

THE TRADITIONAL MALAY ARCHITECTURAL WORLD VIEW (WITH EMPHASIS ON THE ROLE OF THE TUKANG)

ABDUL RAZAK ABDUL RAHMAN
Department of Architecture
Faculty of Built Environment
Universiti Teknologi Malaysia
Skudai, Johor

Abstract

This paper seeks to explain the traditional Malay Architecture world view by reviewing the concepts of traditional Architecture and the Malay world view through communal practices, beliefs and ethics of the society as well as individual craftsmen. It is apparent that, contemporary architecture lacks theoretical base, and therefore has no regional identity.

1.0 Introduction

Various scholars have stipulated various reasons as to why a building takes a particular form. Some attributed it to culture, some to material, some to climate. Rapoport (1969) cited culture as the form determinant of houses adding to it climate, materials and technology as form modifiers. Indeed Lawrence (1990) identified seven explanations as to why a vernacular building takes a particular form.

1. The aesthetic or formalist - concerned with the formal composition of buildings.
2. The typological - focused upon the geometrical and compositional rules but also examined the nomenclature, meanings and use of rooms, building materials and construction techniques.
3. The evolutionary - when the development of designs evolved to include more than one room.
4. The social and geographical diffusionism - when design and construction were influenced by the introduction of new designs and construction techniques by foreign people in a specific region.
5. The physical - concerned with materials and technology, site and climate.
6. The social - concerned with economics, household structure, defence etc.
7. The cultural - included the collective spatial images and religious practices.

However, Waterson (1990) said, "Architecture involves.... the creation of a social and symbolic space - a space that both mirrors and moulds the world view of its creators and inhabitants". And Yaakub Idrus (1996), said, "...kewujudan rumah Melayu bukanlah terjadi secara kebetulan atau timbul akibat dari keperluan... tetapi ia adalah hasil daripada pernyataan atau manifestasi world view orang Melayu." Also Jencks (1995) in "The Architecture of The Jumping Universe, emphasises form follows world view. Our world view and way of that life are represented in architecture." Thus, it is safe to hypothesize that world view is another explanation as to why a building takes a particular form. Indeed if we infer to classical physics we will discover that world view is its form determinant for according to Capra (1984) - "It is fascinating to see twentieth-century science, which originated in the Cartesian split and in the mechanistic world view, and which indeed only became possible because of such a view."

Yeang (1978) considered contemporary Malaysian architectural scenes as diverse, messy and lacking in regional identity. Contemporary Malaysian architecture is based on the Modern Movement which Brolin (1976) and many others considered as a failure. Thus it is possible to infer that contemporary Malaysian architecture is a failure too. Whilst such buildings as Putera World Trade Center of bank Bumiputera are laudable examples of our attempts to regionalize architecture other examples have made mockery of the traditional Malay architecture. Hijjaz (1996) commenting the indiscriminate use of Roman columns in houses considered it, "as deplorable to the

extent that architects who practised such ideas should be shot." The sad state of affairs is perhaps due to our lack of understanding of our own heritage and the roots of our architecture. World view then qualifies as one of the roots of architecture worth pursuing.

2.0 Definition of World View

The world view (of a people) is defined as "the characteristic outlook of the universe and is concerned with the inside view of a man in a particular society, i.e. the way he typically sees himself in relation to his world." Counellis (1988), defined world view to include cosmology, ethics, dynamics and telos.

1. Cosmology - the objective observations people make about their world and the pattern of meanings they imposed upon them.
2. Ethics - values, evaluative methods and axiological structures attached to things and assigned to human behaviours.
3. Dynamics - the principles of internal motion that make the world view function as a biological reality.
4. Telos - ordained purposes, goals and the ultimate.

3.0 The Traditional Malay Architectural World View

We may define the traditional architectural world view as the way a Malay typically sees himself in relation to his 'architectural' world. This world view is reflected in the architecture of the Malays which are manifested through palaces, mosques, houses and pavilions (*Diagram 1*). This world view is layered in form because although the Malay is now a Muslim, he was once a Hindu-Buddhist and animist too. And often times his past will resurfaced despite his present reality.

Cosmologically, the Malay universe is reflected in the traditional Malay architecture in the form of vertical layerings. As followers of the Hindu-Buddhist once, he believed the world to be hierarchical, the upper world the abode of gods, the middle world the abode of humans and the lower world the abode of demons. He also believed the world and the human body to

be connected, the world as macrocosmos and the human body as microcosmos. Hence, within a building, the head, body and legs are represented as the roof space, living space and "kolong" accordingly. Abdullah Nakula (1980) reiterated this point in "Flasafah dan Pemikiran Orang-orang Melayu" when he layered Masjid Kampung Laut according to the head, body and legs subdivision but expanding it further embrace the Islamic cosmology (*Diagram 2*). A similar argument was forwarded by Budihardjo (1991) for the Balinese architecture, another Malay World culture.

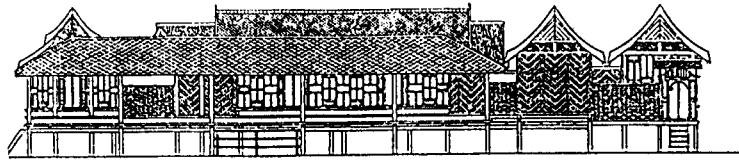
Malay ethics are reflected not only through the spatial concept but also the structural system. Lim (1987) for example discussed the significant of the "serambi" and other spaces as reflection of the Malay ethics (*Diagram 3*), whilst Yaakob Idrus (1996) discussed the role of various posts within a Negeri Sembilan house. Istana Maziah used to be linked by bridges because the Terengganu princesses were not allowed to step upon the ground until they were married.

Malay dynamics were seen in the socio-political structure which comprised of the raja at the top most of the pyramid, followed by the nobility, the citizens and the slaves. This gave rise to certain rules and regulations, for example a "bendul mancong" is reserved only for the palaces of kings and the nobility in Negeri Sembilan. So is the use of "anjung istana", the octagonal shaped extension found in front of palaces and houses reserved only for the nobility and headman. Other dynamics included the concept of segregation between males and females, rights and respect, territoriality, "gotong royong", "kerah" etc.

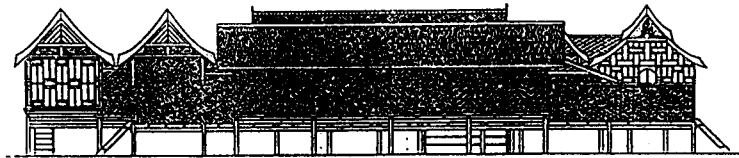
The Malay telos included the idea of heaven for the good-doers in the afterlife and the concept of harmonious living in the herenow. Thus geomancy played a significant role as expressed in Kitab Tajul Muluk. The selection of good site, good timber were designated job of the "pawang" or "dukun". This was to ensure the well being of the occupants and the good fortunes of future generations.

In the traditional Malay society, a Malay was bounded by "adat" regardless of his status in the socio-political hierarchy. Thus a Malay subscribed to the collective spirit of the society which in turn manifested the world view and vice versa. And this world view was reflected not only in architecture but in other material

Diagram 1 : Examples of Malay Houses.



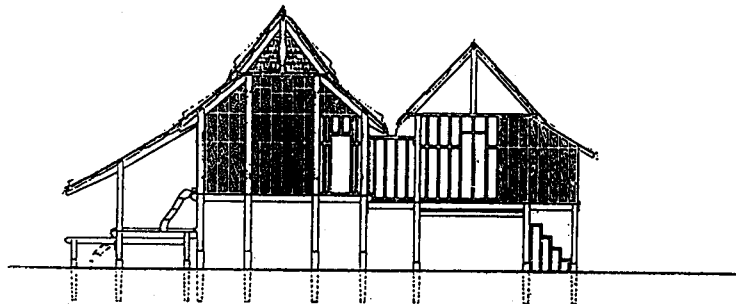
PANDANGAN HADAPAN (TIMUR)



PANDANGAN BELAKANG (BARAT)

Skala 0 2,5 5 10 20
meter

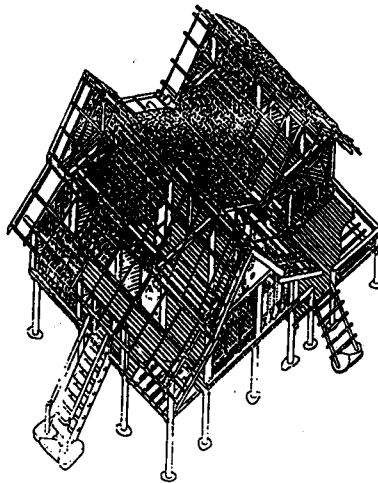
26



KERATAN B-B

Skala 0 1 2 4 5 8
meter

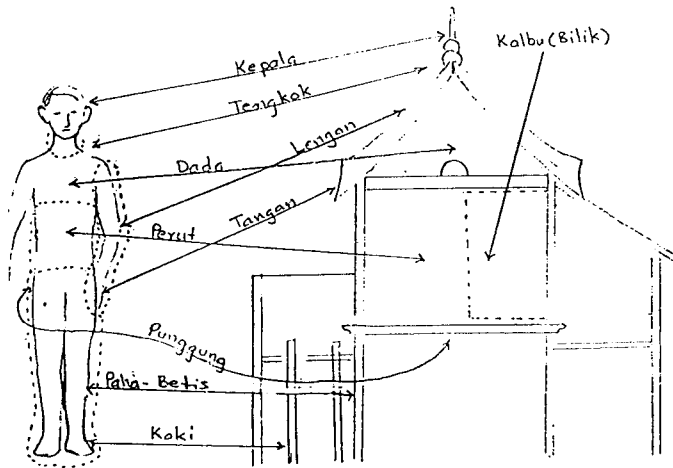
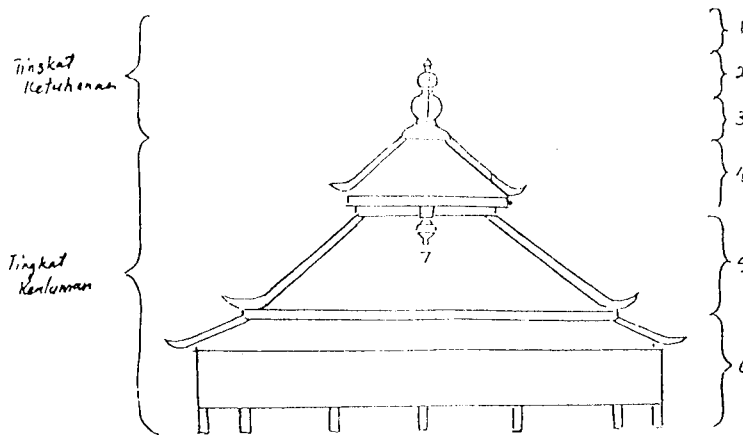
73



AKSONOMETRIK KERATAN

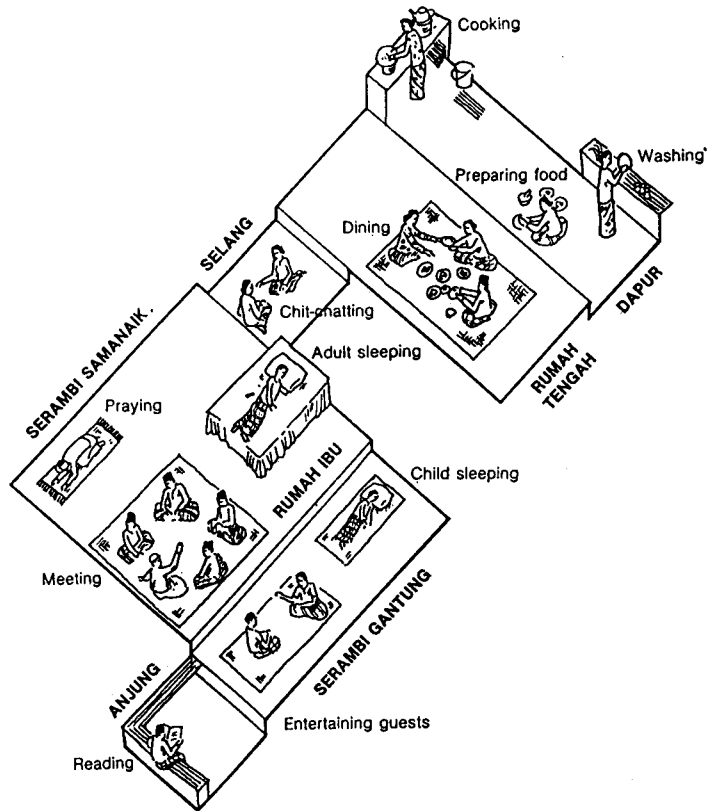


Diagram 2 : Human Body - Building Relationship



Source : Abdullah Nakula (1980).

Diagram 3 : Spatial Layout of a Traditional Malay House.



Source : Lim Jee Yuan (1987).

and non-material culture of the Malays. Salleh (1985) portrayed the world view of the folk-tales and folk-dramas of the traditional Malays, whilst Mohd. Nor (1985) of the Islamic Kitab literature. According to Kocchoningrat (1990) all societies have their world view but an individual within that society can have or need not have a world view. If he has a world view then his world view must subscribe to the collective spirit although he can have his personal one. This is because in a traditional society, one cannot exist outside that society. Thus a traditional Malay architectural world view should have two components, the collective world view of the society and possibly that of the individual.

In the Malay building tradition, various participants existed, each playing various roles. Some as builders, some as standard bearers. It is possible to speculate that almost all able bodied males were "tukang" in one form or another. Sejarah Melayu cited various groups, the Ungaran, the Tungkal, The Panchor Serapong etc. involved in the construction of the new palace of Sultan Mansur Shah. Even Bendahara Paduka Raja cut, planed and replaced a deformed joist himself. The Raja however, usually acted as the standard bearer demanding the best efforts from various participants. The major role however was acted by the "tukang", the builder, who may be a "tukang raja", a "tukang kerangka" or a "tukang kayu". He was the person responsible for the construction of the buildings. He was usually also the designer although on occasions the house holder may be directly involved. Itam Bahak for example designed his daughter's house in Kota Lama Kiri in 1819, the construction by Tukang Ham Lani from Kelantan.

Ramli Abas (1985) cited Pawang Husin from Kota, Negeri Sembilan who designed and constructed a few houses for this family members. Husin was not only a "tukang" but also a "pawang" and a "ketua adat cum imam". Tukang Kahar who constructed Istana Seri Menanti was not only a tukang, a pawang, a ketua adat but also a "pengukir", a carver. Thus a true "tukang" must possess these four attributes to qualify as a master builder, the equivalent of a modern master builder. This is because his knowledge from these four attributes makes his understanding of the traditional Malay architecture whole. We may describe these attributes as such:

1. As a tukang - he knows materials, the types, their properties, strength and weakness, potentials and constraints. He is skillful in the construction techniques; he knows various joinery systems, various tools of the trade etc. He also knows various structural systems such as "tiang 12", rumah bujang, the square plan tiered meru roof form for mosques etc.
2. As a pawang - he knows the site; how to go about "buka tanah", to placate the spirits and appease the gods. He knows how to extract timber from the forest, how to erect the buildings, what to place underneath and on top of the "tiang seri" etc. He knows the rites and rituals involved in the construction process.
3. As a ketua adat cum imam - he knows the "adat" ie. Customs and practices pertaining to the building traditions as well as the rites and rituals of harmonious living. Pawang Husin for example ministered various ceremonies as well as headed the prayers within his community in Kota, Negeri Sembilan.
4. As a carver - he knows aesthetics and the sense of "sempurna" ie. The Malay concept of beauty, completeness and perfection. This is usually expressed in the beautiful "sobek" carvings of wall panels, ventilation gaps, posts and various decorative and symbolic elements such as "buah butun", "lebah gantung" etc.

As exemplified by the various building forms, the single type palace of Istana Seri Menanti of the assorted type palace of Istana Balai Besar, the single type house of Rumah Besar Negeri Sembilan, the "dua beradik" type house of Rumah Tele, Terengganu of the assorted type of Kampung Pulau Panjang, the square plan mereu roofed type mosque of Kampung Laut of the long plan "bumbung panjang" type mosque of Langgar, all buildings forms were a reflection of the traditional Malay world view. Thus, we may sum up the traditional Malay world view of architecture as such :

1. Practical and pragmatic - This was because the buildings were designed and constructed to be dismantled and re-erected on another site. The construction system itself allowed for "buka pasang". Spaces were flexible and multi purpose, the walls movable, suitable to the needs of

the household. Some amount of innovation and novelty were expressed by various "tukang" being an expression of skills and creativity. We may recognize the "air tangan" of a particular "tukang" through his skillful manipulation of materials and architectural elements (*Diagram 4*).

2. Spirit bound - This was because the buildings were seen to have a "semangat" of their own hence the concept of "beri nyawa" ie. Cosmized or concretized was significant. The idea of a house as having constructed with measurements from the housewife's "jengkal, hasta" etc. and not in imperial or metric dimensions illustrated this point.
3. Culturally relevant - This was because the buildings were appropriate to place, people and time. The concept of "rumah ibu" and "rumah dapur" was reflective of the idea that the front portion was to be seen hence was usually handsomely built whereas the kitchen house can be left in a shabby state without disgrace to the owners. Also the use of various elements such as the "bendul" to denote point of social demarcation was reflective of the cultural constraints.
4. Aesthetically sensible - This was because the buildings were well proportioned. The sense of scale was pleasing to the eye which according to Syed Iskandar (1990) was based on the golden section. The use of decorative cum symbolic elements such as "buah butun" to hide timber joints was reflective of the Malay sense of aesthetics (*Diagram 5*).

4.0 Conclusion

Two aspects of the traditional Malay architectural world view may be discerned. One that pertained to the collective spirit of the society and the other of the individual "tukang". Both aspects will constitute the traditional Malay world view.

The architectural form was always distinctly layered to conform to the Malay cosmology. Orientation especially the "kiblat" was significant with most houses orientated towards it. The spatial concept, the decoration and even the structural system observed the Malay

ethics. The building constructional process followed the Malay dynamics of "gotong royong" etc. Aesthetics is of prime importance as perceived not only in the decoration but the building configuration.

The traditional Malay architecture was typological with regional variations. This was because building types were developed and became accepted as the standard norms. Hence a house was usually of the "tiang 12" structure with either a long roof or a hip roof or regional variations of both. The society at large and the "tukang" recognised this form, used it but do not deviate from it. However there exist regional variations due to people, place and time difference. For example a "rumah tiang 12" in Melaka and in Terengganu was the same but the Melakan used a "serambi gantung" for the front part of the house whereas in Terengganu, the front "serambi" was "sama naik". The mosque typologically can be grouped as the square plan with meru roof or long plan with either gable or hip roof. Again regional variation became distinct. For example in Melaka a mosque always sat on the ground whereas in Kelantan it was raised above ground with a "kolong" underneath. The "tukang" also contributed to the regional variations through their innovative spirit and sense of novelty. For example "dinding papan kembang" was found throughout the Malay Peninsula reflecting the collective world view but "dinding janda berhias" and "dinding janda ria" was only found in Kelantan and Terengganu, reflecting the regional "tukang's" world view.

Within the traditional Malay architectural world view the "tukang" was not the form-giver, neither was he the symbol-giver. He, like other members of his society accepted the given form and the given symbols. He contributed by providing a practical and pragmatic solution giving in beauty and completeness, a sense of validity and relevancy within the context of his culture and always an architecture that is mystically tied to the spirits and "semangat". In another word the traditional Malay world view of architecture was the classical language of traditional Malay architecture, one based on the collective spirit of the society but with the significant role played by the "tukang".

Diagram 4 : Wall Panels and Carvings.



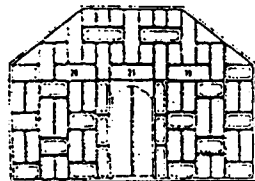
RAJAH 9

Ukiran tebok ini mempunyai sifat dan konsep yang sama dengan rajah 6.

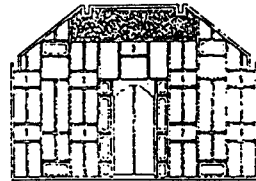


RAJAH 10

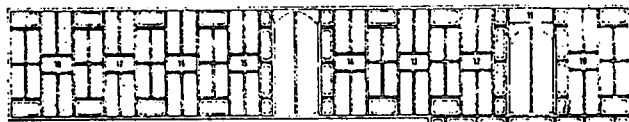
Sabek nombor 72 ada lah sama dengan rajah ini, pada bahagian tengah nya terdapat "khat" yang menunjuk kan empat nama-nama Khalifah Allah yang di jadi-kan sebagai simbol kekuatan bagi menjaga rumah



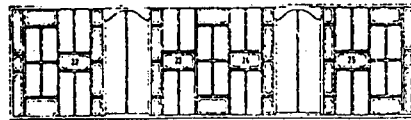
BELAKANG (BARAT)



HADAPAN (TIMUR)



SISI (SELATAN)



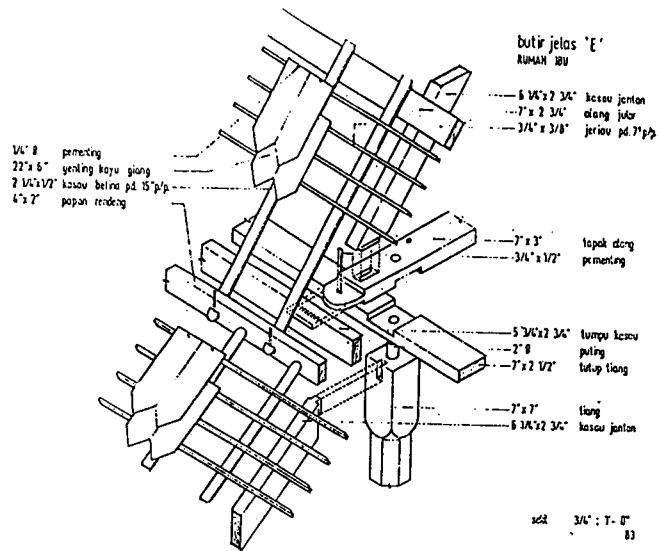
SISI (UTARA)

Sekil 0 1 2 4 6 8 kaki

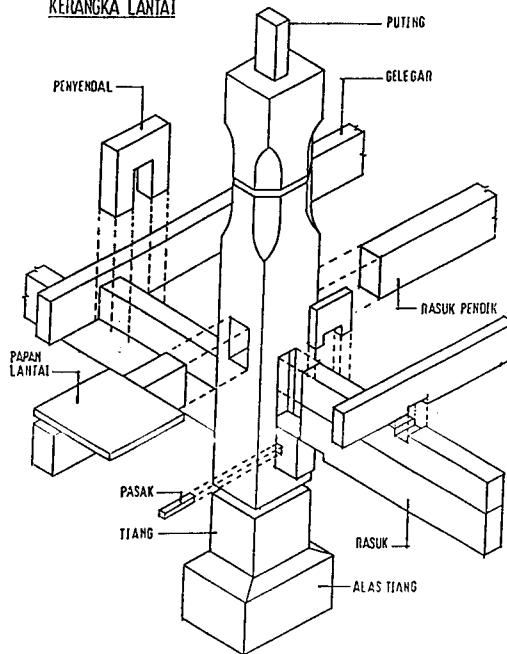
DINDING RUMAH IBU

Source : KALAM, UTM.

Diagram 5 : Constructional Details



**BUTIR JELAS 7:
KERANGKA LANTAI**



skd : 1 : 5

Source : KALAM, UTM.

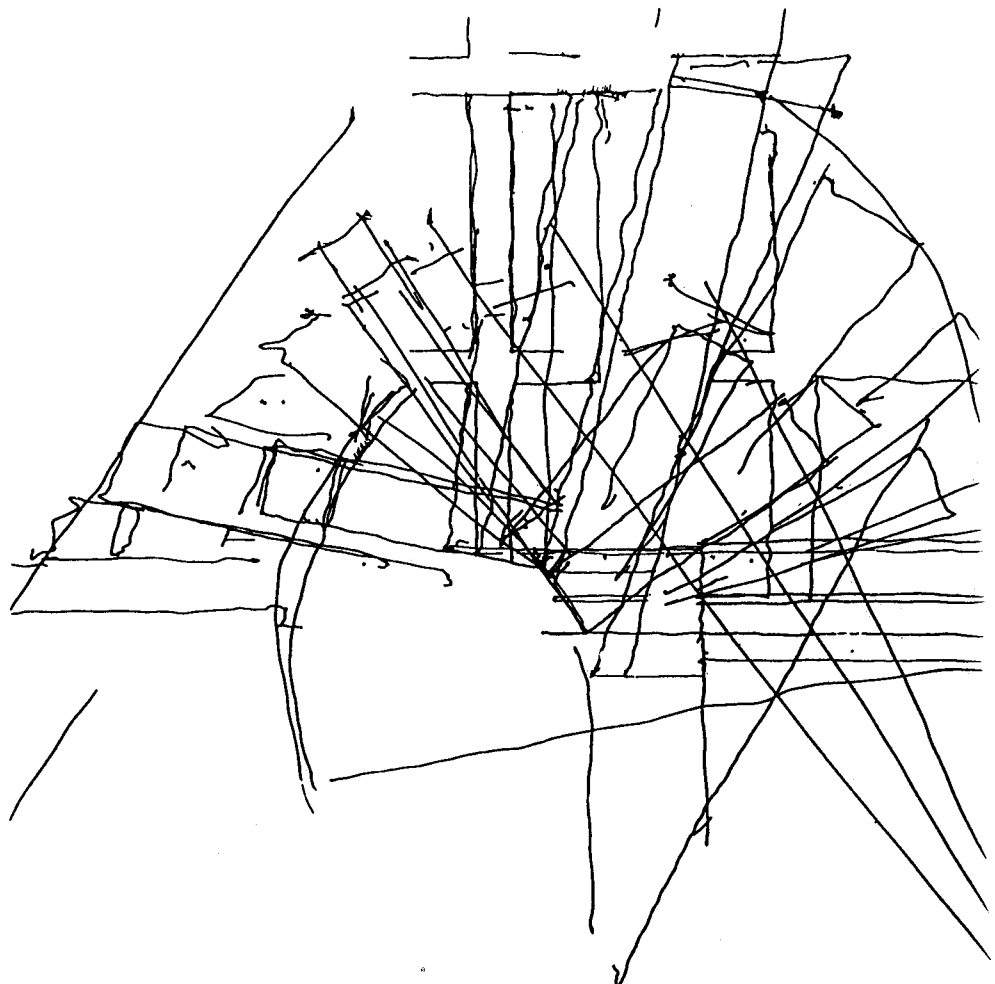
5.0 What next?

In discussing the works of Zaha Hadid, Eisenman, Liberskind etc. Jencks (1995) introduced the notion of their works emerging from their personal world view (*Diagram 6*), hence the validity of their architecture. Contemporary Malaysian architecture unlike traditional Malay architecture seems to lack this theoretical base, hence the seemingly obvious problem of lacking in regional identity, as well as it is too internationalized. Today a new world view had emerged (*Diagram 7*). To validate contemporary Malaysian architecture a contemporary architectural world view needs to be constructed. This is the challenge facing us all.

Bibliography

1. Abdullah Nakula (1980) **Falsafah dan Pemikiran Orang-orang Melayu**. Kementerian Kebudayaan Belia dan Sukan, Kuala Lumpur.
2. Brolin, B.C. (1976) **The Failure of Modern Architecture**. Studio Vista, London.
3. Budihardjo, E. (1991) **Architectural Conservation in Bali**. Gadjah Mada University Press, Yogyakarta.
4. Capra, F. (1984) **The Tao of Physics**. Bantam Books, New York.
5. Counelis, J.S. (1988) **Knowledge, Values and World-Views: A Framework for Synthesis - The Touch of Midas, Sardar**, Z. ed. Pelanduk Pub. Petaling Jaya.
6. Hijjaz (1996) **Can Architecture Shape Housing Landscape in Asia**. TV 2 Global Talkshow, Kuala Lumpur.
7. Jencks, Charles (1995) **The Architecture of The Jumping Universe**. Academy Editions, London.
8. Lim Jee Yuan (1987) **The Malay House**. Institut Masyarakat, Pulau Pinang.
9. Ramli Abas (1985) **Adat Perpatih dan Pengaruhnya Terhadap Seorang Tukang Rumah di Rembau, Negeri Sembilan**. Unpub. Arch. Dissertation, UTM, Skudai.
10. Rapoport, Amos (1969) **House Form and Culture**. Prentice-Hall, New Jersey.
11. Taib Osman (1985) **Malaysian World View**. Inst. Of Southeast Asian Studies, Singapore.
12. Lawrence, R.J. (1990) **Learning from Colonial Houses and Lifestyles - Vernacular Architecture**, Turan, M. ed. Avebury, Aldershot.
13. Toben & Wold (1987) **Space-Time and Beyond**, Bantam Books, New York.
14. Mohd. Nor (1985) **Malaysian World View**, Mohd. Taib Osman ed. Inst. Of Southeast Asian Studies, Singapore.
15. Salleh (1985) **Malaysian World View**, Mohd. Taib Osman ed. Inst. Of Southeast Asian Studies, Singapore.
16. Waterson, Rozana (1991) **The Living House: An Anthropology of Architecture in South - East Asia**. Oxford University Press, Singapore.
17. Yaakob Idrus (1996) **Rumah Tradisional Negeri Sembilan: Satu Analisa Senibina Melayu**. Penerbit Fajar Bakti, Kuala Lumpur.
18. Yeang, K. (1978) **The Causes of Homogeneity Amongst Architects in Urban Areas** - Majalah Akitek 2:78. Pertubuhan Akitek Malaysia, Kuala Lumpur.

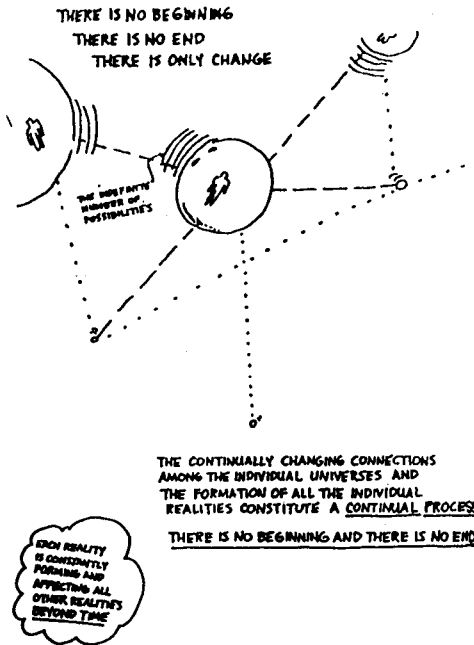
Diagram 6 : An Example of Eisenman's Building



Peter Eisenman, Columbus Convention Center, 1990-92. Abstract worms appear on the sides and top, while the entrance which the public use has articulated well-scaled fronts.

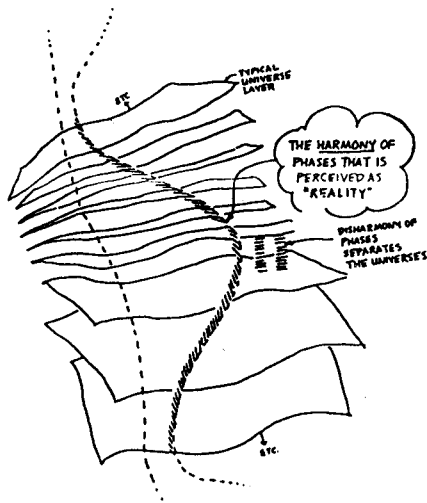
Source : Jencks, Charles (1995)

Diagram 7 : Space-Time Relationship



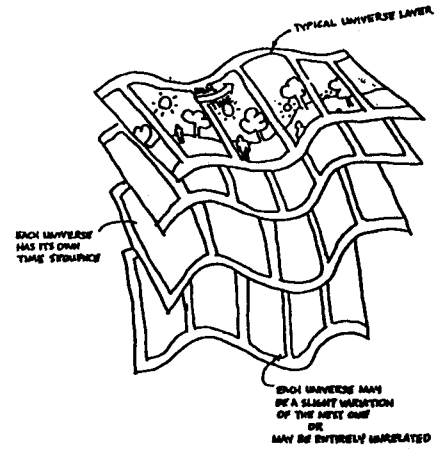
(C) (E)

THE "ORDINARY" REALITY WE PERCEIVE IS NOT ONE UNIVERSE
IT IS THE HARMONY OF PHASES OF MOVEMENTS OF AN INDEFINITE NUMBER OF UNIVERSES



(E)

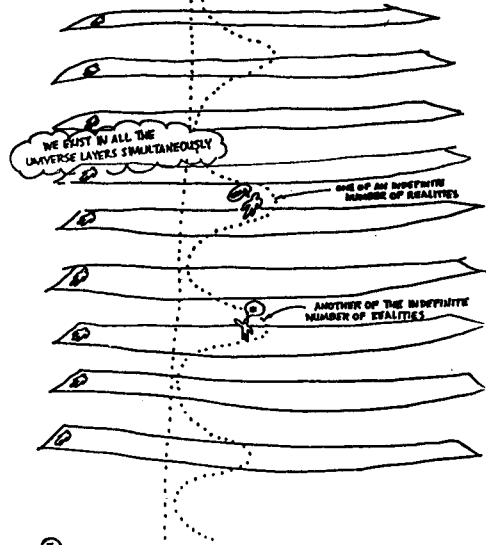
FOR EACH OF US, AN INDEFINITE NUMBER OF UNIVERSES EXISTS SIMULTANEOUSLY



(E)

ALL THINGS ARE POSSIBLE
BUT SOME ARE MORE PROBABLE

THERE IS AN INDEFINITE NUMBER OF HARMONIES
CONSTRUCTING AN INDEFINITE NUMBER OF POSSIBILITIES



(E)

Source : Toben & Wolf (1987)