

# Malaysian Project

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# Malaysia



- West and East Malaysia
  - 13 States
- Tropical Rainforest Climate
- Multi-Cultural
- Modern and Rustic Architecture Divided in Many Ways
- Different from the U.S. in Multiple Ways, as well

# Climate and Weather

- Tropical Rainforest Climate
  - 20°C/68°F - 34°C/93°F
  - 80% average humidity!
- On average, temperature always high
  - April = Warmest
  - September = Coolest
- On average, much rain
  - April = Wettest
  - June = Dryest



# The Culture of Malaysia

Chinese, Indian, Malay, and International styles meet in this melting pot of beauty and creates an intriguing culture. Whether it be architecture, the people, or the food, Malaysia's culture is unique and exciting.



→ Multi-Cultural, Multi-Ethnic

→ Family and Religious Values

→ Classes and Caste System

→ Emphasis on Art and Humanities

→ Heavy Use of Symbolism

→ Urban and Rural Divisions

→ Special Customs and Traditions

→ Division of Gender Roles

# The People of Malaysia

- Average Household Size = 4.3
- Average Monthly Cost of Living: 2500-3500MYR / \$790-\$1100USD
- Big on Public Transportation
- Travel is easy
- Rich and Diverse in Culture





# Food of Malaysia

- ~ Heavily influenced by Thai, Chinese, Indonesian, and Indian cuisine
- ~ Food is generally spicy
- ~ Use a lot of herbs, spices, and coconut milk
- ~ Nasi Lemak- Malaysia's National Dish  
Steamed rice served with anchovies, peanuts, hard boiled eggs, dried shrimp, cucumber, and sambal
- ~ 400-500MYR/\$126-\$160USD typically spent per month, on average



# Modern Balinese Architecture

- ~ Strong use of local natural materials
- ~ Known for being in harmony with nature
- ~ Design is heavily influenced by ancient culture and art
- ~ Materials commonly used in Balinese design include: coconut wood, bamboo poles, teak wood, stone, and brick
- ~ Homes are composed of separate pavilions; each one serving a different purpose



# 6 Philosophies of Balinese Architecture



1. Tri Hata Karana  
Creating harmony and balance between the 3 elements of life
2. Tri Mandala  
Rules of space division and zoning
3. Sanga Mandala  
Rules of space division and zoning based on direction
4. Tri Angga  
Concept of hierarchy among different realms
5. Asta Kosala Kosall  
8 guidelines of architectural designs regarding symbols, shrines, stages, and measurement units
6. Arga Segara  
Sacred axis between mountain and sea



# 4 Aspects that Balinese Architecture Focuses On

1. Strong Ventilation System

Use of big windows, and a large free space between the roof and walls

2. Strong Foundation

3. Large Yards

Concept of being in harmony with nature

4. High Guarding Wall

Hides home from public view. Also wards off black magic and evil spirits from entering the property

# Precedent Study

# Tropical Box House

- Architect: WHBC Architect
- Location: Kuala Lumpur, Malaysia
- Area: 7,500 sq ft
- Resident: Unknown



“A concrete tropical box that embraces the lush jungle. The project was envisioned as an inward looking abode that safeguards its interior from the tropical sun and rain while at the same time, embraces the dense, natural floral enclave that the house sits within.”

# Tropical Box House Design Solutions



“We designed a concrete egg-crate structure that envelops the house to keep the heat out, but draw daylight in to create comfortable spaces within. The perforated nature of this envelope allows the existing overgrowth to grow into the volume of the house”



# Design Solution Continued



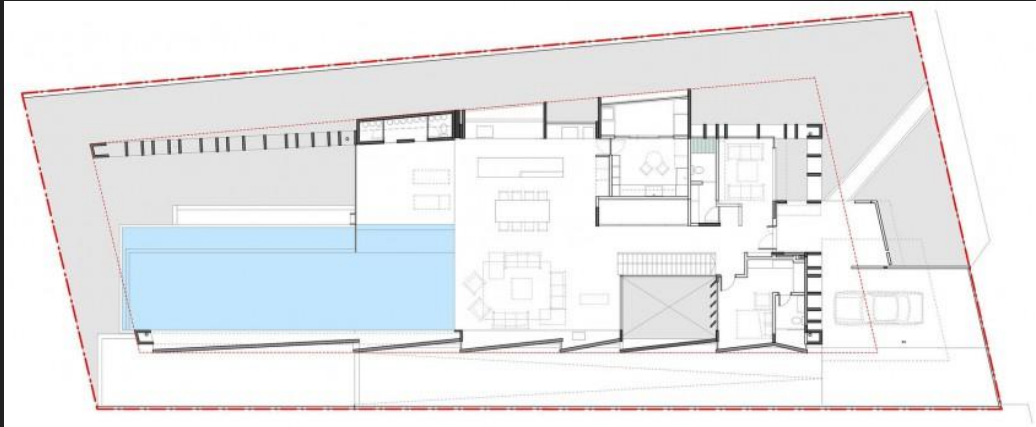
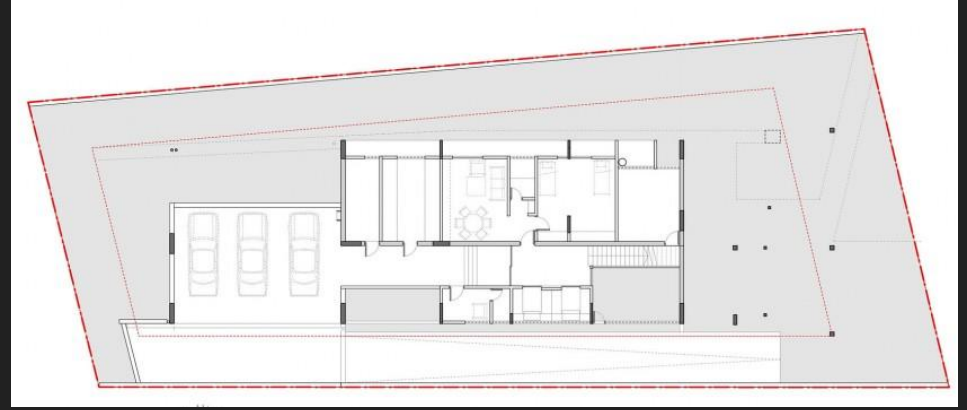
“The spaces are arranged to keep most parts of the house raised from the ground. This elevates the house to sit among the canopy of the trees.”



“Main spaces- living, dining and the pool are positioned at the entry level; the bedrooms are placed on the upper floor; finally a garage and service area sit on the lower ground. This ensured that dampness and pest is kept away, keeping the house airy and dry.”

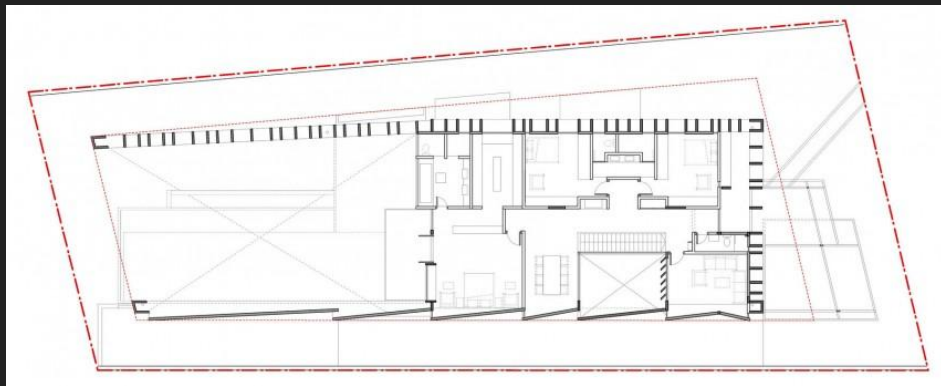
# Floorplans

Lower Level/Basement



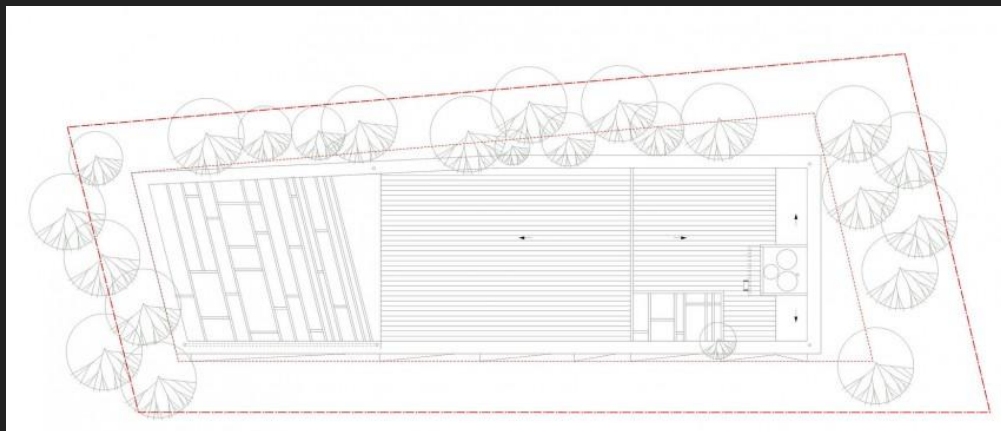
1st Level

# Floorplans



2nd Level

Roof





# Wet and Dry Kitchens

## Wet Kitchen

- Where the oven, stove, and sink are located
- Work with meat
- Requires a lot of clean-up
- Most *work* is done in the wet kitchen

## Dry Kitchen

- Where the fridge and counters are located
- Requires less clean up
- Usually does not contain a sink and used for storage of food and dishes
- Often doubles as family dining room or breakfast table
- Food is presented to guests here and always clean





## Laundry Room

The purpose and functionality of this laundry room is to help accomplish a regular chore. This space is highly functioning and in need of special attention when it comes to design, layout, and overall atmospherics of the space. Location matters when it comes to the places laundry is taken to most often and this should be considered when designing this space.

## Foyer

The purpose and functionality of this foyer is to accommodate traffic and invite you into the home and welcome you to the specific style of the layout. This can be accomplished through high ceilings, large staircases, open hallway, etc.

## Outdoor Seating

The purpose and functionality of the outdoor seating in this home has to do with the desire to be with nature. As human beings that desire is in most of us, be it more or less intense. Outdoor seating is a simple way to invite gatherings, such as meals, to a space of tranquility and peace, as well as an escape from the regular business of our day to day lives.



## Likes

- ❑ Plants brighten the space and draw in nature
- ❑ Beautiful Location
- ❑ Very Open Layout
- ❑ Clean and Sleek Design
- ❑ Use of many different textures

## Dislikes

- ❑ Feels prison-like with full concrete
- ❑ All the concrete makes the home feel hard
- ❑ Does not feel “kid-friendly” or necessarily safe
- ❑ Not enough color, feels bland

# Sustainable Materials Used

- House naturally cools itself
- The grid acts as a natural sun filter; blocking direct rays while still allowing in natural light
- Built on stilts as to disturb the surround jungle as little as possible
- Home uses passive shading and ventilation



# Work Cited

- <http://www.arcgis.com/home/item.html?id=1bbb840eb1834dd68ada1093336ae34d>
- <https://weather-and-climate.com/average-monthly-Rainfall-Temperature-Sunshine.petaling-jaya,Malaysia>
- <https://www.quora.com/What-is-the-standard-cost-of-living-in-Malaysia>
- <http://www.theluxurysignature.com/2015/02/06/balinese-architecture-overview-and-design-philosophy/>
- <http://www.sbs.com.au/food/article/2008/07/01/about-malaysian-food>
- <http://lotusleen.blogspot.com/2006/09/dry-kitchen-vs-wet-kitchen-real-concept.html>
- <http://www.everyculture.com/Ja-Ma/Malaysia.html>
- <http://www.homedsgn.com/2015/08/15/tropical-box-house-by-whbc-architects/#more-163063>
- <http://www.slideshare.net/wmchia1/final-case-study-tropical-box-house>