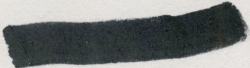


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**MALAYSIAN CENTER
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ARTS AND CULTURE**

**A STUDY INVOLVED IN CREATING AN ARCHITECTURE FOR
THE MULTI-RACIAL PEOPLE OF MALAYSIA**

**BY
ZAIDAH MOHDZAINAL**

**A THESIS SUBMITTED IN PARTIAL FULFILLMENT
OF THE REQUIREMENTS FOR THE DEGREE OF
BACHELOR OF ARCHITECTURE**

Approved:

Advisor

Thesis Coordinator

Director, School of Architecture

**MONTANA STATE UNIVERSITY
Bozeman, Montana
June 1987**

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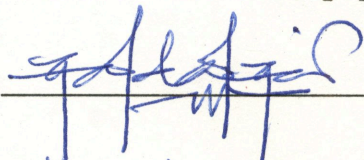
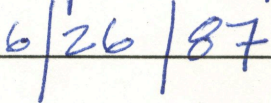
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ACKNOWLEDGMENT

I wish to dedicate this thesis to my fiance, Adnan, whose unfailing support and encouragement will always be remembered.

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Introduction

This thesis deals with culture and its relationship to the built form. Culture changes with time, therefore building forms and environments also change with respect to time. In doing this project, I'm concerned with the issue of finding an architecture that will serve the people of Malaysia, while reflecting the values of the country. In order to do this, it is necessary to take into consideration the problems involved in designing for a multi-racial country. I want to take the heritage of the country into consideration while still meeting the requirements of modern day architecture. The object of this project is to develop a better cultural understanding of my country through research, study and application of that understanding in my design.

Thesis Statement

To design a public assembly place under the influence of a particular culture with the emphasis on climate control, use of suitable, local materials and local craftsmanship. My purpose is to create an architecture that will reflect the character of the country.

Project Synopsis

Purpose:

To design a center for the arts, crafts and cultural activities of the people of Malaysia.

Scope:

The project is being proposed by the Ministry of Culture.

The project is located in an urban park, in Kuala Lumpur, Malaysia.

Size of project will be ^{69,000}sq. ft. on a 240,000 sq. ft. site.

The center will provide auditorium space for 1,000 people for cultural shows, and galleries and workshops for displays.

Focus:

The question of architectural identity is very important to a country with diversified cultural background. In order to address this issue, I will be focusing on three factors which are shared by the multi-racial people of Malaysia. These are the equatorial climate, use of local materials and use of local craftsmanship.

Methodology:

Given the lack of precedent and pattern language that is sensitive to the Malaysian people, this project will focus on developing an architecture that will be aware of the environment, and will take advantage of the skills and crafts of the people. This project will attempt to draw the multi-racial people of Malaysia together; therefore it is important to create a more cohesive and universal "Malaysian" environment rather than to use the approach which attempts to incorporate diverse, disparate and individual

architectural forms in an eclectic architecture.

By addressing the shared elements of climate, local materials and craftsmanship, I will hopefully be able to create a cohesive architectural style for Malaysia. Local materials such as timbers and marble are found in abundance and design considerations should be given to this issue. People are highly creative in craftsmanship as seen in detailed woodcarvings. Their creativity should be employed for this project. Climate, the most shared element must be considered to create a place for humans to live in comfort.

Project Goals:

To create a place where tourists can visit and observe the arts and crafts and cultural activities of the multi-racial people of Malaysia.

To create a place of interaction for the people of Malaysia, by having cultural and arts shows.

To enhance the sense of creativity of local artists by creating a place of their own - dance studios, workshops, and galleries.

To strengthen and support the financial factor of local people by selling local craftwork.

To create a Malaysian atmosphere by addressing the shared elements of the culture that comprise the social-cultural fabric that unites the people.

Philosophical Statement

The forms most cherished by man are derived from cultural ideals which have been taken from beliefs relating back to a particular civilization's lifestyle. The way in which he deals with the elements of form is through a strong belief in a cosmic order that has been transplanted throughout the existence of a civilization.¹ Form is generated by choice based on an understanding of the relationship between the built form and that of the existing natural environment and is derived from a culture's activities, life styles and values.² Activities are the primary aspect of culture upon which to base decisions when man is deciding to create the built form. The certain values placed on specific activities have been very influential in helping man decide how he should make choices which will truly represent that particular civilization. Activities such as those based on religious beliefs and ritual practices have greatly influenced the more primitive forms of architecture. Ziggurats and pyramids are examples of architecture based on religion. The ziggurats were believed to be linking elements between man and god. As man evolved through time, his building forms developed to a higher, more technical level, but kept the dominant features of religion and symbolism.

A major change in lifestyle occurred during the Industrial Age which led to new values and thus a new culture. This new culture was based on machine products and technological processes. This cycle occurred because life styles were dependent on values shared by that particular culture and values were based on the judgment of activities relating to that culture.³

Symbols used in the built form play an important role in forming the essence of a culture through a communicative language system adopted by that specific culture. Along with the symbolism that is

involved in the built form, it is necessary to take the aesthetics into consideration. These aesthetic perceptions are due to influences of religion, economics, history, politics and communication. Aesthetic values are dependent upon a culture's view of itself and elements that are compatible while, at the same time, influencing activities and lifestyles.

Economics can effect the built forms through the monetary condition of the culture. A wealthy culture will tend to have a more elaborate built form, whereas a poverty stricken culture will have a built form mainly designed for function based on its limited resources and education. A wealthy culture would have much more freedom as far as materials, techniques and other factors. The values of these two cultures will vary, having an effect on how they make choices.

Climate can be defined as a secondary element which also effects the forms of the built environment. The system of choice has been used in deciding how to design a form that can be controlled by climatic conditions. In building in such a manner, one can minimize the extremes of hot and cold weather. For example, in hot, humid climates, built structures are open, freeflowing, which induces comfort through shading and access to cool breezes. Other weather conditions to work with are rain, and wind patterns, which bring heavy storms to the tropical areas. Climate tends to have only minor fluctuations, so it is a fairly reliable element when choosing to build the proper form. Even though climate plays such an important role, it still comes in second to the religious factor in some areas. In parts of the world, people believe that the gods are in control of the weather, so the gods are their primary concern. Form is built around what they feel the gods want.

Along with an understanding of the climate, there is the site and

the topography to be taken into consideration. Site choice is also influenced by the values that a culture possesses. Some of those sites have been based on ritual reasons while other sites have been set up because of certain climatic conditions. In a sense, the site is cultural rather than physical, reflecting back to the idea of cultural ideals and the concept of choice.

Raw materials tend to affect the built form, but in the sense of a modifying factor. In many places, indigenous materials are used to reflect the buildings response to that particular area, while in other areas, materials are easily transported to the specific site to meet the needs of modern requirements. For example, a certain local material may be substituted with one that better satisfies building codes. The tools and construction of the built form must also be considered carefully. Some of the tools are restrictive and primitive and will limit the outcome of the building.

After considering all of these factors, one must remember the overriding importance relating the design criteria to the idea of culture. In addition to the previous things to consider, with my project there is the problem of a multi-cultural country, not one culture, but a country that has a variety of needs for such a diverse population.

In order to gain a clearer understanding of the problem, it seems appropriate to add additional information from past research that I have done concerning my 470 project.

Introduction

The development of architecture in any country in the world is important. The pursuit towards a contemporary and identifiable architecture, one which is compatible with modern societal needs and at the same time vernacular, is very critical. In the Asian region, particularly in Malaysia, the search for an endemic architecture seems to be pervasive. To a country that is developing and has been through

many periods of different architectural style, the question of its architectural identity must be addressed. The concept is difficult; one could not resolve the problem simply by combining together historical and traditional architectural elements into a modern configuration. To do this and then to claim the end results to be the identity is a fallacy. Malaysia is involved in rapid urbanization and development; its urban environment is highly layered and culturally complex. Therefore its architectural development contains ambiguities, complexities and contradictions. Malaysia is a country that consists of a multi-racial population such as the Malay, Chinese, Indian and European with each race having their own traditional values and cultures. Already we have seen some contrast between its traditional values and modern societal needs, for instance, the value of the kampung (village) and society's desire to work and to live using modern technology and to come face to face with the world's media and permissive culture. This is a reality that needs to be faced and resolved. Unlike other older and more developed countries in the world, Malaysia has a relatively short architectural history. We have not had the benefit of a long and gradual process of architectural development; we do not have to look very far to realize that we have leapt from the indigenous homes of the kampung to the contemporary houses and buildings of today. In between these two extremes, we have the simply built shophouses of our towns, the terrace houses and other similar structures to provide for basic needs for shelter or for our business to be conducted in. Thus, the architectural environment of Malaysia today is comprised of a real amalgam of the new and the old, the big and the small, the Malay and the Chinese, the Indian, European and a collection of other influences. Therefore, it is essential that Malaysian architects pursue a national identity besides creating an architecture that is functional in its image, adaptable to its climate, economical in its construction, sympathetic to its setting and harmonious in its environment.

DETRIMENTS TO NATIONAL IDENTITY

According to a few leading architects of Malaysia, there is no distinct or clearly defined architectural expression that we can describe as Malaysian. What we do have is a good deal of building designed to meet the very real and stringent demands of the end users according to the economic restrictions involved. There are several reasons contributing to this identity problem; the rapid urban development, the economic restrictions, architects indifference, and societies misconceptions about traditional values

URBAN DEVELOPMENT

Malaysia is a very young country and is developing rapidly. Modern and hi-rise buildings are constantly being built. Malaysia is trying to pace itself to the rate of growth of other developing countries in the world. People are trying to build so much in such a short time, and often they tend to copy the urban environment of more developed countries rather than to create their own architectural environment. As a result, the urban environment in Malaysia looks similar to the urban environment in other cities in the world.

THE ECONOMIC RESTRICTIONS

Like any other developing country in the world, Malaysia faces some economic problems. Buildings are being built and financed primarily by the government. Since the government is also responsible for the majority of funding for schools and other institutions as well as wages for its people, they can not afford to be as luxurious in the construction of buildings. Thus, the architect has to design buildings within the economic restrictions; therefore his freedom in design is limited. The time spent in designing has to be shortened, and the materials used must be basically simple. For instance, instead of spending his time designing a complex roof structure, such as those commonly seen in Malaysia, he might design a flat roof, which is a common design for an urban environment.

ARCHITECT'S INDIFFERENCE AND SOCIETY'S MISCONCEPTIONS

The so-called modern architecture in Malaysia is synonymous with the architects background, education, training and practical exposures. Almost all architects in this country were trained in Western countries and their present philosophy of architecture is, by and large, oriented towards Western philosophy. Because of their overseas training, local architects are unfamiliar with what can be identified as local design elements in architecture.

The general public is similarly amiss on this identity problem, which explains why most owners still insist on a preference of the so-call "Spanish" style for their house design, as they feel that this is the most fashionable style for the day. Without a clear conviction as to what really constitutes a Malaysian identity in architecture, most owners would readily discard, for example, the Malay Minangkabau roof design under the mistaken belief that this design befits only a rural setting. Since the population in the rural areas are mostly low-income people, a rural interpretation of housing would act against urban home owners personal status, thus far advanced in their urban life. There also exists in the minds of the general public a lack of knowledge and understanding of the basic subject matter of architecture itself, not to mention the more sophisticated aspect related to the national identity factor.

The public frequently correlates good architecture to mere building design, facade treatment and style. To them, good architecture means a highly stylized and fashionable building using modern technology. Hence, they have a tendency to decorate their houses with "Spanish" arches and "Mansard" roofs which render our domestic architecture somewhat alien to our culture and environment. There is another contributing factor to the public's lack of understanding of the traditional values in Malaysian architecture. The enticement of modernization, with the preference for concrete, glass, plaster and painted structures indicates a measure of success and becomes a symbol of elevated status. This misconception that is implanted in the minds of the public has caused the mutilation and demolition of

some very outstanding traditional houses and historical buildings, which are being replaced by technologically modern buildings.

PLACE

Historical Aspects

Malaysia has been inhabited for at least 6,000 years by aborigines, but the first settlers came to Malaysia from Central China as early as the 10th Century. They traveled towards most of the Asian region, and, at last settled in Malaysia. These people, who called themselves the Malays, are a mixture of Chinese, Arab, Spanish and Sino.⁴ They were the ones to bring civilization to Malaysia. The Malays brought with them their traditional way of life and through the years they learned how to live on Malaysian soil. They created a Kampung (village) environment, became farmers, fishermen and craftsmen.⁵ It was not until the early part of the 15th century that the Chinese traders, as well as traders from the Middle and Far East, arrived on Malaysian soil. These traders were influential to the Malays culturally, and socially as well as on their religion. The Middle East traders brought in Islamic religion and the spread of Islam began mostly among the Malays.

Malaysia was invaded by three distinct groups of European colonists: the Portuguese, the Dutch and the British. The early European intrusion began during the 15th century when the fame of one of the sates of Malaysia, called Malacca, reached Europe. Malacca during that time was famous for its spice trade. The first colonist, the Portuguese, arrived in Malacca in 1509, and they started the period of European Dominance in Asia. Their intrusion also created the beginning of a European political movement in Malaysia. Malacca became one of Portugal's major trading ports until 1641, when the Dutch laid seige on Malacca. The Dutch did not rule for very long as in 1786 the British arrived and weakened the Dutch influence in Malaysia. In 1795, the British took over the country and the era of British political influence in Malaysia began. British

political control over Malaysia transformed the country economically and socially. Many buildings were built as was a means of transportation: the railways. The development of transportation assisted in the rapid growth of the important rubber and tin industries, which the British developed. Because of these industries and the lack of laborers, the British brought in Chinese and Indian immigrants to Malaysia. These immigrants brought with them the traditional values and culture from their home countries. The British maintained the three different races politically and created a plural society; self-government was discouraged.⁷

The British ruled until 1957, when Malaysia gained its independence. Kuala Lumpur was declared the national capitol and all immigrants were given citizenship. Malaysia, under the rule of the local people, developed rapidly.

Geographical condition

Malaysia is a country divided into two continents: Peninsular Malaysia and East Malaysia. Peninsular Malaysia, strategically located in the Asian continent, is surrounded by the South China Sea and the straits of Malacca. It is located 6°40' North of the latitude and has an area of about 50,800 square miles.⁸ It is bordered by Thailand to the North and Singapore to the South. Most of the land area in Peninsular Malaysia is 500 feet above sea level, and about half of the land area is covered by granite and other igneous rocks, such as stratified rocks and alluvium. Topographically, Peninsular Malaysia is dominated by mountainous land that extends from Burma and Thailand.

East Malaysia consists of two states, Sabah and Sarawak, and is

separated from Peninsular Malaysia by some 400 miles. It is located on the Island of Borneo and has a total area of 76,510 square miles.⁹ The separation between these two continents has caused some problems in communication; therefore, while Peninsular Malaysia is rapidly developing, East Malaysia is progressing more slowly, and most of the country remains in a rural, undeveloped state.

Climatic condition

Malaysia has an equatorial climate which is hot and humid throughout the year. The annual temperatures are uniformly high, averaging 78° to 82° F with a similarly high relative humidity of 82% to 86%. Besides the high temperature and humidity, Malaysia also receives heavy regular rainfall averaging 100 inches annually. Malaysia does not experience any distinct changes in weather, but the country is influenced by eight major airstreams that flow from the North-east, South, and West. These airstreams are responsible for the division of the climatic year into four seasons:

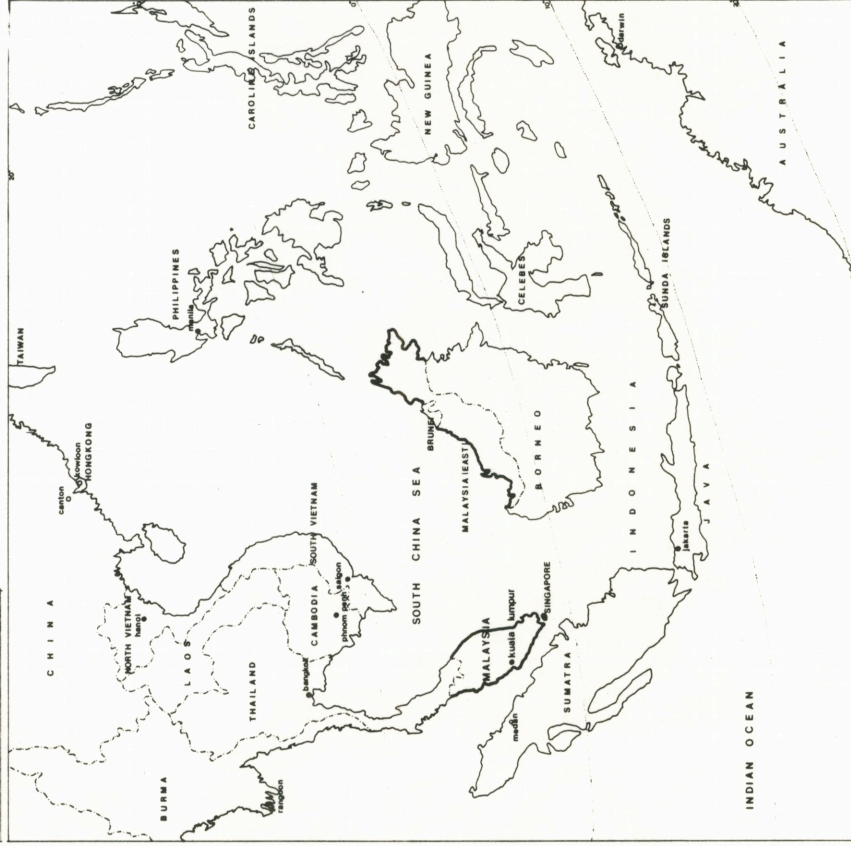
- 1) The North-east monsoon that flows from December to March,
- 2) The first intermonsoon period from March to May,
- 3) The South-east monsoon from June to October, and
- 4) The second intermonsoon period from October to December.

These airstreams, or changes of monsoons, are not distinctly separate.¹⁰

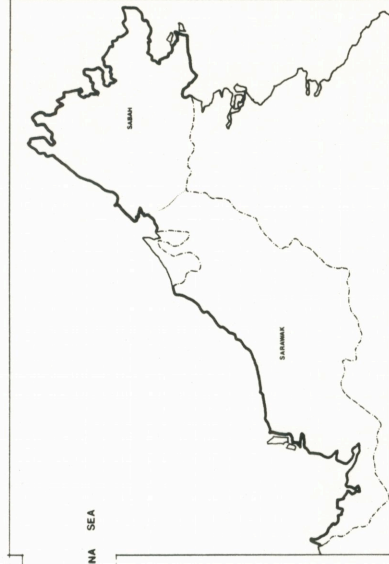
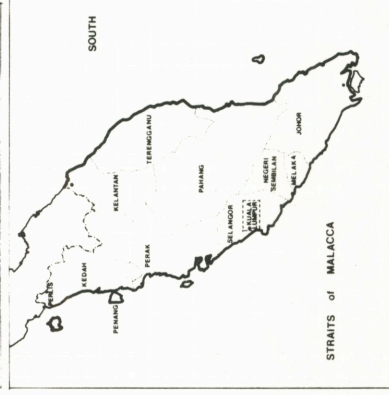
Population condition

The population of Malaysia is about 15 million people of great ethnic, linguistic, cultural and religious diversity. Basically, they are divided into four ethnic groups with each group having their own language. The Malay, the majority of the people, make up 48% of the population, the Chinese 35%, India 11%, and other minorities, such as European and Eurasian Sikh, 6%. The Malays were referred to as the indigenous people of Malaysia. While the Malay language was declared as the national language, with Islamic as the national religion, Malaysia offers a freedom of language and worship. The English, Chinese and Indian languages are all spoken and Buddhism, Hinduism and Christianity are all practiced by the people of Malaysia.¹¹

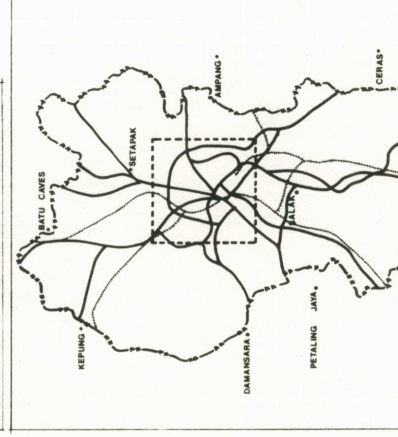
SOUTH EAST ASIA



MALAYSIA - WEST and EAST



CITY OF KUALA LUMPUR



LEGEND

- capital city
- major city
- land
- water
- major roads
- land boundary
- state boundary
- railroad tracks

MALAYSIA : FACTS

population : 15mill.
 malay 48 %
 chinese 35 %
 indian 12 %
 other minorities 5 %
 latitude : 4° N
 climate : hot humid
 temp. av. 78-82° F
 rel. humidity : 82-86 %
 rainfall : 100 in.



MALAYSIAN CENTER of ARTS and Kuala Lumpur, Malaysia



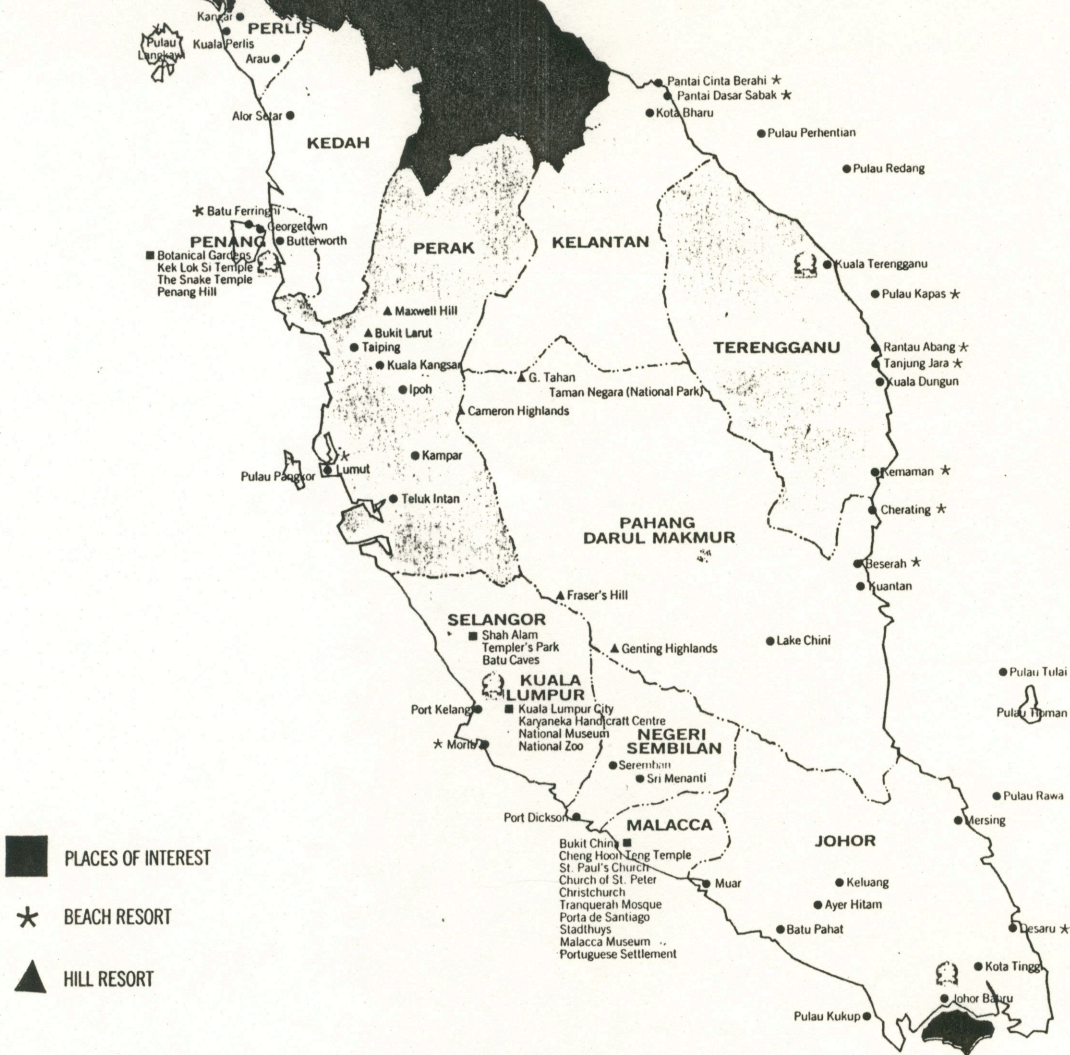
CULTURE



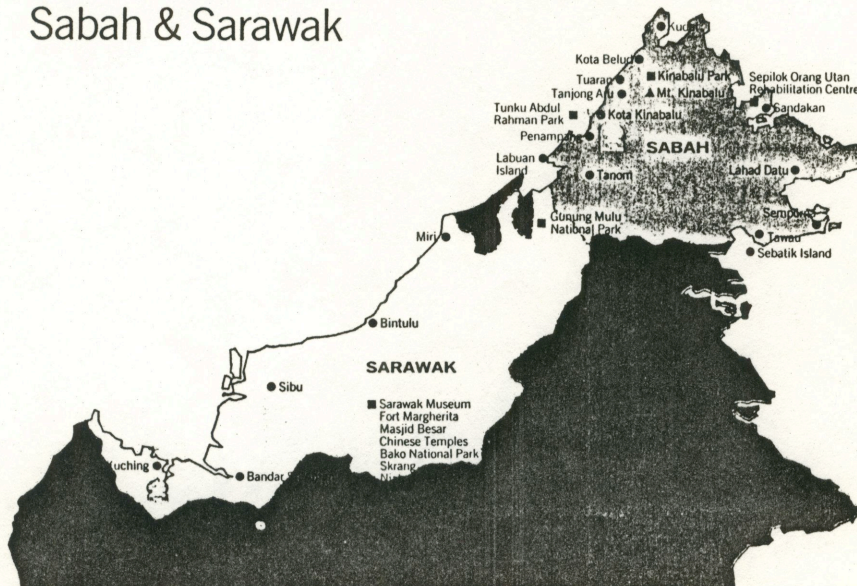
A map of Peninsular Malaysia.



Peninsular Malaysia



Sabah & Sarawak



Social and Cultural Conditions

Malaysia is considered to be a cultural melting pot where one can find various races intermingling as they work, shop, chat and have fun together. The three major races, the Malays, Chinese and Indians, together with other various indigenous races, live harmoniously with each other. It is a country that can be described as exotic, adventurous, cultural, scenic and exhilarating. There is a blend of the modern and ancient existing in harmony. The combination of festivals, cultural events and arts and crafts, present us with somewhat of an understanding of the multi-racial country.

The religious festivals are celebrated all year round. One festival follows another, each significant and important in the lives of those who celebrate it. The year begins with Chinese New Year Celebration consisting of the Lion Dance, with traditional foods prepared for the holiday. The Malay people celebrate the Islamic holiday, Hari Raya, which marks the end of the fasting month, Ramaddhan. Deepavali, the festival of lights, is a holiday celebrated by the Indian people. During this time, many of the Hindu people light numerous oil lamps within their homes to symbolize the victory of good over evil. This leads to very illuminated Hindu neighborhoods. The Christian holiday festival is at Christmas time. Christmas in Malaysia is celebrated by all to some degree, no matter what race or religion. The practice of giving gifts is not confined only to the Christians. All of these festivals are open house events, which bring people of different cultures together to help them to better understand each one's religious beliefs. Besides the four major festivals, there are smaller ones such as the Thaipusam, Chap Goh Meb and many more.

Cultural events throughout Malaysia are also very diverse. One such event is the cultural show, where Malaysia is represented by folk dances, operas and other performing arts. The Malaysia folk

dancers and costumes reflect certain influences that have been derived from neighboring countries. Some of these countries are Thailand, the Philippines and India. The Chinese are well known for operas, which are stories based on Chinese classics. Indians portray the richness of their culture through songs and dances such as the Bharta Hatyarn and KataKuli. These show vigor and drama. They depict the tales of Ramayana and Mahabrata which are Hindu epics. The costumes worn by the dancers are always very ornate and colorful, with accessories from head to toe. These dances and songs are usually accompanied by their traditional musical instruments. One such instrument is the sitar. There are other equally exotic aspects of the culture.

The country is very rich in arts and crafts. The craftsmanship can be traced back through the history of the people groups. Along with being skilled craftsmen, the Malay people are especially gifted and creative weavers. One type of weaving is the Mengkuang weaving in which they produce inexpensive items, such as baskets, floormats, slippers and purses. On the other end of the spectrum, there are the songket weavers that produce a cloth made of gold threads that is very beautiful and elegant. It has been identified as a symbol of Malaysian Royalty. It is also a highly prized garment worn for formal occasions. Every piece of songket produced is distinctive and has an identity of its own.

The Malay people are also known for their beautiful batik fabric. It has been described as a wearable, practical, versatile, inexpensive and vibrantly colored piece of art. Since the batik is hand-produced, no two pieces are exactly identical.

The Chinese excel in creating exquisite chinaware. The Indians are known for their craftsmanship of pottery. Besides these traditional crafts, there are also creative paintings on ceramics and

jewelry and sculpture making. In viewing these aspects of culture and the arts, one can see there is a considerable amount to learn from each culture and an appreciation to be gained.

Malaysia

A Cultural Melting Pot

A traditional Indian dance

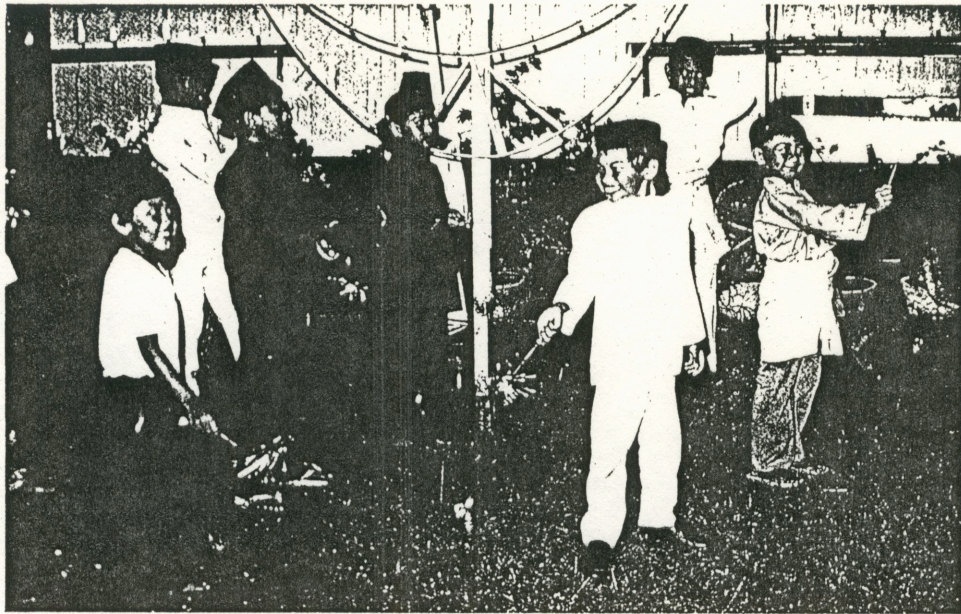


A dancer going through the steps of the 'Tarian Kolu'



A Chinese opera star in all her splendour

Festivals & Celebrations



Muslim children, dressed in their best, playing with sparklers.

A lion dance troupe gaily decked in red and gold.

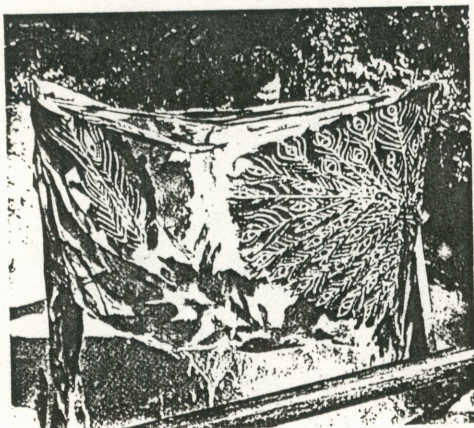


A Hindu priest passing round the holy ashes.



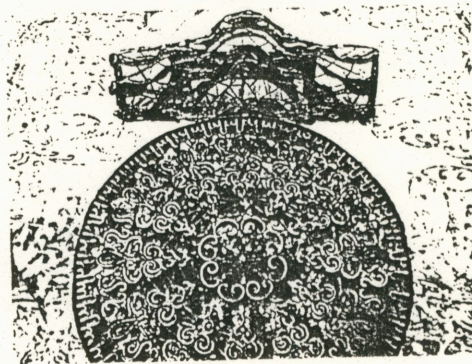
Santa Claus with his assistants spreading the Christmas joy.

Batik



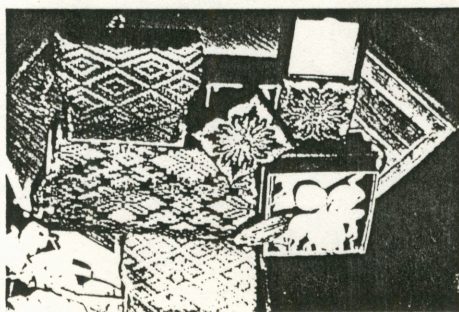
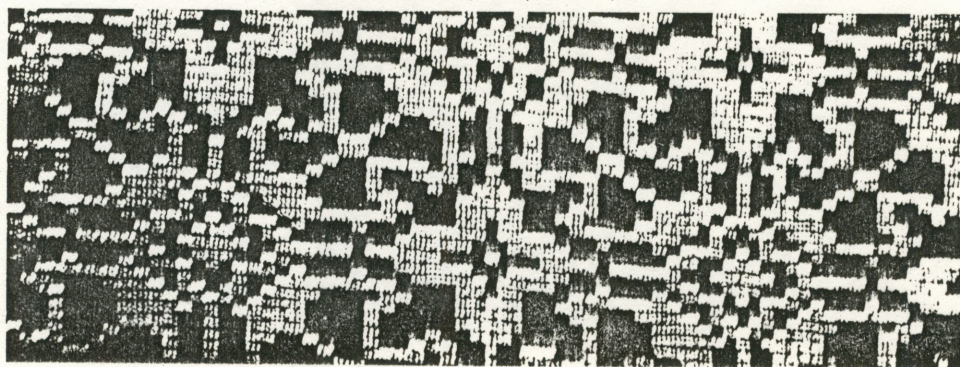
Rinsing the batik.

An intricately-patterned 'jap'.



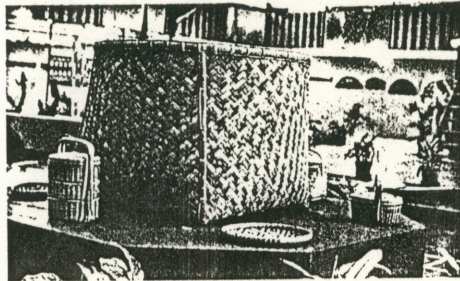
Songket

The intricate design on a piece of songket

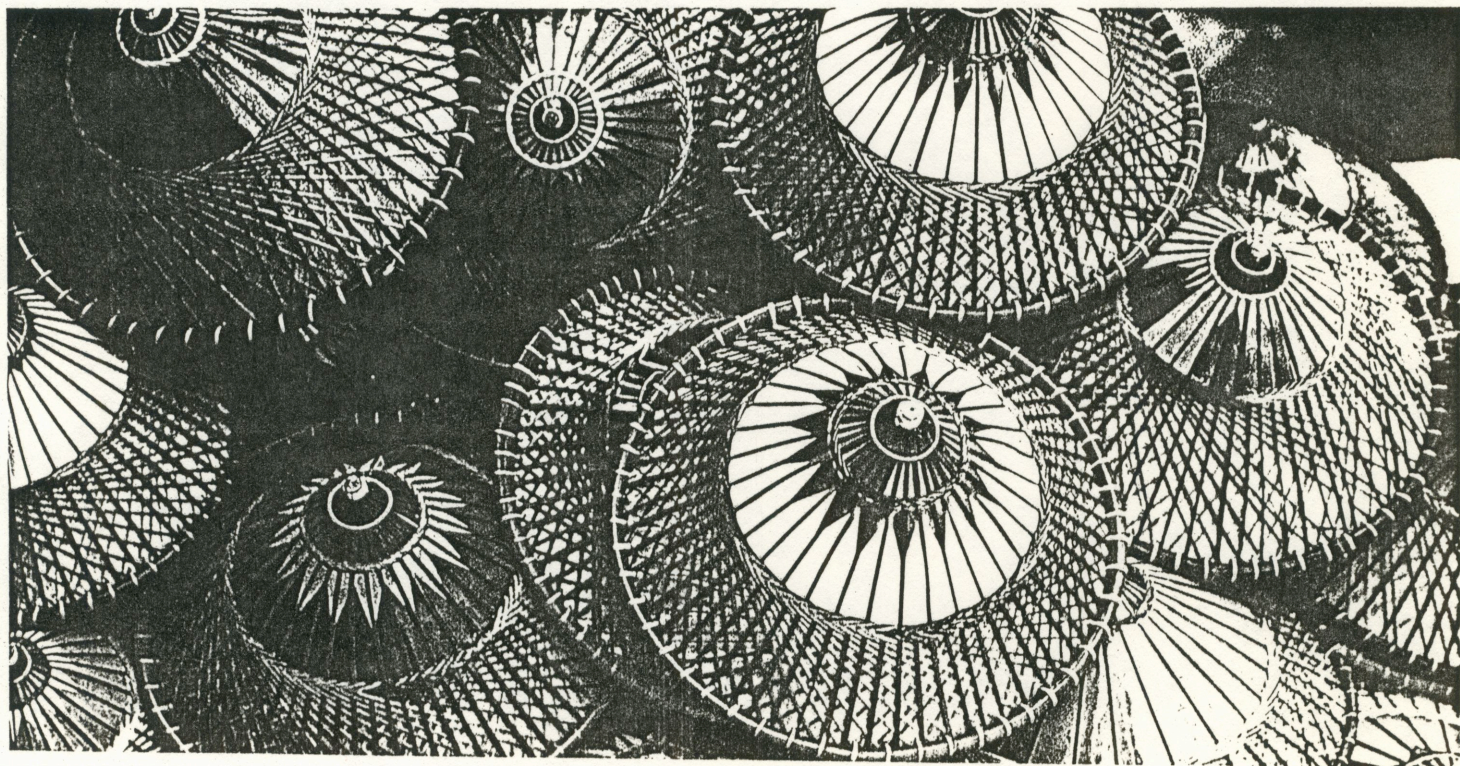


Songket items

Mengkuang Weaving



Natural coloured mengkuang made into
baskets & trays of all shapes & sizes.



Kuala Lumpur

Kuala Lumpur, the national capital, is the largest city and the most important administrative, commercial and cultural center in Malaysia. Covering an area of about 96 square miles, it has a population of nearly a million inhabitants. Kuala Lumpur is rich, with a luxuriant, green landscape and many historically important buildings.

Kuala Lumpur was founded in 1857 between the confluence of two important rivers, Sungai Gombak and Sungai Klang. Since the discovery of tin from these rivers in the late 19th Century, Kuala Lumpur has attracted alot of people, especially the Chinese, to settle in this town. Because of the tin-mining industry developed by the British, the population of Luala Lumpur boomed from 2,000 people in 1870, to 30,000 towards the end of the 19th century. It was the fastest growing city in Malaysia. Besides the tin-mining industry, rubber also became one of the important industries and many people, especially the Indian and Malay, were attracted to this town. Even though the majority of the population in Kuala Lumpur are Chinese, the number of Malays, Indians and Europeans in Luala Lumpur are also increasing.¹²

Nowadays, Kuala Lumpur is a city that is rapidly developing. Skyscrapers, shopping complexes and hotels were built everywhere, and its luxuriant, green spaces have been sacrificed. The City Hall elected to keep its greenery as much as possible. They started to turn Kuala Lumpur into a city within a garden. One of the largest gardens in Luala Lumpur is Lake Perdana, a 100 acre green area,

sprawled over landscaped hills and lawns. Lake Perdana is a favorite park for the city people to get away and get fresh air. The 100 acre area is full of trees, flower gardens and a lake. It is a favorite spot for weekend activities such as strolling, jogging, picnicking and boating. Also in this park are many places of attraction such as the national museum, amphitheater, memorial building and sports club.

Because of the industries, an efficient means of transportation had to be built. In 1886, the first railway was built and the first car made its appearance in the early 20th century.¹³

The British first developed Kuala Lumpur and they built many prominent buildings, mostly of European and Islamic style. These buildings are the government buildings and most of them still exist to the present day.

The residential areas near Kuala Lumpur are diverse in style. Even though Kuala Lumpur has become a city, the residential neighborhoods still retain something of a village air – some India, some Chinese and some Malay style.

City Highlights

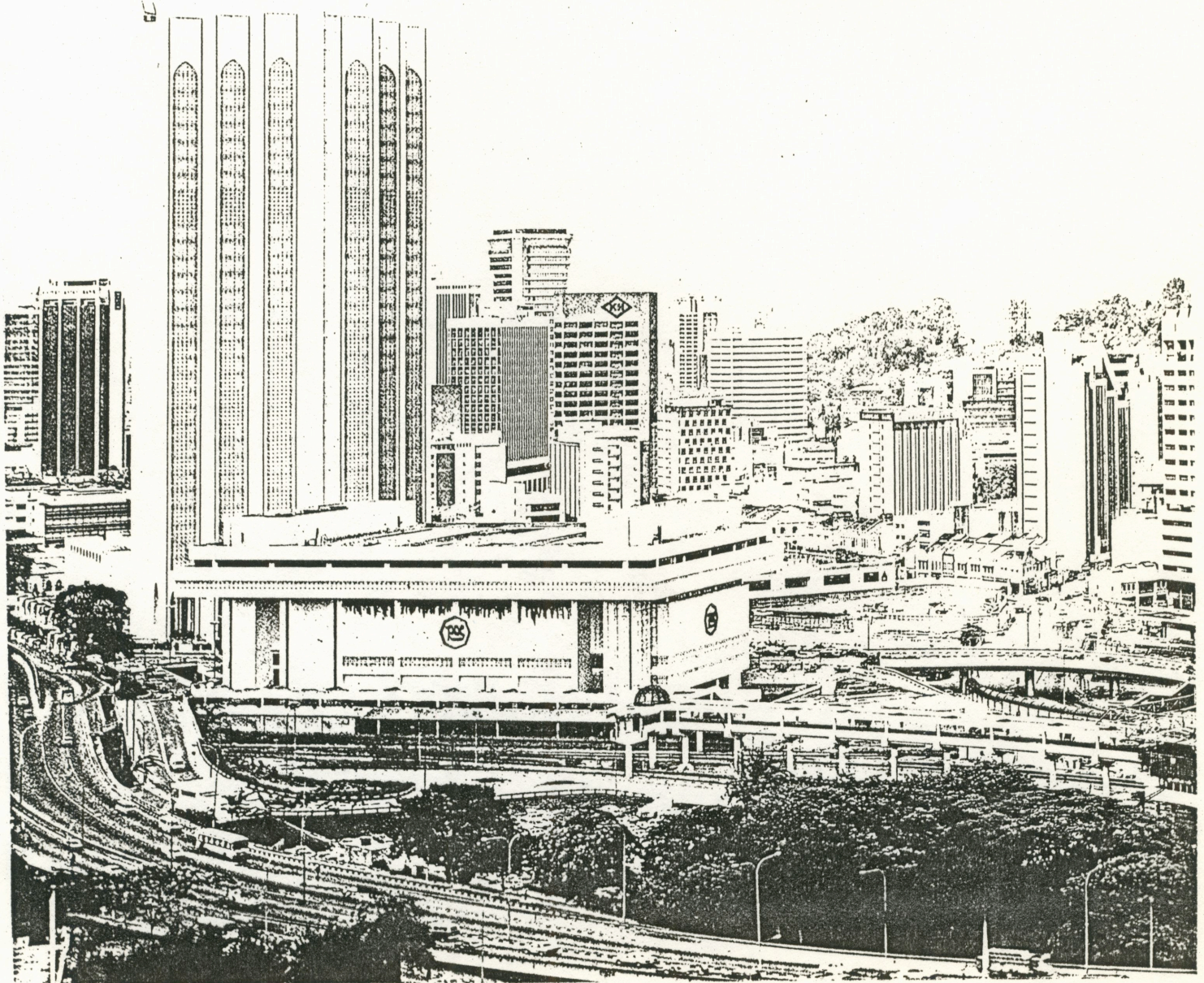
Kuala Lumpur

— The Ultimate Malaysian City

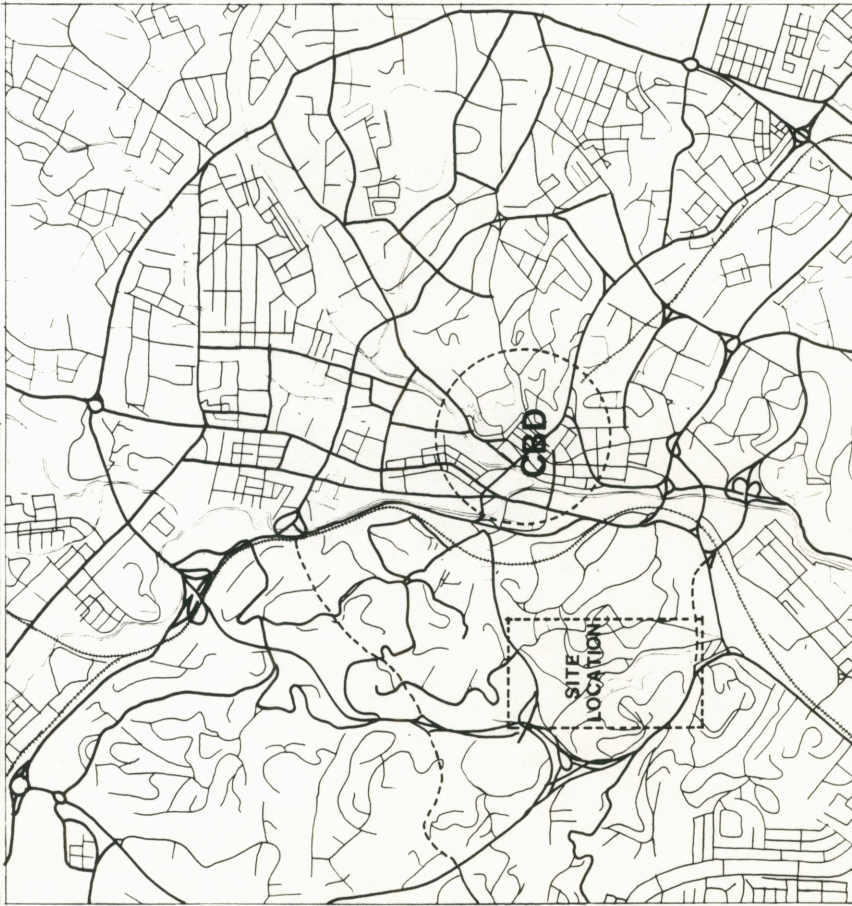


Kuala Lumpur, or the 'Muddy Estuary', was born in 1857 when 87 miners led by the Bugis Chief, Raja Abdullah, landed at the confluence of the Klang and Gombak Rivers.

In time Kuala Lumpur or K.L., as it is fondly called, grew at such a pace that today it stands as the commercial, cultural, educational and administrative centre of Malaysia.



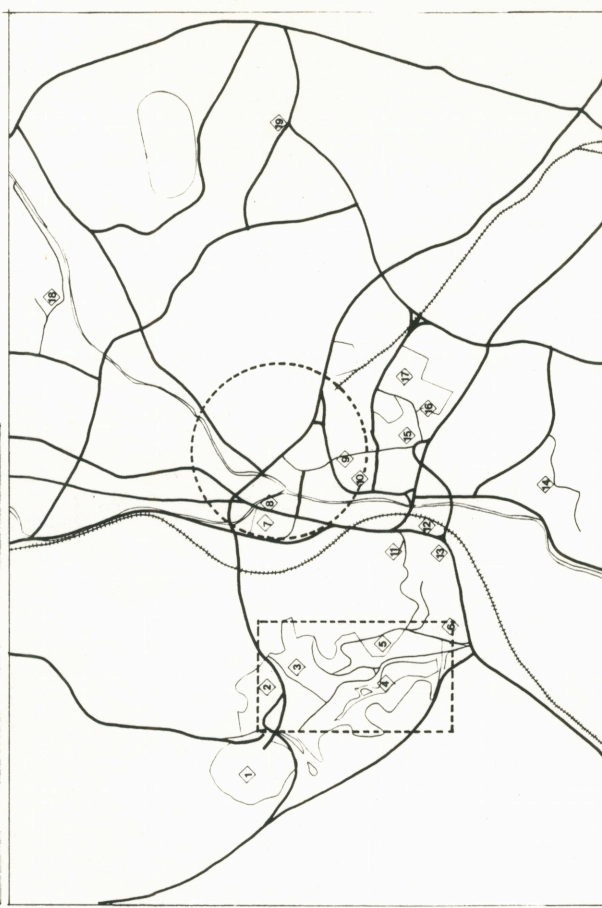
KUALA LUMPUR - Existing Land Use



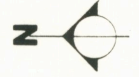
LEGEND

- | | | |
|-----------------|---------------|----------------------|
| major roads | government | attractions |
| minor roads | commercial | major hotels |
| railroad tracks | institutional | mass transit station |
| open spaces | residential | |
| rivers | shopping | |
| lakes | public bldgs. | |

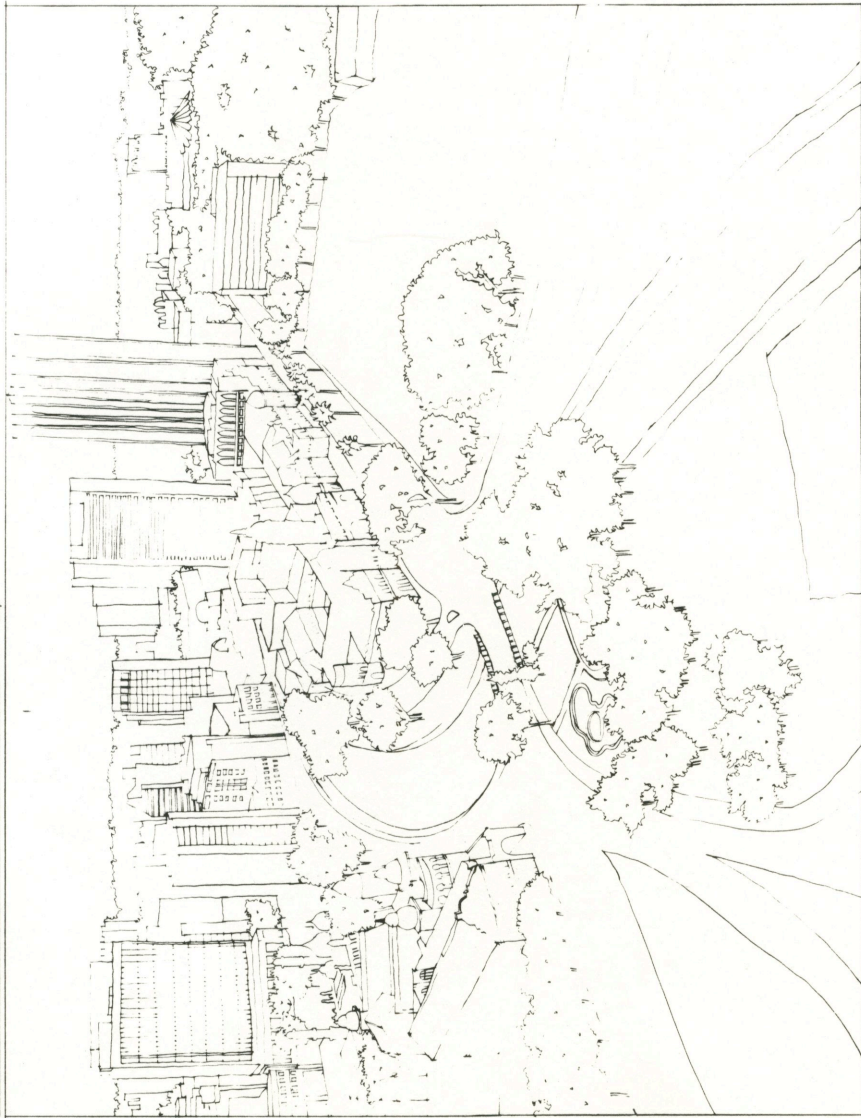
MAJOR ROADS and ATTRACTIONS



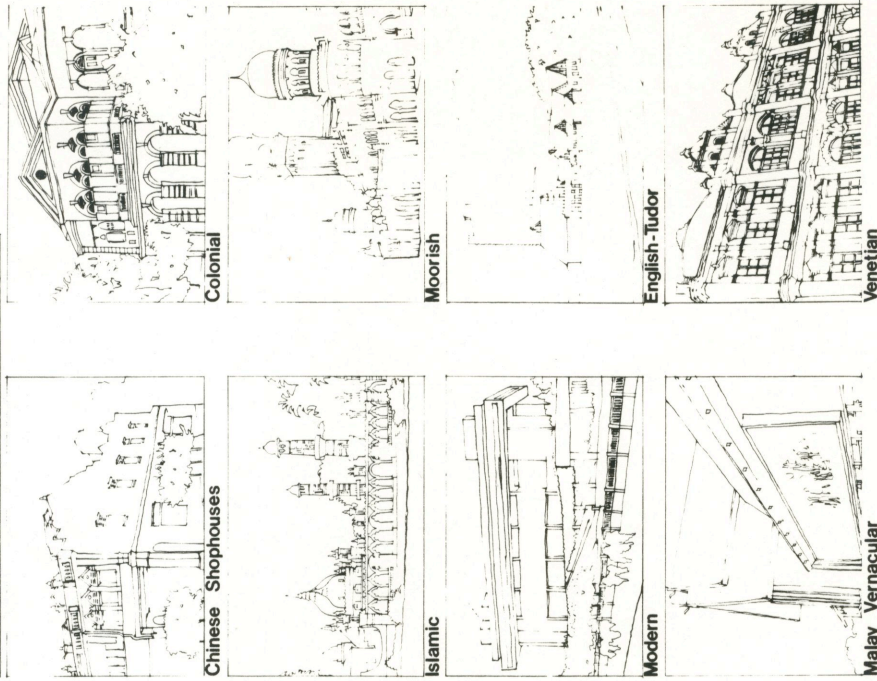
MALAYSIAN CENTER of ARTS and CULTURE Kuala Lumpur, Malaysia



KUALA LUMPUR : Image of The City



PRECEDENTS : Architectural Types



MALAYSIAN CENTER of ARTS and CULTURE Kuala Lumpur, Malaysia

PRECEDENTS

Malaysian Architectural Heritage

The development of architecture in any country both in the East and in the West has always been influenced by religious and social practices. Like its Asian counterparts whose architectural heritage includes the tiered Borubodur, Malaysia also has a rich cultural and architectural heritage that is worthy of mention.¹⁴ Malaysia's Kampung (village) house with Minangkabau roof complete with carved decorative fascia and gable design, its Hindu temple that reflects the spirit of religious fervency, its Chinese geomancy and its historical buildings of Colonial and Islamic influences, indeed reflect the diversity of architectural heritage. Historically, Malaysian architecture has been influenced by basically three distinct groups:

- i. The Colonials – Dutch, Portuguese and British
- ii. The Immigrants – Chinese and Indian
- iii. The Vernacular

Most buildings handed down by the colonials and immigrants are urban, slightly run down, but generally still in use. Colonial buildings, in the main, reflect current European styles of the period when they were built. Thus, Malaysia has various periods of architecture, for example, Mock-Tudor, Moorish Revival, Victorian Colonial, Dutch Renaissance and others.¹⁵ The immigrants brought in the idea of shophouses. These buildings that are still in use that create good street architecture. On the other hand, vernacular architecture, which has been basically rural and has not been influenced by external elements, has maintained its originality.

COLONIST INFLUENCES

Most of the buildings handed down by the colonist are the churches, convents and administrative buildings. Many of the

buildings built during the Portuguese and the Dutch era were ruined or no longer exist. What is left of the colonial buildings are the administrative buildings, mostly located in Kuala Lumpur and still in use by the government. These buildings, such as the Sultan Abdul Samad Building, the Selangor Club and others, display Islamic architectural empressions, reminiscent of British Indian architecture. These buildings are some of the colonial buildings that are being conserved by the government in order to keep the historical identity of Malaysian architecture.

Here are some examples of the colonial architectural heritage.

1. Bangunan Sultan Abdul Samad was built between 1894-1897. It is the major landmark of Kuala Lumpur with its 135 feet high clock tower. The clock tower is featured extensively in Malaysian tourism promotion, and is as famous as the Eiffel Tower to Paris. This building was constructed in fair-faced brickwork with plaster-lined Moorish-type arches. It was originally designed as the Selangor State Secretariat; it is now used as the Selangor State Government Treasury, The Federal Treasury, Attorney General's Office, Accountant General's Office and the Marriage Registry.¹⁶
2. The Selangor Club was first built using attap and timber in 1890 and rebuilt in 1910. The Selangor Club was established in 1884 to meet the social and recreational needs of the Europeans in and around Kuala Lumpur. The Tudor style double storey club house faces directly Bangunan Sultan Abdul Samad, accross the Selangor Padang.¹⁷
3. Masjid Jame' was built in 1909 and is claimed to be a direct replica of North Indian Mosque. The building has 3 domes with 2 flanking minarets towering above decorative towers. The building is constructed of brick with plaster-lined Islamic style arches.¹⁸
4. The Church of St. Mary was built in 1894. It was the first

brick Anglican church in West Malaysiaa, designed with early English Medieval architectural expression. Local timber was extensively used in the roof and interior decorative work.¹⁹

5. Mahkamah Tinggi was built in 1909. It is still used as the high court. Its architectural expression is Islamic style, with an external facade in plaster.²⁰

IMMIGRANT SHOPHOUSES

A shophouse is generally a commercial and private structure consisting of two or more stories, in which the tenants conduct commercial activities on the lower level and have their residence on the upper floor. The structure of the shophouses is flexible enough to contain a variety of businesses, for example, sundry shops, light industries and warehouses.²¹ Blocks of shophouses follow the floor plan and elevation styles typical of shophouses that originated in the 19th century. Traditionally, it is a long deep building that consists of eight to ten shophouses with a narrow street frontage. It is in a form that allows merchants to live and work in the same building. The floor plan of a typical shop house consists of a shoplot at ground level with storage, back yard and central air well for ventilation. The upper level plan consists of a living room, kitchen and bedrooms. The shophouse is characterized by five foot colonnaded walkways at ground floor level, opulent ornamentation of the facade by the use of Chinese and European motifs, and a profusion of tiles, stucco and timber as material for construction.²² Colonnaded walkways provide a distinct feature to the long, narrow building of the shophouses, creating a strong imagery

in the streetscape. Also the colonnaded walkways play a unique role in the urban streetscape as they are both a semi-public and a private zone. They provide a partially enclosed transitional buffer zone between the quieter inner shopfront of the shophouses and the noisy streets. They are a climatically suited architectural device that enables pedestrians to move from one shop to another in rainy weather without getting excessively wet. They also protect against the hot sunny weather. The colonnaded walkways are the distinct feature of shophouse blocks and have become an important component to the local urban environment, thus constituting a unique architectural element of Malaysia.

THE VERNACULAR MALAY HOUSE

The traditional Malay house is probably one of the most significant architectural types of rural Malaysia and the most important component of our existing architectural heritage. It is sensibly planned, intelligently framed and often very finely decorated. Many of the houses built along traditional lines are cooler, better looking and better to live in than many modern houses. Its fundamental form consists of a steeply pitched roof with overhanging eaves to provide protection from the sun and heavy rains. The house is built on stilts and entered by means of a ladder or staircase, offering protection against flood waters and wild animals and incidentally allowing cooling winds to pass below the floor. Slatted floors with one-half inch gaps provide

ventilation and cleanliness. Construction materials are those readily available from the forest. The walls are made of light timbers, which do not retain heat, but keep the house cool during hot, sunny days. All Malay houses contain basically the same planning elements, but vary considerably in the arrangement of the elements and the form of the building. The variations exist because of geographical and cultural diversity. The structure and carpentry are generally the same in all areas: a series of columns erected on stone or timber bases held together by beams which also act as bearers for floor joists; and wall plates to support the roof structure and between columns.²³ Always, in the old times and frequently today, no nails or bolts are used, only timber dowels and wedges since it was necessary for buildings to be dismantled and moved when required.

The general planning elements of the Malay house are the Serambi (verandah), the reception room or visitor's sleeping room, Ibu Rumah (main house), sleeping rooms and the kitchen. The serambi or verandah provides a shaded buffer zone between the house and the outside. All Malay houses are oriented East-West to face Mecca, an Islamic principal of orientation that has been adopted by Malays in all cases. This orientation is also a climatic adjustment to prevent solar gain into the house.²⁴

The variations in the Malay houses are mainly attributable to different roof shapes, different numbers of tiangs (upright posts) and variations in ornamentation. One of the most significant styles of the roof form is the Minangkabau roof, which is largely adapted

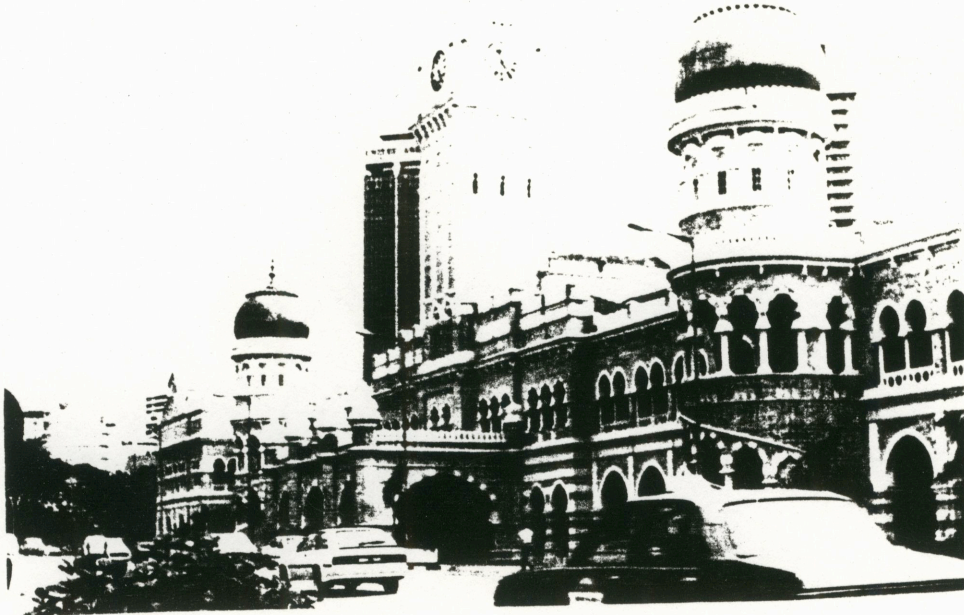
by the Malays in Negeri Sembilan and Malacca. This style was brought over from Sumatera.²⁵ The basic form of the Minangkabau roof is familiar: the curve of the ridge line upwards towards the gables and smaller front or side roofs overlapped by a larger central portion. The ridge line creates an upflung point; a design created by the Sumatran people as they had a particular respect for bulls and like to use the horns as decoration.

The traditional Malay house is an indigenous solution to housing, evolved through the generations by the Malays themselves, adapting to their own needs and environment. Materials used are local and are freely available in their natural surroundings. The Malay house has been able to reduce climatic stresses by providing good natural ventilation; most houses are designed with window openings from floor to ceiling that capture the winds at body level. In short, the Malay house is far more adequate in terms of climatic design, and the house can be designed and built by the owners themselves with a good understanding of their own nature and environment.

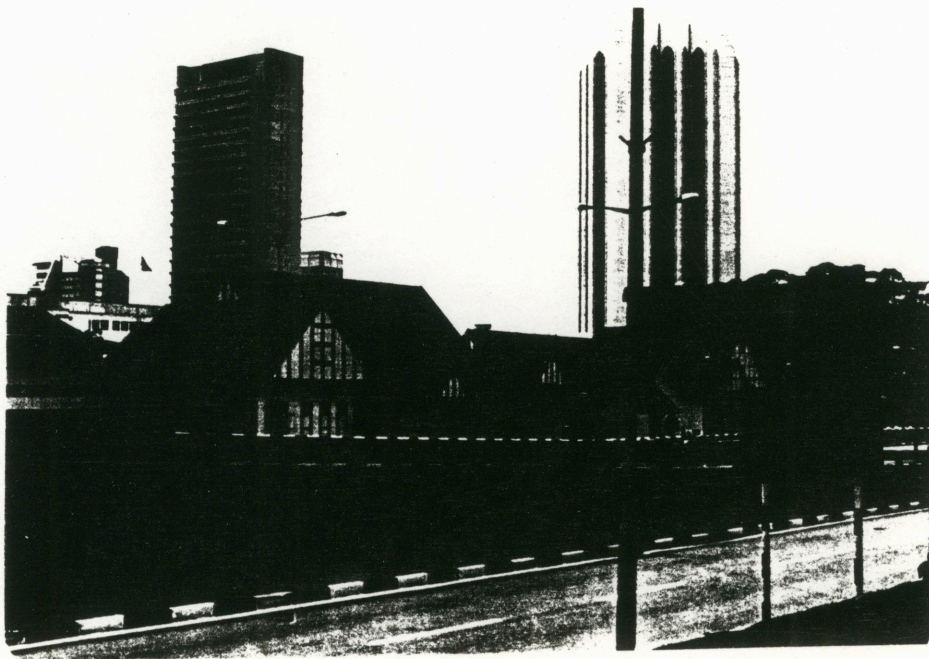
THE RELIGIOUS ARCHITECTURE

Historically, other building types which are suitable for identity expression are the religious buildings of different faiths and denominations. This is because the function of these buildings is well defined and the symbols of the various religious faiths are easily recognized. For instance, the Islamic mosque in this country has the most easily identifiable architecture. The design of the mosque here in Malaysia is inspired by the mosque from India and those from the Middle East. They are usually characterized by highly decorative domes and a minaret. Their principal orientation is to face Mecca which has been adopted by the Malays in all cases. Whereas the mosque is well known because of its domes and minarets, the Hindu temples are characterized by richly adorned sculpture and statues of dieties and goddesses. The typical example of a cathedral church can be seen throughout the country; it is usually designed around a cross-plan with arches, stained glass and adorned with religious emblems. Chinese temples typically have curved overhanging eaves and an adorned ridge, full of animal characters that have their own symbolic meanings. The temples are colorful, and very often richly decorated with ornaments, symbols and patterns.²⁶

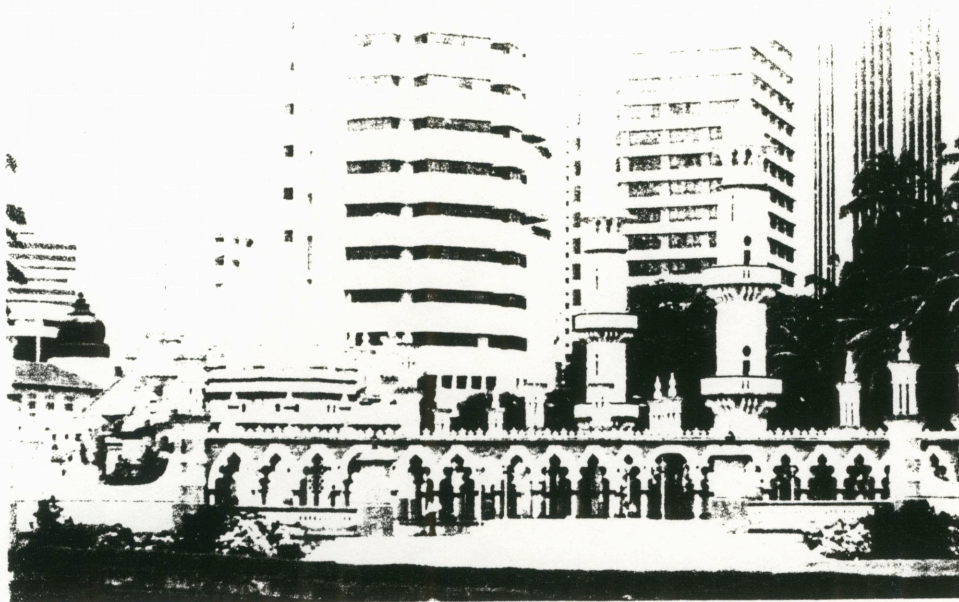
Bangunan Sultan Abdul Somod.



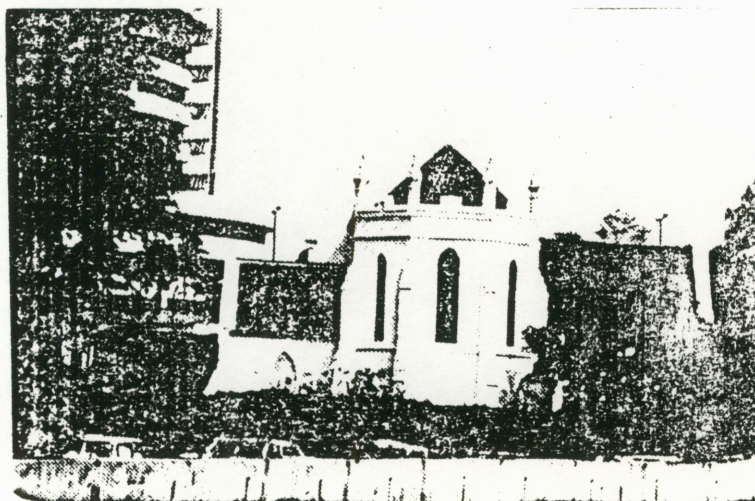
The Selangor Club.



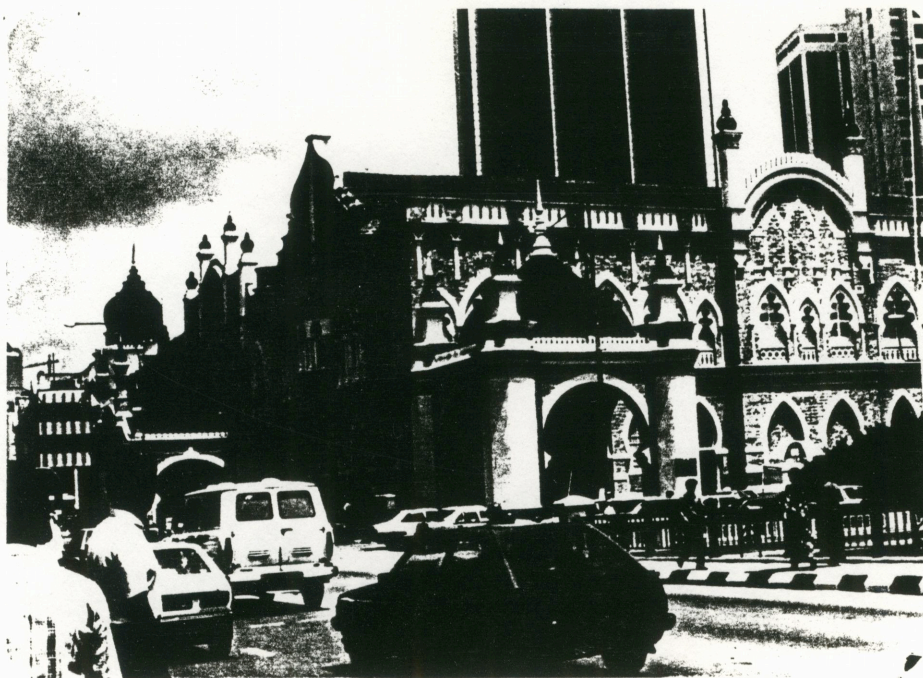
Masjid Jame'



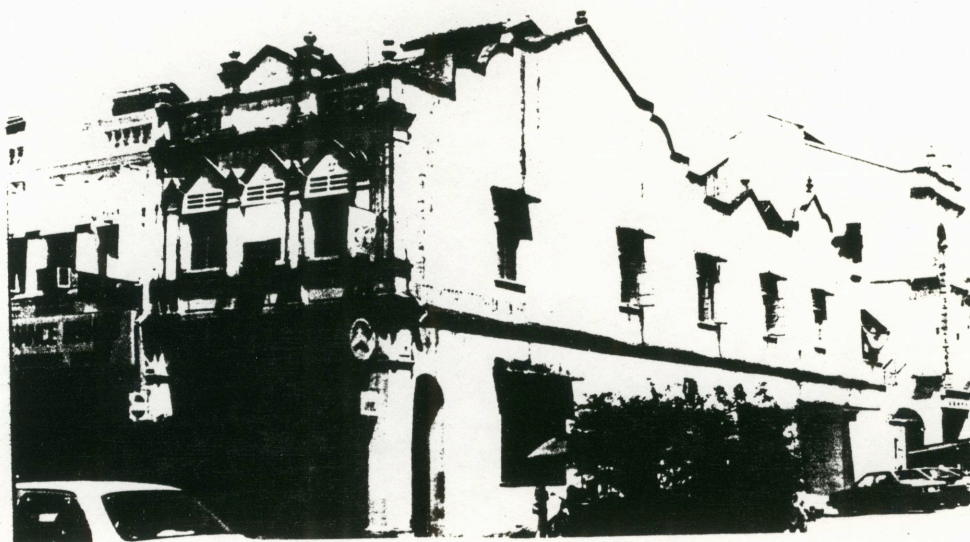
The Church of St. Mary



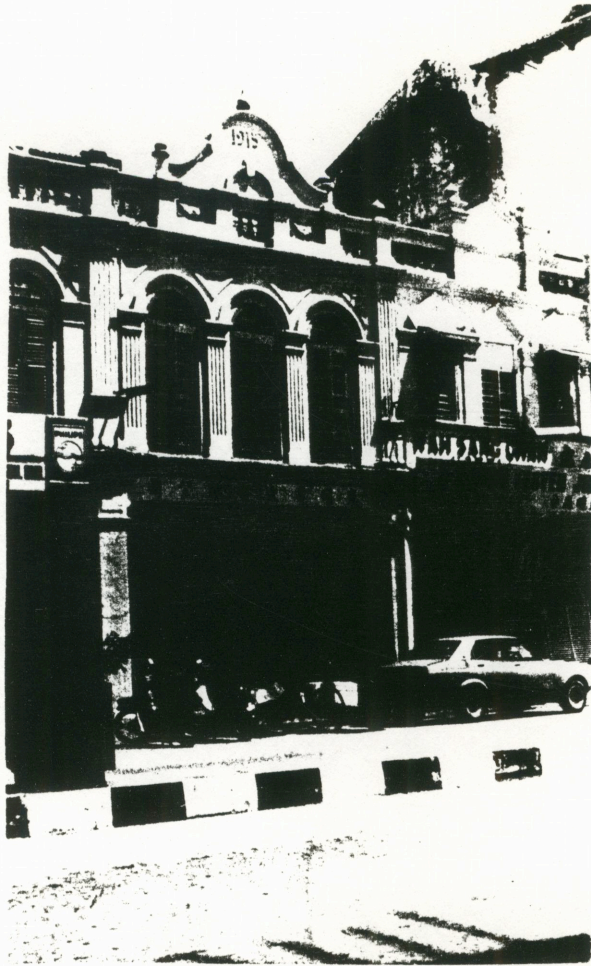
Mahkamah Tinggi



A long deep block of shophouses.



detail of a shophouse.



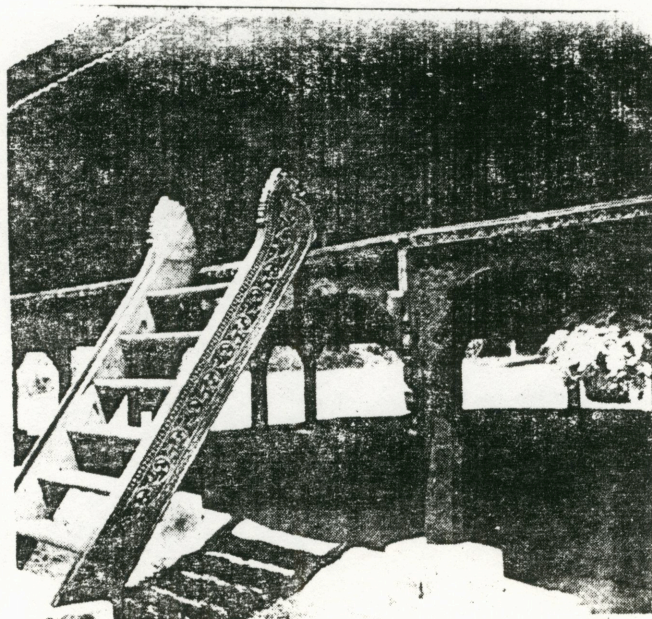
Shophouse block create an excellent streetscape.



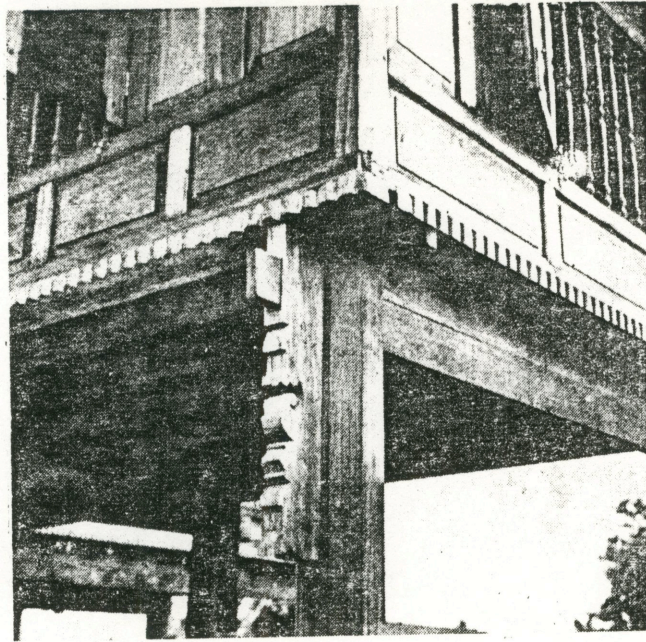
House raised on stilts.



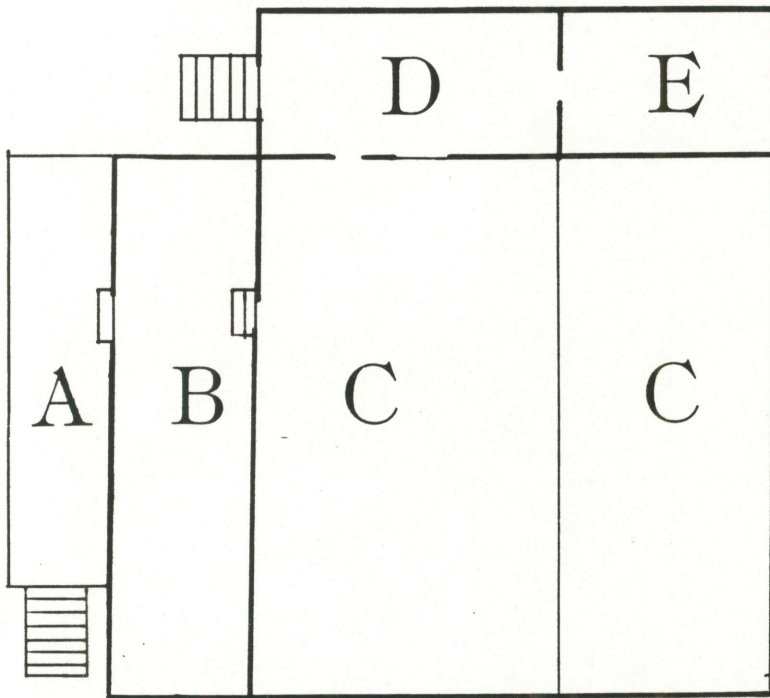
A typical staircase of a Malay house.



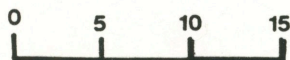
The use of timber dowels and wedges.



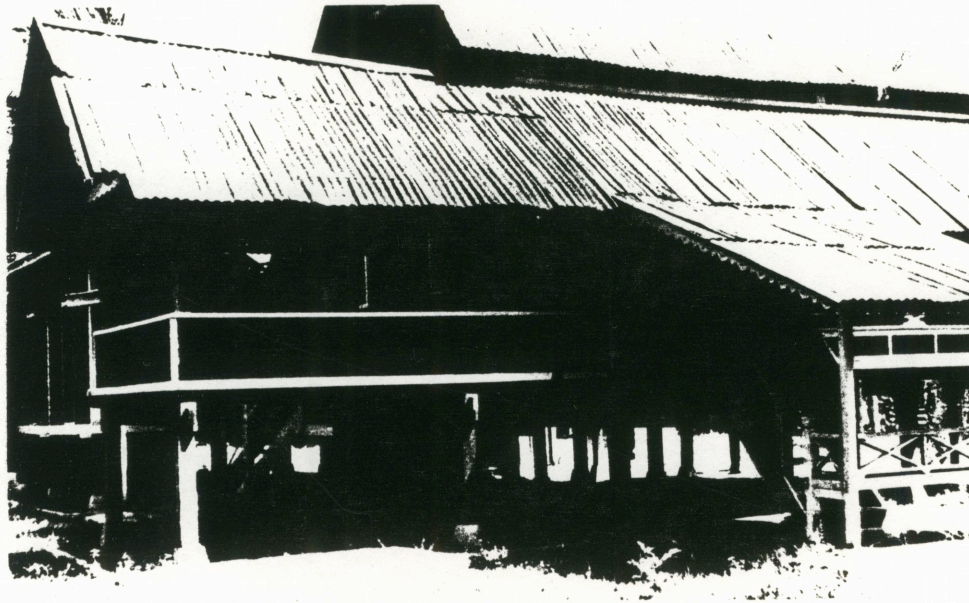
A typical floor plan of a Malay house.



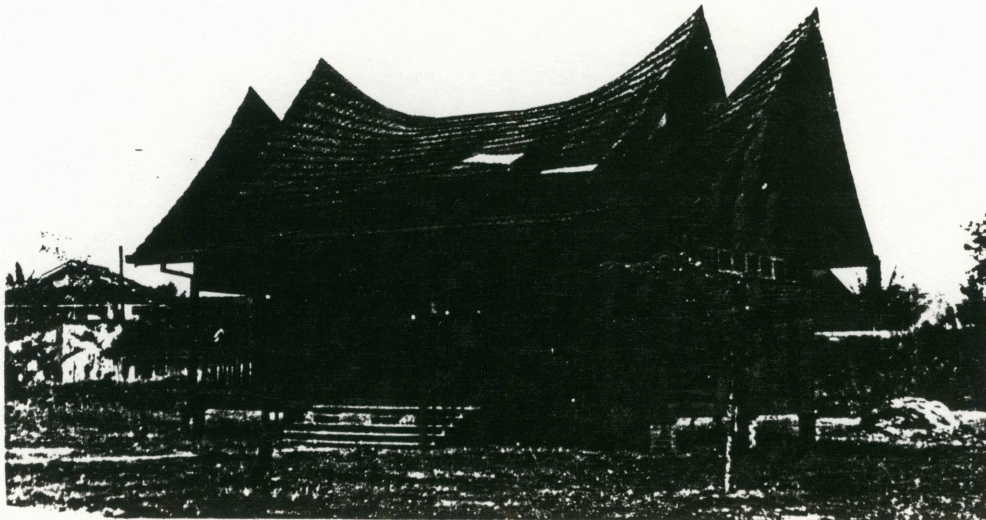
A: SERAMBI
B: RECEPTION
C: IBU RUMAH
D: SLEEPING
E: KITCHEN



The serambi or verandah



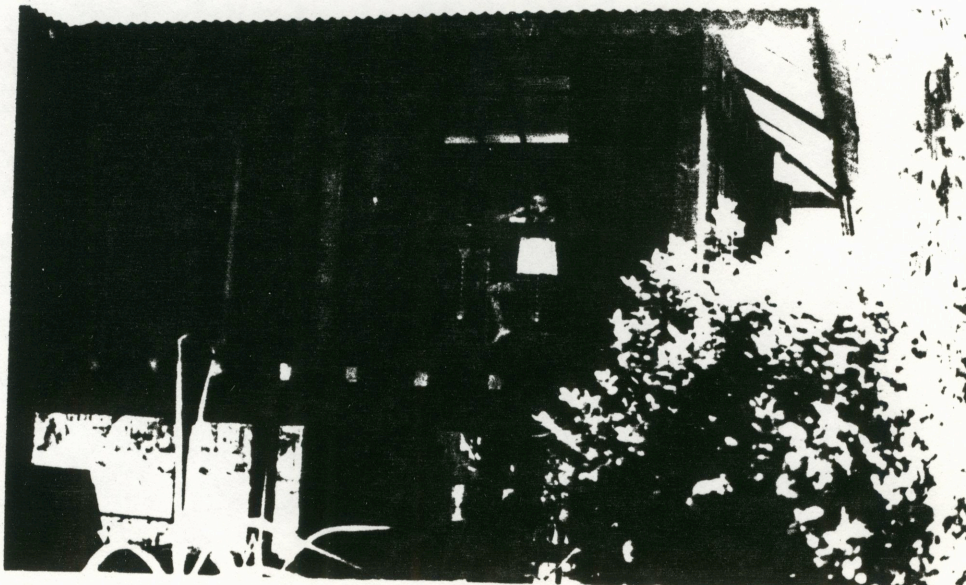
The basic Minangkabau-style house.



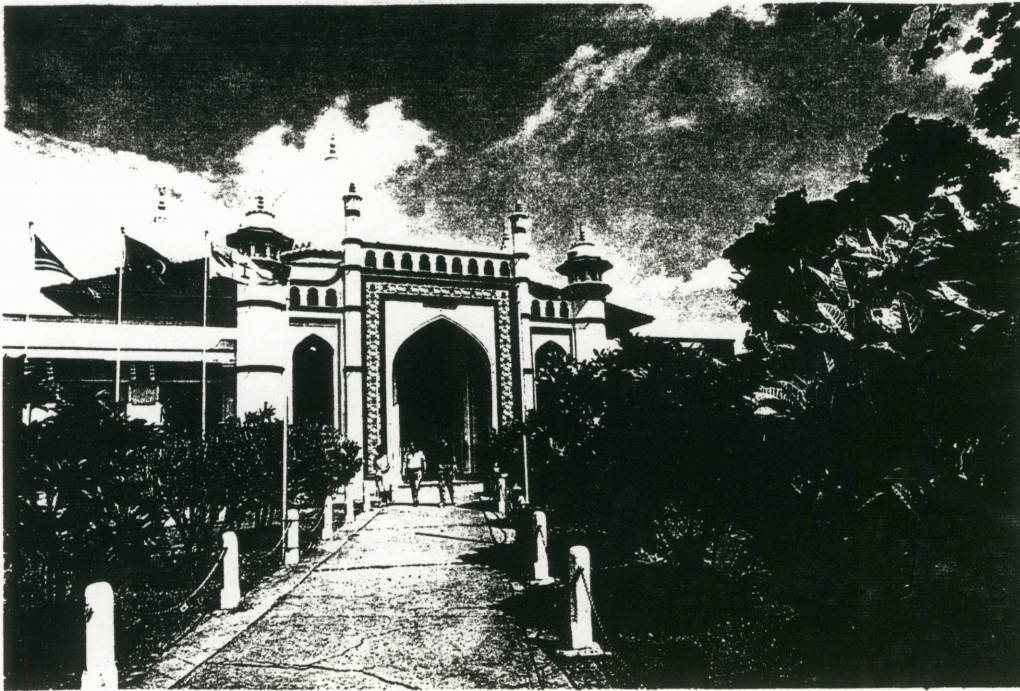
The curved roof of a bullock cart.



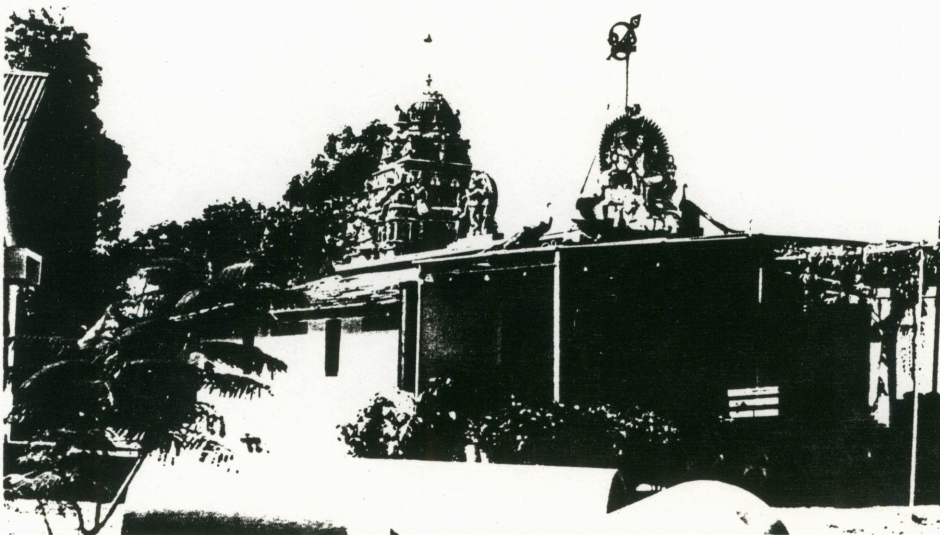
A full-length window of a Malay house.



A typical mosque with dome and minarets.



A Hindu temple.





An example of a church.

A Chinese Temple.



PROJECT

Introduction

The project is intended to symbolize the integration of multi-cultural Malaysia into a national identity through the use of shared elements, while still maintaining an awareness and appreciation for each individual culture within that identity. The Center will undertake and perform the following functions:

- (i) Serve as a center for promoting and improving all cultural activities;
- (ii) Revive the role and importance of the traditional arts in the country;
- (iii) Integrate all the various traditional arts in the country;
- (iv) Instill a sense of patriotism and pride towards a national identity.

The Center will assist Malaysia in its efforts towards achieving the aspiration of the nation of a national culture of high standing that would influence and enrich the lives of its people. In short, the activities that will take place in the Center will, in themselves, serve as inspirations for the individuals to promote and be involved in the activities.

In order to fulfill its purpose, the complex will be dominated by the various facets of a National Theatre/Auditorium which will enable efforts to be made in the direction of improving the quality of cultural activities, encouraging different sectors of the community to become involved and will be a way of popularizing the Center. As the basic intention is towards the improvement and

promotion of cultural activities, this complex should not confine itself to just those aspects of performing arts, but also to other more relevant aspects of culture, such as drama, Malaysian folk dance, and more. In this regard, it is apparent that facilities for public displays, exhibitions and workshops be included so that an appreciation of the arts will be integrated into the project.

Auditorium

An auditorium is defined by the Dictionary of Architecture as "any place constructed for the accomodation of persons who have to listen to others." In the case of a multi-purpose building in which the auditorium is the most important feature, the term is used to indicate the entire structure. An appropriate architectural definition might be "a place to which people come to hear and see. The acoustics must be excellent, the vision uninterrupted, the lighting good, the seats comfortable and the ventilation not bad."¹

A multi-purpose auditorium can serve both concert and theater modes. This type of auditorium is more desirable from an economic standpoint, but it poses problems when the size of the audience is smaller, such as for drama events, and a large unoccupied seating area can sometimes make the performers nervous. Therefore, the structure for the multi-purpose auditorium must be sufficiently flexible so that it can be quickly modified to meet the demands of various types of performance. The auditorium in my project will be multi-purpose. Here, cultural masterpieces in such fields as drama, folk dances, ballet,

and drama will be presented in a more formal setting. This auditorium will serve as the main attraction of the Center.

Galleries and Workshops

There is visual communication and experience space between object and observer. The gallery space will exhibit the arts and crafts of the multi-racial population of Malaysia. The gallery will also exhibit work from both foreign and local artists, either those from the Center itself or from the outside facilities. The workshop spaces will cater to the needs of local artists to work in their own pleasant environments. So far, there hasn't been any facility that accomodates artists with a place to work among themselves. These workshops will be used specifically for each different race to provide a place where their own work can be sold and displayed together in the galleries.

Other Facilities

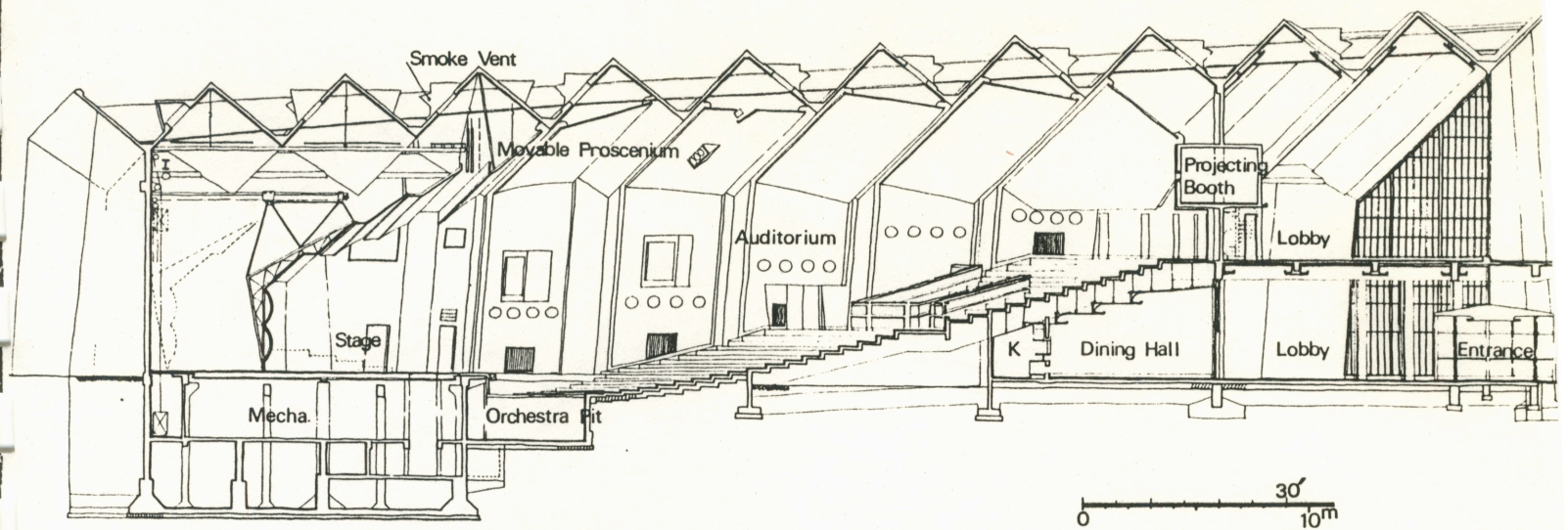
Apart from the two major aspects of the complex, there will be other facilities established to cater to the needs of the population, such as administrative offices, an open plaza, a dance studio and the arts and crafts library.

The Client

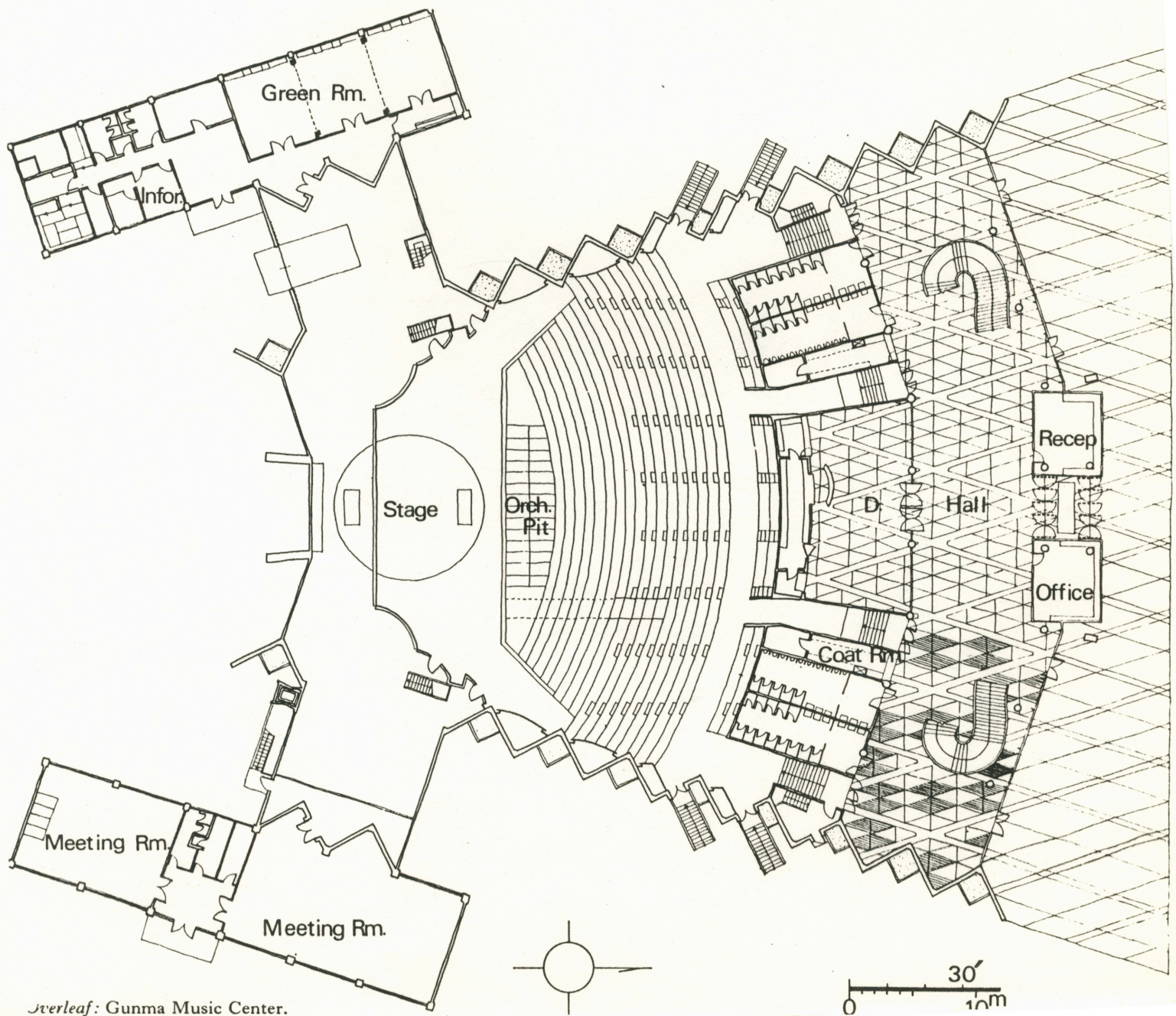
The original proposal stated by my client, the ministry of Youth, Culture and Sports, was for a National Theatre. One of the main reasons behind the idea of the National Theatre was based on the fact that unlike many neighboring countries, such as Singapore, Thiailand, Indonesia, the Philippines and the Khmer Republic,

Malaysia cannot take pride in its own cultural architecture, such as a national theatre. The few play houses available are small, dilapidated and usually lack the basic facilities required for important presentations. Their proposal consists of an open plaza, an ample theatre, a hostel to accomodate people staying overnight and a common purpose complex which would consist of areas for purposes of training, rehearsals, and meetings.

In light of recent development, I am expanding their proposal by attempting to use their idea as a basis for my proposal, which consists of a Cultural Arts Center. This Center would meet the requirements of the client while bringing about a sense of pride for the country of Malaysia, as it will include a National Theatre along with galleries, workshops, dance studios and other related facilities.



Cross-section and floor plan, Gunma Music Center.



Overleaf: Gunma Music Center.

Site Analysis

Lake Pardana, the location of the site, consists of 100 acres of green lawns, trees and flower gardens. The site is an urban park located half a mile west of the Central Business District in Kuala Lumpur. The park will serve as a public recreation area used for picnics, taking evening strolls, jogging, boating, or for weekend relaxation. It is for people who want to get away from the city. The park is surrounded by tourist type attraction buildings. To the south side of the park lies the national museum, exhibiting the country's culture through arts and crafts. The National War Memorial stands in the flowered gardens on the north end of the park. It is a bronze statue constructed in the memory of the National heroes. At the north east end of the flower gardens there stands the symbol of Malaysian democracy. Within the park itself, there is an outdoor amphitheatre, which will be used for cultural shows. Other significant features within the park are the TAR memorial, boat house, plant house, the lake club and the children's playground.

The site itself is a 240,000 square foot area, facing the south side of the lake. The lake, which is now enhanced by the beauty of the greenery, was once a tin mine. Tropical vegetation provides a picturesque view when the site is viewed from any angle. In light of the climate, one might describe that the prevailing winds that are from the north east and the south west as gentle breezes perfect for relaxation for those enjoying the site.

VICINITY PLAN

- vehicular paths
- pedestrian pathways
- body of water
- major attractions



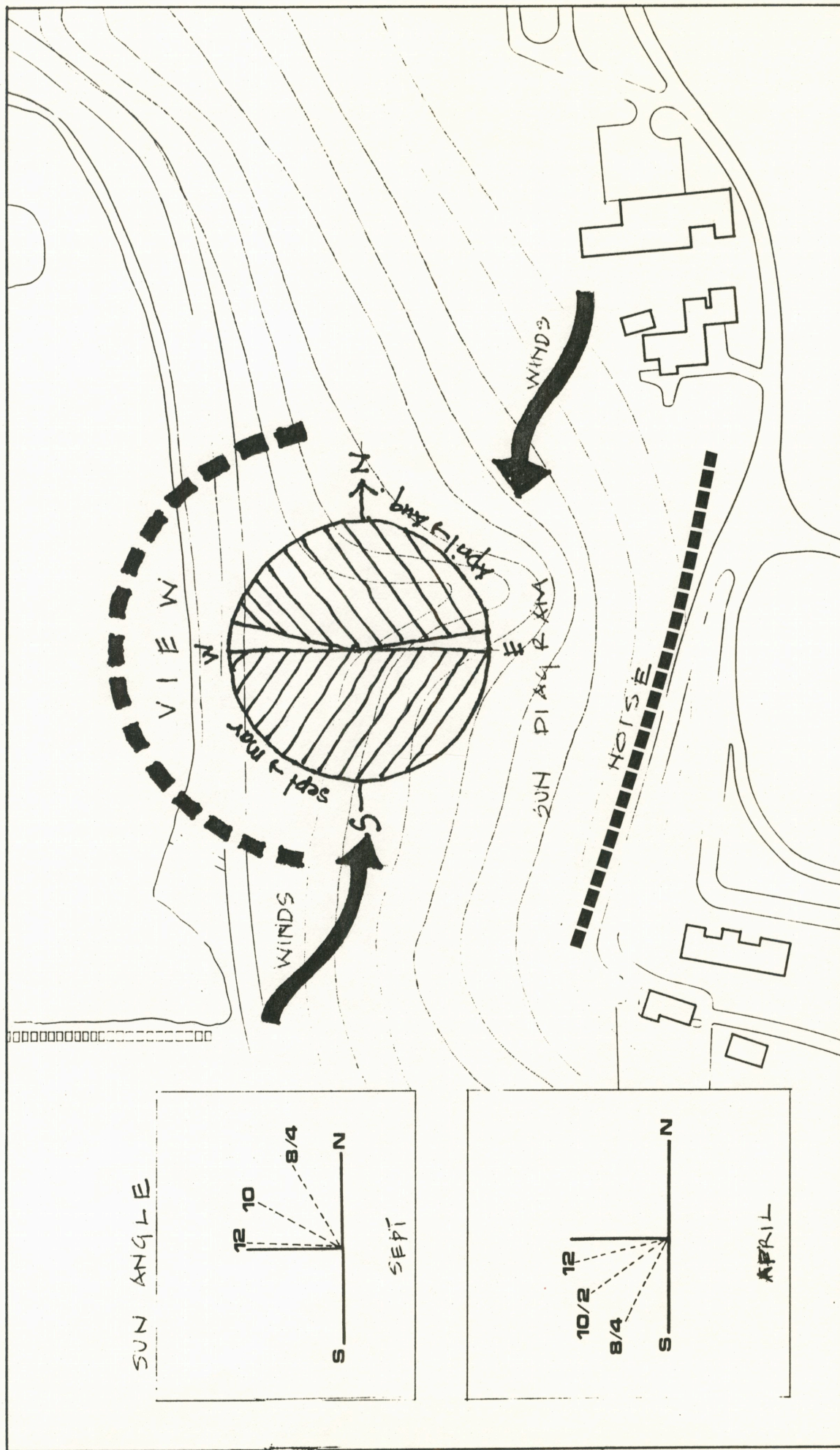
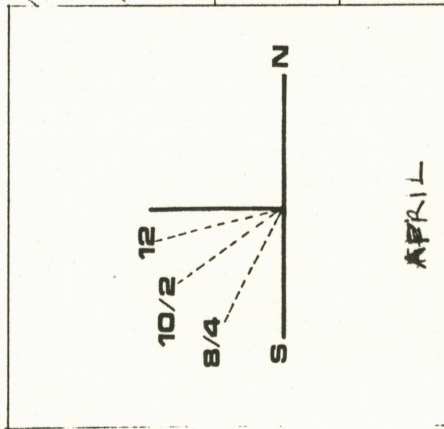
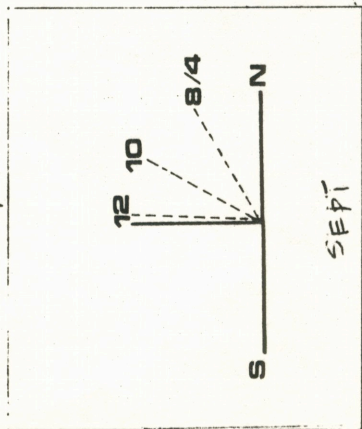
MALAYSIAN CENTER of ARTS and CULTURE Kuala Lumpur, Malaysia



MALAYSIAN CENTER of ARTS and CULTURE
Kuala Lumpur, Malaysia



SUN ANGLE



The Program

In 1971, the Ministry of Youth, Sports and Culture commissioned the architect, Nik Mohammad, to provide a program and to design the National Theatre Building. I obtained some part of the program which all has been revised. The entire program includes background information, space requirements, structural, environmental and climatic factors and control and construction costs. For this project, I obtained the space requirements for the auditorium facilities as a basis of my functional program. Other space requirements I based on research and precedent studies.

Spaces of my project are being divided into three zones:

Zone A - Cultural Center

Zone B - Arts and Crafts

Zone C - Administration

Zone A - Cultural Center

Consists of an auditorium space for 1,000 people and stage facilities. Function of spaces will be for cultural performances, such as dance, drama, musical drama and traditional music of the diversified ethnic groups: the Malay, Chinese, Indian, and Western, and for other international performing arts, such as ballet, jazz, etc.

F = Function

A = Adjacency

<u>SPACE</u>	<u>DESCRIPTION</u>	<u>QUANTITY</u>	<u>AREA</u>
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Public Services

Lobby	F: Waiting and orientation space, also intermission A: Auditorium, Restroom refreshment bar	1 @ 2,500 sq ft
Restrooms	F: Located in lobby but must be off the main	4 @ 625 sq ft
Refreshment Bar	F: Sale of alcoholic and non-alcoholic drinks - in lobby but off main route	1 @ 225 sq ft

Administration

Business office	F: Located within easy access to all paths of the production spaces A: Lobby	1 @ 500 sq ft
Performance organization	F: For scenic, lighting and costume design A: Control room, auditorium lobby	1 @ 600 sq ft
Production manager's offices	F: For cultural performances and performing arts A: Auditorium lobby	2 @ 150 sq ft = 300 sq ft
Box office	F: Selling of tickets before and during performances A: Entrance, lobby	2 @ 50 sq ft

Performance

Auditorium	F: To seat 1,000 people at
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(with balcony)	10 sq ft per seat (local code) A: Lobby, stage	1 @ 10,000 sq ft
Stage	A: Auditorium seatings, backstage facilities	1 @ 1,200
Backstage	A: Stage	1 @ 1,000 sq ft
Green Room	F: Waiting space before each performance, includes kitchenette A: Stage, dressing rooms	1 @ 400 sq ft
Dressing	F. For changing costumes and make-up Group dressing room - female Group dressing room - male Individual dressing rooms	1 @ 450 1 @ 300 4 @ 150 = 600
Locker/Shower	A: Dressing rooms Male Female	1 @ 300 1 @ 450
Dance Studio	F: Capacity of 50 dancers to practice, develop and rehearse dance routines Also, space to exercise before performances A: Locker/shower, stage	1 @ 1,500 sq ft
Music rehearsal Studio	F: Musical practice A: Stage, musical instrument storage	1 @ 1,350
<u>Production</u>		
Scene shops	F: Preparation of scenery and props - carpentry and	

paint rooms

A: Stage, loading dock 1 @ 2000 sq ft

Lighting and
Sound equip-
ment Storage

A: Stage, loading dock 1 @ 750 sq ft

Musical equipment
Storage

F: To store and repair musical
equipment

A: Music rehearsal room 1 @ 900 sq ft

Wardrobe
Storage

F: For storage of costumes,
cleaning and repair

A: Dressing rooms 1 @ 300 sq ft

Support

Private restrooms

janitorial space F: One each floor 3 @ 150 = 400

Zone B

Arts and Crafts

Consists of gallery spaces for display of craftwork and workshops. Workshops function as studios for local artists to create their craftwork. The artists will display and sell their work in the galleries. The general public will be given access to the workshops to observe the artists at work.

Public Services

Lobby

F: Orientation space and
general information

A: Circulation desk, galleries 1 @ 2,500 sq ft

Gift shops

F: Local gifts shop

	A: Lobby	1 @ 660 sq ft
Arts and Craft Library	F: Records and books on local and foreign arts and crafts and culture A: Lobby	1 @ 2,000 sq ft
Snack bar	A: Gallery	1 @ 200 sq ft
Restrooms	A: Lobby, one each floor	2 @ 660 sq ft = 1,320 sq ft

Management

Reception/Circulation

Desk	F: Telephone switchboard and general information A: Lobby, entrance	1 @ 100 sq ft
Sales	F: Cashier for sales of exhibition objects A: Lobby	1 @ 240 sq ft

Display

Arts and Crafts Gallery

	F: Display of local and foreign arts and crafts A: Lobby, storage	1 @ 5,800 sq ft
Workshops	F: Space for local people to produce their craftwork; Crafts studio Painting studio Pottery studio	1 @ 1,600 sq ft 1 @ 1,600 sq ft 1 @ 1,600 sq ft

Production

Gallery storage	F: Arts and Craft storage	
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	A: Gallery, loading dock	1 @ 1,800 sq ft
Workshop storage	F: Storage for workshop equipment	
	A: Workshop, loading dock	1 @ 1,350 sq ft
Artist's lounge	F: Place for artists to relax, including kitchenette	
	A: Studio, locker/shower	1 @ 1,200 sq ft
Locker/shower	Male	1 @ 900 sq ft
	Female	1 @ 600 sq ft

Support

Private restroom	2 @ 300 sq ft = 600 sq ft
Janitorial space	2 @ 150 sq ft = 300 sq ft

Zone C - Administration

Consists of office spaces for management of the Center, whose function is to manage, employ and audition people/artists.

Administrative/ Business office	F: In charge of whole Center	1 @ 500 sq ft
Accountant/ Bookkeeping	F: To keep records of all sales exhibition and events. Also in charge of the incoming and outgoing expenses of the whole facility.	1 @ 375 sq ft
Media/Publisher	F: To promote the events and exhibition. Also prepares gallery literature	1 @ 450 sq ft

Photography/
Print/Dark room

1 @ 250 sq ft

Technical staff/
Designer

1 @ 700 sq ft

Conference
rooms

F: Personal and outside
meetings

2 @ 450 sq ft

Offices

Creative Director

1 @ 180 sq ft

Assistant Creative Director

1 @ 180 sq ft

Administrator

1 @ 180 sq ft

Executive secretary's
office

1 @ 300 sq ft

Support

General storage

1 @ 1,200 sq ft

Private restrooms

2 @ 300 sq ft =
600 sq ft

Subtotal building area: 60,000 SF

15% mechanical and
circulation:

9,000 SF

Total building area: 69,000 SF

Parking:

Visitor's (garage) 300 cars @ 250 sq ft =

75,000 sq ft

Employee's (lot) 50 cars @ 250 sq ft =

12,500 sq ft

APPENDIX

TOWARDS A NATIONAL IDENTITY (FROM ARCH 470)

INTRODUCTION

To achieve a national identity, we must take into account the climatic factors of this country. Furthermore one would want to create an architecture that reflects the multi-racial population with a mixed cultural heritage. The situation should not arise where there would be only one style of Malaysian architecture. Instead, it should be possible to design a modern building that captures the Malaysia spirit. In order to do this, we must know our community and cultural background, our traditions, our climate, our materials, our craftsmen and have actually learned some of our own crafts. But, before we can achieve a Malaysian architecture, we must create a good architecture first, and good architecture is a combination of many factors: being functional in its image, adapted to its climate, economical in its construction, sympathetic to its setting and harmonious to its environment. Local identity in architecture, however, besides having to satisfy the above criteria, must also reflect the local aspirations and lifestyle of the people with an added emphasis on interior decorations that are readily recognizable.

RESEARCH ON HISTORICAL BUILDINGS

First, what we should do is to carry out much more extensive research into our architectural heritage and cultural background. We must investigate what we have in the way of our indigenous arts and crafts. Government agencies, such as the Ministry of Culture, should take a leading role in the drive to preserve historical buildings and create a board of membership that will do research on

these historical buildings. Architecture is dynamic, and its evolution is generated from existing cultural patterns, achievements and contributions of our forefathers. It is through an appreciation and awareness of this heritage that the future development of Malaysian architecture may evolve.

PROMOTION OF COMPETITION

There should be frequent promotion of architectural competition for prominent public buildings. The emphasis should be on the adoption of local design elements such as the Minangkabau roof, colonnaded walkways and others. The Malaysian Institute of Architects should be given the task to sponsor or promote this competition.

AWARENESS OF ARCHITECTS

Local architects should be encouraged to be aware of the importance of a national identity. Even though our architects are trained overseas, they should be able to maintain an open minded approach to the appraisal of local design elements. They should be more sympathetic and receptive towards these elements instead of borrowing elements from the West that might not be suitable to our culture and environment.

COMMON UNDERSTANDINGS

Architects and the general public (clients) should have a common understanding of what architecture is. Architects should be able to simplify the use of architectural "jargon" in order to enable the clients a reasonable degree of understanding of the basic elements of architecture itself. Perhaps, from this knowledge and understanding, the public will be better able to appreciate the architectural values of

this country.

EXTENSIVE USE OF LOCAL CRAFTS AND MATERIALS

The architectural work that we inherited from our forefathers displayed a high quality of craftsmanship and creative ability. There should be constant promotion of the traditional skills and craftwork by encouraging local craftsmen to display their work. Many craftsmen who have been responsible for much excellent work are fast declining in number due to lack of demand and their inability to earn a reasonable living. Every effort should be made to ensure that their skills are employed before they are forgotten. We should make an effort to support these people by hiring them or having their work put on public display. (See figures 4.1 and 4.2)

The forests of Malaysia contain a great variety of timber trees, which are very suitable for building materials. They have great structural strength, are durable and are quite good looking. There should be a promotion of the use of the local materials such as these timbers. Besides their strength, they are also a suitable material for use when considering the climatic factor; they do not retain heat, therefore they will keep the homes cool.

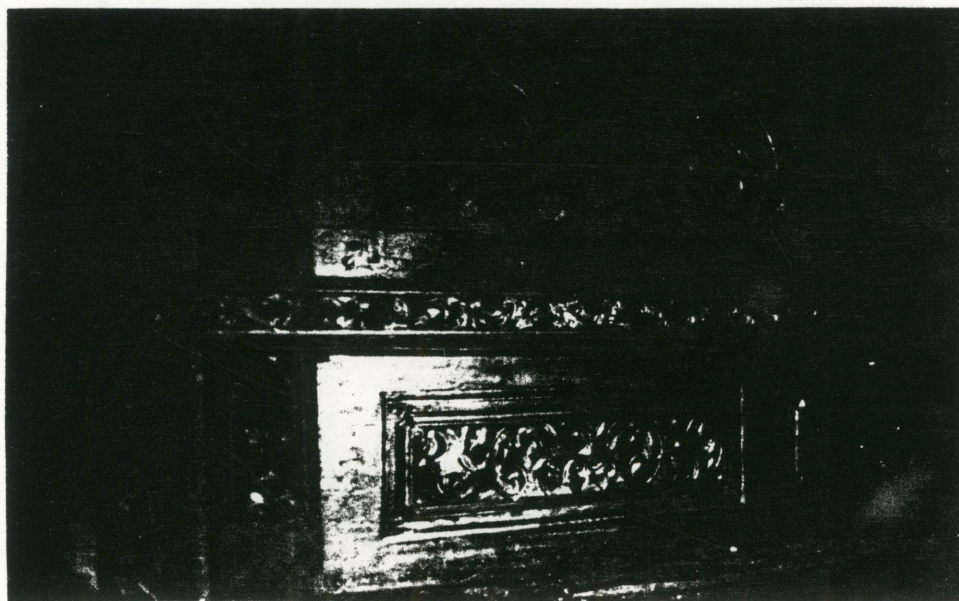
CLIMATIC DESIGN

Climate is the single most consistent element in Malaysia that should influence our architecture. The climatic condition in this country is hot and humid with seasonal rainfall and prevailing winds. It is important that buildings and houses of this country are designed to relieve the climatic stress. Natural ventilation is important for cooling the home, instead of the Western method of using air-conditioning. As for the orientation of the building, it should be in relation to solar movements and the prevailing winds.

We must create a tropical urban architecture in Malaysia. This is an image suited to Malaysia's climate and culture. It is an image that requires a careful integration of new development with the local vegetation and landscape. This country has a magnificent tropical vegetation; the natural landscape features should be seen as opportunities for enhancing the image of the urban environment by providing a natural identity as contrasted with a man made identity. The tropical vegetation can also act as a buffer or shade against the hot sun. People in Malaysia like to walk in the shade, so a series of trees along a sidewalk can create a nice image, and at the same time provide a shaded area for pedestrians. The interplay of buildings with the vegetation can create an excellent atmosphere for the architecture of Malaysia.

Architecture should be practiced with a strong sense of tradition, character, cultural heritage and within the climatic conditions. It is hoped that being inspired by these thoughts, ideas and concepts, we will be able to develop an architecture that is our own and create an identity for the architecture of Malaysia.

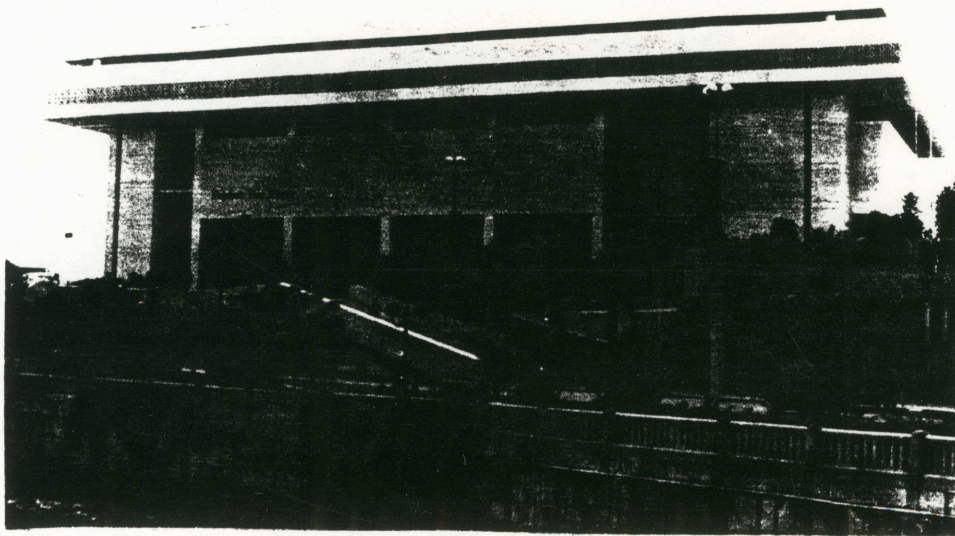
Sensitive and articulated wood craftsmanship



Trees as shade.



Examples of the tropical architecture - interplay of buildings with vegetation.



BIBLIOGRAPHY

- Abel, Chris. "Built sources of Malaysian Identity." Majallah Akitek (March 1985): p. 32-29.
- Burris-Meyer, Harold and Cole, Edward C. Theatres & Auditoriums. New York: Reinhold Publishing Corporation, 1949.
- Burris-Meyer, Harold and Cole, Edward C. Theatres & Auditoriums, 2nd ed. New York: Litton Educational PUB INC., 1964 and New York: New material by Robert E. Krieger Publishing Co., INC., 1975.
- Ching, Francis D.K. Architecture: Form, Space & Order, New York: Van Nostrand Keinhold Co., 1979.
- Haji Abdul Majid, Hajeedar. "Towards a conservation movement in Malaysia." Majallah Akitek (April 1977):p. 10-15.
- Haji Abdul Majid, Hajeedar. "Sejauh manakah perkembangan kita sehingga hariini." Majallah Akitek (January 1981): p. 23-25.
- Hamlin, Talbot. Forms and Functions of Twentieth-Century Architecture, New York: Columbis University Press, 1952.
- Hewish, R.A. "Malaysian Architecture - The influence of the West." PETA (September, 1956). p. 3-6.
- Honey, Raymond. "An architecture for Malaysia." PETA (January 1956): p. 1-3.
- Kahlid, Ruslan. "The role of patronage in the development of art and architecture." Majallah Akitek (January 1981): p. 29-32.
- Lim, Jimmy. "Malaysian architecture." Majallah Akitek (April 1978):p. 42-46.
- Lim, Jimmy. "Conservation - A rising consciousness." Majallah Akitek (January 1978):p. 2-4.
- Lim, Jee Yuan. "Relief of climatic stress in housing in Malaysia." Majallah Akitek (April 1979): p. 36-42.
- Loo, Kington. "Atmospheric concepts which will create Malaysian architecture." Majallah Akitek (April 1971):p 17-19.
- Mohamad, Mahathir. The Malay Dilemma. Kuala Lumpur: Dewan Bahasa dan Pustaka, 1970

Morley, P.G. "Malay timber buildings." PETA (January 1957): p. 11-22.

Morris, Jan; Allen, Charles; Tindall, Gillian; Amery, Colin; Stamp, Gavin. Architecture of the British Empire, New York: Robert Termor-Hesketh, 1986.

Nasir Abdul. Rumah Tradisional Melayu Semenanjung Malaysia, Kuala Lumpur: Loyal Press Sdn. Bhd, 1985.

Oliver, Paul. Shelter, Sign and Symbol, New York: Barrie & Jenkins, Ltd., 1977.

Posener, J. "Architecture in Malaysia - Impressions of a newcommer." PETA (January 1956): p. 22-30.

Rapoport, Amos. House Form and Culture, New Jersey: Prentice Hall, Inc., 1969.

Rubenstein, Harvey M. A Guide to Site and Environmental Planning. New York: Reinhold Publishing Corporation, 1969.

Sherwin, Dean. "Malay roof forms and ventilation." Majallah Akitek (January 1977): p. 53-58.

Teh, David, Majid, Hajeedar Abdul, Lim, Jimmy C.S.; Ismail, Syed Sabri Syed; Ting, Jim; Yeany, Jim; Harum, Shaharum Data. Houses 7KL Architects, Kuala Lumpur: Vinlin Press Skn. Bhd.

Yeang, Ken. "A chat on design trends in Malaysia." Majallah Akitek (April, 1981): p. 18-29.

Yeang, Ken. "Comments on architecture in Malaysia: In praise of innovation." Majallah Akitek (April 1977): p. 48-49.

Yeang, Ken. The Tropical Verandah City. (Kuala Lumpur: Asia Publication, 1986).

Yong, K.P. "Chinese buildings." PETA (April 1957): p.15-18.

Yould, Eric. "Natural ventilation of buildings." PETA (January 1947): p. 40-46.

Sejarah Malaysia. (Kuala Lumpur; Dewan Bahasa dan Pustaka, 1980).

END NOTES:

1. Amos Rapoport, House Form and Culture, (New Jersey: Prentice Hall, Inc., 1969) p.32
2. Ibid
3. Ibid
4. Ibid, p.56
5. _____, Sejarah Malaysia, (Kuala Lumpur: Dewan Bahasa Dan Pustaka, 1980) p. 17
6. Ibid, p. 26
7. Ibid
8. Ibid
9. Ibid, p.12
10. Ibid, p. 14
11. _____, Sejarah Malaysia, (Kuala Lumpur: Dewan Battasa Pan Pustaka, 1980) p.30
12. Ibid
13. Ibid
14. Ken Yeang, The Tropical Verandah City, (Kuala Lumpur: Asia Publication, 1986) p.35
15. Jimmy Lim, "Malaysian Architecture", Majallah Akitek (April 1978) p. 42
16. Ibid
17. Ibid
18. Ibid
19. Ibid
20. Ibid
21. K.P. Yong. "Chinese Buildings", Peta (April 1957) p. 15
22. Ibid
23. P.G. Morley, "Malay Timber Buildings" Peta (January 1957) p.12

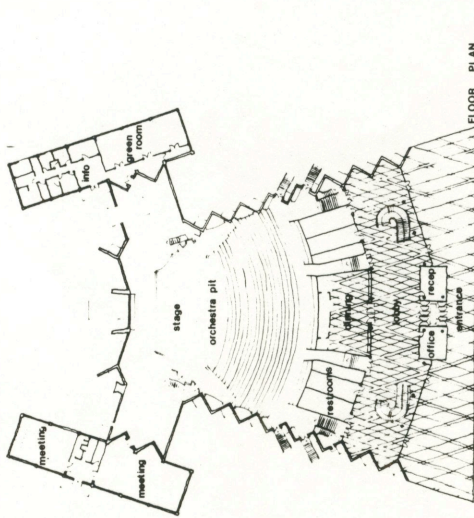
24. Jee Yuan Lim, "Relief of Climatic Stress in Housing in Malaysia", Ajallah Akitek, (April 1979) p. 37

25. P.G. Morley, "Malay Timber Building", Peta (January 1957) p.20

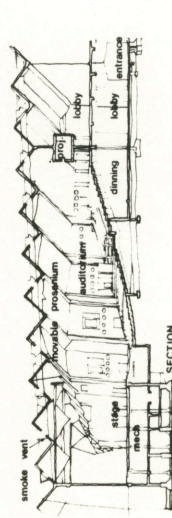
26. J. Poseher, Architecture in Malaysia - Impressions of a Newcomer" Peta (January 1956) p.25

27. Ibid

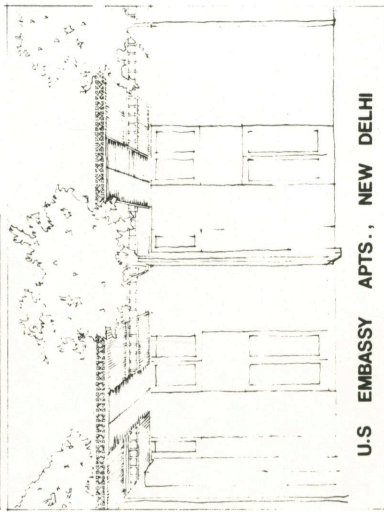
PLAN STUDY



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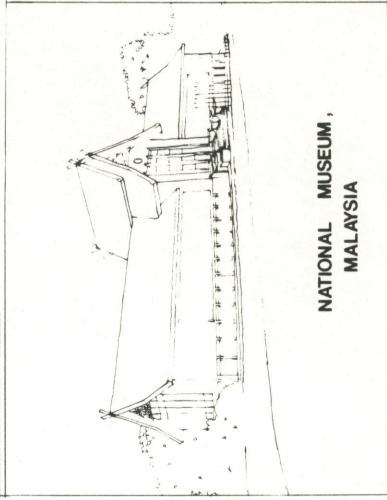


CLIMATIC RESPONSES



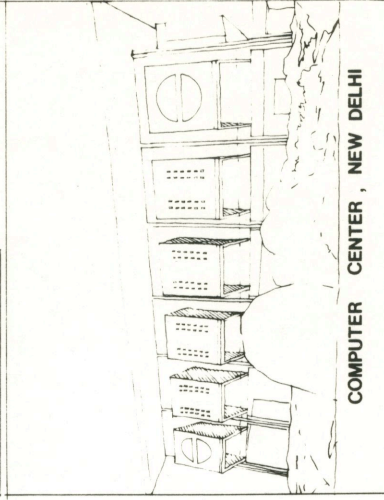
U.S. EMBASSY APTS., NEW DELHI

FORM STUDY



NATIONAL MUSEUM,
MALAYSIA

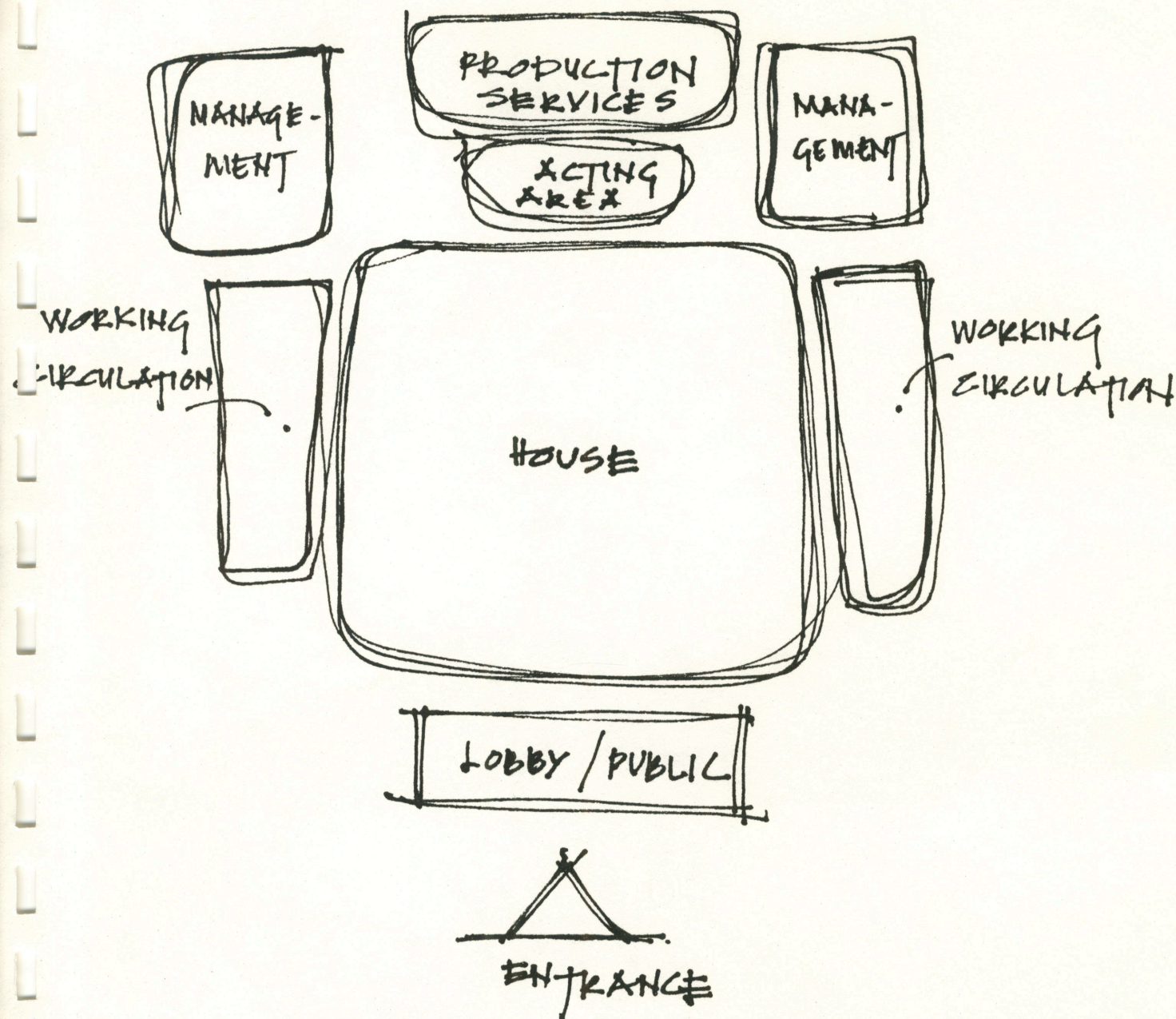
SHADING DEVICES



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MALAYSIAN CENTER of ARTS and CULTURE Kuala Lumpur, Malaysia

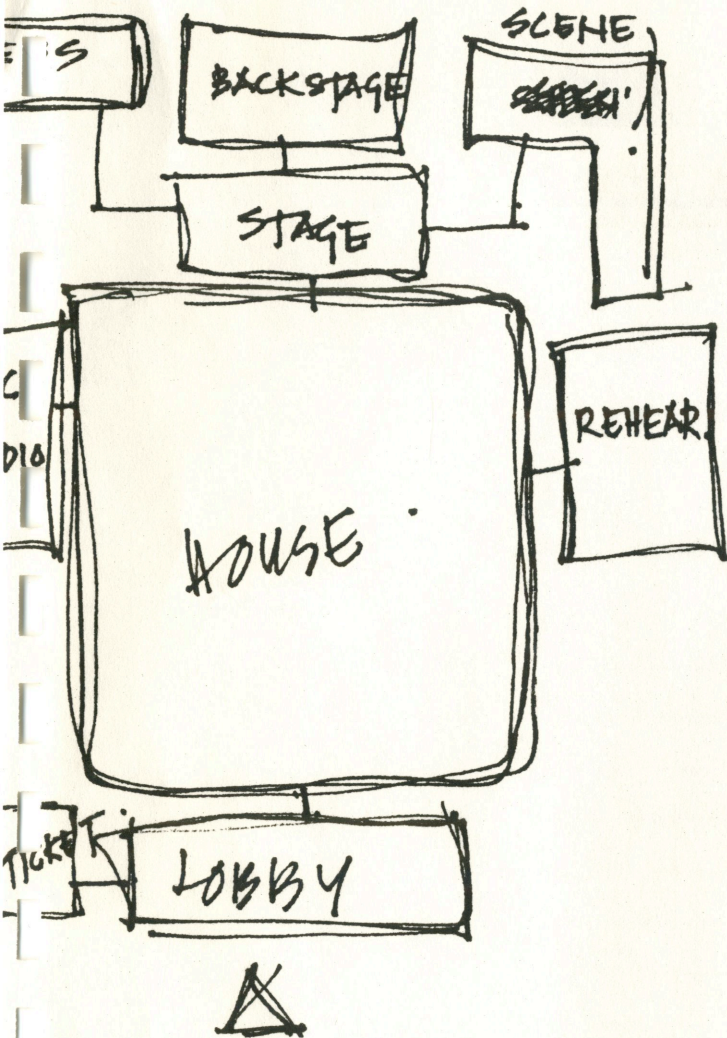
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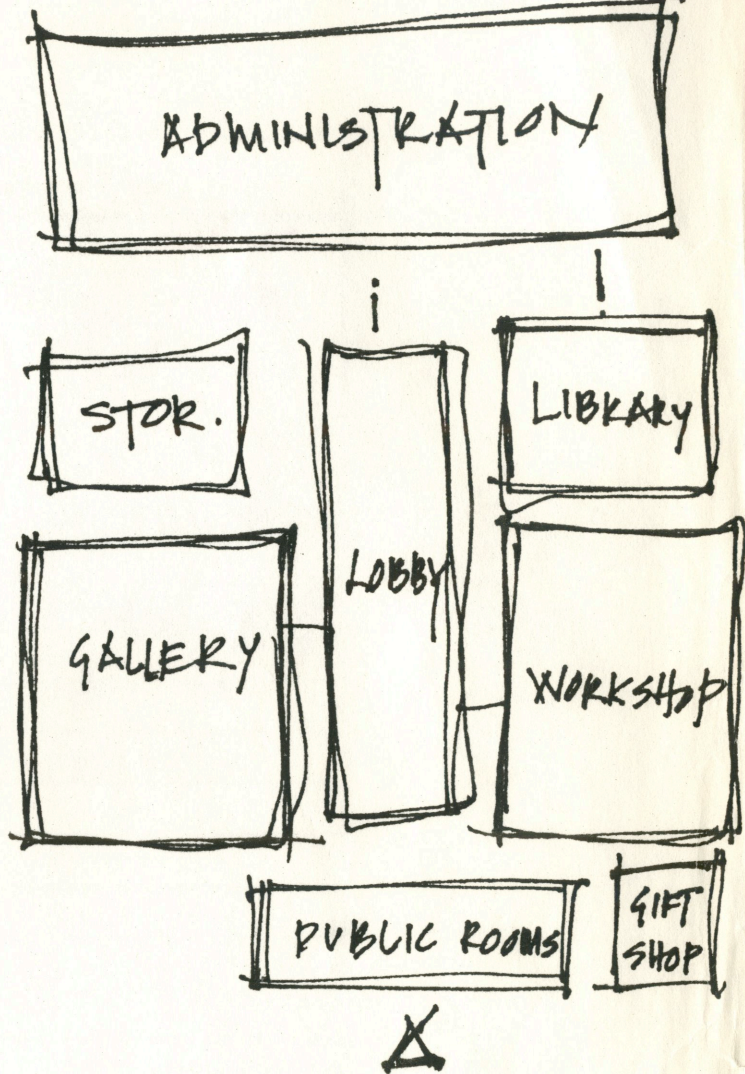
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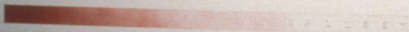
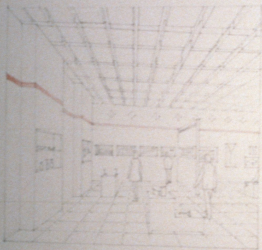




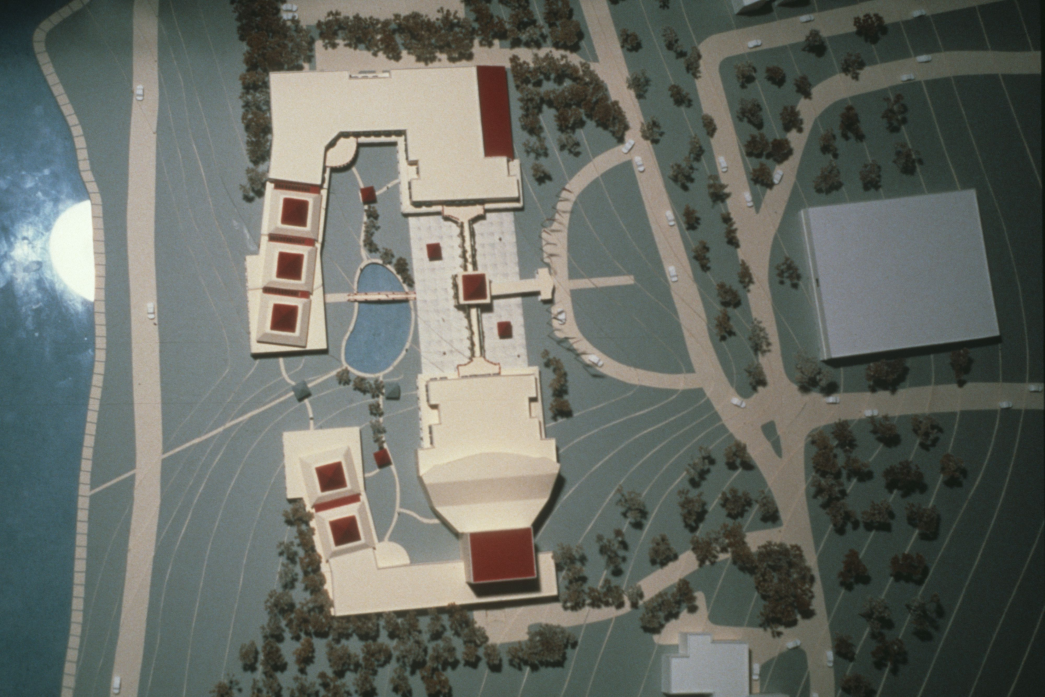


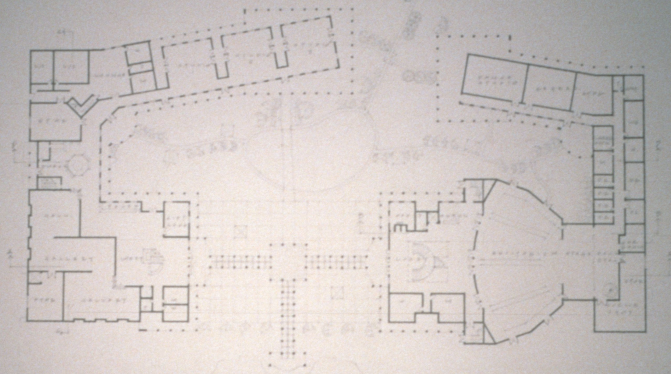




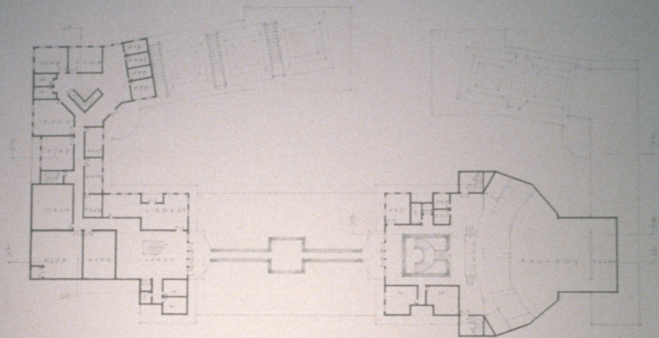




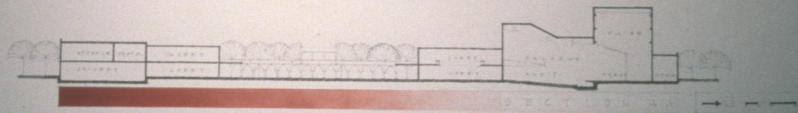


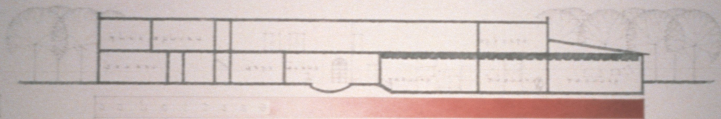
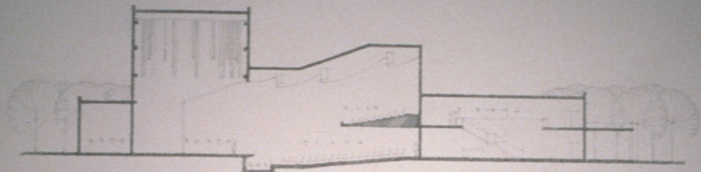


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