

Re-visiting Asian Architectural Ornaments in Singapore:
The rationalisation of Asian architectural ornaments to irrelevance

by

Micki Chua Ju Kean
HT085898U

Dissertation submitted to the Department of Architecture
in partial fulfilment of the requirements for the Degree of

MASTER OF ARCHITECTURE
at the
National University of Singapore

September 2008

Abstract

This dissertation is a re-visitation of Asian architectural ornamentation in Singapore. As the nation rapidly develops in hopes of becoming an international economic hub, its identity as an Asian country is subjected to pressures to adapt with our modernised society. Presently, the challenge to celebrate this modernity while preserving our tradition, has led architects to look to Asian architectural ornaments for inspiration. The observation is that these architectural ornaments are often rationalised through functionalism and are frequently described as unrecognisable, or even irrelevant to users.

This dissertation proposes that the rationalisation of ornament is a consequence of the nation's fetish with the portrayal of a modern city, echoed by Adolf Loos' manifesto, '*Ornament and Crime*'. This attitude not only disregards the intrinsic values of ornaments, but continually portrays them as irrelevant in contemporary architectural discourse. Through three key chapters, this paper seeks to understand the phenomenon of rationalising architectural ornaments within Singapore.

The relevance of architectural ornaments will firstly be established, based on Asian interpretations of ornaments, as a carrier of meanings. This will be juxtaposed with a dialogue between two opposite attitudes: architectural ornament as 'excesses' by Loos and Le Corbusier, and architectural ornaments as 'essentials' by Kent Bloomer, Hayden Huntley and Mark Wigley. This forms the basis for further discussion of significant architectural developments that parallel phases in Singapore's development since its independence in 1965. Finally, three pivotal ornamented local buildings, the Singapore Conference Hall, the Esplanade and the Assyafa'ah Mosque, are studied.

Through this paper, a critique on the rationalisation of architectural ornaments is constructed, and in doing so, raises the need to stop undermining Asian architectural ornaments as irrelevant additions.

Keywords: Ornaments, Singapore, Rationalisation, Kitsch

Dissertation Supervisor: Dr. Lilian Chee

Title: Assistant Professor

Acknowledgement:

Dr. Lilian Chee: Thank you for your patience and concern. No words can describe your dedication to my research and maturity as an architectural student...you are a tutor, mentor and
And yes, you need not check my grammar anymore!!

Jiaying: Through our countless discussions, whipping up of meals at 3am and fish feeding, you have made this dissertation an exciting journey which brings meaning to this paper.

Kwan, Weixi and Siwei: Appreciate all your sweet effort to proofread my paper on your way to work or lunch. It felt like we were in secondary 2 again somehow at Macs.

Sarah and Qibao: Its crazy that you have helped me despite your suffocating schedules and submission. Thank you.

Mr William Lim: Thank you for your time, tiramisu and most importantly your kindness for the short but highly enriching interview.

Mr Tan Kok Hiang: Your frankness, enthusiasm in the theme of architectural ornamentation has spurred, inspired and provoked my thinking in this paper.

Mr Vikas Gore: Your insightful comments and honesty during the interview is of great help in my understanding of Singapore's architectural discourse.

My Family: Not forgetting, my dad, mum and bro who surprises me with great supper and visits to perk me up during this long tedious journey.

People who were interviewed: Although you remain anonymous, your candid responses and comments have played the biggest role in my critique of architecture.

Contents Page**Chapter 1: Introduction (800)**

1.1	Re-visiting Asian Architectural Ornaments	2
1.2	Framework	5

Chapter 2: Asian Architectural Ornaments (2320)

2.1	The Relevance of Architectural Ornaments	8
2.2	The Language of Architectural Ornaments	8
2.3	The Debate of Architectural Ornamentation	16

Chapter 3: Timeline: Architectural Ornaments in Singapore (1988)

3.1	Embracing modernity while preserving traditions of Singapore	28
3.2	Modernist Movement in Nation Building, (1960-1973)	29
3.3	Self- Actualisation, Conservation and the construction of Asian Ornament as Kitsch(1980s)	32
3.4	Contemporary vernacular and media’s rationalization of Asian Ornaments (Late 1990s – Present)	35

Chapter 4: The Rationalisation of Mengkuang Pattern (3023)

4.1	The <i>Mengkuang</i> Patterns of the Singapore Conference Hall and the Esplanade	40
4.2	<i>Mengkuang</i> Pattern - its Appeal	41
4.3	Controversy of Response to the <i>Mengkuang</i> Pattern.	46
4.4	The Weaving of <i>Mengkuang</i> in the Singapore Conference Hall	47

4.5	The Weaving of the Esplanade as a Durian?	54
4.6	Conclusion	59
Chapter 5: The Rationalisation of the Islamic Symbols in Assyafa'ah Mosque (2980)		
5.1	The Rationalisation of Ornaments in the Assyafa'ah Mosque	62
5.2	The Assyafa'ah Mosque	63
5.3	Contemporary Islamic Need to De-ornament	66
5.4	The Unornamented Assyafa'ah and its Success in portraying a 'Dynamic Mosque, Progressive Community'.	71
5.5	The Ornaments of Assyafa'ah Mosque	74
5.6	Conclusion	84
Chapter 6: Conclusion (683)		
6.1	Conclusion and Implications	85
	Bibliography	88
	Appendix	95

List of Images and Diagrams

p.3.	fig. 1.a:	Aerial view of Beijing Olympic Stadium. (2008).
	fig. 1.b:	Chinese wood crafted ornament depicting swallows returning to their nest to suggest home-coming. (2007).
p.4	fig. 1.c:	Islamic patterns in the Assyafa'ah Mosque (left) and weaving patterns in the Esplanade (right) are rationalised to sun-shading devices. (2008 on site).
p.9	fig. 2.a	a cover page.
	fig. 2.b:	Greco-Chinese flowers circle the Chinese characters 'health' and 'safety' on each pillar, before they merge to flourish as phoenixes at the entrance of the shophouse along Balestier Road, Singapore. (1997).
p.10	fig. 2.c:	Dragon sculpture on Chinese Temple Pillar.(1998).
p.11	fig. 2.d:	Bat sculpture on wooden window panel. (1999).
	fig. 2.e:	Stone lion in commonly placed at doorways to 'ward off evil spirits and guard wealth', are also favoured by Chinese businessmen today.(2002.)
p.12	fig. 2.f:	<i>Tawing hadapan</i> of Banja houses used to demarcate bedroom from the public living. Tiny gaps allow female inhabitants to peep at guests.(1994).
p.14	fig. 2.g:	Interior of the Alhambra Mosque of Spain, Granada.(1998).
p.18	fig. 2.h:	Housing Development Board in Precinct South 1 (Outram/Havelock rd) in 1966.(1967).
	fig. 2.i:	<i>Plan voisin pour Paris</i> , strategic planning for Pais, River Seine in 1925.
p.21	fig. 2.j:	Female dressing styles of a traditional Papuan girl (left), a sleek cut American dress of 1970s (middle) and a trendy girl (right) from Shinjuku, Japan, 2008.(collated in 2008).
p.25	fig. 2.k:	Mass customised ornamented architectural features designed by Bernard Cache in Archilab Exposition, 1999.
p.29	fig. 3.a:	Shophouses along Keong Saik Road. (2008).
	fig. 3.b:	Great Southern Hotel by Swan and McLaren in 1936 (2006).
p.31	fig. 3.c:	Singapore Conference Hall and Trade Union House, 1965. (1970s).
	fig. 3.d:	Housing Development Board apartment at Precinct North 1, Beach Rd. 1966.(HDB, 1970s).
p.34	fig. 3.e:	Entrance of Forbidden City, formerly The River House, Singapore. (2004).
p.37	fig. 3.f:	Chee Tong Temple in Hougang, Singapore.(1998).
p.39	fig. 4.a:	cover
p.41	fig. 4.b:	Traditionally woven rice baskets for rice collection and wedding. (1999).
p.42	fig. 4.c:	Sample patterns of <i>mengkuang</i> weaving. (1994).
p.43	fig. 4.d	Similarities of the mengkuang motif in the walls of Singapore Conference Hall(left) and traditional motif (right).
p.45	fig. 4.e:	Similarities of the mengkuang weaving on the Esplanade's roof(left) and traditional weaving detail (right).
p.46	fig. 4.f:	Similarities between the Esplanade (left) , housefly eyes (middle) and durians (right) can be observed.

- p.47 fig. 4.g: Exterior views of the Singapore Conference Hall. (2008)
- p.49 fig. 4.h: *Mengkuang* patterns manifested as mosaic on walls of the performance halls bring vibrancy to the spaces. (2008)
- p.52 fig. 4i: *Mengkuang* patterns as background for VIPs such as maestro conductor Tsung Yueh, at the Singapore Conference Hall .(2006).
- p.54 fig. 4.j: Woven basket from Malaysia .
- fig. 4.k: Exterior view of the Esplanade, (2008).
- p.56 fig. 4.l: Sun shading device of the Esplanade, (2008).
- fig. 4.m: Aerial night view of Esplanade shows a woven roof
- fig. 4.n: View from user's eye level at Esplanade. (2008).
- p.57 fig. 4.O: A rare basket shaped like a soursop with spikes, used in the *upacara samangat padi* (a rice ceremony for invoking spirits of the paddi fields) seems to be the only basket that bears most resemblance to Esplanade.
-
- p.64 fig. 5.a: Exterior views of the Assyafa'ah Mosque. (2008).
- p.65 fig. 5.b: Interior views of the Assyafa'ah Mosque. (2008).
- p.67 fig. 5.c: Singapore' Sultan Mosque with aesthetics of conventional mosques such as the moghul dome and *minaret* and Islamic writings in the interior of the *mihrab* of Hagia Sophia, Istanbul, Turkey.
- p.69 fig. 5.d: Plans of the Asyafa'ah Mosque.(2006).
- p.70 fig. 5.e: Sections of the Asyafa'ah Mosque (2006).
- p.76 fig. 5.f: Intricate trimmings of the arches. (2008).
- p.77 fig. 5.g: Geometric tessellation of Islamic *zellij* patterns
- fig. 5.h: *Zellij* inspired screens of Assyafa'ah Mosque. (2008).
- fig. 5.i: Chinese screens from China, Beijing. (2007).
- p.79 fig. 5.j: Arabesque screens of Assyafa'ah Mosque are individually installed and are segregated which breaks the infinite tessellation. (2008).
- p.80 fig. 5.k: *Zellij* pattern on screens of Assyafaah Mosque, Singapore compared to the *Zellij* pattern in cupola of Masjid Alhambra, Spain.
- p.81 fig. 5. l: Abstraction of dome as a void formed by the arches resembles that of the Islamic dome such as the Dome of the Rock. (2008).
- p.83 fig. 5.m: The contrast between the experience at a conventional (left) *mihrab* and one in in Assyafa'ah mosque (right) with more 'openness' has received mixed reviews by the users. (2008).

Chapter 1.

Introduction

*While attempting to observe the walls, ceilings and doors, almost everywhere within the mosque, one finds concentric circles of stars inscribed on the surfaces, conjuring up the image of constellations described in the Qur'an. That is the beauty of Islam.*¹

*Ornament, known as alamkara in Sanskrit, is the eloquence not for the sake of the art..., but as the effective communication of traditions.*²

"The evolution of culture is synonymous with the removal of ornament from objects..."³

*The dragons on the eaves, chairs and columns with indefinable extensions and flourishes....it is an ornament with a life, bringing aura to the Emperor.*⁴

Eliminating ornaments reduces working hours and increases wages. Compare the Chinese carver and American labourer.⁵

*The ornaments of savage people can only be properly studied in connection with a sensitive study of their magical and religious beliefs.*⁶

The child, like the Papuan, is amoral (the latter eating his enemies), but not criminal, whereas a modern man who ate his enemies would be. The Papuan tattoos everything in reach, but the modern man who tattoos himself is criminal or degenerate...

Ornament is crime.⁷

¹ Martin J. Powers, *Pattern and Person, Ornament, Society, and Self in Classical China* (Harvard University Press, Cambridge, 2006), p. 18.

² Ananda K. Coomaraswamy, 'Ornaments', *The Art Bulletin*, v. 21, n. 4 (Dec, 1939), pp. 375-382.

³ Adolf Loos, 'Ornament and Crime', Ed Opel (ed), *Selected Essays*, (Riverside California, Ariadne Press, 1999), p. 167.

⁴ Max Loehr, 'The Fate of Ornament in Chinese Art', *Archives of Asian Art*, v. 21 (1967-68), pp.12-13.

⁵ Loos, 'Ornament and Crime', p. 168.

⁶ Harries Karsten, *The Bavarian Rococo Church: Between Faith and Aestheticism* (Yale University Press, 1983).

⁷ Loos, 'Ornament and Crime', p. 165.

1.1 Re-visiting Asian Architectural Ornaments

'Ornament and Crime', the century-old manifesto by Adolf Loos, has portrayed architectural ornamentation as the antithesis to modernity; till today, archaic perceptions that ornaments must be eliminated in order for society to 'evolve' still seem to hold.⁸ This paper questions such perceptions of architectural ornaments in the present Singaporean context and poses the question: Are architectural ornaments irrelevant to the cityscape of Singapore?

With Singapore's emphasis on its economic growth since its political independence in 1965,⁹ Loos' consumerist design approach, emphasising efficiency and progress, seems to have been conveniently accepted.¹⁰ This has led to the repression, neglect and rejection of architectural ornaments. Consequently, the depth and richness of Singapore's hybrid culture has been reflected less convincingly in its cityscape.¹¹

⁸ Loos, *Ornament and Crime*, p. 167.

⁹ Chua Beng Huat, 'Not Depoliticized but Ideologically Successful: The Public Housing Programme in Singapore', Ong Jin Hui, Tong Chee Kiong, Tan Ern Ser, ed. *Understanding Singapore society* (Singapore: Times Academic Press, 1997), pp. 307 -315. He speaks about the ideological consensus of Singaporeans who seek 'survival through pragmatism'. Launching of various urban renewal programs such as the Singapore Masterplan in 1975 which gazette Shenton Way as the commercial hub, and subsequently the Singapore 21 launched in 1997 by Prime Minister Goh Chok Tong to emphasis on knowledge-based economy in order to stay economically competitive.

¹⁰ Bloomer, *The Nature of Ornament*, pp.11-12. Another reason for rejecting architectural ornaments was the nation's emphasis on political stability, as suggested by Mr Vikas Gore, Director of DP Architects Pte Ltd: 'Which race or cultural roots should Singapore emphasise? Will we be comfortable with ornaments of Malay origins since we used to be part of a Malayan state, would the Chinese or Indian community complain' (Interview, 6th August, 2008)

¹¹ Interview with William Lim Siew Wai on the 12th August, 2008. (See Appendix A)



fig. 1.a:
Aerial view of Beijing Olympic Stadium



fig. 1.b:
Chinese wood crafted ornament depicting swallows returning to their nest to suggest home-coming.

In recent years, numerous projects have challenged the repression of architectural ornaments in the Asian region. The Beijing Olympic Stadium (2008) by Herzog & de Meuron Architekten (fig. 1. a), also known as the 'bird's nest' (fig. 1. b),¹² was an Asian representation of a home to which guests from all over the world are welcome.¹³

The re-visitation of architectural ornaments can also be observed in Singapore, upon the emphasis on 'national identity' since the 1980s.¹⁴ Projects such as the Esplanade (2002) and the Assyafa'ah Mosque (2004) are critically acclaimed for their innovative architectural ornamentation.¹⁵ However, in many of these projects, ornamentation is often rationalised by

¹² Weaving 44,000 tonnes of structural steel members into Bird's Nest featured in Herzog and de Meuron Architekten in China Trailer, (T&C Film, Christoph Schaub and Michael Schindhelm, 2008), 00:42.

¹³ Ai Wei Wei, unpublished interview (Beijing: FAKE studio, November 2007).

¹⁴ National identity is promoted by Singapore's government through which aims to emphasize arts and culture in constructing a 'Renaissance City' in MITA Journal 1989. Urban Redevelopment Authority (URA) introduced the *Conservation Policy* in 1989 to restore historical buildings to preserve identities and the *Uniquely Singapore* slogan by Singapore Tourism Board in 2004 which promotes the need to portray a distinct character of Singaporeans.

¹⁵ Extensive write ups for both Assyafa'ah Mosque and the Esplanade- Theatres by the bay featured in *SA magazine*, v. 223 and v. 214 respectively (Singapore Institute of Architects, 2005).

abstracting traditional ethnic patterns or symbols, which are re-interpreted as functional features such as structures or bio-climactic devices (fig 1.c).

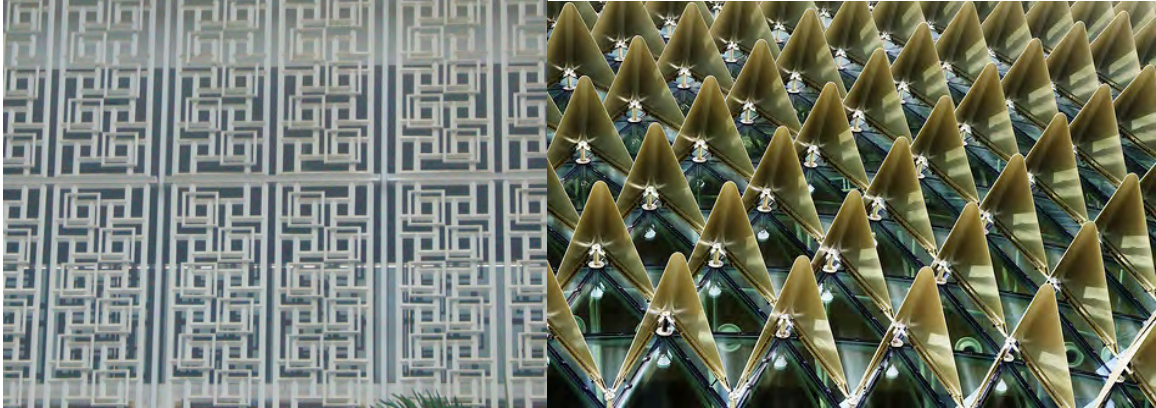


fig. 1.c:
Islamic patterns in the Assyafa'ah Mosque (left) and weaving patterns in the Esplanade (right) are rationalised to sun-shading devices.

This paper suggests that such 'celebration' of Asian ornamentation is paradoxical, as designers often rationalise ornaments to justify their use. This implies that 'ornament is (still) crime', but perhaps a smaller one when functionality is incorporated. Furthermore, meanings and symbols fundamental to the ornaments are often lost during rationalisation, leaving only a physical presence – which fails to communicate with users, and perpetuates the notion that Asian ornaments are irrelevant. Hence, this dissertation seeks to explore whether such phenomenon of rationalisation demeans Asian architectural ornaments and reinforces their notion as kitsch.

1.2 Framework

Theory

Asian architectural ornaments in Singapore should be explored beyond their stereotype as 'Oriental artefacts'.¹⁶ Ornamentation as an architectural feature that embodies meanings and symbolisms, communicated to users through the semiotics of their physical orders will first be established.¹⁷ This forms the basis of a dialogue between opposing theories on ornamentation in contemporary architectural discourse: manifestoes by Loos and Le Corbusier preaching ornaments as 'superfluous', 'feminine' and 'costly',¹⁸ against theories by Kent Bloomer, Mark Wigley and Hayden Huntley. The juxtaposition of such theories with the above understanding of Asian ornamentation will serve to illustrate the role of architectural ornaments in Singapore today.

Time line

Since its independence, Singapore has faced contradictions in establishing itself as a nation with Asian heritage, while embracing rapid progression towards modernity. The approach towards ornamentation in significant architectural movements in Singapore will be scrutinised to elucidate various mechanisms and prejudices towards ornamentation in each movement, which may have contributed to the current conception of architectural ornaments as kitsch in Singapore.

Case studies

¹⁶ James Ferguson, *History of Indian and Eastern architecture* (New York: Dodd, Mead, & Company, 1891).

¹⁷ Bloomer, *The Nature of Ornament*, pp. 35-40.

¹⁸ Loos, *Ornament and Crime*, p. 171.

The dissertation's argument is advanced through the study of three projects which play pivotal roles in the discourse of Asian architectural ornaments in Singapore. The *mengkuang* pattern¹⁹ will be studied in relation to the Singapore Conference Hall (1965) and the Esplanade (2002). These examples will demonstrate the importance of sensitivity during rationalisation, to realise the communicative abilities of architectural ornaments. In a separate case study of the Assyafa'ah Mosque, controversial because ornaments are unrecognisable or even non-contextual,²⁰ the rationalisation of ornaments will be placed under scrutiny,

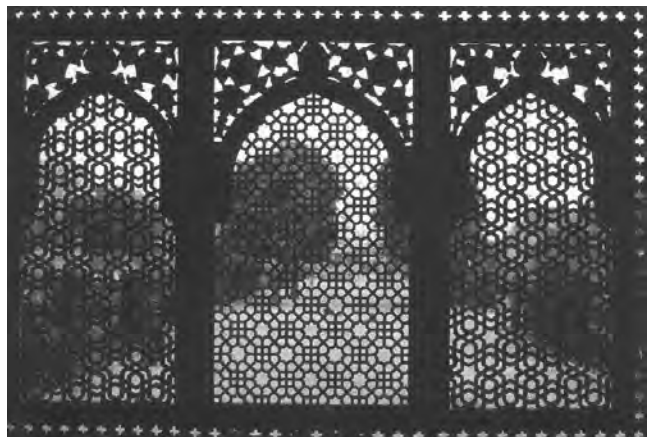
These investigations will put architectural writings and media reports against information collected through interviews with designers and users of the buildings. This is done to paint a more complete picture of design concerns for architectural ornaments, and its subsequent impact.

¹⁹ For further elaboration, refer to Chapter Four.

²⁰ The mosque is hailed by former Deputy Prime Minister, Dr Tony Tan as the mosque which has radicalised the image of the Muslim community by having, 'no dome nor minaret', Dr Tony Tan, unpublished speech at a dialogue session with Muslim religious leaders at Assyafa'ah Mosque, 10th April 2005. However, multiple surveys conducted with visitors to Assyafa'ah Mosque presents reviews which agree that the mosque may be too radical and not conducive for praying.

Chapter 2.

Asian Architectural Ornaments



2.1 The Relevance of Architectural Ornaments

The relevance of Asian architectural ornaments is illuminated in this chapter. Contrary to claims by James Ferguson in *'History of Indian and Eastern Architectures'*, architectural ornaments are not superfluous embellishments,²¹ but carriers of meaning and inherent beauty.²² These attributes are essential to the architectural construction of identity and character of Singapore.²³ In order to understand the relevance of Asian architectural ornamentation in Singapore, it is important to first establish the meaning of Asian architectural ornaments.

2.2 The Language of Architectural Ornaments

As Kent Bloomer, in *'The Nature of Ornament,'* elaborates, ornamentation is a form of language which communicates through its inherent rhythms and orders.²⁴ The semiotic capability of architectural ornaments is explained by Mary Foster's: the repetition, mutations and climax of two- and three-dimensional forms in ornaments produces rhythms, which enable the ornaments to communicate embedded meanings.²⁵ For example, foliated scrolls of shophouse façades along Balestier Road display architectural ornaments intended to convey blessing on the occupants making their daily movements in and out of the house (fig. 2.b).

²¹ Loo:
²² Blo
²³ Blo
indivi
²⁴ Blo
²⁵ Mai
Unive



ted by
egon:

fig. 2.b: Greco-Chinese flowers circle the Chinese characters 'health' and 'safety' on each pillar, before they merge to flourish as phoenixes at the entrance of the shophouse along Balestier Road, Singapore.

Myths

The meanings and symbols embedded within Asian architectural ornaments are often associated with traditions, myths and rituals. In Chinese culture, detailed dragons and abstracted clouds on temple columns are traditionally believed to confer order on the universe, while evoking 'supernatural' chaos in uniting Heaven and Earth (fig. 2.c).²⁶



fig. 2.c:
Dragon sculpture on Chinese Temple Pillar.

This basic principle of a sacred/secular tension behind the ornaments in Chinese temples is congruent with Semper's interpretation. He engages the Greek word *Kosmos* which signifies cosmic order within chaos, proposing that the relevance of ornaments lies in the 'careful balance between anarchy and order'; their complexity allows myths, spiritual events and traditions to pervade into the highly structured contemporary society.²⁷

of ornaments may serve to relieve the anxieties of a phenomenon endemic in Singapore over the past

Asian culture,

²⁶ Martin. J, *Powers, Pattern and Person, Ornament, Society, and Self in Classical China* (Harvard University Press, Cambridge 2006), p.18.

²⁷ Gottfried Semper, *The Four Elements of Architecture and Other Writings* (United States of America: Cambridge University Press, 1989), pp. 74-80.

²⁸ Gombrich E.H., *The Sense of Order: A study in the Psychology of Decorative Art* (Cornell University Press, 1979), p. 111.

architectural ornaments continue to be used by certain local communities. Hanging sculpted bats (fig. 2.d) Stone lions (fig. 2.e) at entrances continue to be favoured by the Chinese today.



fig. 2.d:
Bat sculpture on wooden window panel.
Hanging sculpted bats over gateways of courtyard houses in China conveyed auspiciousness since the early sixth century.



fig. 2.e:
Stone lion is commonly placed at doorways to 'ward off evil spirits and guard wealth', are also favoured by Chinese businessmen today

Such architectural ornaments have met the desire of a number of Chinese for a sense of mythology within the existing Singaporean 'world of disenchantment'.²⁹ According to Max Webber, it is precisely in today's 'hyper rational' society that architectural ornaments, are most critical in complementing our rational lives.³⁰

Identities and Associations

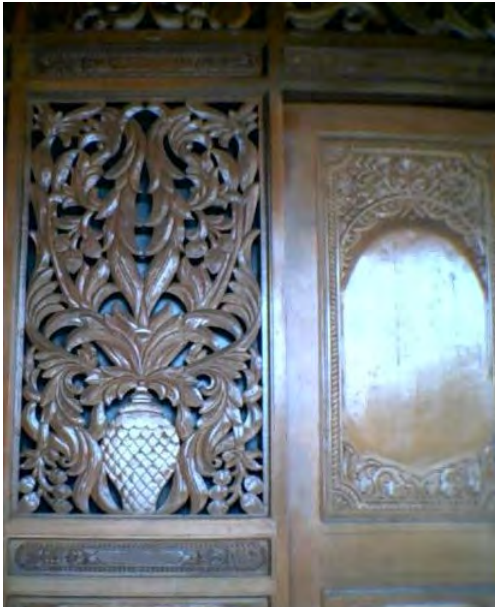


fig. 2.f:
Tawing hadapan, of Banja houses used to demarcate bedroom from the public living. Tiny gaps allow female inhabitants to peep at guests.

The semiotics of ornaments also imparts the ability to represent, and aid in constructing the identities of certain communities. The Banja houses of Kalimantan use ornaments at various levels to evoke the hierarchy of spaces such as the *tawing hadapan* (fig. 2.f).

²⁹ Max Weber, *Essays in Sociology*, trans. and ed. by H. H. Gerth and C. Wright Mills (New York: Oxford University Press, 1946).

³⁰ Weber, *Essays in Sociology*, p. 42. Weber explains that ornaments are important in this respect because of their embedded myths and superstition, tied to tradition.

Beauty

The function of architectural ornamentation transcends beyond aesthetic expression of a culture's intellectual progress.³¹ Order and proportions in ornaments express the beauty of 'fundamental regularities of the universe, and above all, its fecundity'.³² Ornaments, with their inherent forms, can be perceived to express the beauty and richness of nature - Divine Beauty.

33

This Divine Beauty is emphasised in Islamic ornamentation – this beauty of the ornamental intricacies in the Alhambra Mosque (fig. 2.g) creates a 'spiritual resonance through the poetic perception of a meta-physical nature'.³⁴ Such meta-aesthetics is not only a form of visual pleasure, but also a means to transport users into a spiritual realm associated with God's beauty, also known as *falsafa* in classical Arabic thought.³⁵

³¹Ferguson, *History of Indian and Eastern architecture*.

³² 'Ornament in general, gave evidence to the creativity and the beauty of cosmic order, just as fruits and flowers that if often imitated were the products and finery of nature' proposed by Antoine Picon, 'Architecture, Science, Technology and Virtual Realm', *Architecture and the Sciences: Exchanging Metaphors* (London: Princeton Architectural Press, 2003), p. 238.

³³ Antoine Picon, 'Architecture, Science, Technology and Virtual Realm', *Architecture and the Sciences: Exchanging Metaphors*, p. 238.

³⁴ Meta-aesthetics is an Islamic philosophy of sensory experience that does not treat its subject separately as an object of knowledge but includes a wider area of orders of questions, the ontological, religious and ethical, and their derivatives, the senses (*hiss*), imagination (*khayal*), estimative faculty (*wahm*), conjecture (*zann*) and the intellect (*aql*)

³⁵ Valerie Gonzalez, *Beauty and Islam: Aesthetics in Islamic Art and Architecture* (London: I.B. Tauris Publisher, 2001), p. 7.

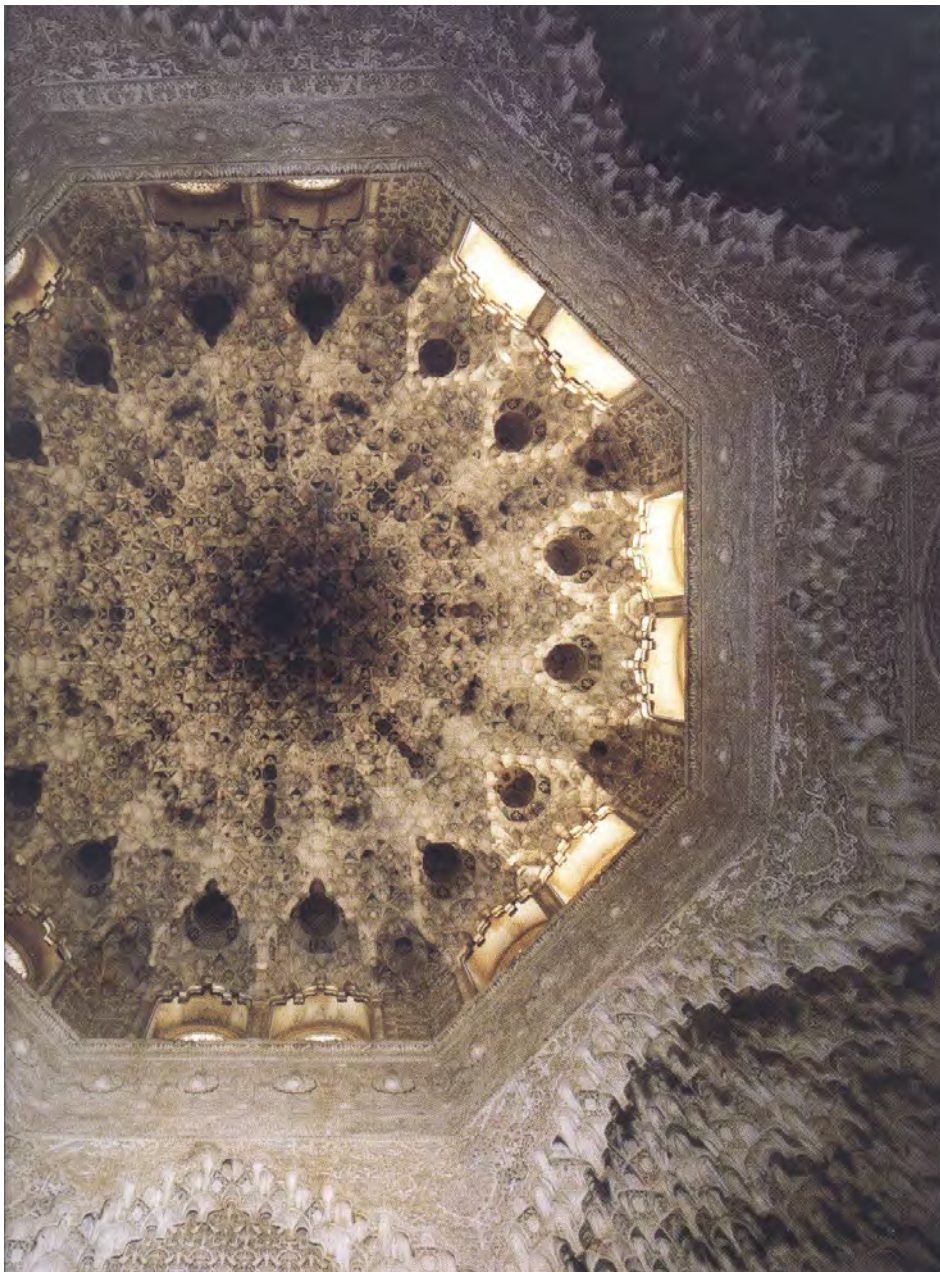


fig. 2.g:
Interior of the Alhambra Mosque of Spain, Granada

Ornaments were a medium through which people could observe such divine beauty in relation to their God, which serves to complete the self. This parallels the Sanskrit term for ornament, *alamkara*, defined as having metaphysical effects in conferring meanings beyond adornment.

As carriers for meanings, traditions and cultures through beauty, architectural ornaments do present the potential in contributing to the vitality of arts and culture, aspects emphasised in the portrayal of Singapore as a Renaissance City.³⁶

³⁶ Singapore's vision to be a Renaissance City was promoted in a MITA report, *Renaissance City Report, Arts and Culture of Renaissance Singapore* (Singapore: MITA Press, 1989). Contents include Prime Minister Goh Chok Tong emphasizing for the need for more attention 'devoted to arts and culture to strengthen the nation's identity'.

2.3 The Debate of Ornamentation

Despite their recognised significance, Asian architectural ornaments in Singapore are often neglected due to their stereotype as ‘excesses’.³⁷ Influenced by powerful literary works, the local architectural community has been led to view architectural ornaments only in its intricate detailing and frills, neglecting their meanings.³⁸ Such approach, coupled with arguments of architectural ornaments as superfluous, economically non-viable, feminine and backwards constructs their irrelevance in Singapore.³⁹ In this discussion, the themes of essentialism, feminism and production of ornaments are set in focus by engaging the perception of ornament as an ‘excess’ and an ‘essential’.

The Essential Ornament

Ornaments are often defined as an embellishment, a mask for faults;⁴⁰ this contributes to its identity as an ‘excess’. Rapid progress in engineering technology in the late nineteenth century encouraged a view where architectural ornaments played second fiddle to structure. Civilisation was even defined as the elimination of the ‘superfluous’ in favour of the ‘essential’.⁴¹ In Loos’ canonical essay, *‘Ornament and Crime’* (1908), the erasure of ornaments was even considered the bedrock of a cultural cleansing.

³⁷ Loos, *Ornament and Crime*, p. 167.

³⁸ Influential manifestoes by Adolf Loos in ‘Ornament and Crime’ (1908) and Le Corbusier’s *‘L’art decorative d’aujourd’hui’* (The decorative art of today, 1925).

³⁹ Loos, *Ornament and Crime*, pp. 165-171.

⁴⁰ Le Corbusier, *The Decorative Art of Today*, trans and ed. by James Dunnet (Cambridge: MIT Press, 1987), p. 135.

⁴¹ Mark Wigley, *White walls and Designer Dress* (Cambridge: The MIT Press, 1995), p. 2.

*The evolution of culture is synonymous with the removal of ornament from objects of daily use...lack of ornament shows intellectual power....soon the streets of the cities will glow like white walls!*⁴²

A similar take on ornaments is noted in 'Towards an Architecture' (1923), by Le Corbusier. He has argued that a modernised culture should promote the 'rejection (of ornaments), for the clear and naked emergence of Essential'.⁴³

*For civilisation to occur, the naked truth or body needs to be exposed to display its functions and visual proportions, rather than to hide it in the sensuality of clothes.*⁴⁴

Le Corbusier suggested that the removal of ornaments in favour of structure was a move from texture to smoothness, sensual to intellectual.⁴⁵

⁴² Loos, *Ornament and Crime*, pp. 168.

⁴³ Le Corbusier, *Towards a New Architecture*, trans and ed. by Frederick Etchells (London, John Rodker, 1931), p.143.

⁴⁴ Le Corbusier, *Towards a New Architecture*, p. 143.

⁴⁵ Le Corbusier, *Towards a New Architecture*, p. 37.



fig. 2.h:
Housing Development Board in Precinct South 1 (Outram/Havelock rd) in 1966.



fig. 2.i:
Plan voisin pour Paris, strategic planning for Paris, River Seine in 1925.

As such, architectural ornaments – the ‘non-essentials’ – were subjected to cleansing, to attain architectural ‘nakedness’.⁴⁶ This emphasis on ‘nakedness’, apparent in Le Corbusier’s designs, is also reflected in Singapore’s Housing Development Board apartments (fig 2.h), reminiscent to Le Corbusier’s planning of Paris (fig 2.i).⁴⁷ Subsequent manifestoes such as *Towards a New Architecture* (1925),⁴⁸ condemned all ornate objects of daily use. Ornamentation was portrayed as a mask, by which ‘reality’ was disguised, while ‘nostalgic fantasy in the face of modernity’, sustained.⁴⁹

This ‘mask’ of ornaments elaborates structures, instead of hiding them. This refers to Wigley’s response to Semper’s *Principle of Dressing*, which argues that ornaments were never meant to hide or misrepresent structures.⁵⁰

*Hanging carpets remained as true walls...The solid wall behind them are necessary for reasons that had nothing to do with the space...They are needed for security and structure to hold up the house....It is an invisible structure behind the true and legitimate representatives of a wall, the colourful woven cloth.*⁵¹

If we are to consider Semper’s view,⁵² Ornamentation is thus seen as essential to architecture, while structures are ‘secondary’, for ‘support and security’.⁵³ Walls and structures serve mainly to prop the carpets, which define the qualities of the space. As such, the ‘nakedness’ of modern

⁴⁶ Le Corbusier, *L’art decorative d’aujourd’hui*, *Towards a New Architecture*, p. 41.

⁴⁷ Le Corbusier, *Plan voisin pour Paris*, strategic planning for Paris, River Seine in 1925.

⁴⁸ Translates as the *Decorative Art of Today*

⁴⁹ Le Corbusier, *The Decorative Art of Today* analysed by Mark Wigley in *White walls and Designer Dress*, p. 2.

⁵⁰ Wigley, *White walls and Designer Dress*, p. 2.

⁵¹ Gottfried Semper, *The Four Elements of Architecture and Other Writings*, pp.74-129.

⁵² Wigley, *White walls and Designer Dress*, p. 11.

⁵³ Wigley, *White walls and Designer Dress*, pp. 11-15.

architecture seems to be wrongly portrayed. As Wallace Rosenbauer points out, ornamentation complements an object and should never be seen as a separate entity.⁵⁴ Like a crown which empowers a king, or a wig to a judge, ornaments can confer meaning to architecture instead of existing as an excess.⁵⁵

Furthermore, Le Corbusier's obsession with white paint can be seen as a 'bogus modernism'.⁵⁶ It was the 'most perfect way to do away with reality...White suggests pureness, nakedness, but [any dressing] is neither pure nor naked'.⁵⁷ The use of white paint thus ironically reaffirms how ornaments can communicate with its users, in this case, to suggest the 'purity' of space. Wigley elaborates on this by suggesting that the sleekness of the International style is comparable to slim cut Western suits, while ornaments can be compared to the cut favoured by peasants (Fig. 2.j). Both are clothes – ornaments – to express individual taste. If ornamentation is to be removed, and men to walk 'naked' on the streets, architecture would also be expected to strip off layers of meaning, contradicting the very basis of architecture itself.⁵⁸

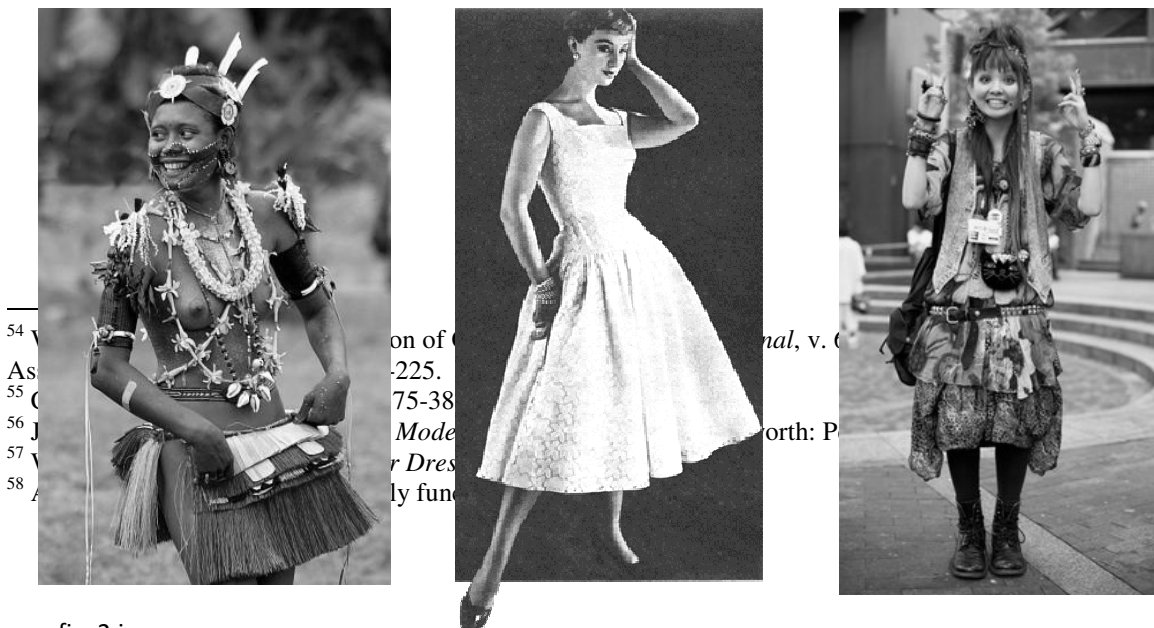


fig. 2.j: Female dressing styles of a traditional Papuan girl (left), a sleek cut American dress of 1970s (middle) and a trendy girl (right) from Shinjuku, Japan, 2008

The ornament-structure binary relationship that has been assumed thus far is placed under scrutiny by Andrew Benjamin, in '*Surface effects: Borromini, Semper, Loos*'.⁵⁹ According to Benjamin, the surfaces of all architectural elements are key in the construction of space; these may be considered ornaments.⁶⁰ This supports the aforementioned views, that ornamentation is critical in evoking spatial qualities.

Feminine ornaments

The rejection of architectural ornamentation by modern society is perhaps related to the association of ornaments with the feminine. Ornaments, with their intricate aesthetics, and ability to impart meanings and traditions, are often associated with similar qualities in women and mothers.⁶¹ The ancient Greek term for 'ornament' also means 'female adornment'.⁶² Loos

⁵⁹ Andrew Benjamin, 'Surface effects: Borromini, Semper, Loos', *The Journal of Architecture*, v.11 n.1, (London: Mortimer House, 2006), pp.1 – 36.

⁶⁰ Andrew Benjamin, 'Surface effects: Borromini, Semper, Loos', *The Journal of Architecture*, pp. 1-24.

⁶¹ Hilde Heynan and Gulsum Baydar, *Negotiating Domesticity: Spatial Productions of Gender in Modern Architecture* (Routledge, 2005), pp. 2-6.

⁶² Bloomer, *The Nature of Ornament*, p. 15.

also compared ornaments to ‘lacy’ objects embroidered by women, or ‘beautiful things made by an old lady from glass, beads and silk’.⁶³

Modernity however, is often conceived as a masculine quality. In Genevieve Loyd’s *The Man of Reason*, an intimate relationship has been drawn between critical thinking in modernity, and masculine qualities.⁶⁴ Also, Rita Felski has shown how modernity is often associated with the virility of masculinity.⁶⁵ Linked to progress and change, modernity is naturally associated with leaving of home. In *The Homeless Mind, Modernisation and Consciousness*, Peter Berger elaborates that the identification of modernity with masculinity may imply the rejection of femininity – the leaving of home.⁶⁶ Ornaments, categorised as feminine, exist as a physical antithesis to ‘progressive’ society. As much as the female gender is often associated with passivity and weakness,⁶⁷ architectural ornaments are equally ghettoised as (economically) non-contributive objects in modernity.

A problem arises when the over-emphasis on economic progress positions the ‘regressive’ nature of architectural ornaments as a ‘threat to the nation’.⁶⁸ While economic progress is important to the growth of a society, the expression and development of its culture and traditions are equally important.⁶⁹ Roles such as the ‘passing down of traditions and folklore’

⁶³ Loos, *Ornament and Crime*, p. 171.

⁶⁴ Genevieve Loyd, *The Man of Reason. “Male” and “Female” in Western Philosophy* (Minneapolis: University of Minnesota Press, 1984).

⁶⁵ Heynan and Baydar, *Negotiating Domesticity: Spatial Productions of Gender in Modern Architecture*, pp. 4- 9.

⁶⁶ Peter L. Berger, Brigitte Berger and Hansfried Kellner, *The Homeless Mind, Modernisation and Consciousness* (New York: Vintage Books, 1974).

⁶⁷ Heynan and Baydar, *Negotiating Domesticity: Spatial Productions of Gender in Modern Architecture*, p. 4.

⁶⁸ Loos, *Ornament and Crime*, pp. 169

⁶⁹ Goh Chok Tong, in a written response to the Report of the Advisory Council on Culture and the Arts in April 1989 cited in *Renaissance City Report: Culture and Arts in Renaissance Singapore*, (MITA Press,

and ‘performances of family rituals and acts of bonding’ are ‘nostalgic’ and ‘sensitive’ concerns, usually carried out by females, realised in architecture by ornaments.⁷⁰ As a child is attached to his mother, emotions and attachments to a place are often evoked by ornamentation. This is especially pertinent considering the ‘homeless’ condition, endemic in rapidly progressing societies characterised by (masculine) large public squares and business centres. Ornamentation, associated with concepts of home and tradition is a balance against the overwhelming influence of modernity.

Backdated processes and cost

The need to remove ‘unproductive’ elements was proposed by Loos, arguing that ornamentation is of little economic benefit; the beauty embodied by ornaments is projected as less important.

An ornamental craftsman has to work twenty hours to reach the pay a modern worker earns in eight...a decorated object, with materials costing the same and demonstrably taking three times as long to produce is put on sale at half the price of a plain object...The result of omitting decoration is a reduction in working hours and an increase in wages.⁷¹

Such an ethos of efficiency and productivity constructs values based on austerity and thrift. Here, Loos assumes that ornaments are necessarily badly made and time-consuming to produce; such views should have been fossilised in the nineteenth century.⁷² Haydn Huntley in

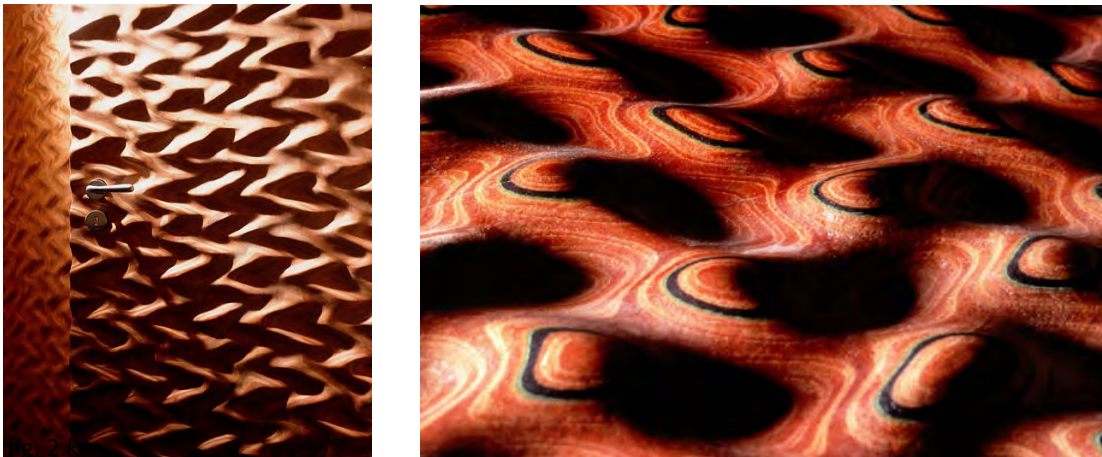
1989), p. 11. (then) PM Goh speaks about the importance of culture and arts in building nation’s identity upon the attainment of economical and political stability.

⁷⁰ Heynan and Baydar, *Negotiating Domesticity: Spatial Productions of Gender in Modern Architecture*, p. 7.

⁷¹ Loos, *Ornament and Crime*, pp. 172.

⁷² Bloomer, *The Nature of Ornament*, pp. 17-21. Kent elaborated on peasants who embraced badly made furniture that replicated those favoured by the middle class Victorian community such as claw feet chairs and upholstered parlors are considered ‘social impostures’.

'*In Defense of Ornament*', argued against Loos in that the construction of ornaments as 'bad taste' is contributed by insufficient rigour in design, and the cowardice of manufacturers in developing ornaments.⁷³ Here, the example of Bernard Cache, an architect specialising in TOPCAD, is provided.



Mass customised ornamented architectural features designed by Bernard Cache in Archilab Exposition, 1999.

Cache, using the computer's rationalization and mathematisation, produces ornaments with special attention to the 'most decorative' computations of 'inflection'.⁷⁴ Loos' statement that ornament is wasted work is countered by Cache's ability to design 'singular, decorative, and playful objects', while ensuring easy manufacturing and installation (fig 2.k). He has shown how architecture, going beyond 'mere handling of downward loads, may be fundamentally

⁷³ Haydn Huntley, 'In Defense of Ornaments', *College Art Journal*, v.6, n. 1 (College Art Association, Autumn, 1946), pp. 29-36.

⁷⁴ Bernard Cache, 'Digital Production and the Semparian Object', *Detail: The Subject of the Object*,

indeterminate and hence ornamental'.⁷⁵ Such ornaments have raised the issue about the loss of 'craftsmanship' due to the shift from hand crafting to designers sculpting via software. However, relevant ornaments can still be realised through the application of the same rigour of ornamentation via a more efficient method.⁷⁶ Technology should not be separated from ornamentation and ornaments need not only be handmade.

Asian architectural ornaments are significant due to their ability to embody meanings and symbolisms relevant to contemporary conditions in Singapore. Perceptions of ornaments as time consuming should also be rethought in light of new manufacturing technologies and design systems. A juxtaposition of the established theoretical background on architectural ornaments, with an understanding of the significance of Asian ornamentation in Singapore, forms the basis of critique in the following chapters.

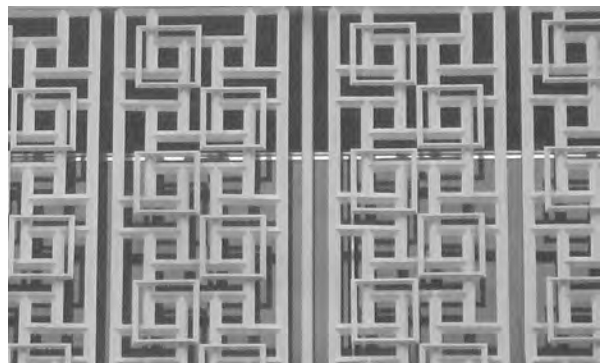
<http://www.peggydeamer.com/images/detail.pdf>, (Accessed on the 22nd July 2008)

⁷⁵ Cache, 'Digital Production and the Semparian Object', *Detail: The Subject of the Object*, pp. 6-7.

⁷⁶ Huntley, 'In Defense of Ornaments', *College Art Journal*, p. 34.

Chapter3.

Timeline: Architectural Ornaments in Singapore



3.1 Embracing modernity while preserving traditions of Singapore

In discussing the relevance of Asian architectural ornaments in Singapore today, one would confront the dilemma raised by Paul Ricouer: 'In order to get to the road to modernization, is it necessary to jettison the old cultural past?'⁷⁷ The constant paradox of becoming modern and returning to our sources⁷⁸ has inevitably resulted in a selection process of cultural remnants deemed fit for preservation, or unnecessary enough to give up in the search for a modernized image of Singapore.

Unfortunately, in this struggle, ornaments have largely been sacrificed – this is visible in their absence, and lack of development, within local architecture. Since the 1960s, Asian architectural ornaments have been deemed unimportant, and even eliminated from the local design palette. By exploring architectural trends in Singapore over the past forty years, this chapter seeks to trace attitudes towards Asian ornaments alongside concurrent phases in Singapore's architectural history.

This research attempts to reveal how each design phase neglected or inappropriately reproduced ornaments in Singapore. It will also demonstrate that this continual process of rejection by designers, coupled with the reproduction of badly designed artifices in the guise of ornamentation, has resulted in the relegation of Asian ornaments as kitsch.

⁷⁷ Ricouer Paul, *Universal Civilisation and National Cultures in History and Truth* (Evanston: Northwestern University Press, 1965). pp. 271-284.

⁷⁸ Robert Powell, *Innovative Architecture of Singapore* (Singapore: Select Books, 1989), p.10.

3.2 Modernist Movement in Nation Building, its “monotonous buildings,”⁷⁹ and Asian ornament as backward. (1960-1973)

Before the 1960s, architecture in Singapore was diversified, eclectic and generally ornamented. Local hybrid architectural ornaments such as Anglo-Indian, Chinese Baroque, Straits-Chinese, and Mercantile Classicism styles characterized the buildings.⁸⁰ Shophouses and significant buildings such as the Great Southern Hotel (fig. 3.b) exemplified the use of Asian ornaments as a symbol of prosperity, and a means of association with the Chinese community.



fig. 3.a:
Shophouses along Keong Saik Road.



fig. 3.b:
Great Southern Hotel by Swan and McLaren in 1936

Upon gaining independence in 1965, Singapore entered its heroic stage of nation building. During this phase, the language of architecture shifted to one which echoed the assembly line of industrialization, characterised by speed, economy and quantity, and a penchant for uniformity and non-traditional aesthetics.⁸¹ Asian ornaments also began to be regarded as objects of frivolity and backwardness:

⁷⁹ Chen, ‘Direction of the Architect in the Eighties and Beyond’, p 2.

⁸⁰ Wong Yunn Chii, ‘Time Line of Singapore’s Architectural Trends’, *Singapore Architecture Magazine*, v.230 (Singapore: Singapore Institute of Architects 2007), p 134.

⁸¹ Tay Kheng Soon, ‘A World Class City Deserves a World Class Architecture’, *Conference Paper for the Inter-Faculty Conference on Towards Excellence in the Built Environment* (Singapore: 1987), p.3.

'...in the dichotomization of cultural perception, historical heritage, cultural religious, spiritual is identified with the past as backwardness and poverty, while the image of progress in the future is borrowed from...the West'.
– Director of World bank, Ismail Serageldin⁸²

As such, Asian ornaments in a host of traditional buildings have made way for the International style, believed to portray the nation's desired image of political and economic progress.⁸³ Emphasis was placed on the pragmatic approach of the renewal of the urban core; the demolition of a large number of historical buildings was considered 'a fair price to pay for progress'.⁸⁴

This image of 'progress' was indeed successfully portrayed by several projects which displayed effective, functional and efficient nuances of the nation's industrialization and advancement, such as the Singapore Conference Hall and Trade Union House (1965) (fig 3.c).⁸⁵ The Government's home-ownership Scheme (1964) introduced the Housing Development Board, Precinct North 1 HDB flats along Beach Road in 1966. The construction of a large number of reasonably priced apartments solved housing problems which citizens once 'struggled for roofs over their heads'.⁸⁶ However, this created a homogeneous urban landscape, similar to the 'white gleaming blocks of Zion'.⁸⁷ These white boxes destroyed the evolutionary development of localism and identity, while providing a 'superficial image of progress and modernity' (fig. 3.d).⁸⁸

⁸² Serageldin, Ismail, 'Space for Freedom', *Aga Khan Award for Architecture* (Butterworths Architecture, 1989), p.1.

⁸³ Tay, 'A World Class City Deserves a World Class Architecture', p 2.

⁸⁴ Choe, Alan FC. 'Objectives in Urban Renewal', *First congress of the Singapore National Academy of Science* (Singapore, Aug 1968).

⁸⁵ Wong Yunn Chii, *Singapore 1:1 City: A Gallery of Architecture & Urban Design* (Singapore: Urban Redevelopment Authority, 2005), p. 39.

⁸⁶ Liu Thai Ker, Chief Executive Officer, HDB. Foreword to *Designed for Living* (Singapore, 1985), p. 1.

⁸⁷ Loos, 'Ornament and Crime', p. 175.

⁸⁸ Lim, William SW. 'A Tale of the Unexpected'. *Paper for Special Commonwealth Association of Architects Session. International Union of Architects(UIA) Congress* (U.K, 13-17 July 1987), pp. 4-6.



fig. 3.c:
Singapore Conference Hall and Trade
Union House, 1965



fig. 3.d:
Housing Development Board apartment
at Precinct North 1, Beach Rd. 1966.

These planning ideas and architectural styles were firmly based on the theoretical and aesthetic frameworks of the Modern Movement.⁸⁹ However, this has been at the expense of our identity, and its tendency as a quantitatively oriented process which rejects traditional Asian buildings and ornaments.⁹⁰ This mirrored the statement of Loos, 'The evolution of culture is synonymous with the removal of ornament from objects of daily use'.⁹¹ However, the removal of traditional buildings and their Asian ornaments has transformed our culture to one that is 'weak in tradition and identity'.⁹²

3.3 Self- Actualisation, Conservation and the construction of Asian Ornament as Kitsch(1980s)

An interesting comparison here to be made with J. M. Richards in describing white walls as bogus modernism.

⁸⁹ Lim, William SW. 'Public Housing and Community Development- the Singapore Experience' in *MIMAR: Architecture in Development*, n.7 (Singapore, Jan-Mar 1983), pp. 319-327.

⁹⁰ Wong, Edward HY, 'The Search for Excellence in the Built Environment', *Conference Paper for the Inter-Faculty Conference on Towards Excellence in the Built Environment* (Singapore: 1987), p. 6.

⁹¹ Loos, 'Ornament and Crime', p.168.

⁹² Interview with Dr William Lim Siew Wai on the 12th August, 2008.

The acknowledgement of Asian ornaments' in local architecture in the late 1980s can be noted in the nation's self-actualisation phase.⁹³ Senior Minister Lee Kuan Yew's concerns about the negligence towards Asian architectural ornamentation are clear:

We made our share of mistakes in Singapore...in our rush to rebuild Singapore, we have knocked down many old and quaint Singapore buildings. Then we realized we were destroying a valuable part of our cultural heritage... demolishing what tourists found attractive...the value of these areas cannot be quantified in dollars and cents. We were a little late...⁹⁴

Seemingly, the adoption of a Modern approach to urban development has gentrified the urban landscape to isolated self-contained structures or a collection of buildings within a city block.⁹⁵

The drop in tourism was so severe in the 1980s, a Tourism Task Force was formed in 1984 to investigate the cause. It reported that:

The drop, in part, was due to the devastating effects of urban renewal...in the effort to modernize, Singapore has removed aspects of our Oriental mystique and charm which are best symbolized in old buildings and traditional activities...⁹⁶

To preserve our Asian identity, the Urban Renewal Authority (now Urban Redevelopment Authority) introduced the Conservation Policy in 1989. Although extensive guidelines to conserve traditional buildings were given, there were no specifications for the conservation and

⁹³ Abraham Maslow's primary contribution to psychology is his Hierarchy of Needs. Maslow contended that humans have a number of needs that are instinctoid, that is, innate. These needs are classified as "conative needs," "cognitive needs," and "aesthetic needs." "Neurotic needs" are included in Maslow's theory but do not exist within the hierarchy.

⁹⁴ Lee Kuan Yew, speech given on 13th March, 1995 cited in, *Recognising Quality Restoration 1994-1998* (Singapore: Urban Redevelopment Authority, 1998).

⁹⁵ Wong, Edward HY, 'The Search for Excellence in the Built Environment', *Conference Paper for the Inter-Faculty Conference on Towards Excellence in the Built Environment* (Singapore: 1987), p. 5.

⁹⁶ Tourism Task Force, Report of the Tourism Task Force (Ministry of Trade and Industry: Singapore, November 1984), p.6.

development of ornaments.⁹⁷ This abetted the production of Asian ornaments as artifice.⁹⁸ As designers were unfamiliar about the meanings and purposes of the ornaments, they opted to restore ornaments to their originality, to comply to the 'Maximum Retention' principle.⁹⁹ Despite a growing acceptance of Asian ornaments, their mere presence seems to be taken for granted in the construction of Singapore's Asian identity. The 'Oriental charm', perceived to be revitalized by bringing Asian ornaments back to their originality, was seemingly exploited as an exoticism in Asian culture.

Overseas craftsmen were hired to replicate original ornaments in buildings such as the River House at Clarke Quay, restored by RSP Architects Planners & Engineers in 1993. Renamed the 'Forbidden City', the historic building was transformed into an Oriental-themed discotheque, where 'silk lanterns provide dim lighting and the fragrance of jasmine fills the air'.¹⁰⁰ The scholarly scrolls on the walls used to represent the status of wealth and intelligence of its merchant owner, Tan Yeok Ngee, were restored and juxtaposed above two newly added, larger-than-life, stone warriors flanking the entrance of the club, welcoming bar-hoppers daily (fig. 3.e).

⁹⁷ Chan Yew Lih, Conservation Techniques, *Seminar on Conservation Techniques* (Singapore : Singapore Institute of Architects and Urban Redevelopment Authority, December 1988), pp. 1-15.

⁹⁸ unlike extensively documented structural features such as the wooden posts and beams – for which specific methods of renovation and regulations for re-invention were suggested

⁹⁹ 'Principle and Approaches', <http://www.ura.gov.sg/conservation/mod3.htm> (Accessed on 23rd July 2008).

¹⁰⁰ <http://www.asiarooms.com/travel-guide/singapore/things-to-do-in-singapore/nightlife-in-singapore/bars-&-pubs-in-singapore/bar-cocoon-in-singapore.html> (Accessed on 1st August 2008).



fig 3.e
Entrance of Forbidden City, formerly The River House, Singapore

With the lack of understanding of ornaments within the RIVER HOUSE, Asian ornaments were restored to originality in the hopes of preserving their identity – regardless of appropriateness to the new architectural programme and functions. The preservation of Asian architectural ornaments to portray the Asian aesthetic, juxtaposed with irrelevant programmes, re-introduced ornaments as objects of bad taste.¹⁰¹ The respective agencies, failing to emphasise and respect the values and meanings of the ornaments, perpetuated their construction as meaningless kitsch.¹⁰² Although this view is an evolution from the perception of Asian ornaments as thoroughly ‘backward and barbaric’, the notion of their irrelevance continues to linger within the contemporary architectural context.¹⁰³

¹⁰¹ Rejuvenation plans by URA for conserved sites such as Clarke Quay in 7 July 1989, involves the change of functions to draw economic returns. Programs such as discotheques and drinking pubs are layered over shophouses with ornaments which suggests good health and even to represent deities. Such are the insensitive actions taken which may be considered sacrilegious to the context of the historical ornaments.

¹⁰² A phenomenon of misplacing architectural ornaments. National movements such as Singapore 21 stresses on the importance of heritage buildings to create national identity through memory clearly is contradicted by preserving oonly the aesthetics of historical buildings and neglecting the appropriateness of functions.

¹⁰³ Tay Kheng Soon, ‘A World Class City Deserves a World Class Architecture’, p. 4.

3.4 Contemporary vernacular and media's rationalization of Asian Ornaments (Late 1990s – Present)

The misconception of Asian ornament as kitsch and the indulgence of architectonics in the search for 'contemporary vernacular' architecture has propelled the treatment of ornaments in the 1990s into another realm of re-interpretation: the rationalization of Asian ornaments.¹⁰⁴

With Singapore's growing affluence,¹⁰⁵ and its own promotion as a nation of 'high growth, high quality of life, high standard of living in attracting foreign investors as a global hub',¹⁰⁶ design approaches shifted to the phase of corporatization¹⁰⁷ where expensive finishes and exaggerated expression are regarded as 'outstanding design'.¹⁰⁸ Desiring to project the image of a global modernized city, and to address pertinent issues of our Asian identity, designers have begun reinterpreting our cultural heritage in terms of contemporary idioms.¹⁰⁹

One example is the Chee Tong Temple designed by Akitek Tenggara, which displays technological and environmental considerations while innovating traditional design. It is arguably the most controversial temple built to date. Adorned by a pyramidal steel roof, it is extremely bright because of the permeable light structure which was designed as a climatic response. It is a refreshingly intellectual and unintimidating temple to non-Buddhists, due to its

¹⁰⁴ Chen, Kenneth KL, 'Direction of the Architect in the Eighties and Beyond', .p 6.

¹⁰⁵ Annual National Growth of average 7.7% indicated in Economic Indicator Singapore, <http://www.singstat.gov.sg/stats/keyind.html#keyind>, (accessed in 2nd August 2008)

¹⁰⁶ Lee Hsien Loong, 'Crucial Role the Productivity Movement', *Speech at The 2001 Productivity Campaign Rally on 5 September 2001*.

¹⁰⁷ Wong, Yunn Chii, 'Time Line of Singapore's Architectural Trends', *Singapore Architecture Magazine*, v.230 (Singapore: Singapore Institute of Architects 2007), p. 137.

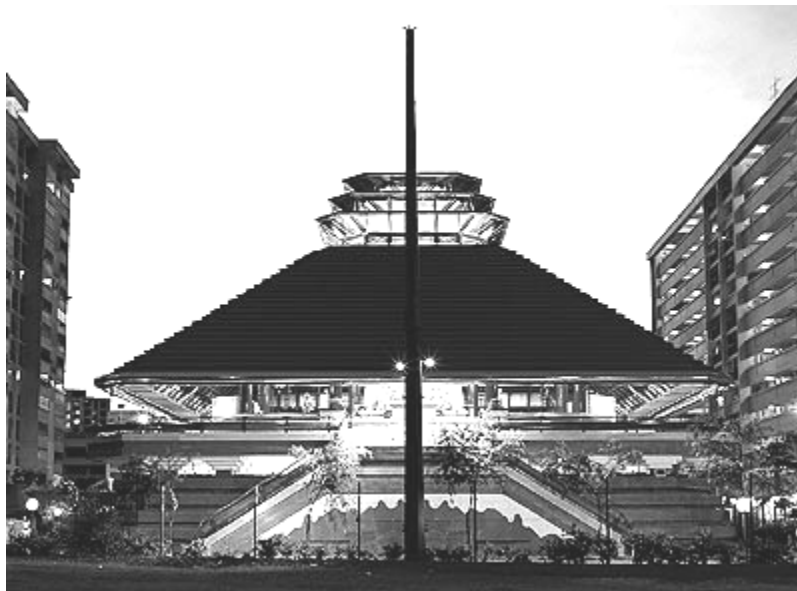
¹⁰⁸ Chen, Kenneth KL, 'Direction of the Architect in the Eighties and Beyond', p. 6.

¹⁰⁹ A call for creativity by the government to express culture and arts of Singapore since 1990s in numerous campaigns such as the Singapore 21, Singapore Heartbeat and Uniquely Singapore.

high level of technology and detailed resolution of climatic issues (fig. 3.f). The lack of Asian ornaments in the temple have been deemed as unreligious by some Buddhists.¹¹⁰

Richard Ho shares the view of the Buddhist community, saying:

*What is wrong (with the use of traditional ornaments)? If the borrowed images provide a connection for the users of the space to a particular activity that they went to the space for. Why shouldn't the images be used?*¹¹¹



Chee Tong Temple in Hougang, Singapore.

Ho's statement, when interpreted shallowly, may suggest another phenomenon: the mere presence of Asian ornaments is believed to be adequate in constructing an Asian identity. Influential magazines such as *Trends* and *Home and Decor* portray Asian ornaments as essential embellishments in constructing the eclectic and Oriental style. With descriptions such as 'you can have a piece of that *uber* hip Oriental chill out home you always wanted',¹¹² affixed to

¹¹⁰ Powell, *Innovative Architecture of Singapore*, pp. 25-27.

¹¹¹ Richard Ho K. F., What Qualifies as Successful Architecture, in the *Sunday Times* (Singapore Press Holdings, April 22 1994).

¹¹² Arthur Sim, " A Taste of Orient at Home', *Home and Décor* (Singapore: Singapore Press Holdings, May 24th Issue 2004), p. 36.

pictorials depicting ornaments from China or Bali, it is no surprise why ornaments are perceived as superficial objects. The critique here is against the transient, stylistic image of ornaments portrayed in these journals. The significance of Asian ornaments is lost on readers when Chinese bamboo screens are described as ‘uber hip’, without mention of the intricate crafting undertaken to convey meanings while serving as visually pleasing thresholds of privacy in the Chinese culture.

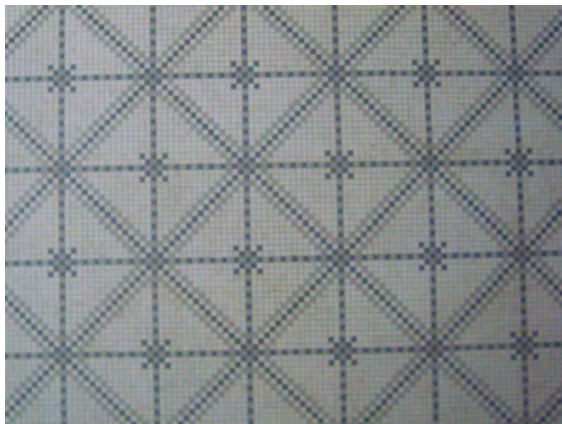
Notably, Asian ornaments are still perceived as relevant in constructing an Asian identity. But with their continued portrayal as kitsch, while overtly ‘high-tech’ buildings replace traditional ones, designers continue to seek new approaches to re-invent ornamentation. Recent trends reveal an attempt to resolve the prolonged paradox of retaining Asian ornaments within our modernized Western society.¹¹³ Like the contemporary vernacular approach, designers today apply a high level of technical and professional skill onto the rationalisation of Asian ornaments, into features such as shading devices and structural components. Although such approaches admittedly bring a new layer of function, and perhaps sophistication, to the ornaments, these tend to be realised through the ‘acrobatics’ of excessive architectonic.¹¹⁴ Such methods are antithetical to the need to portray Asian ornament as non-kitsch; the addition of functions has so far only reinforced their irrelevance, and belittles their inherent meanings and representations.

¹¹³ Chen, ‘Direction of the Architect in the Eighties and Beyond’, p. 5.

¹¹⁴ Chen, ‘Direction of the Architect in the Eighties and Beyond’, p. 6.

Chapter 4.

The Rationalisation of Mengkuang Pattern



4.1 The *Mengkuang* Patterns of the Singapore Conference Hall and the Esplanade

Asian ornaments in Singapore's architectural history have often received mixed criticism from architectural critics and the public. Some were perceived as kitsch, while others appeared successful in the construction of meaning, as deemed appropriate to their context of application. Two examples that clearly illustrate this mixed response are the Singapore Conference Hall, and the Esplanade - Theatres by the Bay.

Both buildings are hailed as 'milestone[s] of innovation'¹¹⁵ of their respective eras. Although forty years lie between their respective dates of construction, both the Conference Hall (completed in 1965), and the Esplanade (completed in 2002), employ the traditional *mengkuang*¹¹⁶ pattern in professed hopes of portraying our Asian heritage. Although this pattern can be clearly discerned in both projects, an interesting observation is forwarded: the Esplanade fails to relate its patterns to its visitors as compared to the Conference Hall. This brings into question whether such traditional patterns are still relevant today, or if it is the method of rationalising the ornaments that affects its legibility.

A series of interviews with the respective chief designers of the Conference Hall and Esplanade, studied in conjunction with media and architectural coverage on the two buildings, shows two different processes of approaching *mengkuang* patterns. Juxtaposed with visitor's reviews, this reveals how each approach contributes to the eventual perception of such patterns as either an architectural feature which conveys Singapore's cultural heritage, or as an irrelevant item. A

¹¹⁵ Wong Yunn Chii, *Singapore 1:1 City: A Gallery of Architecture & Urban Design* (Singapore: Urban Redevelopment Authority, 2005), pp. 40-43.

¹¹⁶ Traditional Malay weaving pattern, the significance of which will be elaborated in the following subchapter.

comparison of these two examples highlights the need for a sensitive approach to the use of Asian ornamentation.

4.2 *Mengkuang* Pattern - its Appeal



fig. 4.b: Traditionally woven rice baskets for rice collection and wedding.

The engagement of *mengkuang* patterns in both buildings was intended as a tribute to Singapore's Malayan roots. Historically, this pattern is derived through the habitual weaving of *mengkuang* leafs (*pandanus*) into mats, baskets and hats by indigenous tribes of Western Malaysia (fig. 4.b).¹¹⁷ Due to the long history of cultural exchange within South-east Asia, the patterns observed today are varied and hybridised.¹¹⁸ However, these indigenous arts and crafts patterns carry important symbolism, while functioning as objects of everyday use. Abstract motifs of flora and fauna, such as the *tapak harimau* (tiger's claw), and the *kepala gajah* (elephant head), relate folklores and legends from the Malayan Archipelago. These motifs have come to represent auspicious symbols thought to bring luck, success, and prosperity. These

¹¹⁷ Examples include the Rawa tribes in Perak and the Mah Meri are one of the 18 tribes of [Orang Asli](#) living in West Malaysia.

¹¹⁸ Zakiah Ahmad, *Crafted in Malaysia* (Malaysia: Malaysian Handicraft Development Corporation, 2007), p. 59.

patterns through the dexterity of their craft, reflect on the locals' beauty, courage, and strength (fig. 4.c).¹¹⁹

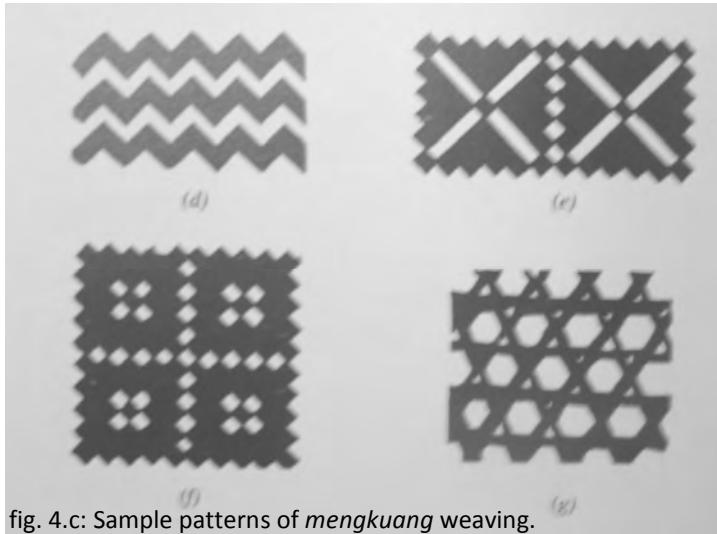


fig. 4.c: Sample patterns of *mengkuang* weaving.

Mengkuang patterns were chosen as a design feature for the Conference Hall because they embodied symbolisms which mirrored Singapore's status as an emerging nation of Malay heritage.¹²⁰ The design, which won a 1961 nation-wide competition because of its 'avant garde' approach, was created by Architects Team 3, led by Lim Chong Keat, William Lim Siew Wai and Chen Voon Fee. As a space intended for multiple international events, C. K. Lim's position was that the Conference Hall 'should not only exhibit Singapore's economical and political stability, but also demonstrate our national identity'.¹²¹ C.K. Lim considered *mengkuang* patterns appropriate because of the 'familiarity of the locals with the aesthetics of the ornament'.¹²² Furthermore, this building would house the National Trade Union Congress (NTUC) Secretariat,

¹¹⁹ Ahmad, *Crafted in Malaysia*, pp. 59-60.

¹²⁰ Wong, *Singapore 1:1 City: A Gallery of Architecture & Urban Design*, p. 12.

¹²¹ Interview with William Lim Siew Wai on the 12th August, 2008. Mr Lim explained that the use of the *mengkuang* patterns was Mr Lim Chong Keat's idea.

¹²² Interview with William Lim Siew Wai on the 12th August, 2008.

whose role was to emphasise the ‘importance of workers’ contributions in realizing the government’s emphasis on economical prosperity.’¹²³ The *mengkuang* patterns, traditionally woven by village craftsmen to express their ‘success and prosperity’, represented NTUC’s emphasis on collective labour (fig. 4.d).

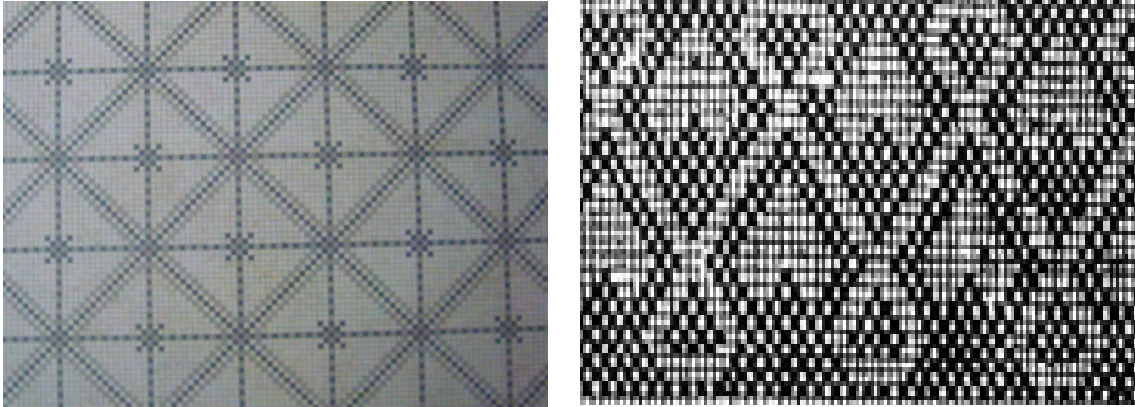


fig. 4.d

Similarities of the mengkuang motif in the walls of Singapore Conference Hall(left)

and traditional motif (right)

For the Esplanade, the design team from DP Architects, led by Mr Vikas Gore, took similar inspiration from the ‘geometric weaving patterns found in Southeast Asian baskets and mats to promote Singapore’s national identity.’¹²⁴ Replacing the Singapore Arts Centre, the Esplanade aimed to become one of the world’s top performing arts centres while propelling Singapore’s growth in its artistic and cultural dimensions.¹²⁵ It was thus essential for the project of such influential significance to showcase the national identity of Singapore.

*Adopting the identity of the woven baskets was necessary to construct an iconic building. With a building of such a large cost (600 million SGD), the theatre will have a great influence in the nation. Thus the Esplanade needs to be an icon which embodies Asian identity to illustrate our tradition.*¹²⁶

¹²³ Wong, *Singapore 1:1 City: A Gallery of Architecture & Urban Design*, p. 40.

¹²⁴ Erin Ng, Glenn Lerh, Robert Teh, *DP Architects Pte Ltd* (Singapore: DP Architects Pte Ltd, 2007), p. 43.

¹²⁵ Michael Wong Parkshong, *The Esplanade Co Ltd Annual Report 02/03* (Singapore, 2003), p.11.

¹²⁶ Interview with Vikas Gore on the 6th August 2008.

The reference to *Mengkuang* patterns was considered a means by which Singapore's distinctive culture could be conveyed (fig 4.e).¹²⁷ The association of this pattern with the expression of beauty and tradition through technical dexterity was also analogous to ideas of a new but relevant aesthetic of technological triumph, integral to the Esplanade's design. Besides, the Esplanade was designated as 'a performing arts centre for everyone,'¹²⁸ rather than being exclusive to the affluent. Basketry, generally regarded as a folk craft, was 'associated with the commoners'.¹²⁹ As such, the *mengkuang* pattern was perceived as an 'essential feature to relate the Esplanade with people of all walks of life.'¹³⁰

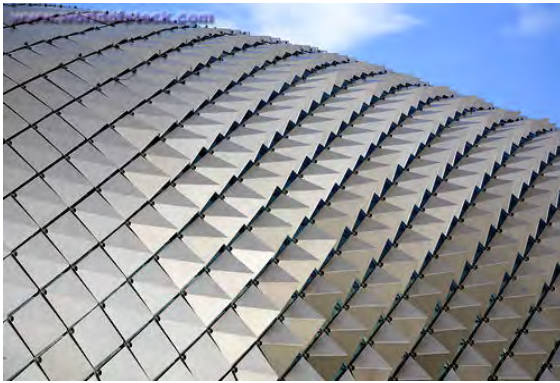


fig. 4.e:
Similarities of the mengkuang weaving on the Esplanade's roof(left) and traditional weaving detail (right).

It is evident from these two buildings that *mengkuang* patterns are perceived to be significant in aesthetically portraying architecture with an Asian identity. Despite four decades of technological and economic progress, the ability of such patterns to suggest Singapore's historical roots and to evoke beauty and symbolism, seem as significant now as in the 1960s. As such, the Conference Hall and the Esplanade both put forth the notion that certain Asian

¹²⁷ Ng, Lerh, Teh, *DP Architects Pte Ltd*, p. 43.

¹²⁸ Dr K U Menon, 'Esplanade- Theatre on the Bay', *create.connect@sg: Arts, Media and Infocomm in Singapore* (Singapore: Ministry of Information, Communications and the Arts, 2002), p. 59.

¹²⁹ Sulaiman Othman, Haji, *The Crafts of Malaysia* (Singapore : Editions Didier Millet, 1994), p.174.

¹³⁰ Interview with Vikas Gore on the 6th August 2008.

ornaments remain an irreplaceable aspect of portraying our Asian identity within architectural design.

4.3 Controversy of Response to the *Mengkuang* Pattern.

However, a survey¹³¹ of visitors' responses to the Esplanade and Singapore Conference Hall reveals an interesting reaction to ornamentation in the respective buildings. 94% of visitors to the Conference Hall noted the presence of *mengkuang* patterns and felt that such patterns were relevant. In the Esplanade, 92% of visitors failed to identify any *mengkuang* patterns. When informed, 78% felt that the weaving should not have been used if it was the inspiration for the design of the sun-shading. With criticism of the Esplanade likened to a 'durian', 'ungainly shroud', and 'housefly's eyes',¹³² it is evident that the *mengkuang* pattern does not seem like a relevant ornament for the Esplanade (fig. 4.f).



fig. 4.f:
Similarities between the Esplanade (left) , housefly eyes (middle) and durians (right) can be observed.

¹³¹ 50 visitors to the Esplanade were interviewed on the 2nd and 9th of August.

¹³² Various descriptions of the Esplanade obtained from writer's survey on Esplanade. (See appendix)

Noticeably, the Esplanade demonstrates a more abstract re-interpretation of the woven basket. Instead of expressing the *mengkuang* pattern directly, the pattern has been re-interpreted and seemingly rationalised into sun-shading devices. With this observable difference between *mengkuang* patterns in SCH and Esplanade, the appropriateness of rationalization is questioned as it seems to have led to the portrayal of ornamentation as kitsch in the Esplanade.

4.4 The Weaving of *Mengkuang* in the Singapore Conference Hall



Fig. 4.8
Exterior views of the Singapore Conference Hall.

Incorporation of the *mengkuang* pattern

The Singapore Conference Hall is regarded as a canonical object of Singapore's modernism, while portraying the nation's traditional heritage.¹³³ It epitomised Singapore's modernism by celebrating economic and functional advancement through its 'brutalistic' architectonic expression, while addressing its tropical context with a large cantilevered roof. Amidst these modern approaches in design, an antithetical approach of ornamentation was undertaken to

¹³³ Wong, *Singapore 1:1 City: A Gallery of Architecture & Urban*, p. 33.

highlight the Singapore's Asian identity. While this seems incongruous to the modernist approach, ornamenting the Conference Hall with traditional motifs of the *mengkuang* pattern was essential for the architect to emphasise Malayan influence on Singapore's culture.

*The mengkuang pattern was to remind the local and inform the foreigners of Singapore's cultural roots even in the context of intense globalisation and economical development.*¹³⁴

Set to celebrate architectonics and honesty in construction techniques,¹³⁵ it is somewhat contradictory that the Conference Hall is ornamented with motifs from traditional baskets. Furthermore, these motifs were not reduced nor rationalised into their fundamental forms. Instead, the *mengkuang* patterns were translated through the use of glass mosaics tiles, clad on interior walls of the building (figure 4.h). Such an approach clearly challenged the ethos of 'Brutalism' and also the predominant attitude of disregarding ornaments as superficial excess.



134
135



2th A
ectur



fig. 4.h.

Mengkuang patterns manifested as mosaic on walls of the performance halls bring vibrancy to the spaces.



This pattern is manifested as glass mosaics on the exterior surfaces of the main concert halls. Sandwiched between the two halls is the entrance to the concourse, conceived as a large social gathering space. Visitors entering the building are immediately embraced by a kaleidoscope of patterns, colours and rhythms derived from *mengkuang* patterns. Sleek and simple lines of ‘Brutalist’ architectonics further accentuate the vibrant halls as focal points of the building. As described by Wong Yunn Chii, the ‘modernist austerity of the Singapore Conference Hall is offset by details embellished in local materials and motifs, to highlight “indigenous patterns and colours” of “Malayan theme”’.¹³⁶

¹³⁶ Wong, *Singapore 1:1 City: A Gallery of Architecture & Urban*, pp. 42-43.

Labelled as the representation of Singapore's urbanity and cultural traditions, the Conference Hall 'celebrates modernism while looking back to its past'.¹³⁷ Visitors' ability to relate to 'the past' through the *mengkuang* patterns has validated the significance and relevance of such ornamentation in this building. The construction of ornament as a relevant attribute was realized because of the designers' understanding of its symbolisms, coupled with a sensitive treatment of the ornament, beginning at the initial stages of design.

Design Process of the Singapore Conference Hall

*An architectural ornament of real value is one which is deliberately integrated in the early stages of design. Such feature assigned as an essential aspect in the building, contributes to the entirety of the design, may it be aesthetical or functional. In this case, the mengkuang completes the architecture of the Singapore Conference Hall.*¹³⁸

The *mengkuang* pattern was implemented in the early stages of design as it was considered an integral aspect of the Conference Hall even during conceptual design stages.¹³⁹ According to S. W. Lim, ornamentation can remain relevant if its design evolves and develops with the rest of the building. As discussed by Semper that ornamentation was seen to be crucial for the completion of a building, the early inclusion of *mengkuang* pattern as part of the design allowed for its exploration in search of the most appropriate design approach.

As a deliberate and permanent inclusion in the building, the *mengkuang* patterns had to be rationalised. *Mengkuang* leafs, a natural material used to weave the baskets, are considered easily degradable. C. K. Lim's solution was to interpret the rhythms and proportions of the

¹³⁷ Wong, *Singapore 1:1 City: A Gallery of Architecture & Urban Design*, p. 33.

¹³⁸ Interview with William Lim Siew Wai on the 12th August, 2008.

¹³⁹ Interview with William Lim Siew Wai on the 12th August, 2008.

traditional motifs using glass mosaic to replicate the patterns. Warm coloured tiles resembling the original colours of natural dyed used in tradition woven objects were selected. Bloomer's semiotics of ornaments has been realised by retaining the rhythm and proportion of the pattern, which makes it recognisable.

It provides for the need to express the Malayan identity, without losing its meanings by being designed like all other parts of the buildings, rationalized, but yet is kept in the same spirit of the building's honesty and rawness.¹⁴⁰

This approach in the 'honesty' of the pattern's expression not only pays homage to the ornament but adheres to a "Brutalist" style of interpretation. The result is a harmonious unification of 'backward' indigenous patterns within an *avant-garde* building. The appropriate and succinct rationalization of the ornament, has propelled the significance of the Conference Hall as a triumph of technological achievement while reminding visitors of the influence of Malayan arts and crafts on Singapore's cultural roots.

Significance of *Mengkuang* Pattern to Singapore Conference Hall Today

The relevance of the patterns is still observed today in the renovation of the Conference Hall in 2002. With a twenty-two million dollar budget to renovate for the Singapore Chinese Orchestra's use, several essential features were changed and altered. What remains unchanged are all the *mengkuang* patterns on the halls, maintained and restored to their original state. The significance of these ornaments is evident in the multitude of photographs featuring famous

¹⁴⁰ Interview with William Lim Siew Wai on the 12th August, 2008.

visiting artists posing with equally charming patterns (fig 4.i).¹⁴¹ In addition, a visit in the SCO website¹⁴² reveals the same *mengkuang* patterns being used as the main icons.



fig. 4.i:
Mengkuang patterns as background for VIPs such as maestro conductor Tsung Yueh, at the Singapore Conference Hall

This phenomenon reaffirms the notion that when Asian ornaments are sensitively rationalised, they transcend the realm of architectural design through time and space. It can also be seen that the patterns are not only an expression of Singaporean culture and heritage, but have come to be symbolic of, and immediately associated with, the Conference Hall itself. Sensitively used, such ornamentation has been accepted as an intrinsic part of the architecture, and has imparted a unique identity to the building. The significance of the ornament has even impinged on the identity of the user-groups of the space.

¹⁴¹ Pictorial records of SCO from 2003-2008 along the walls of Singapore Conference Hall.

¹⁴² <http://www.sch.org.sg/> (Accessed in 25th June)

4.5 The Weaving of the Esplanade as a Durian?



fig. 4.j:
Woven basket from Malaysia



fig. 4.k:
Exterior view of the Esplanade, 2008



Conceptualised in 1989, the Esplanade has commonly been called the ‘durian spikes’;¹⁴³ its iconic status largely been due to its complex sun shading device. Its designers allude this form to the weaving of *mengkuang* leaves in baskets. In the Esplanade, such weaving was articulated as a three-dimensional roof pattern, such that the building, in aerial view, resembles a basket (fig. 4.j). Since this image is commonly seen in posters and postcards (fig .4.k), it is ironic that visitors fail to identify this woven pattern. Such a phenomenon seems to contradict the extant observation that architectural ornaments, when reinterpreted in a manner that retains their aesthetic integrity, remain identifiable and engages the user. This section explores whether this is a result of the irrelevance of the pattern in today’s context, or the inappropriate manner in which the *mengkuang* pattern was rationalised.

Conceptualisation of the weaving

¹⁴³ Michael Wong Parkshong, *The Esplanade Co Ltd Annual Report 02/03* (Singapore, 2003), p.11.

In the Esplanade, *mengkuang* patterns were not intended in the initial stages of design. With the brief requiring designers to maximise the view of the Singapore River, a full-glass roof was envisioned initially. In Singapore's tropical climate, this feature required an efficient shading system to minimise glare and to improve energy efficiency. DP Architects and Atelier 1, co-engineered a complex mesh of sun shades as a solution to this problem (fig. 1).¹⁴⁴ During construction in 2001, architectural critics and the public both expressed that the Esplanade was too Westernised and did not reflect Singapore's Chinese, Indian and Malay heritage¹⁴⁵. At this time, the media began to promote the roof system as a derivation from a traditional woven basket as a means to construct an Asian identity for the theatre.

*...adopting the identity of the woven baskets was necessary to construct an iconic building. With a building of such a large cost (600 million SGD), the theatre will have a great influence in the nation. Thus Esplanade needs to be an icon which embodies Asian identity to illustrate our tradition.*¹⁴⁶

Furthermore, the controversy on the use of the sun shades described as the 'ungainly shrouds'¹⁴⁷ was thought to be justified and more easily understood by the public if it was likened to a basket. The public's negative response to the woven baskets of the Esplanade is possibly the consequence of post-rationalising the sun-screens in an attempt to adopt the *mengkuang* pattern as a justification of the roof form.



August 2008.
fig. 4.1:
Sun shading device of the Esplanade.
<http://www.architecture.about.com/cs/greatbuildings/a/esplanade.htm> (accessed 5th August 2008)

¹⁴⁷ 'The Esplanade, A new performing arts centre change the skyscape in Singapore', <http://architecture.about.com/cs/greatbuildings/a/esplanade.htm> (accessed 5th August 2008)

What Basket?



fig. 4.m
Aerial night view of Esplanade shows a woven roof



fig. 4.n:
View from user's eye level at Esplanade.

However, this assumed basketry is only observable in aerial views of the Esplanade and photographs which have been used in its advertising media (fig 4.m) – these share common a dramatic aerial view, displaying the weaving effect of roof. As the woven basket was not a deliberate intention of the design, its weaving effect was not considered from the point of view of the users, and naturally not expressed in its elevation or interiors. As such, visitors to the Esplanade, who usually encounter this building at street level, fail to see the weaving patterns commonly hyped by media or the architects (fig. 4.n).

Furthermore, an extensive search for this typology of woven baskets reveals one such basket used by indigenous tribes from West Malaysia¹⁴⁸. (fig 4.o). The obscurity of this type of basket is likely the reason why most users and viewers fail to recognise its application on the roof of the

¹⁴⁸ Ahmad, *Crafted in Malaysia*, p. 62.

Esplanade. As such, visitors are presented with large spiked sun screens, which remind them of a local fruit rather than a traditional craft. Also, the employment of an abstract form, as opposed to abstracted rhythms and proportions that convey meanings, does not suggest the association of the ornament with symbolisms tied to culture and meanings.

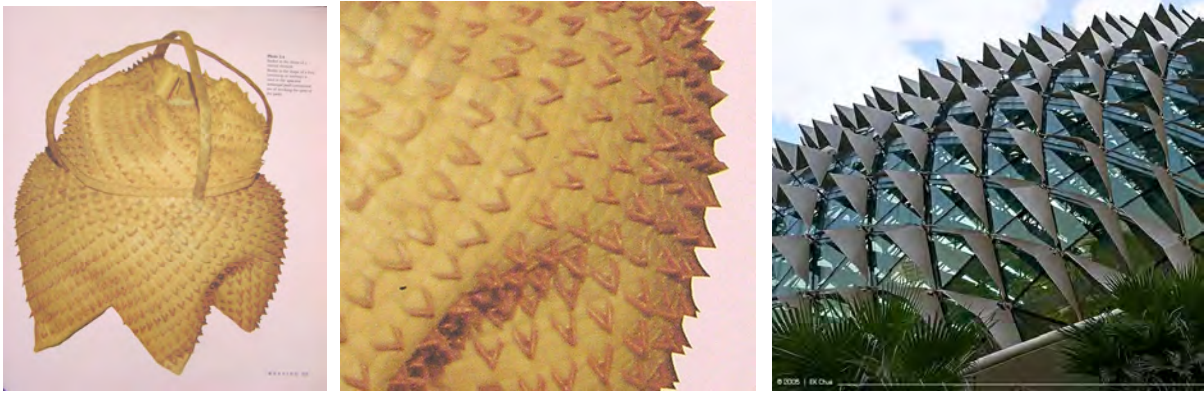


fig. 4.0:
A rare basket shaped like a soursop with spikes, used in the *upacara samangat padi* (a rice ceremony for invoking spirits of the paddi fields) seems to be the only basket that bears most resemblance to Esplanade.

Considering how visitors manage to relate with the patterns in the Conference Hall, it would thus be unfair to deduce that the Esplanade failed to evoke its Asian identity because the *mengkuang* pattern no longer holds symbolic significance for visitors today. Rather, it is probably the failure to integrate the ornamental pattern within the design during the early stages of the design process, which prevents visitors from recognising the patterns.

Creation of Wrong Expectations

Although it is important to construct an identity that relates to Singapore's traditions, the act of post-rationalising the sun shades as an interpretation of a woven basket can be detrimental. With apparent insensitivity in its expression, this casts doubts on the designer's ability to convey

design intentions experientially. More critically, it perpetuates the notion that traditional Asian ornaments are no longer significant and valid in our lives.

The sun shades are still promoted as being inspired by *mengkuang* patterns in several journals and articles.¹⁴⁹ The maintenance of such a post-rationalized stance on this ornament is not only insensitive to the integrity of the *mengkuang* pattern, but also falls victim to the superficial approach of 'ornamenting identity' in which architects embellish designs with kitsch ornaments, or adopt irrelevant ornaments in an attempt to draw on its cultural symbolism. By adopting an Asian ornament, the Esplanade corroborates the existing attitude in which designers treat ornaments at face value, believing that the ornament has been fully articulated even without integrating it with the design.

4.6 Conclusion

These two examples reveal that even when there is a need to demonstrate political and technological developments, the engagement of ornaments can potentially aid in constructing an Asian identity. If rationalized and abstracted appropriately, as demonstrated in Singapore Conference Hall, ornamentation may even be relevant after many decades.

When ornamentation, and its associated 'identity', is adopted with inadequate understanding however, this provokes concerns about the relevance of Asian ornamentation. The Esplanade is

¹⁴⁹ Ng, Lerh, Teh, *DP Architects Pte Ltd*, p. 43.

2. Dr K U Menon, 'Esplanade- Theatre on the Bay', *create.connect@sg: Arts, Media and Infocomm in Singapore* (Singapore: Ministry of Information, Communications and the Arts, 2002), p. 60.

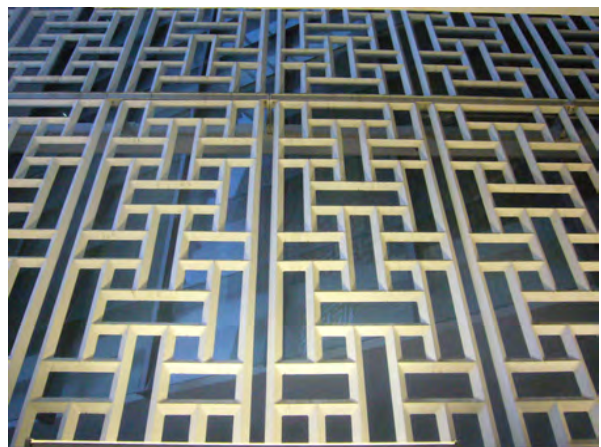
3. <http://www.geocities.com/shinyeesiek/esplanade.htm> (accessed 2nd August 2008)

4. 'The Esplanade, A new performing arts centre change the skyline in Singapore', <http://architecture.about.com/cs/greatbuildings/a/esplanade.htm> (accessed 5th August 2008)

not an example that shows how over-rationalisation has overwhelmed the *mengkuang* pattern, but instead demonstrates how this pattern has been misplaced by designers and marketing agencies and became misunderstood by the public. Thus, it would help to clarify that there was no Asian ornamentation incorporated in the Esplanade design, so that such ornamentation will not be further 'criminalised'.

Chapter 5.

The Rationalisation of the Islamic Symbols in Assyafa'ah Mosque



5.1 The Rationalisation of Ornaments in the Assyafa'ah Mosque

The manifestation of Asian ornaments as functional aspects of architecture in Singapore today may be exemplified in the Assyafa'ah Mosque. Commissioned by the Islamic Religious Council of Singapore (MUIS), and built in 2004, the Mosque was designed by Forum Architects under Tan Kok Hiang. This Mosque has received positive critiques from around the world.¹⁵⁰ The Architecture + Awards 2004 Master Jury described it as a 'courageous design solution for one of the most traditional building types that has developed little over the centuries.'¹⁵¹ Within the architectural community, this building is perceived to have broken away from tradition to broaden its appeal to non Malay Muslims.¹⁵²

However, ornamentation within the Mosque features prominently despite its reputation of being modern and non-traditional; ornaments are perhaps the most painstakingly designed features of this edifice. However, the ornaments are engaged through a process of rethinking, re-invention, and possibly even repression. This chapter seeks to understand the context and attitudes towards architectural ornaments in the design of this Mosque. Opinions of the mosque from the client, the Singapore Islamic community and the architect, will contribute to an understanding of the 'de-arabisation'¹⁵³ of the mosque, and the perceived need to rationalize its ornaments.

¹⁵⁰ List of publications include Singapore Architect, v.233, 2005 p.49, a+umagazine, 'Making Waves in South East Asia', v.423, 2005, p. 46 and Olivia McDowell, 'Mosque For Many Cultures', *Specifier Magazine* v. 79 (Chatsworth, 2005).

¹⁵¹ Certificate for Architecture+Awards 2004 Design for a New World awarded to Forum Architects (Ref. Resource 01).

¹⁵² Darlene Smythe, 'Culture and identity', *SA magazine*, v. 223 (Singapore Institute of Architects, 2005), p. 49.

¹⁵³ Term proposed by Mathew Lai Chee Kai as the approach in Assyafaah Mosque design in his dissertation, *Assyafa'ah Mosque in Dialogue: Constructing Fetishes in the post 9/11 context* (National University of Singapore, 2005).

It will be demonstrated that, in the process of projecting a modernized Muslim identity, ornamentation has been rationalized within Assyafa'ah Mosque to an extent that its symbolic and cultural roles have been repressed. As a result, the newly imposed functions and concerns for rationality undermine the meanings of such ornaments, causing them to lose their original significance and integrity.

5.6 The Assyafaah Mosque

The Assyafaah Mosque was built to replace the Sembawang Naval Base Mosque at 1 Admiralty Lane in Woodlands. With an area of 3350sqm, the mosque is able to accommodate up to 4000 people during major praying occasions.¹⁵⁴ The exterior of the Mosque is described as 'commercial' or 'deceiving',¹⁵⁵ arguably projecting a utilitarian image which does not convey the aesthetics of a religious building.¹⁵⁶ All four storeys of the Mosque are clad with glass curtain walls, and extensively patterned with 'arabesque' aluminium screens configured in overlapping rectilinear shapes. A coat of white paint finishes all the exterior walls of the Mosque.



¹⁵⁶ Mathew Lai Chee Kai, *Assyafa'ah Mosque in Dialogue: Constructing Fetishes in the post 9/11 context*, (National University of Singapore, 2005).

fig. 5.a:
Exterior views of the Assyafa'ah Mosque

Perhaps the most recognizable feature of this building as a Mosque is the Islamic crest and star situated four meters below the peak of the symbolic minaret. Its position is a compromise between the architect's desire to remove the symbol, and MUIS' insistence that this symbol be retained at the peak of the minaret.¹⁵⁷ The traditional dome is absent, but the integration of complex arches within the basic post-beam structure of the mosque is observed in the heavily sculpted concrete arches of the praying hall.



The interior of the Mosque such as the prayer halls, ablution areas and multipurpose halls, are strategically arranged around an open and naturally-ventilated prayer hall. Walking from the ablution room, the curvilinear arches lead one's eyes to this triple volume hall. Despite the absence of Arabic inscriptions of the *Quran* on the walls of the prayer hall, an arabesque quality is implied through the patterned screens, evocative of the arabesque *zellij* pattern¹⁵⁸ seen in other local Mosques. These screens inscribe their shadows into the voluminous prayer space, decorating the walls and floors from eight in the morning until four in the afternoon¹⁵⁹. Seemingly, such an abstraction of Islamic symbols has allowed the Assyafa'ah Mosque to embody the identity which MUIS and Tan hoped it could portray.¹⁶⁰

5.7 contemporary Islamic need to de-ornament

The need for the Assyafa'ah Mosque to dissociate from symbols of Islamic tradition arose from the need to distance itself from the religion's fundamentalist beliefs.¹⁶¹ Coupled with the

¹⁵⁸ An Islamic pattern derived from the composition of geometries. It is an expression of Islamic teachings and will be elaborated further in this chapter.

¹⁵⁹ Interview with Mr Muhammed Shareef, the caretaker, of the Mosque on the 8th July 2008.

¹⁶⁰ Muis e-Publication, v. 4, http://www.muis.gov.sg/eServices/dg_newsletter.aspx (Accessed on 28th June 2008).

¹⁶¹ Mathew Lai Chee Kai, *Assyafa'ah Mosque in Dialogue: Constructing Fetishes in the post 9/11 context* (National University of Singapore, 2005).

government's desire to cultivate a multi-racial society, a redefinition of the Singapore Islamic architectural identity was undertaken. PERGAS (Singapore Islamic Scholars and Religious Teachers Association) addressed the need for the Muslim community to integrate effectively with the economic and social context of Singapore,¹⁶² creating pressures for the Mosque to play down the specificity of the religion so that it could appeal to non-Muslim users.¹⁶³ MUIS agreed that the Assyafa'ah Mosque should adopt an architectural style characterised by contemporary forms, instead of mimicking historical Mosque typologies of Arabic or Malayan origins (fig 5.c).



fig. 5.c: Singapore Sultan Mosque with aesthetics of conventional mosques such as the moghul dome and minaret and Islamic writings in the interior of the *mihrab* of Hagia Sophia, Istanbul, Turkey.

However, MUIS also required the architect to retain Islamic symbols such as the dome and minaret.¹⁶⁴ Consequently, these paradoxical directives from MUIS have led to an interesting 'de-

¹⁶² Convention held were held in response to the relation between the values and doctrines of the Muslim community and the larger context of Singapore's economic, social and political context.

¹⁶³ Muhamad Ali, 'Moderate Muslims thrive in Singapore', *The Straits Times Review* (Singapore Press Holdings, August 31, 2005), p. 21.

¹⁶⁴ Interview with Mr Tan Kok Hiang at Forum Architects on the 18th July 2008.

arabisation¹⁶⁵ of the Assyfa'ah Mosque, reinforced by Tan's perception of a Mosque, and his view on architectural ornamentation. However, his challenge was to reflect the belief system of the Islamic religion without literally using, or having any historical basis, in terms of design.

*Many Mosques in Singapore use Muslim traditional symbols, such as the dome, arch, and the minaret, which stem from Mughal, Ottoman, Mamluk or Safavid cultures which have little relevance to the cultural context of Muslims and Malays in Singapore.*¹⁶⁶

As such, we see the abstraction of ornaments in Tan's approach, as he re-invents Islamic ornaments through an in depth understanding of their meanings, while consciously ignoring the historical context. To Tan, such an approach has generated a design based on an understanding of the Islamic religion, rather than on precedents of Mosques in Asia. Ultimately Tan considers this a more appropriate approach in designing ornaments.¹⁶⁷

¹⁶⁵ Darlene Smythe, 'Culture and identity', *SA magazine*, p. 49.

¹⁶⁶ Tan Kok Hiang, cited in 'Culture and identity', *SA magazine*, p. 49.

¹⁶⁷ Interview with Mr Tan Kok Hiang at Forum Architects on the 18th July 2008.

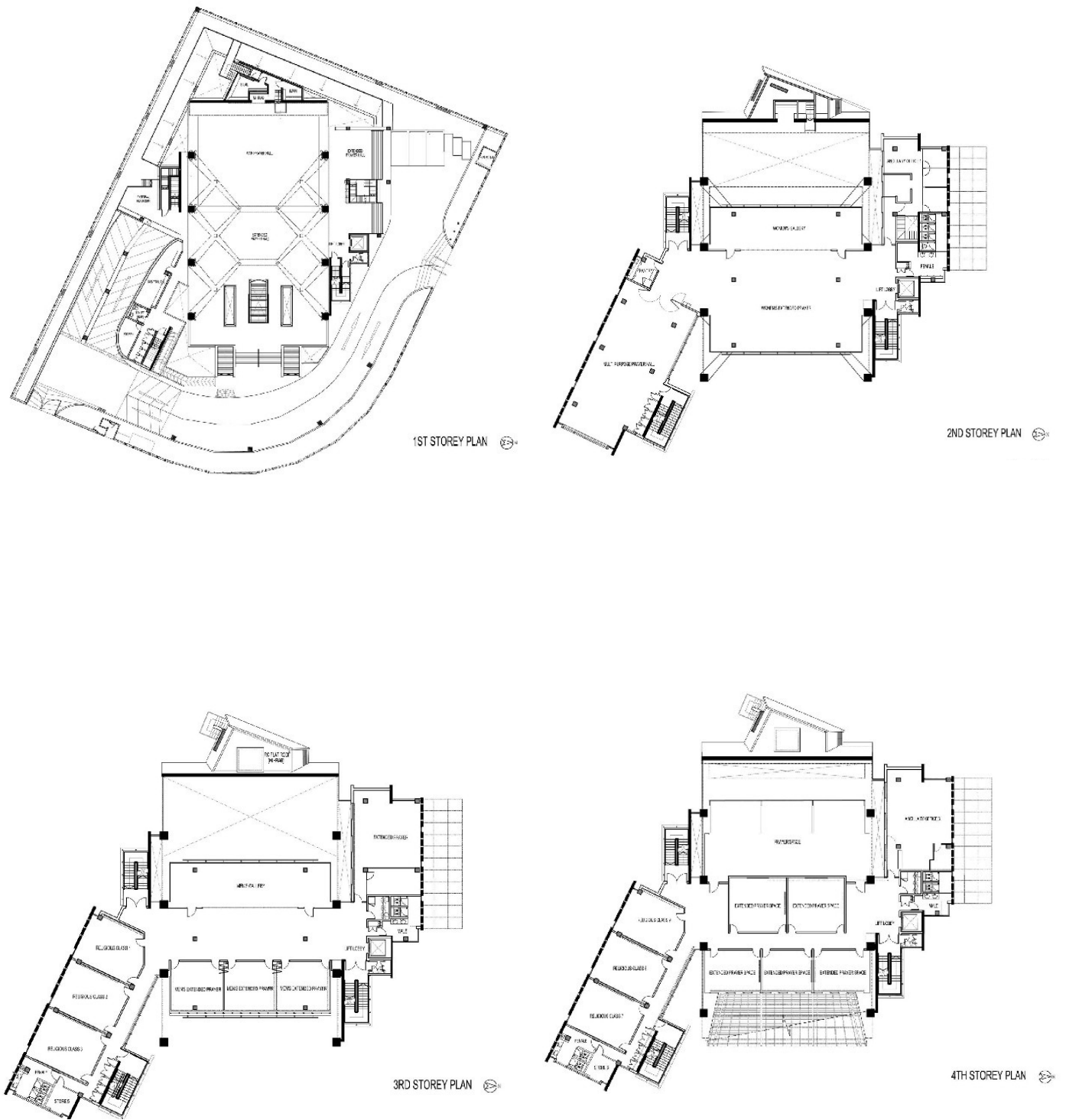
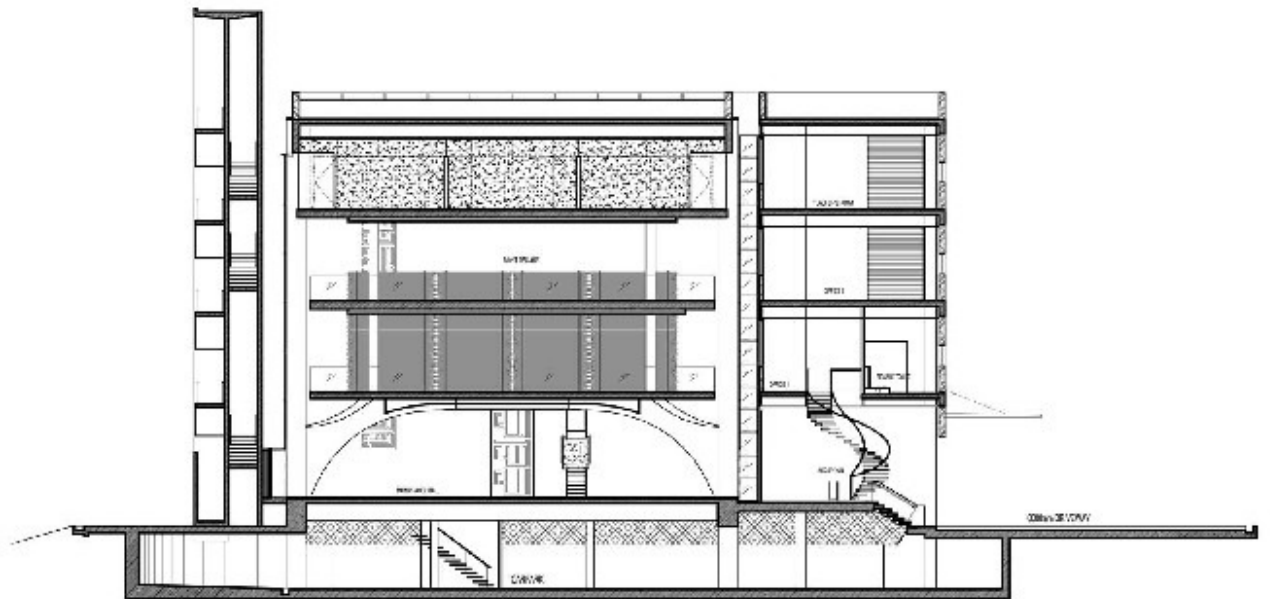
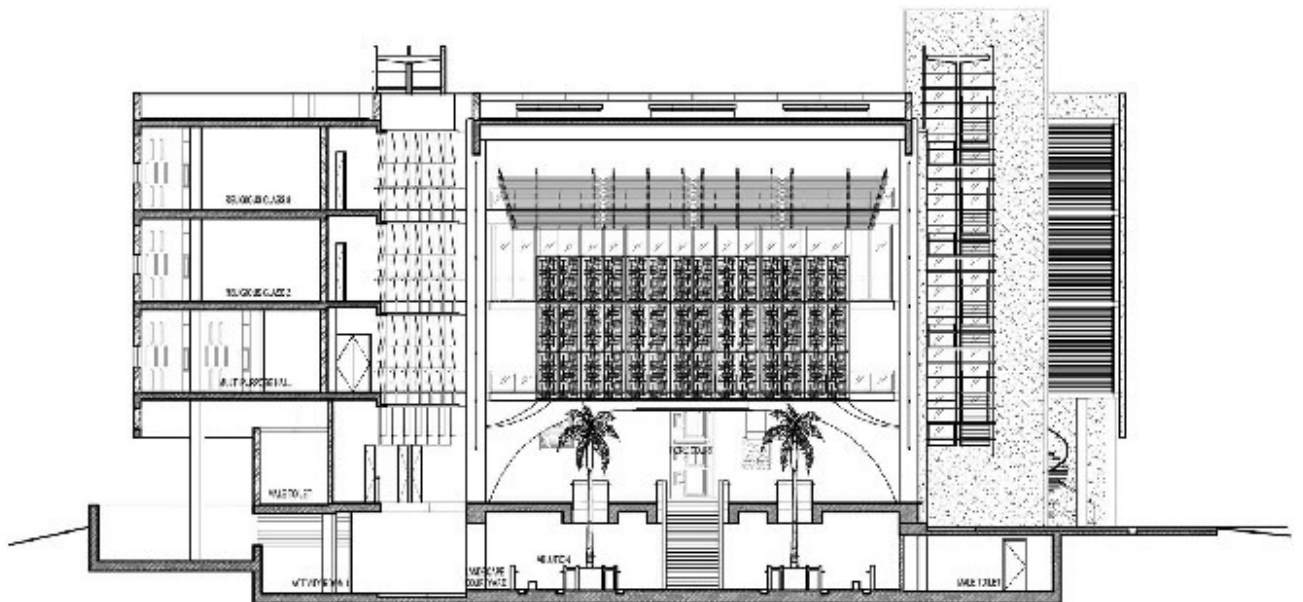


fig. 5.d:
Plans of the Asyafa'ah Mosque



SECTION C-C



SECTION D-D

fig. 5.e:
Sections of the Asyafa'ah Mosque

5.8 The Unornamented Assyafa'ah and its Success in portraying a 'Dynamic Mosque, Progressive Community'.¹⁶⁸

The abstraction of Islamic patterns to conform to a universal image was recognised in a speech made by Singapore's Deputy Prime Minister Dr Tony Tan, in commending the relevance of Assyafa'ah Mosque to the Muslim community in Singapore.

*It has no dome and traditional minaret.... It means we've moved forward in the last three years, grappled with some of the issues, and now we've come to a very coherent picture of what we want to do as a community.*¹⁶⁹

The visual absence of the dome and traditional minaret seemed to signify that the Muslim community has progressed, and is comfortable with modernity and the wider secular world.¹⁷⁰ Conversely, the physical presence of traditional Muslim ornaments within the Mosque may be taken as a symbol of backwardness and non-progression. The opening of the Mosque, labelled as an "almost historical occasion" by Dr Tan, has marked the triumph of ornament - by rejecting it. Tan's statement is interestingly similar to a quote by Loos.

*Do you not see the greatness of our age resides in our very inability to create new ornament? We have gone beyond ornament, we have achieved plain, undecorated simplicity.*¹⁷¹

¹⁶⁸Slogan for the Assyafa'ah Mosque, <http://www.mosque.org.sg/assyafaah/index.asp> (Accessed on 26th June 2008).

¹⁶⁹ Tony Tan, cited by Li Xueying, 'Government Nod for Muslim Identity', *The Straits Times* (Singapore Press Holdings, 11th April 2005), p.68.

¹⁷⁰ Dr Keith Critchlow, 'The use of Geometry in Islamic Lands', *Architecture + Islam*, v. 76, n. 6. (London : Wiley-Academy, Nov/Dec 2004), p. 76.

¹⁷¹ Loos, 'Ornament and Crime', p. 162.

Although these two statements were made a century apart, it is evident that Loos' rejection of ornaments is still advocated by the political leaders in Singapore, who stigmatize ornamentation as being backward and irrelevant to Singapore's society today.

The "invisible ornaments" of Assyafa'ah Mosque to the design community

The projection of ornaments as an irrelevant aspect of this Mosque is also partly a result of the design community's disregard of its ornaments, possibly due to an assumption that ornaments contribute little to the construction of place. In influential architectural critiques and publications, the neglect of ornaments in the Mosque can be observed in their failure to mention any relationship between spatial qualities and ornamentation. Such avoidance underpins the notion that ornaments are mere accessories, and contributes to the conception of ornaments as kitsch.

Architectural journals such as *Singapore Architecture Magazine* (SA magazine) v.233, *architecture + urban Magazine* (a+u) v.423 featured the Assyafa'ah Mosque in extensive write ups. These focus on spatial qualities of the Mosque, but pointedly neglect its ornaments. The writers have taken a typically Modernist approach in reviewing the Mosque, emphasising light, shadows, tectonics and materiality.¹⁷² As a result, ornamentation is implied as an 'excess',

¹⁷² Erwin S. Viray, 'Making Waves in South East Asia', *A+U magazine*, v.423, (Japan: a+u Publishing Co, 2005). He described the Mosque with a detailed narrative of his journey through the forecourt, arches and prayer hall. Terms such as 'pause space', 'fleeting shadows', and 'feel the breeze passing by', conjure experiential qualities of the Mosque, without any mention of the spatial experience created by the ornaments within this religious space.

unrelated to the construction of place.¹⁷³ This indifferent attitude towards ornamentation in architectural publications may be considered a form of ‘de-ornamentation’.

Notably, the architectural reviews are different from users’ views of the Mosque. During recent interviews with users of the Mosque and its caretaker, the most frequently mentioned topics were the minaret, the arabesque screens and the curving arches.¹⁷⁴ Why do the architectural publications fail to address the ornaments of the Mosque, when the users’ descriptions of the Mosque were mostly related to elements such as the minaret and the screens? It is clear that there is a contradiction between the view of ornaments held by architectural critics, and that held by the users.

Despite Tan’s effort to explore ornamentation in the Mosque, the design community apparently continues to neglect the significance of such ornaments. With media coverage desiring to portray a contemporary image of the Islamic community, coupled with influential critics’ subversion of the ornaments’ presence, it is inevitable that ornaments would be seen as irrelevant in Singapore’s architecture today, or at least within the design community. Such a phenomenon corroborates Loos’ consideration of Ornaments as ‘backward’, by paralleling how Austrian common folk preferred ornamented shoes, while modern men appreciated shoes, devoid of any embellishments.¹⁷⁵ Evidently, we see again the relegation of ornamentation to the interest of the ‘common, uncultured man’¹⁷⁶, while the intellectual community, and the public, view it as irrelevant; kitsch.

¹⁷³ Loos, ‘Ornament and Crime’, p. 161.

¹⁷⁴ Attained from interviews with 50 users of the Assyafa’ah Mosque on 24th July 2008 (Appendix F).

¹⁷⁵ Loos, ‘Ornament and Crime’, p. 162.

¹⁷⁶ Loos, ‘Ornament and Crime’, p. 168.

5.9 The Ornaments of Assyafa'ah Mosque

Amidst the lack of coverage on ornaments in the Assyafa'ah Mosque, this chapter attempts to argue for the relevance of architectural ornaments engaged during its design process. Through interviews with the architect and the users of the Mosque, the spiritual and cultural relevance of these ornaments may be validated.

An interview with the MUIS representative revealed that the minaret and arabesque patterns were in fact, included as part of the brief for the design. These traditional symbols and icons of Islamic religious spaces in Singapore's context were deemed necessary even though the organization hoped to portray a contemporary image of today's Muslim community. Also, 95% of Mosque users stated that they relate more easily with a Mosque when a dome and minaret are present. Such views reinforce Kent Bloomer's claim in '*Lingua of Ornamentation*', that ornaments continue to encapsulate a certain language acknowledged by the users, which are subsequently interpreted into shared communal meanings.¹⁷⁷ The communicative ability of ornaments seems to contradict to Loos' claim that 'ornament is no longer organically related to our culture.'¹⁷⁸

This contradiction demonstrates that the rejection of ornament in Loos' context may not apply to the Muslim community in Singapore today. Furthermore, Tan has also commented that, 'ornaments are essential to the architecture of all societies with cultures'.¹⁷⁹ He elaborates that

¹⁷⁷ Bloomer, *The Nature of Ornament*, pp. 35-46.

¹⁷⁸ Loos, 'Ornament and Crime', p. 175.

¹⁷⁹ Interview with Tan Kok Hiang at Forum Architects on the 18th July 2008 (Appendix E).

'through ornaments, we can engage in crafts to produce substantial architecture which are not only able to continue our traditions, but also to better ourselves as designers.'¹⁸⁰ This statement not only suggests the socio-cultural relevance of ornaments, but also raises another significance of architectural ornaments. According to Tan, the rigour in crafting ornaments aids in the attainment of focus and inner peace within the designer.¹⁸¹



The rigour of ornamentation can be witnessed through painstaking effort taken to express the curvature of the arches while resolving the structural capabilities. The trimmings of the structural arches are also well articulated in that they seamlessly converge at every junction to form silhouettes that distinctly resemble Moghul domes (fig 5.f).

fig. 5.f: Intricate trimmings of the arches.
Tan's ornamentation of the arch to express its curves and poetic trimmings can also be considered an equally 'malleable' and 'erotic' crafting.¹⁸² Originally, the arches were further

¹⁸⁰ Interview with Tan Kok Hiang at Forum Architects on the 18th July 2008 (Appendix E).

¹⁸¹ Interview with Tan Kok Hiang at Forum Architects on the 18th July 2008(Appendix E).

¹⁸² Like William Hogarth tracing with scientific exactitude, the curvature of bones in the lines of a woman's pelvis.

romanticised in a raw concrete ‘to age elegantly’;¹⁸³ but were later painted white to blend with the surrounding walls.

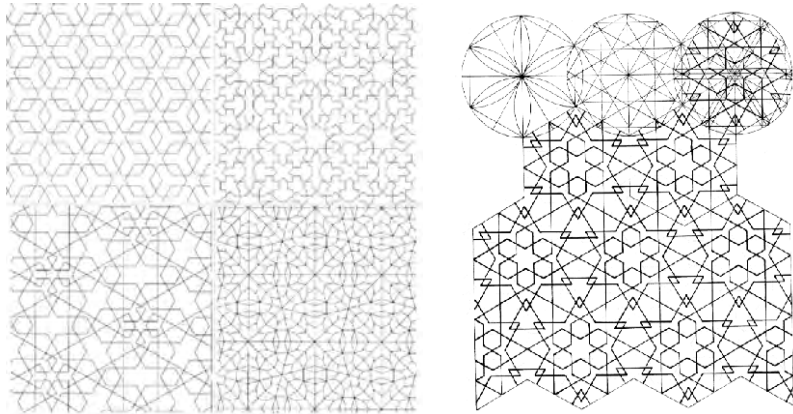


fig. 5.g:
Geometric tessellation of
Islamic *zellij* patterns

The re-invention of the *zellij* patterns of the arabesque screens (fig 5.g) was also considered a ‘ritual’ of crafting to Tan. He explains that the experimentation with geometric compositions enabled him to attain ‘spiritual peace’ and self confidence.¹⁸⁴

Rationalisation Arabesque Screens

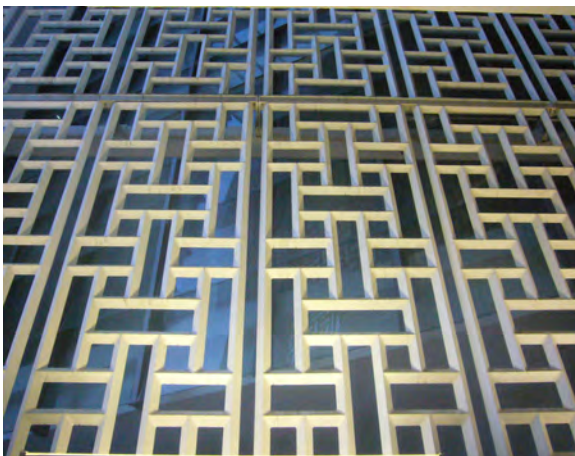


fig. 5.h:
Zellij inspired screens of Assyafa’ah Mosque.



fig. 5.i:
Chinese screens from China, Beijing.

¹⁸³ Interview with Tan Kok Hiang at Forum Architects on the 18th July 2008 (Appendix E).

¹⁸⁴ Interview with Tan Kok Hiang at Forum Architects on the 18th July 2008 (Appendix E).

The arabesque aluminium screen used as cladding in the Mosque is admittedly one of the more controversial ornaments of the Mosque as the Islamic *zellij* pattern is often unrecognisable. The various misinterpretations of this feature suggest the failure of the screens in communicating their true meaning. Considering that none of the interviewed users felt that the screen had any Islamic meaning, the production of such ornaments may emphasize that these screens are of mere aesthetic and functional purposes, without any embodiment of symbolisms. Tan admitted that the screens were over simplified and rationalized due to practical reasons such as cost of fabrication, ease of constructability, and its effectiveness as a sun shading device.¹⁸⁵ Unfortunately, such rationalisation has produced a pseudo-Islamic ornament which is criticised as ‘Japanese, Oriental but definitely not Islamic (fig. 5.i)’;¹⁸⁶ to this critique, Tan responded humbly:

It is a mistake in my judgment to simplify the screens due to practical reasons. I think the over-simplification has led to the loss of its meanings...¹⁸⁷

To craft the pattern, Tan took reference from Islamic teachings on the ‘five attributes’ in the Quran: the complete, infinite, clear, multi-centred and awe-inspiring. From this, a geometry of interlocking rectangles was derived. However, the composition of the screen does not fully reflect the fundamental principles of the *zellij* pattern.¹⁸⁸ This is because the prefabricated

¹⁸⁵ Interview with Tan Kok Hiang at Forum Architects on the 18th July 2008 (Appendix E).

¹⁸⁶ Rizal Bin Jaffar, 31, Interview with Mosque User.

¹⁸⁷ Interview with Tan Kok Hiang at Forum Architects on the 18th July 2008 (Appendix E).

¹⁸⁸ The layering of two geometries to produce three or more geometries which constructs an infinite tessellation of patterns.

screens were designed as individual panels due to cost and manufacturing constrains (fig 5.j).¹⁸⁹ Furthermore, each screen is framed for structural strength, causing the patterns to be enclosed, thus losing continuity and rhythm. When positioned together, the screens fail to express an infinite and multi-centred picture, and present themselves as a scattered linear arrangement of finite and segregated rectilinear patterns. As such, the Assyafa'ah screens lose their visual effect in representing the Islamic teachings.

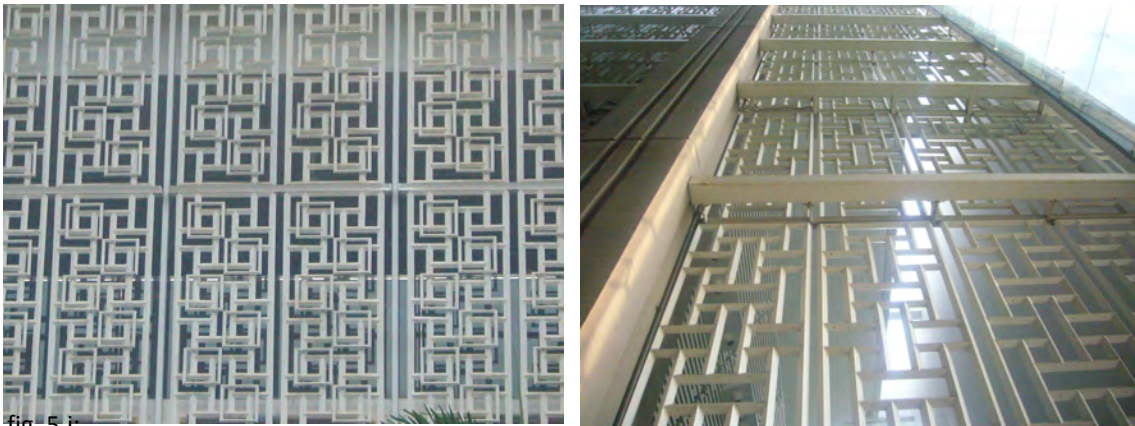


fig. 5.j:

Arabesque screens of Assyafa'ah Mosque are individually installed and are segregated which breaks the infinite tessellation.

Also, the simplification of the patterns into two-dimensional flat surfaces for efficient production results in insufficient complexity of the ornament. Consequently, the pattern fails to draw the viewer's attention, preventing them from fully engaging with the ornament.¹⁹⁰ Such a phenomenon is substantiated by Mary Foster's study that three-dimensional ornamental forms have a stronger influence than flat or two-dimensional ones.¹⁹¹ By comparing the Assyafa'ah Mosque's screens with the *zellij* pattern in the Alhambra Mosque's cupola (fig 5.k), we can

¹⁸⁹ Interview with Tan Kok Hiang at Forum Architects on the 18th July 2008 (Appendix E).

¹⁹⁰ Interview with Tan Kok Hiang at Forum Architects on the 18th July 2008 (Appendix E).

¹⁹¹ Bloomer, *The Nature of Ornament*, pp. 35-46.

observe that the complexity of the Alhambra *zellij* pattern produces a more awe-inspiring and captivating spatial experience that exemplifies the imagery of infinity.

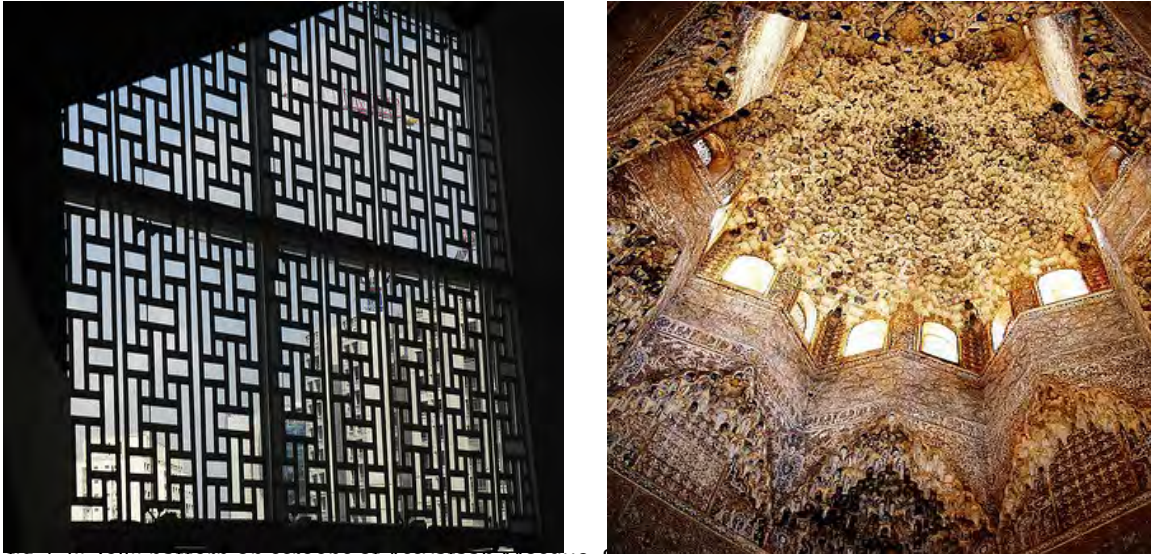


fig. 5.k: Zellij pattern on screens of Assyaraan Mosque, Singapore compared to the Zellij pattern in cupola of Masjid Alhambra, Spain.

Mr Muhammed Shareef, caretaker of the Mosque since its completion, confesses that he remains unconvinced by the architect's derivation of the pattern despite Tan's explanation.¹⁹² As such, over-rationalisation can be seen to have led to the production of pseudo-Arabesque screens – features which mimic Islamic symbols but are not meaningful to the Mosque. In fact, the screens' perceived redundancy is worsened by the difficulty during maintenance due to their intricate geometries, and unreachable positions.

¹⁹² Interview with caretaker Muhammed Shareef and interviews with 50 users of the Assyafa'ah Mosque on 24th July 2008 (Appendix F).

The emphasis on the porosity of light and wind, in pursuit of an environmental solution,¹⁹³ coupled with the Tan's over-simplification of the ornament for mass production, have caused the screens to lose the order and proportions of arabesque patterns, such that they are perceived as irrelevant in the Mosque.

The Construction of Arches as Kitsch

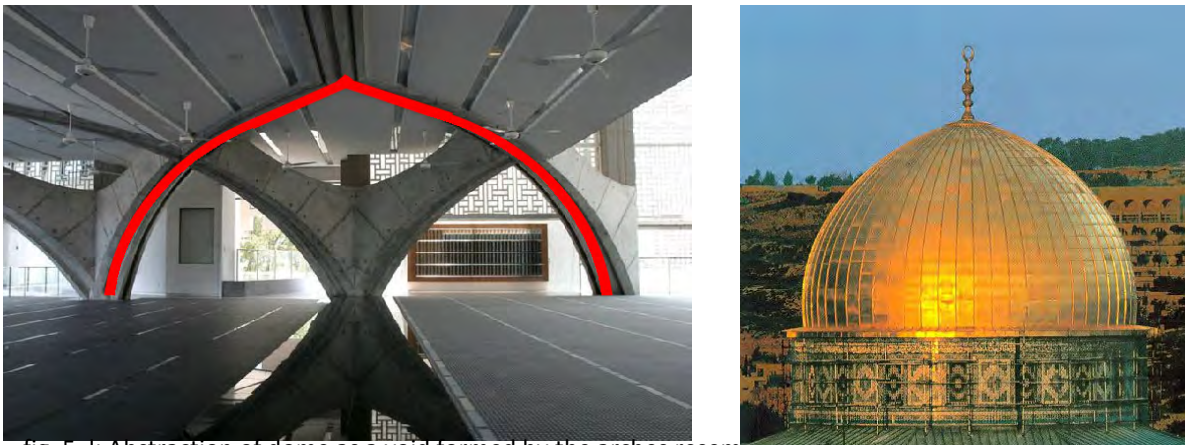


fig. 5.1: Abstraction of dome as a void formed by the arches resembles that of the Islamic dome such as the Dome of the Rock.

According to Tan, the form of the arches was entirely derived from structural considerations. However, detailed observation reveals a slight tip when they meet, suggesting the silhouette of Moghul domes (5.1). This gesture, clearly non-structural, suggests great care taken to craft these arches to convey Islamic qualities. In view of MUIS's refusal to incorporate a conventional dome, the dome can be seen to be manifested as the void between these arches.¹⁹⁴ As such, the 'metaphysical' dome¹⁹⁵ seems to rely on justification as a structural feature, by complying with MUIS' request for an open prayer hall spanning twenty meters, on which a three-story building

¹⁹³ Reflects Tan's view that 'a Mosque is about light and natural materials'.

¹⁹⁴ Mathew Lai Chee Kai, *Assyafaah Mosque in Dialogue: Constructing Fetishes in the post 9/11 context* (National University of Singapore, 2005).

¹⁹⁵ Suggested by Lai and congruent with own observations.

is supported. This intention however, seems to be constructing its own irrelevance due to the lack rigour in developing the structural capabilities.

Due to demanding structural requirements, the arches were thickened to monumental dimensions.¹⁹⁶ In addition, seemingly to emphasise the dome aesthetic, the arches are further thickened at the foot. This renders a two meter space unusable at the foot of each arch due to inadequate headroom. The arches segregate the prayer hall into several parts, which contradicts with the intention to construct a large expansive space'.¹⁹⁷ Users commented that the prayer hall was conducive at times as they disliked 'facing the wall' when praying near the arches or 'afraid to stand up when praying to avoid hitting (their) heads against the arche(s)'.¹⁹⁸ Such inconveniences due to structural compromise seem to convey the impression that the desire for a dome is the cause of problems in the prayer hall.¹⁹⁹

The reinvention of the dome as a void, defined by structural arches, appears considerate of Singapore's climate. However, the large fenestrations, which serve to allow for natural lighting and ventilation, have also removed the 'sense of mystic and encapsulation'²⁰⁰ devotees are accustomed to. Some comment that the space 'is too open' and does 'not help to enable greater focus' during prayers (fig 5.m).²⁰¹ Evidently, the justification of the dome through structure has overwhelmed its meaning and function. Coupled with inconveniences perceived to be a result of such rationalisation, the new dome positions the old as irrelevant, unable to adapt successfully to new contexts and considerations.

¹⁹⁶ Measurement on the 26th June records width of each column at 2.4 metres, at user-height level.

Interview with Tan Kok Hiang at Forum Architects on the 18th July 2008 (Appendix E).

¹⁹⁸ Attained from interviews with 50 users of the Assyafa'ah Mosque on 24th July 2008 (Appendix F).

¹⁹⁹ If they just wanted a bloody large span, trusses and space frames could have been used instead.

²⁰⁰ Attained from interviews with 50 users of the Assyafa'ah Mosque on 24th July 2008 (Appendix F).

²⁰¹ Attained from interviews with 50 users of the Assyafa'ah Mosque on 24th July 2008 (Appendix F).

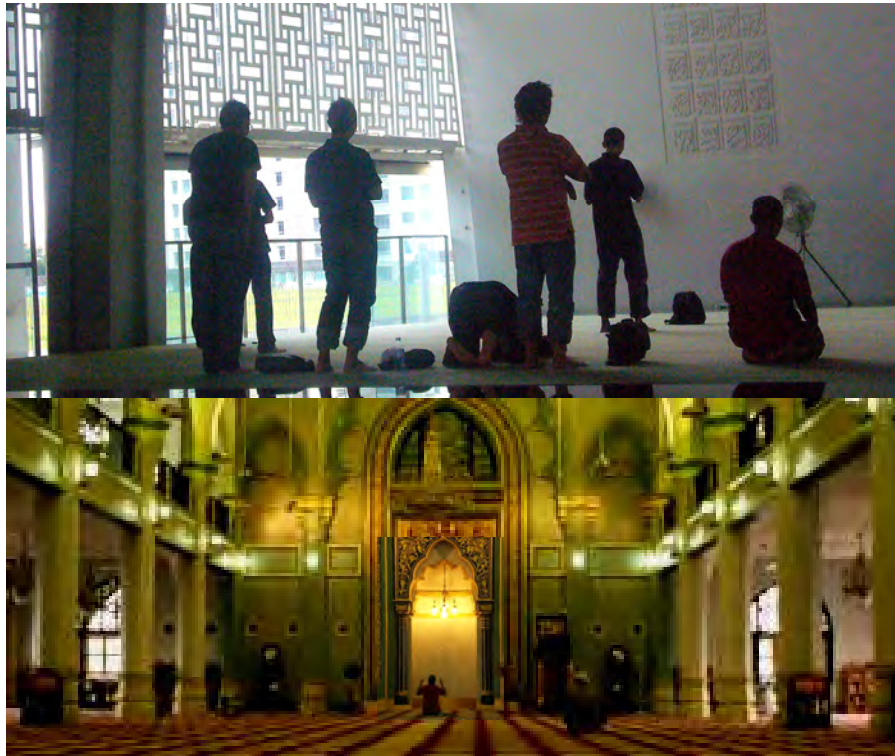


fig. 5.m:
The contrast between the experience at a conventional (left) *mihrab* and one in in Assyafa'ah mosque (right) with more 'openness' has received mixed reviews by the users.

5.6 Conclusion

The de-Arabisation of the Assyafa'ah Mosque was not a process devoid of ornamentation. MUIS and Tan's advocacy of ornaments in the Mosque's design validates the fact that ornaments are still relevant in portraying the Islamic identity today. The architect did not dissociating from ornamentation as the crafting of ornaments was significant as a kind of ritual in which he could gain experience and spiritual strength as an architect.

While the architect attempted to re-invent the ornaments through an in-depth understanding of their meanings, the Assyafa'ah Mosque remains as an example which portrays Asian architectural ornamentation as irrelevant. This is due to the pursuit of the 'universal image', which required the reinterpretation of ornaments in a manner distinct from historical precedents. As a result of inadequate resolution, the meeting of symbolic meaning and functional practicality was one in which the full potential of either was realised. The inability of such ornamental features to perform adequately in either conveying meaning, or serving their practical roles, reinforces existing perceptions in the architectural discipline that Asian architectural ornamentation is now irrelevant and kitsch.

Chapter 6.

6.1 Conclusion and Implication

The juxtaposition of Asian interpretations with contemporary theories on architectural ornamentation has placed Loos' criminalisation of architectural ornaments as superfluous embellishments, under doubt. Architectural ornaments are physical embodiments of Asian traditions, meanings and myths within Singapore's cityscape. Through intrinsic orders, rhythms and proportions, architectural ornaments have the semiotic ability to communicate these meanings. However, architectural ornaments, associated with folklore, traditions and femininity, are often perceived as weak or passive, in contrast with masculine traits of economic progress and modernity. The predominant misconception is that, in this binary relationship, one must be emphasised in favour of the other. As a result, architectural ornaments have been rejected as 'backward' or 'threats to national progress'.²⁰² This study has shown that Asian architectural ornamentation should not be seen as a threat to national economy, but instead, as an aid in retaining or even in celebrating Singapore's Asian identities. This view is supported by theories, proposing that, in a landscape of rapid progress,²⁰³ architectural ornaments remain relevant because they aid in calming the anxieties of a 'homeless' generation.

A study on Singapore's architectural developments since the 1960s has shown various mechanisms which have shaped the 'irrelevance' of Asian architectural ornaments. The Heroic period of the 1960s echoed Loos directives and 'removed ornament from objects of daily use' to

²⁰² Loos, 'Ornament and Crime', p. 162

²⁰³ Bloomer, *The Nature of Ornament*, pp. 35-46.

expedite the evolution of the nation as a politically and economically viable entity.²⁰⁴ This resulted in a scramble for the conservation of 'historic buildings' in the 1980s; as an effort to preserve Singapore's diminishing sense of identity. Conservation practices such as the indiscriminate restoration of ornaments without firstly understanding their meanings, and the arbitrary assignation of unrelated architectural programmes, contributed to the perception of architectural ornaments as irrelevant. The exploitation of Asian architectural ornaments as exotic 'chill-out Oriental' features by the media further depicted them as kitsch or fad.

The prevailing urge from the government, to develop Singapore as an international cosmopolitan hub, while strengthening our identity as an Asian country, has presented architects with a challenge: to celebrate modernity while embracing our traditions. This directive, layered onto past perceptions of architectural ornaments as kitsch, has constructed a trend in which designers have begun to rationalise architectural ornaments as justification for their use.

Through detailed case studies on three local projects influential to the representation of Asian architectural ornaments, the importance of sensitive re-interpretation of traditional Asian ornaments into architectural features has been established. As can be seen in the Singapore Conference Hall, ornaments, if rationalized appropriately through orders and rhythms, may become representative of the architecture, thus assuring their relevance even after many decades. Conversely, the Esplanade reveals how, Asian architectural ornamentation, when over-rationalised and misappropriated as a branding strategy, becomes criminalised as kitsch. The

²⁰⁴ Loos, 'Ornament and Crime', p. 168.

Assyafa'ah Mosque, on the other hand, illustrates the struggle faced by designers in constructing a 'universal' image while retaining architectural ornaments. Despite the Mosques' multiple accolades, this paper has shown that it remains a victim of over-rationalisation, in which neither practical function nor symbolic meaning have received due resolution.

Implications

The prejudice towards, and neglect of, Asian architectural ornaments is perhaps a consequence of the government's and design community's over-emphasis on the portrayal of Singapore's economic and political progress over the past four decades. In the wake of recent efforts to strengthen our national identity, architectural ornaments are increasingly engaged. However, with lingering perceptions of ornaments as kitsch, these attempts stifle their own agenda, perpetuating the 'criminalisation' of architectural ornaments as designers fail to fully embrace ornaments in their entirety during design. Subsequently, architectural ornaments are applied superficially or rationalised into functional features as a means to justify their use. Such approaches often dilute the meanings, and overwhelm the inherent significances of Asian architectural ornaments. Such is the dilemma faced by Asian architectural ornaments, as a relevant yet misunderstood feature in the discourse of architecture in Singapore. In the current search for a 'modern' image with 'strong traditional roots', the challenge to Singapore's

architectural discourse today is no longer the expression of progress, but the search for a balance in the celebration of modernity and the expression of Singapore's cultural past.²⁰⁵

²⁰⁵ Ricouer Paul, *Universal Civilisation and National Cultures in History and Truth* (Evanston: Northwestern University Press, 1965). pp.271-284.

Bibliography

Interview

1. Interview with William Lim, Siew Wai on the 12th August 2008 (Appendix A).
2. Interview with users of Singapore Conference Hall on the 3rd of August 2008 (Appendix B)
3. Interview with Vikas Gore on the 6th August 2008. (Appendix C).
4. Interview with users of the Esplanade on the 3rd of June 2008 (Appendix D).
5. Interview with Tan Kok Hiang at Forum Architects on the 18th July 2008 (Appendix E) .
6. Interview with users of Asysafa'ah Mosque on the 3rd of June 2008 (Appendix F).
7. Interview with users of Esplande on the 2nd and 9th of August 2008 (Appendix G).
8. Interview with users of Singapore Conference Hall on the 24th of July 2008 (Appendix H).

Newspaper and Documents Resources

1. Certificate for Architecture+Awards 2004 Design for a New World awarded to Forum Architects
2. Dr Tony Tan, unpublished speech at a dialogue session with Muslim religious leaders at Assyafaah Mosque, cited Li Xueying, 'Government Nod for Muslim Identity', *The Straits Times* (Singapore Press Holdings, 11th April 2005)Syarif Hidayatullah, 'Moderate Musims Thrive in Singapore', *The Straits Times* (Singapore Press Holdings, 31st August 2005).
3. Lee Hsien Loong, 'Crucial Role the Productivity Movement', [Speech at The 2001 Productivity Campaign Rally on 5 September 2001 cited](#)

- by Mafoot Simon, 'Remain positive about negative numbers', *The Straits Times* (Singapore Press Holdings, 3rd September 2005).
4. Betsy Pisik, 'Tolerance key in war on terror: George Yeo', *The Straits Times* (Singapore Press Holdings, 23rd September 2005).
 5. Ho, Richard KF, What Qualifies as Successful Architecture, in *Sunday Times*. (Singapore, April 22 1994).
 6. Restoration guidelines of Conservation Policy in 1989 and 2008 chan yew lih
-
1. Tourism Task Force, Report of the Tourism Task Force (Ministry of Trade and Industry: Singapore, November 1984), p.6.
 2. *Architecture Asia* #1 March 2005 – May 2005, p.36
 3. *Renaissance City Report: Culture and Arts in Renaissance Singapore*, (MITA Press, 1989)

Dissertations

1. Ahmad Farid B Mohd Fadzuli, **Mosques** and beyond : Islamic achitecture in the age of a Muslim identity crisis (National University of Singapore, 2000)
2. Mathew Lai Chee Kai, *Assyafaah Mosque in Dialogue: Constructing Fetishes in the post 9/11 context* (National University of Singapore, 2005)

Websites

1. 'Annual National Growth of average 7.7% indicated in Economic Indicator Singapore', <http://www.singstat.gov.sg/stats/keyind.html#keyind>, (accessed in 2nd August 2008)
2. 'Re-sampling Ornaments', http://www.sam-basel.org/index.php?page=ornament_e (accessed 9th July 2008)

3. 'The Esplanade, A new performing arts centre change the skyline in Singapore', <http://architecture.about.com/cs/greatbuildings/a/esplanade.htm> (accessed 5th August 2008)
4. <http://www.asiarooms.com/travel-guide/singapore/things-to-do-in-singapore/nightlife-in-singapore/bars-&-pubs-in-singapore/bar-cocoon-in-singapore.html> (Accessed 01 August 2008)
5. <http://www.sch.org.sg/> (Accessed in 25th June 2008)
6. *people's MUIS* newsletter in the form of e-Publication ,http://www.muis.gov.sg/eServices/dg_newsletter.aspx (Accessed on 28th June 2008)
7. NADI, Pulse of the Singapore Muslim Community newsletter in the form of e-Publication, http://www.muis.gov.sg/eServices/dg_newsletter.aspx (Accessed on 28th June 2008)
8. 'The Esplanade, A new performing arts centre change the skyline in Singapore', <http://architecture.about.com/cs/greatbuildings/a/esplanade.htm> (accessed 5th August 2008)
9. <http://www.geocities.com/shinyeesiek/esplanade.htm> (Accessed 2nd August 2008)
10. Bernard Cache , 'Digital Production and the Semparian Object', *Detail: The Subject of the Object*, <http://www.peggydeamer.com/images/detail.pdf> (Accessed 4th August 2008)
11. Singapore 21 Report, http://www.singapore21.org.sg/menu_menu_5keys_heartbeat.html (Accessed on 25th July 2008)

Media (Films)

1. Bird's Nest, Herzog and de Meuron in China Trailer, (T&C Film, Christoph Schaub and Michael Schindhelm, 2008).

Published Readings

1. Andrew Benjamin, 'Surface effects: Borromini, Semper, Loos', *The Journal of Architecture*, v.11 n.1, (London: Mortimer House, 2006),
2. Peter L Berger, Brigitte Berger and Hansfried Kellner, *The Homeless Mind, Modernisation and Consciousness* (New York: Vintage Books, 1974).
3. Kent Bloomer, *The Nature of Ornament* (New York : W.W. Norton and Company Inc. 5th Avenue, 2000).
4. Chan Yew Lih, Conservation Techniques, *Seminar on Conservation Techniques* (Singapore : Singapore Institute of Architects and Urban Redevelopment Authority, December 1988).
5. Kenneth K. L. Chen, 'Direction of the Architect in the Eighties and Beyond', *Conference Paper for the Conference and Exhibition on " The Role of the Singapore Architect in the 80s and Beyond* (Singapore: February 1983).
6. Ananda K. Coomaraswamy, 'Ornaments', *The Art Bulletin*, v. 21, n. 4 (London: [College Art Association](#) ,1939).
7. Alan, F. C. Choe, Objectives in Urban Renewal, *First congress of the Singapore National Academy of Science* (Singapore, Aug 1968).
8. Dominique Clevenot, *Ornament and Decoration in Islamic Architecture*, (London: Thames and Hudson Ltd, 2000).
9. Le Corbusier, *Towards a New Architecture*, trans and ed. by Frederick Etchells (London, John Rodker, 1931).
10. Keith Critchlow, The use of Geometry in Islamic Lands, *Architecture + Islam* , AD v. 76, n. 6 (Nov/Dec).
11. James Ferguson, *History of Indian and Eastern architecture* (New York: Dodd, Mead, & Company, 1891).
12. Mary LeCron Foster, unpublished paper delivered at the conference, *Giving the Body its Due* (Oregon: University of Oregon, 1989).
13. Valerie Gonzalez, *Beauty and Islam: Aesthetics in Islamic Art and Architecture*(London: I.B. Tauris , 2001).
14. Gombrich E.H., *The Sense of Order: A study in the Psychology of Decorative Art* (Cornell University Press, 1979).

15. Hilde Heynan and Gulsum Baydar, *Negotiating Domesticity: Spatial Productions of Gender in Modern Architecture* (Routledge, 2005).
16. Haydn Huntley, 'In Defense of Ornaments', *College Art Journal*, v.6, n. 1 (College Art Association, Autumn, 1946).
17. Seralgadin, Ismail, 'Space for Freedom', *Aga Khan Award for Architecture* (Butterworths Architecture, 1989).
18. Siti Zainon Ismail, *The Traditional Malay Handicraft Design* (Malaysia: Perspustakaan Negara, 1997).
19. Harries Karsten, *The Bavarian Rococo Church: Between Faith and Aestheticism* (Yale University Press, 1983).
20. William S. W. Lim, 'A Tale of the Unexpected', *Paper for Special Commonwealth Association of Architects Session. International Union of Architects(UIA) Congress* (U.K, 13-17 July 1987).
21. William S. W. Lim, 'Public Housing and Community Development- the Singapore Experience' in *MIMAR: Architecture in Development*, No.7. (Singapore, Jan-Mar 1983).
22. Liu Thai Ker, Chief Executive Officer, HDB. Foreword to *Designed for Living*. (Singapore, 1985).
23. Max Loehr, 'The Fate of Ornament in Chinese Art', *Archives of Asian Art*, v. 21 (1967-68).
24. Adolf Loos, 'Ornament and Crime', Ed Opel (ed), *Selected Essays* (Riverside California, Ariadne Press, 1999).
25. Genevieve Loyd, *The Man of Reason. "Male" and "Female" in Western Philosophy* (Minneapolis: University of Minnesota Press, 1984).
26. Olivia McDowell, 'Mosque For Many Cultures', *Specifier Magazine* v. 79, (Chatsworth, 2005).
27. Dr K. U. Menon, 'Esplanade- Theatre on the Bay', *create.connect@sg: Arts, Media and Infocomm in Singapore*(Singapore: Ministry of Information, Communications and the Arts, 2002).
28. Erin Ng, Glenn Lerh, Robert Teh, *DP Architects Pte Ltd* (Singapore: DP Architects Pte Ltd, 2007).
29. Sulaiman Othman , Haji, *The Crafts of Malaysia* (Singapore : Editions Didier Millet, 1994).

30. Ricouer Paul, *Universal Civilisation and National Cultures in History and Truth* (Evanston: Northwestern University Press, 1965).
31. Antoine Picon, 'Architecture, Science, Technology and Virtual Realm', *Architecture and the Sciences: Exchanging Metaphors* (London: Princeton Architectural Press, 2003).
32. Robert Powell, *Innovative Architecture of Singapore* (Singapore: Select Books, 1989).
33. Martin J. Powers, *Pattern and Person, Ornament, Society, and Self in Classical China* (Harvard University Press, Cambridge, 2006).
34. J.M. Richards, *An introduction to Modern Architecture* (Harmondsworth: Penguin Books, 1940).
35. Wallace Rosenbauer, 'The Function of Ornament', *College Art Journal*, v. 6 n. 3 (College Art Association, Spring, 1947).
36. Gottfried Semper, *The Four Elements of Architecture and Other Writings* (United States of America: Cambridge University Press, 1989).
37. Arthur Sim, " A Taste of Orient at Home', *Home and Décor* (Singapore: Singapore Press Holdings, May 24th Issue 2004).
38. Darlene Smythe, 'Culture and identity', *SA magazine*, v. 223 (Singapore Institute of Architects, 2005).
39. Tay Kheng Soon, 'A World Class City Deserves a World Class Architecture', *Conference Paper for the Inter-Faculty Conference on Towards Excellence in the Built Environment* (Singapore: 1987).
40. Erwin S. Viray, 'Making Waves in South East Asia', *A+U magazine*, v.423, (Japan: a+u Publishing Co, 2005).
41. Max Webber, *Essays in Sociology*, trans. and ed. by H. H. Gerth and C. Wright Mills (New York: Oxford University Press, 1946).
42. Edward H. Y. Wong, 'The Search for Excellence in the Built Environment', *Conference Paper for the Inter-Faculty Conference on Towards Excellence in the Built Environment* (Singapore: 1987).
43. Michael Wong Parkshong, *The Esplanade Co Ltd Annual Report 02/03* (Singapore, 2003).
44. Wong Yunn Chii, *Singapore 1:1 City: A Gallery of Architecture & Urban Design* (Singapore: Urban Redevelopment Authority, 2005).

45. Wong Yunn Chii, 'Time Line of Singapore's Architectural Trends', *Singapore Architecture Magazine*, v.230 (Singapore: Singapore Institute of Architects 2007).
46. *Crafted in Malaysia* (Malaysia: Malaysian Handicraft Development Corporation, 2007)

Appendix A

Interview with William Lim on the 12th Aug 2008 @ W- architects.

National University of Singapore
School of Design and Environment
Faculty of Architecture
Masters Programme
Micki Chua Ju Kean
U044593J

Brief

1. What did you and Mr Lim Chong Keat have in mind for the SCH?

We were looking at a building which is contextual and at the same time reflective of our new found knowledge. Many of us just returned from A.A. and we were adventurous to explore new languages.

2. In this design, was there a kind of image you were hoping to portray for Singapore back then in 1962?

Tropicalism and modernity. We graduated from AA and were heavily influence by our mentors who advocates brutalism.

3. Was it important to project an Asian image in the buildings back then?

To push for the idea of being modern, functional and sensitive to our environment. That is what sets us apart and demonstrate our knowledge from AA and developed into an Asian tropical context

Exterior and spaces

1. Why was this approach taken?

It was Lim;s idea. He comes from Penang and feels very attached to his origins. It is perhaps his own agenda to realate the identity of Singapore as part of Malaya before we gained independence.

2. As a project commissioned by the government, what was their response to the design?

The fact that we won the competition, I would see that they were approval of what we did. The fact that it was used so extensively demonstrates its functionality and all.

3. How did you feel about it? (any difference between then and now?)

It is a good piece of work as it response to the functional needs, spatial requirements, context within a tropical country and the ability to project our Malayan roots.

Asian patterns

As much as it was a brutalist approach,
The mengkuang patterns on the foyer was an interesting feature.
There is quite a bit of coverage on the patterns, especially in recent publications such as 1:1

1. At the time, ornaments were considered as objects of kitsch and backwardness. Isn't it a deviation from the international and global hub image?

*No, it was a feature which Lim believed in completing the design.
It aesthetically and symbolically position the building as very contextual.*

2. I understand it was to illustrate our links with the Malayan identity. Why was this Malayan identity emphasized over other aspects of Singapore's culture?

It was perhaps a pattern where people from the SEA could relate to. Baskets woven were common tools in paddy fields and fishing villages whether you are Chinese, Indian or Malay.

3. It seems like it was mimicry of the pattern, a direct copy. Were there any intentions to re-interpret the weaving patterns?

4. Why/ why not?

There is nothing wrong as long as it carries the same meaning as what the tradition deems it to be.

5. How did the public respond to it?

The public understand when they see it and they liked it.

Asian Patterns in Other Projects

6. Referring back to your mengkuang patterns, the esplanade was also about that. But it was a post rationalization of sun screen . There is a recent trend in local architects rationalizing the ornaments such as those in the Assyafaah mosque. What do you think of such approaches to ornaments?

It is good that architects are trying to experiment with traditional symbols, but we must remember not to lose the meanings.

7. Do you think that there is a need to justify the use of ornaments in today's Euro-centric modernized society in Singapore?

Yes and no. The public is becoming more educated and it seems that ornaments need to be placed on the same level as the public. It is not about being Euro-centric but being able to attain a quantum leap, a development of the old so as it can relate to people today.

On Asia Identity

I understand you were president of the Singapore Heritage Society from 1988 to 1997 and have designed a lot of conserved shophouses.

8. What do you consider a heritage in the field of architecture?

The modernity of each society must evolve from within its own traditions and culture...only in this way multiple modernities will be profoundly different. I can't agree more.

9. Do you consider ornaments important in the role of conserving the Asian identity? How do you think their role has evolved?

I think that we should look at ornaments beyond the traditional motifs. Lets look at WOHA's Moulmein rise. I see their vertical planting as a form of ornament, a sculpture. You see, an ornament does not hide the flaws of a building, but completes it. It must be an essential element of the design.

10. Is Asian Ornament a kitsch? (do you think there is a thin line between kitsch and traditional ornaments?)

Kitsch is often used but misunderstood. To me, as long as the ornament is deliberately applied and then interpreted sensitively, it will be a beautiful ornament which completes a building.

11. Do you think that the attitude in portraying an Asian identity as changed over the years or are we still trapped in the traditional symbolisms?

I think the public has a certain expectations of what an ornament is today. It has to inspire and be reflective of our roots.

12. Do you think that it is still important to portray our Asian identity today? DP said no need.

Definitely. Only if we can express who we are, can we define ourselves honestly.

13. What is the future of Architecture in constructing the Asian identity in our Euro-centric modernity today?

We need to be clear about our roots. Our culture is about a diaspora of cultures. Naturally the ornaments may be lost along the way or hybridized with time. But we must learn to extract what is important within this pool of traditions. With young architects such as (Tan) Kok Hiang and WOHA, I think that they set good examples for the new generation to explore the identity of Singapore in Architecture.

Appendix B Survey Results for the Singapore Conference Hall

National University of Singapore
School of Design and Environment
Faculty of Architecture
Masters Programme
Micki Chua Ju Kean
U044593J

1. How often do you visit the Singapore Conference Hall?

Once a week(0%) Once a Month(2%) Once in 3 Month(46%) Once a Year(52%)

2. Are you here to:

Watch performance(60%) Have a meal(34%) Sightseeing(0%)Others(6%)

3. Do you like the design of the Singapore Conference Hall?

Yes (76%) :Feelings of nostalgia, spacious, brightly lit, has usable spaces

No (24%) Feels that the place is too out dated and enough amenities.

4. Which space do you find most attractive?

Exterior Screen Facade(14%) The Entrance (2%) The Concert Hall Interior (2%)
Concert Hall Mosaic Wall(78%) Others(4%) Balcony and Feature staircase

5. Do you think that the Building gives you a feeling of Asian-ness? Why?

Yes (56%) Many feel that the building's long history and the tropical patterns, materials and colours feel Asian.

No (44%) The response was due to the generic spaces and the type of functions in the building which feels universal.

6. Have you been here before its renovation in 2004?

Yes (32%) No (68%)

7. Which aspect of this place holds the most memory to you?

Exterior Screen Facade(14%) The Entrance (2%) The Concert Hall Interior (2%)
Concert Hall Mosaic Wall(78%) Others(4%) Balcony

8 What can you relate the patterns of the mosaic walls to?

Basket Weaving(78%) Cross Stitch(12%) Random Pattern(8%)
Others(2%) Ketupat

9 Do you think the Mosaic Pattern is Important to identify this building?

Yes (74%) Most feel that the pattern is familiar and can relate to our “old” craft
No (26%) The building is more recognisable from its exterior.

10. Do you think that such patterns can be used in buildings today?

Yes (64%) It is viewed as attractive, colourful and easily recognisable
No (36%) 20% do not know enough about the pattern and the rest think the pattern is outdated.

Appendix C

Interview with DP, Mr Vikas Gore & Steven Gan on the 6th August 2008 @ DP Architects.

National University of Singapore
School of Design and Environment
Faculty of Architecture
Masters Programme
Micki Chua Ju Kean
U044593J

Conceptualising stages:

1. Besides the brief on the functions, what was required by Ministry of Information and the Arts (MITA) back in 1991

It was given in the brief that we should create a large performance hall which made full use of the view along Singapore Rier. Also, the Hall was to be a place for all, just like the Esplanade in Singapore in the early 1900s.

2. What were the issues and agenda by your design team?

The challenges we faced were: how do we build a building which is transparent but has to show that is full of activities. This was when the sun shading came in as an essential device.

3. What was the initial design process like? Did it differ a lot from the final design in its form and attitude? Any sketches?

The design of the Esplanade was in fact a square box-like structure. But we felt like it was very rigid. It was only upon the suggestion of placing a mesh over the Esplanade tht we realised the mesh of sun shades were fluid enough to wrap around the irregular shape of a typical auditorium space.

4. How was the idea of the theatres for a Westernised modern Asian country perceived in your design team?

*Firstly we should not confuse contemporary and westernized architecture. We were more interested in designing a performance hall for everyone and it also had to be one of the most well-equipped performance hall in the world. It is more of a world class performance centre to display our acceptance of arts as an economically stable country. The expresses harmony with nature, reflecting the balance of **yin and yang**.*

5. What is Asian architecture in your view?

I think it pretty much depends on the context of the place you are designing for. What is Asian-ness to Singapore? It is a very paradoxical situation. Are you talking about Asian as in our Asian history when we were ruled by Sultans?

I think this becomes a very political because if we are to decide which era we are adopting, it would be perceived as unfair to other races that are played down.

6. How should we portray this new Asian architecture in our westernized, modernized Society today?

In Singapore, the context and culture does not believe in looking in the past. Local media and politics are all about being global and international. As much as we are Asian, we cannot be too stereo-typically Asian, if not we will not be able to receive investors. We need to be universal. If our Asianness is seems to be going in a trend of progressing, high technology, and naturally, it is from the Western countries which we are learning from.

As much as it is a waste, most people will avoid the traditions to avoid the political issues mentioned earlier . As such if you ask me, our Asian identity lies very much that we will remain as the international hub which aims at attracting foreign investors and create more opportunities.

7. Should this approach continue?

Indirectly yes. This is because we will always be looking forward, and history to us will play a smaller role. The contemporary style is the most politically correst approach.

While the project was under construction, some Singapore residents complained that Western influences dominated. The design, said one critic, should incorporate icons that reflect Singapore's Chinese, Malay, and Indian heritage: Architects should "aim to create a national symbol.

Gore believes that the curved lines, translucent surfaces, and ambiguous shapes of the Lyric Theatre and the Concert Hall reflect the complexity and dynamism of Asian attitudes and thoughts.

I've written elsewhere, I feel that the shapes help lend the project a sense of tranquillity and typical of some traditional Asian architecture.

It seems like the public did not see the Asianness of the project.

8. Why does Esplanade need to exude the sense of Asianness?

We had no prior intentions to create a theatre with an Asian identity. The weaving patterns came in only after our partner, Atelier 1 devised a new method of wrapping a mesh of sun-screens did we realise that the mesh creates an effect of weaving.

9. How do I interprete the curved lines, translucent surfaces, and ambiguous shapes? What makes these asian?

Chinese dumplings, copulating aardvarks, and durians (a local fruit). And why, some critics ask, are the two theaters covered with those "ungainly shrouds"?

10. How does the shape represent Asian complexities?

I think a lot of these Asian characteristics were only observed when they were designed or implemented. We feel that it is very refreshing each time ho the Esplanade informs us about our Asian heritage through design sometimes even without our intention.

If you look at the a lot of traditional architecture in Asia, with some exceptions, one sees a strong base or floor with a roof design that aspires to be light and is made of fairly light materials and is almost decorative in form. In terms of the interior design, we wanted to develop a building that is rooted to the soil, to counter-weight the high-tech looking aluminium cladding on top. It was like a Ying and Yang relationship.

11. How are the interiors reflective of its Asian context?

It was like a Ying and Yang relationship. Again it was our idea in seeking balance and contrast to realize a light roof and heavy base, like Asian structures.

Detailings

One of the most controversial feature is the spikes on the Esplanade. I understand it was feature which began as the conception by Wilford and Partners, but they pulled out in 1995 and DP engaged atelier 1.

To design the exterior sunshade screen, we drew inspiration from things the properties of the structural geometry itself as well as elements from nature such as sunflowers, fish scales, the patterns of a bird's feathers etc. Such elements in nature also feature geometry that appears repetitive but changes slowly over the subject. Traditional Asian buildings also inspired us, ranging from "jali" screens in medieval South Asian architecture to the woven mat walls in Southeast Asian buildings.

1. How are the spikes derived? Was it an additional feature to shade the glass roof as it seemed like the glass roof came first, then due to public's response, the sun shade was added. As such was it a post rationalization?

The spikes, curvy form is designed from avert technical approach. First there was the wind tunnel test we used to derive the shape of the massing of the Esplanade. Next was to study the sun path of the Esplanade and to see how the spikes respond to the sun to reduce glare but open horizontal views.

2. What do you think about its label as a durian as it seems like to the public, the Esplanade is referred as the Durian..do you see this as a success or a mistake?

I personally hate durian and in the beginning, the term Durian was used as a purgatory term. But we realized that it meant that the Esplanade is open for abstraction and various interpretations. And to us, good buildings should be able to resolve at 3 levels, its functions, climate and cultural needs. In this case, the durian has become our cultural association.

Esplanade Today

1. How do you think the Esplanade has aged 6 years after its completion?

I think it its great that it is becoming an icon of the nation. After all it is a building of such a large cost, it is important that we givie it an iconic stature with the identity of the nation.

2. Has it performed up to your expectations (in terms of function, and the portrayal of an Asian theatre)?

With the number of world-class performances ad plentiful fringe performances, I would say the Esplanade has been doing very well.

Appendix D
Survey for the Esplanade 2008

National University of Singapore
School of Design and Environment
Faculty of Architecture
Masters Programme
Micki Chua Ju Kean
U044593J

1. How often do you visit the Esplanade?

Once a week(2%) Once a Month(20%) Once in 3 Month(58%) Once a Year(20%)

2. Are you here to:

Watch performance(12%) Have a meal(14%) Sightseeing(62%) Others(12)

3. Do you like the design of Esplanade?

Yes (52%) The place is spacious, looks modern, host good performances and has good views

No (48%) The exterior is over whelming and looks uncontextual

4. Which would you most relate the Esplanade to?

Armoured Animal(4%) Durian (78%) Basket (8%) Housefly Eyes(8%)

Others(8%) Esplanade is mistaken as a spacecraft and even female undergarment.

5. What do you think the Esplanade Design is based on?

Armoured Animal(0%) Durian (90%) Basket (8%) Housefly Eyes(2%)

6. Which feature in Esplanade is most interesting to you? Why?

Performance Hall(24%) Foyer(18%) Esplanade Walk(4%) Roof system(54%)

7. Do you think it looks like a building from Asia?

Yes (6%) No(94%)

8. Do you think the Esplanade should look like a building from Asia?

Yes (86%) No (14%)

9. What do you think is the supposed concept behind the spiked sun shade?

Armoured Animal(0%) Durian (62%) Basket (18%) Others(2%)

11. Do you think that such patterns should be used in other buildings?

Yes (22%) It is viewed as interesting and useful as a sun shade

No (78%) Most feel that the form is too out of context or modern to be used elsewhere.

Appendix E

Interview With Mr Tan Kok Hiang @ Forum Architects on the 18th July 2008

National University of Singapore
School of Design and Environment
Faculty of Architecture
Masters Programme
Micki Chua Ju Kean
U044593J

1. Architect's Concept

1.1. Having read that you have written also a thesis on Mosque, what is your definition of a Mosque?

It is a congregation of people, Muslims Especially and in today's context, we need to have a universal Mosque so that other races will not be intimidated by it.

1.2. Were there any works which influenced the mosque?

I do not think the mosque s influenced by any specific examples. But I think the re-interpretation of the Islamic symbols and ornaments is one of the examples which I have been exploring constantly.

1.3. How did you interpret the brief as a non-Muslim architect?

The result of the Mosque need not be Islamic. As a Singaporean, we should seek to observe what design suits the local context. I think that versatility of the Arabesque was essential, partly it is because of the religion of Islamism.

1.4. What is your attitude to the dome, minaret and screen of a Mosque?

For the minaret, we wanted a design which can age with time. If given a choice, I would not even place the moon and star to avoid the usual symbols. It is only after discussion with MUIS that we decided to have the symbol, but placed slightly below the apex of the minaret which is considered usual in Mosque.

As for the screens, it is through the study of the zellij patterns and modified to fit within the buildability of the building.

As for the dome, there was actually no intention in creating that particular image. I think that it is very interesting that the dome is interpreted by the users.

1.5. Are they necessary?

I will not say that these elements are necessary but these ornaments represent spiritualism. I think that the intricacies, complexities of these features have the ability to evoke the internal concentration of the user.

1.6. Do they represent a mosque.

To the Muslim a mosque can be anywhere. So the challenge here is to design a space in the tropics and also evoke the sense of spirituality for them.

1.7. I understand there are strategies to subvert these symbols, but to me it seems like a lot of effort is put to make them intellectual. As such I question if there was a lot of effort done to construct something which was meant to be played down.

It is not an issue of playing down but re-intepreting the mosque. We are seeking a new language, a mosque which speaks to the modern Muslims.

2. Details on Design

Design of minaret

2.1.1. Do you think it is necessary to have the moon and crest?

As mentioned earlier, I hoped to actually do away with the symbols. But de to the client's request, we had to keep them there. But think it is ok as we have devised a new approach to engage the minaret, to de-materialise it and yet use a aterial which ages with the mosque. Its textures, rhythms are very much like the ornament which we are discussing. Its intricacies, its ability to adapt brings a lot of thoughts and inspirations as one looks at it.

Design of screens

2.1.2. How are the patterns derived?

The zellij patterns are studied, and we abstracted a pattern that is versatile and fundamental to Islamism. It is the layering of 2 or more geometries to create its third geometry.

2.1.3. Some people have said its Japanese and oriental, what do you think of such comments?

I think that a good design renders varied interpretations and readings from the user. Although I do admit that in the design process of the screens, due to ease of construction and production, the screens are reduced quite extensively. As a result the patterns are too reduced in my impression.

2.2. Design of dome

2.2.1. Is there really an intended dome formed by the arches?

As mentioned earlier, there is no dome intended during the design of the columns. I would guess that it is the inherent character of converging the columns which resulted in the dome-like aesthetic.

2.3. Did this work influence other later works in your office? How?

Again, I think that this work contributes to my continual exploration of the Islamic identity. Like the Church in Jurong East, I explored the theme of Islamism

3. Ornaments and society

4.

I am very happy to hear from the users that they think your design should be continued in Singapore because it is the epitome of modernity.

They think that contextually, the mosque is very comfortable and windy unlike the conventional mosques.

4.1. Do you think this is a phenomena that locals are beginning to appreciate function, effectiveness of mosque and perhaps the mystified world (irrational) is viewed as backwards?

I believe in the importance of spiritual enlightenment. Such needs are always around. There is no backwardness in his phenomenon. In architecture, we need to deal with 3 fundamentals: the function, the context and the spiritual, cultural containment. I think this is where things like symbols or ornaments come into play.

4.2. What is your take on Asian ornament in Singapore today such as the Islamic patterns or the dragons on the temples?

Their relevance are essential to a piece of architecture to reflect on its cultural context. The creation of an ornament involves many levels. In the case of the crafter, it benefits the doer by the process of making. The concentration required place the crafter in a spiritual realm which enables the pursuit of focus. This embodiment of ideas is also directed to its viewer. The symbols requires a ritual to be carried out. In this process, the viewer gets inspired, impressed by the intricacies of the ornament such that he attain inner calm which is more potent than external calm such as the noise and environemtn. Such calmness in Mosques or temples is encouraged.

4.3. What is your stand as an Asian citizen and attitude towards preserving our culture and progressing. I understand this is an old discussion and do you think you have succeeded in reinventing and innovating our tradition?

I do not see it as a success or failure. There is always an exploration in every project. What is most important is that the experience learnt should be carried to the next project. For example in Assyfaah, if m screens do not work very well, fine. But I can confidently say that what I learnt from the process of design has allowed me to concentrate and pursue ornaments even if I throw the screens away. The lessons learnt are the most important to me.

4.4. Do you think that they should be kept in modern buildings or are they objects of kitsch?

Ornament when executed sensitively and thoughtfully are platforms which symbolizes forms, values that can be imbued in any society. It encapsulates the ideals and values in a physical permanent form.

4.5. Designers in Singapore tend to make ornaments useful, or rather make useful objects ornamented. Is there such a need? Are the screens even necessary removing the past symbolisms and iconography coz you mentioned about ?

I think that it is the innovations to engage the ornaments and integrate them within the building which is the challenge. It does not justify but re-invigorates the ornament. But it must be done in essence of the ornament. It cannot lose its meanings, its embodiment of spiritual importance. Only with such ornaments, can we produce a personalized space, where the viewer is calm in his mind, by his sensorial interaction with the architecture.

5. Request items: Early sketches, plans and brief.

Appendix F

Asyafaah Mosque Survey 2008

National University of Singapore
School of Design and Environment
Faculty of Architecture
Masters Programme
Micki Chua Ju Kean
U044593J

Section A : Mosque

1. What defines a mosque?

A peaceful place for praying, to socialize and to relate with the God.

2. Which is the most beautiful mosque? Why?

22% mentioned that the Assyafaah is one of the most beautiful.

58% mentioned that they have no preferences

20% mentioned mosques such as the Sultan Mosque and the Assyakirin Mosque.

3. Do you think it is important to pray in a beautiful Mosque? Why?

78% feel that the mosque need not be beautiful as long as it is peaceful, tranquil and comfortable.

22% feel that the mosque needs to give a sense of holiness through inscriptions and ambience.

4. Do you think having ornaments in the mosque is important? Why?

84% feels that images of a mosque such as the dome and the minaret are essential elements of the mosque in allowing familiarity, preparation of mood.

16% feel that a mosque can be anywhere, so with or without the ornament is not essential to their mental calmness.

Section B : Ornaments and Mosque

1. Why do you come to this mosque?

92% replies their live or work nearby

8% mentions that they prefer to visit this mosque

2. Is this like any other mosque you visited before?

100% replied that the mosque is different and refreshing.

3. Do you think there is a lack of ornaments in this mosque?

78% says no as they feel that the dome and minaret are visually recognizable.

22% feel that there can be more ornaments to evoke atmosphere, a more mysterious feel to the mosque. Darkness, quietness and sacredness are preferred.

4. Do you think mosque in modern day should be like this?

56% feel that it should be as it appeals to the younger generation

44% are neutral.

Section C : Ornament in Daily Life

1. Does ornament play a part in your daily life too?

66% not as much. Most prefer to have minimalistic approaches and even zen-styled furniture at home. Ornaments are usually seen in homes of older relatives.

34% feels that they prefer ornaments as it looks more traditional.

