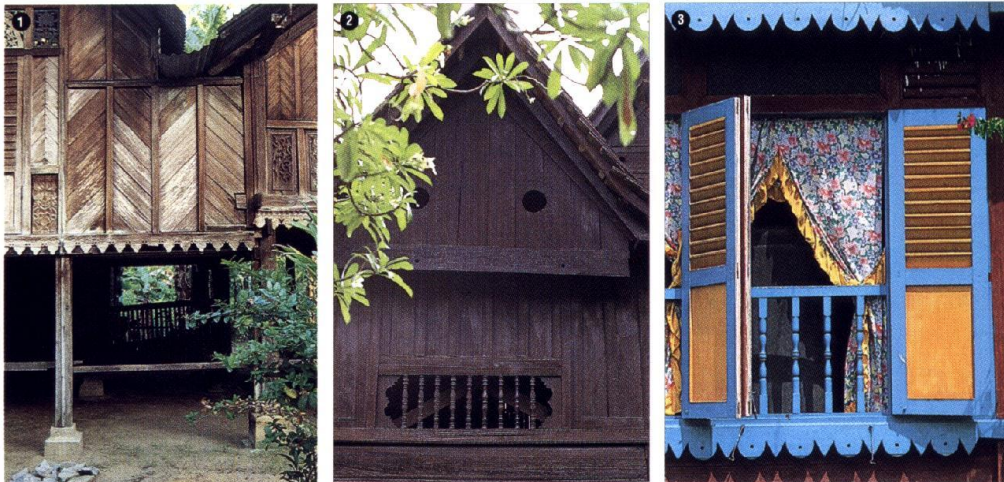
The traditional Malay house relies for its strength on a complex jointing system made rigid by the use of timber wedges. This allows the house to be easily taken apart and reassembled elsewhere.



# The Malay House

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Vernacular houses: MATERIALS AND CONSTRUCTION



Wallboards may be arranged vertically, horizontally or diagonally, or in combination (1). The many voids in the Malay house, for example, in the gable screens (2) and the full-length shuttered windows (3), reflect the importance given to ventilation.

Some details of the Malay Houses

Light  
Climatic  
Privacy  
Ventilation  
Aesthetic  
Status  
Technology  
Craft  
Practicality  
Mobility

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**Interior spaces in the Malay**

One of the most congenial aspects of the Malay house is divided into areas, household activities. A notable feature is the absence of partitions between the different areas.

A single-unit house, *teratak*, is the earliest form, now, except in the main space where the porch extends more widely, consisting of a *verandah* (*serambi*), *dapur* (kitchen), and *rumah* (main house).

**Public:**

The *anjung* is the main space where visitors are greeted. The *anjung* or reception area takes place in good view.

**Private:**

The *rumah* is the core area where sacred household activities are performed. The absence of wooden partitions allows different members of the family to be in the *rumah* at the same time. A *rumah* is an effective firebreak house. The *rumah* is the back of the house where the family congregates and where the kitchen is located. Sometimes a *peleka* (storage area) and dishes and for the *rumah* *dapur*. The space used as storage and 'w'

**The main areas**

1. *Anjung* (covered porch)
2. *Serambi* (veranda)
3. *Rumah ibu* (main house)
4. *Selang* (passageway)
5. *Rumah dapur* (kitchen)

visitors and males and the one at the back mostly for women and children. Sometimes women visitors enter the back entrance to join the womenfolk in the kitchen. At the bottom of the steps is a slab of stone or timber where people leave their footwear, and a clay water vessel (*tempayan*) with a water gourd (*goyong*) where they wash their feet (for hygienic and religious reasons) before ascending the stairs to the house.



1. An illustration of a Chinese house in Isabella Bird's The G...  
 2. A Chinese house in a typical central door overhang provides p...

# Axonometric View of the Malaccan Malay House



# The Malay House

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The construction of a Malay house is often a village affair, combining colourful rituals and cooperative labour.

## The Malay house: Materials and construction

*The traditional Malay house is primarily a timber structure, built off the ground using the post-and-beam method by local carpenters or by the owners themselves. Its walls are usually made of timber, although bamboo is still used in certain areas. Numerous full-length windows line the walls, providing both ventilation and a view outside. The high-pitched, gabled roof, which dominates the house, was traditionally covered with thatch but is now more often covered with galvanized iron.*



### Materials

The main structure of the traditional Malay house—the posts, crossbeams, tie beams or girts and roof structure—are made of hardwood, such as *cengal* (*Neobalanocarpus heimii*), *belian* (*Eusideroxylon zwageri*), *merbau* (*Intsia palembanica*) or *resak* (*Vatica* spp.), while the secondary structure of the house—the rafters, floor joists, wall studs, window frames and door frames—are usually made of a moderately hard timber, such as *meranti* (*Shorea* spp.) and *jelutong* (*Dyera costulata*).



Building materials with low thermal qualities, such as woven bamboo for walls and thatch for roofs (above), have been largely replaced by timber and galvanized iron (below).

The posts, called *tiang*, which carry the weight of the roof directly to the ground, measure at least 12 centimetres square. The crossbeams supporting the floor are mortised through the posts and secured by timber wedges, while girts and tie beams at the top of the posts hold the posts in position and form the base of the roof. Various types of joints and connectors have been developed by Malay carpenters to allow the house to be built in stages, and also to allow it to be dismantled and re-erected elsewhere.

# The Malay House of Peninsular West Coast



The eight west coast states of Peninsular Malaysia.

There are many variations of traditional Malay houses on the west coast of Peninsular Malaysia although the basic component of *Rumah Ibu* ( the Main Living Area), is common to the whole region. The Main distinguishing feature is the roof. On the West Coast 2 major roof forms are indigenous *bumbung panjang* (long ridge roof) and the foreign influenced *bumbung lima* (hipped roof)

INDOCHINA  
THAILAND

# The Malay House of the East Coast

PENINSULA  
MALAYSIA



The eight west coast states of Peninsular Malaysia.

Kelantan

Trengganu

Pahang

Strong Thai and Cambodian influences have shaped the culture of the East Coast for many centuries, and have created what some consider to be the richest cultural heritage of Peninsula Malay states.

# The East Coast Tradition

- It is believed that the early ancestors of the Malays came from the the ancient civilisation of Kemboja (Cambodia) and Champa in Indochina and settled along the east coast of the Peninsula.
- When trade flourishes in the later years it further enforced the cultural influences from these countries.
- **2<sup>nd</sup>-16<sup>th</sup> Century**
- Kelantan, Trengganu and Patani in Southern Thailand was part of the Malay Kingdom of Langkasuka.
- Many of the traditional art forms known today originated there-*mak yong*, *wayang kulit*, *menora* and *sobek*...so does the architectural vocabulary distinctive of the east coast.

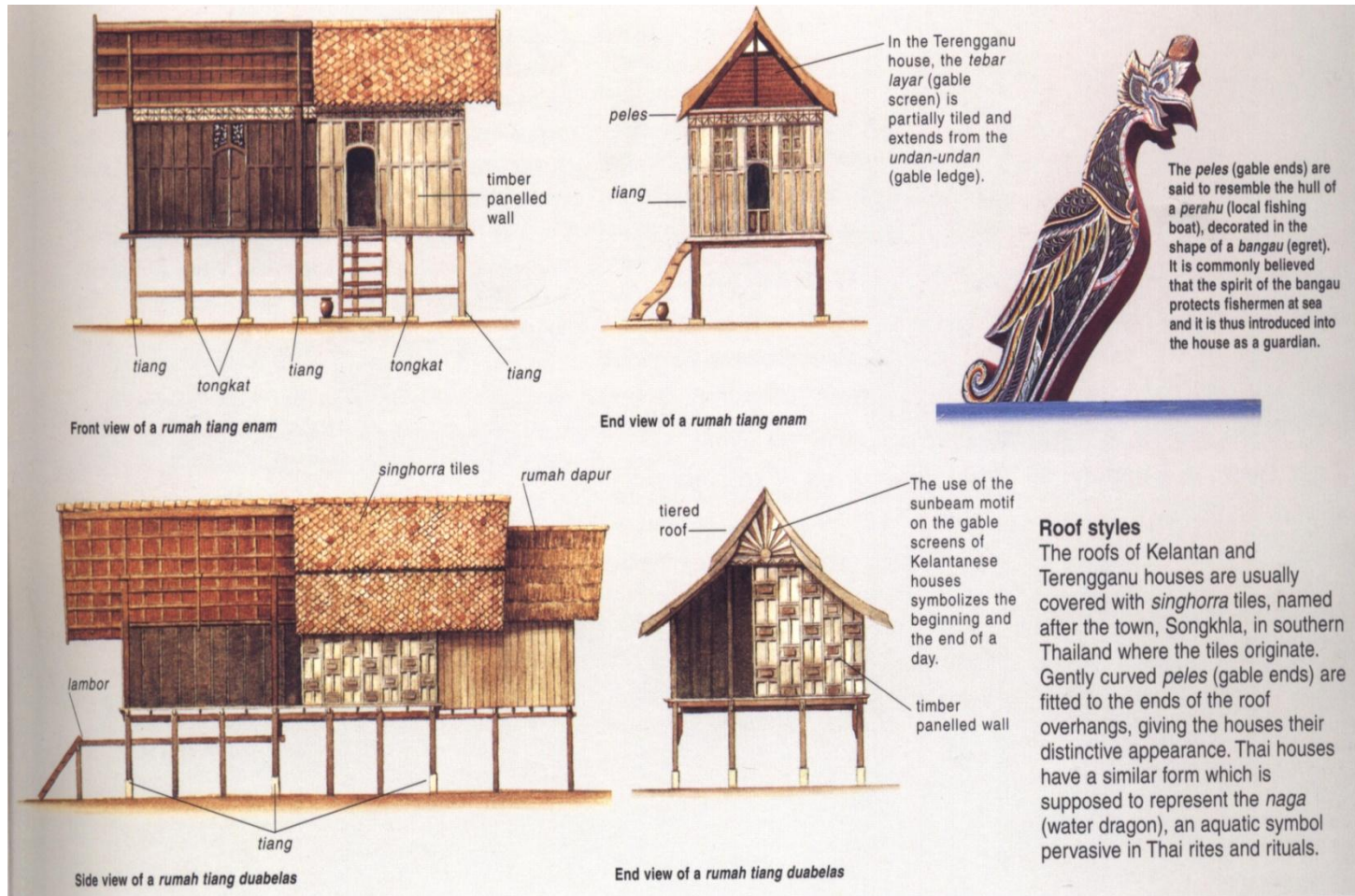


# Regional Influences and Common Features

- Evolution of architectural style of the east coast must have derive from several influences brought about by migration and trade. The development shows homogenous features peculiar to Kelantan, Terengganu, Thailand and Cambodia.
- Features include the steep, tiered roofs with curve gable ends;
- Rhomboid-shaped terracotta roof tiles of Thai origin-*Singhorra Tiles*;
- Walls made of timber panels which are slotted in groove frames found in both Thai and Cambodian construction techniques.

# Examples of the East Coast Architecture

## □ The Kelantanese House



## • The Terengganu House

# The Traditional Architecture of Palaces and Public Building

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In Feudal Malay society; the Istana-residence or palace of the Sultan or Raja , was a paramount importance. Not only was it the place where the Sultan lived, but also the centre of learning, culture and the arts.

Mostly of timber but

built on a larger and grander scale than the traditional Malay house, the construction were still base on basic architectural elements.

Elevated platforms and other internal devices signified public and private domains as well as hierarchy and formality.

Elaborate carvings on walls and posts distinguished the palaces from homes of the common people.

# Mosque typology

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- Vernacular mosque
  - ▣ Three tiered for natural ventilation
  - ▣ Made from timber with no nail joints
  - ▣ Raised from the ground
  - ▣ Tiles from clay from nearby Siam



Kg Laut Mosque, Kota Bharu, Kelantan  
Influence by Chinese muslims

# From traders to Melaka

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- Vernacular Mosque
  - ▣ Of bricks and stones
  - ▣ On platform
  - ▣ Naturally ventilated



Kampung Hulu Mosque, Melaka, Malaysia



- Jamek Mosque from Indian influence (brought by the British)



# Mosque Development

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- The Mosque and the tomb.



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# Contemporary Architecture

Corporate, Housing, Commercial, Institutional



# Contemporary

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Educational



Airport



# Corporate - Contemporary

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Islamic Architecture in the Malay World. 29th May 2009

# SUMMARY

Islamic Architecture?



# Summary

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- The perception of Islamic Architecture had misconstrued the fundamental of what Islam as a way of life is to something still and physical
- Naturally Islam has not change the architecture that was born out of need and necessity in any cultures or region. What it does is to make one aware on ones responsibility towards the Creator and Environment as a steward. And thus create spaces, architecture and aesthetic pleasing innovations out of needs that transcend time, place and age..without wastage for humanity. It has to be SUSTAINABLE.

# Setting the Balance...in environment

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- *“He has raised the Heaven on high, and He has enforced the balance. That you exceed not the bounds; but observe the balance strictly; and fall not short thereof.” (55:7–9)*
- *“Mankind! Your transgression will rebound on your own selves.” (10:23)*



THANK YOU FOR YOUR  
PATIENCE...IT IS A VIRTUE

.....terima kasih.

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