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architecturemalaysia

MASJID RAJA HAJI FI SABILILLAH

PLAZA VADS

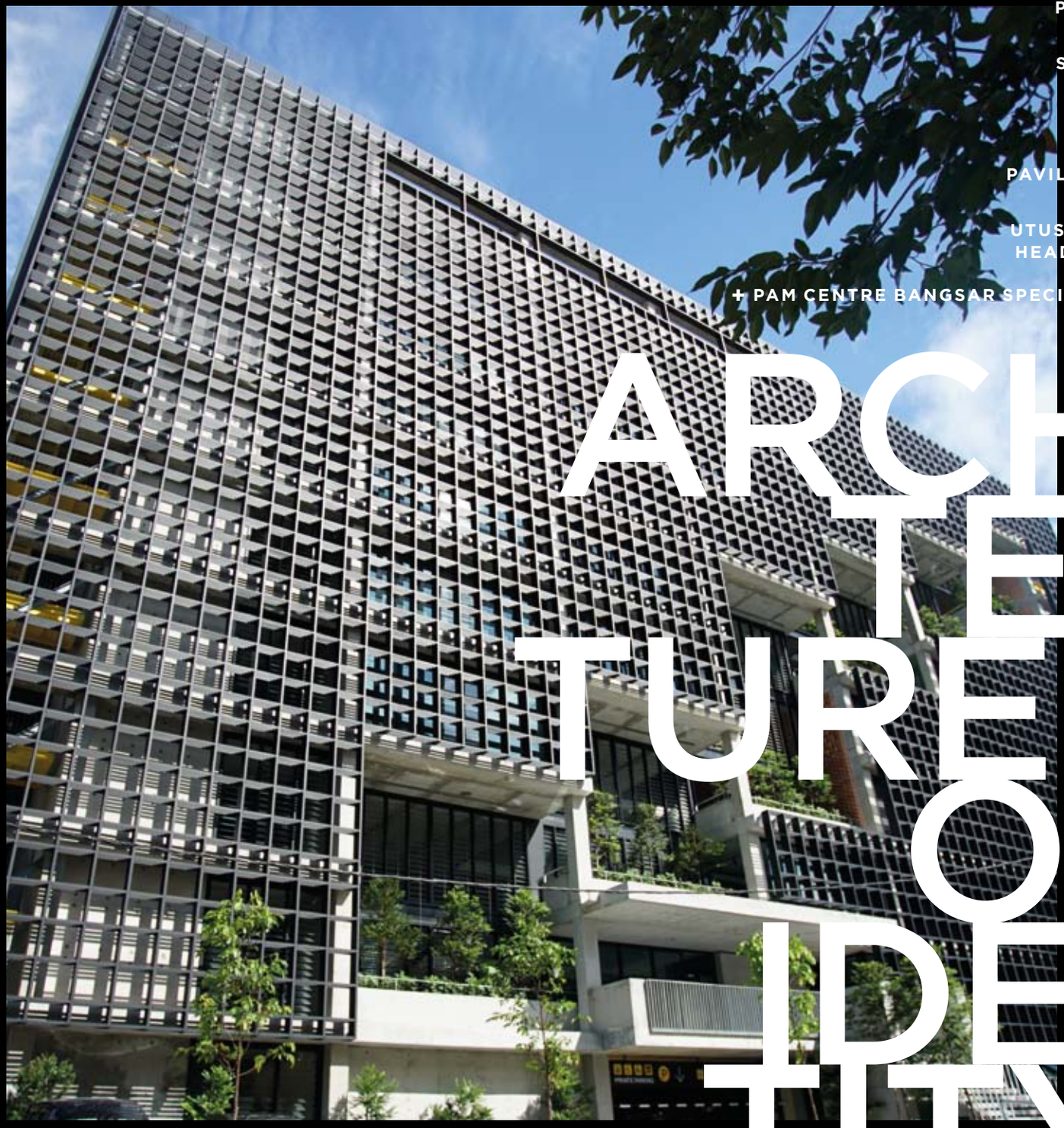
VILLA SANTUBONG

ECOWORLD GALLERY

MALAYSIAN PAVILION, MILAN EXPO 2015

UTUSAN MELAYU HEADQUARTERS

+ PAM CENTRE BANGSAR SPECIAL PROFILE



ARCHITECTURE OF IDENTITY

architecturemalaysia // VOL 28 ISSUE 6 // DECEMBER 2016

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EDITOR'S NOTE

ARCHITECTURE OF IDENTITY

The Malaysian architectural identity has always been a difficult quandary for the architectural fraternity to come to terms with. The very problem lies with the fact that identity is something which is dependent on one's personal world view and perceptions. Identity is something very intimate as it is how one sees themselves through the lens of their understanding and experience. Architecturally, Malaysia is very diverse, with many architects trained in a multitude of countries and in various schools of thoughts.

Invariably, the notion of national identity or a collective identity becomes something very elusive as we try to align varied perspectives into a coherent and cohesive viewpoint. Add to the fact that we are a rather young country that is still growing and seeking maturity where our societal norms are changing constantly. Even global societal norms have changed drastically in the past decades. Some might not notice it but it is prevalent in all our arts, culture and media. Take for example, Disney movies which are the personification of political correctness. In the tradition of *Snow White* and *Sleeping Beauty*, Disney princesses have always been portrayed as homemakers with exquisite domestic skills and damsels in distress awaiting their prince to rescue them for a 'happily ever after' marriage. Yet in the more recent movie *Brave*, one can evidently see that these values have changed where the titular princess is independent, fearless, outspoken and ultimately refuses to marry. It is the princess who outperforms the princes in combat and ends up saving the proverbial kingdom. In 2016, *Elena of Avalor* has even gone a step further to take all the aspects of *Brave* and place it in a Mexican Hispanic background in place of the traditional white cultural background of these movies. I personally like using this popular culture example as many people understand and know them, yet do not notice the change in them.

These pieces from our global collective culture are but a reflection of what society views as right or appropriate. This change in our psyche is evident throughout the generations, which is as relevant as ever here. As an example, terms such as 'nationalism' may mean different things to a grizzled Merdeka freedom fighter as compared to a modern urbanite teen. Words perhaps convey the same base meaning, yet when the context of understanding and experiences comes into play, it creates a completely different narrative to different people. Similarly, the search for a Malaysian architectural identity is one of constant flux as we ourselves are in search of these elusive meanings to things that we often say as a group yet do not understand as a group. Until we, as architects, find a common ground that we all agree is endemic and integral to what Malaysian architecture is, there will be no semblance of resolution.

Perhaps in that light, PAM has inadvertently stepped forward in suggesting some ground for consensus in the new **PAM Centre Bangsar**. As a result of a national competition, the winning entry by HMA & Associates was realised through the collaborative efforts of many architects and friends of PAM. Surely to some degree it represents what Malaysian architecture should be about, such as the considerable respect to our natural environment and the contextual use of materials. We have featured it in this issue extensively as it will be the home of PAM for many years to come and perhaps warrants the scrutiny of all architects.

Continuing this exploration of environmental appropriateness over traditional typological expectation, we have **Masjid Raja Haji Fi Sabilillah**, where the functionality of the place of worship is given eminence over all else. In **Plaza VADS Tower**, we see a continuation of this environmental response taken into a high-rise tower typology in the middle of a town. We can clearly see this narrative being continued in the **Villa Santubong** project where it is reduced to a more residential scale. The **Ecoworld Gallery** is a perfect intersection of old and new, and how adaptive reuse of old buildings can be done elegantly to fit a new purpose. In **Utusan Melayu Headquarters**, the lessons from the old vernacular are applied not literally but rather spatially and subtly to a typology that is non-existent in vernacular architecture, creating a building that is unique and elegant. The **Malaysian Pavilion** for the Milan World Expo 2015 perhaps personifies our quandary with regard to identity – the organic exquisite structure represents the nation, bereft from any familiarity in form yet keeping its national identity subtly in terms of materiality and sustainability.

In addition to projects showcased, we have a multitude of great commentary articles to continue this debate on our identity including one from our past PAM Gold Medal Winner Dato' Dr Ar Ken Yeang where he revisits the purpose and meaning of architectural identity. Aptly, we have Tan Sri Ar Esa Mohamed as the 8th recipient of the PAM Gold Medal to share his acceptance speech which clearly covers the evolution of the Malaysian architecture scene and his overview of the future of Malaysian architectural services exported internationally from his unique viewpoint as the current president of the UIA.

I hope that this issue will spark some manner of discourse among all of us, perhaps towards some consensus with regard to what Malaysian architecture is all about. Without proper discourse and serious exchange of ideas, there will be no improvement to the current state of thought with regard to the Malaysian architectural identity. As we approach 2017, our nation will be approaching its 60th year of independence – a good time as any to recollect, review and reflect. Let us look inwards and do a little soul-searching, before we take on the world.

Last but not least, I wish you all a Happy New Year!

Ar SARLY ADRE SARKUM
Editor-in-Chief
editor@pam.org.my

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01

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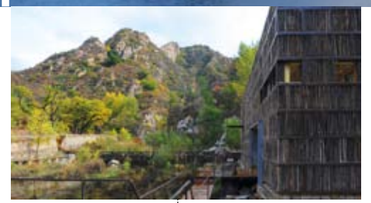


LEFT: The Moriyama RAIC International Prize sculpture designed by Wei Yew; ABOVE: Liyuan Library by past winner Li Xiaodong from China

CALL FOR ENTRIES: POST-HUMAN URBANITY: A BIOSYNTHETIC FUTURE ON NAMSAN

Architectural students and emerging designers seeking a challenge may consider participating in the 'Post-human Urbanity: A Biosynthetic Future on Namsan' competition held in conjunction with the annual 2017 UIA World Congress in Seoul, Korea. The international competition aims to seek new visions for a central site in Seoul, with a particular focus on biosynthetic ecology as a vehicle for urban regeneration.

As the Metropolitan Government of Seoul has recently shifted its direction for urban growth towards a more socially sustainable model of urban regeneration, this competition is part of its initiative to encourage change from the grassroots level. The competition hopes to generate thoughtful and provocative visions for Haebangchon, a village in Namsan, Seoul - an organic habitat where humans and their urban infrastructure co-exist harmoniously with the natural environment. Proposals should address key concepts such as post-human community, biosynthetic diversity, social sustainability and urban regeneration.

The competition is open to university students or young designers in any field with less than 10 years' experience, or three-member multi-disciplinary teams. The medium of the competition is in English. Registration closes on 28 February 2017.

www.uia2017seoul.org

CALL FOR ENTRIES: 2017 UIA-PHG INTERNATIONAL STUDENT & YOUNG ARCHITECT COMPETITION

The International Union of Architects Public Health Group (UIA-PHG), the Global University Program in Healthcare Architecture (GUPHA) and the China Hospital Construction Conference (CHCC) have opened up registration and submission for their newly launched competition, 'Smart, Green & Beyond: Healthcare Facility of the Future', which aims to raise awareness about sustainability in the design of healthcare facilities. The competition brief seeks for innovative proposals in healthcare design that address the challenges faced by the healthcare industry, including dealing with limited resources, utilising new technologies, meeting the needs of an increasing population and reducing cost.

Participants of the competition may register under two categories: Group A (full-time students at undergraduate, graduate or doctoral levels) and Group B (qualified architects under the age of 35). Multi-disciplinary teams are also welcome. The registration deadline for the competition is 28 February 2017, with no entry fees.

www.uia-phg.org

01

CALL FOR ENTRIES: 2017 MORIYAMA RAIC INTERNATIONAL PRIZE FOR EXCELLENCE IN ARCHITECTURE

The Royal Architectural Institute of Canada (RAIC) recently announced the second edition of the 2017 Moriyama RAIC International Prize. The Prize, established in 2014 by Canadian architect Raymond Moriyama along with the RAIC and the RAIC Foundation, is open to architects all over the world and aims to celebrate a single work of architecture that is deemed transformative within its societal context and reflects Moriyama's conviction that great architecture transforms society by promoting social justice and humanistic values of respect and inclusiveness.

The bi-annual Prize is open to architects all over the world, be it architect, team of architects, or architect-led collaboration, who are invited to submit a building or related group of buildings that has been completed, occupied and in use for at least two years prior to the entry deadline. Only one submission per candidate is allowed.

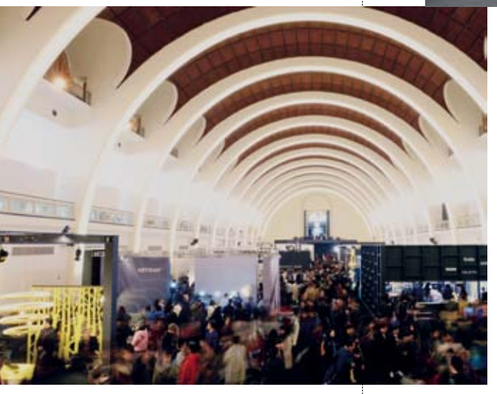
On top of the main award of CAD $100,000 and a hand-crafted sculpture designed by Canadian designer Wei Yew, the 2017 winner will also be invited to participate in the following edition's jury, thus establishing a link between participants, winners and jurors.

All submissions are due by 8 March 2017. For more information on the 2017 Moriyama RAIC International Prize and how to submit your application, please visit the website below.

https://moriyama.raic.org/

IMAGES COURTESY OF DESIGN SHANGHAI

BELOW: The Design Shanghai 2017 exhibition takes place at the historical Shanghai Exhibition Centre; RIGHT: One of the exhibitors that will be present at the exhibition



02

BELOW AND RIGHT: The Universidad de Ingeniería y Tecnología by Grafton Architects

03

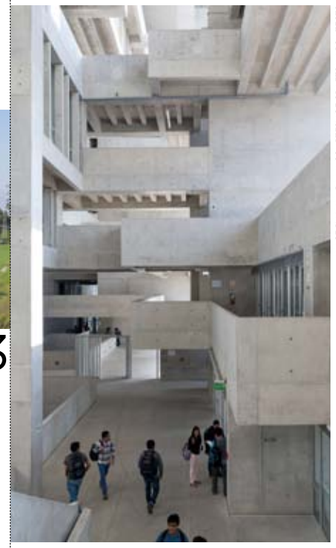


IMAGE BY IWAN BAAN; COURTESY OF GRAFTON ARCHITECTS

02

DESIGN SHANGHAI 2017

Design Shanghai, Asia's leading international design event, is returning to the historical Shanghai Exhibition Centre from 8 to 11 March 2017. Next year's event will accommodate 350 exhibitors, including renowned international and Chinese design brands and galleries such as Zaha Hadid Design, Galerie Dumonteil, Frank Partridge, Moroso, Beyond Object, W+S and YANG House. In addition to the main exhibition halls Contemporary Design, Classic & Luxury Design and Collectible Design, there will be two new additions in the 2017 edition – the Kitchen & Bathroom Design Hall and the Workplace Design Hall.

Held concurrently is the Design Shanghai AD China Design Forum Programme, a comprehensive seminar programme with influential architects and designers, which will focus on the theme, 'Global design, global craft, global manufacturing'.

Design Shanghai will also take over the city, offering a Shanghai-wide celebration of design and creativity by expanding the initiative beyond the exhibition and into the public realm with several offsite events organised in collaboration with its partners.

www.designshanghai.com

ARCHIDEX 17 TO FEATURE NEW BUILDING SYSTEM AND TECHNOLOGY CATEGORY

ARCHIDEX enthusiasts, mark your calendars. The premiere architectural, design and building industry event, ARCHIDEX 17, will return next year from 19 to 22 July 2017 at the Kuala Lumpur Convention Centre. Catered not only for industry experts but the wider public, ARCHIDEX 17 is ASEAN's gateway to the industry's most advanced architectural technology and materials.

In addition to the regular exhibition halls, next year's edition will also feature a brand new Building System and Technology category, in light of the 11th Malaysia Plan, which focuses on transforming the construction industry by enhancing knowledge content, driving productivity, fostering sustainable practices and increasing global competitiveness. The new category will also be in line with initiatives of the Construction Industry Transformation Programme (CITP) that aims to accelerate the adoption of advanced construction methods.

www.archidex.com.my

03

UNIVERSITY CAMPUS IN PERU WINS INAUGURAL RIBA INTERNATIONAL PRIZE

The Universidad de Ingeniería y Tecnología (UTEC) in Lima, Peru, designed by Ireland-based architecture firm Grafton Architects, has won the first edition of the RIBA International Prize.

Located on the edge of a ravine in the Barranco district of Lima, the UTEC is a collaboration between Grafton Architects and local partners, Shell Arquitectos, in creating a campus building for Lima's specialist engineering university, established to give young Peruvians access to qualifications, professional opportunities and to encourage social mobility.

Described by the RIBA jury as an exceptional example of civil architecture, the vertical campus is a modern interpretation of the university campus, a befitting response towards its local climate conditions and respectful towards Peru's terrain and heritage.

To that, the jury also added, "UTEC has been designed to encourage its students to interact in a unique way with the building. The vertical structure provides open circulation and meeting spaces in a succession of platforms that compose the 'frame' of the building; teaching rooms, laboratories and offices are enclosed, inserted into and suspended from the exposed concrete structure. The frame is a device providing shade, a place of rich spatial exuberance and a platform from which to view the life of the city. The entire life of this vertical campus is on full display to the people of Lima."

Opened to architecture firms all over the world, the RIBA International Prize winner was selected from an outstanding shortlisted entries that include the Arquipelago Contemporary Arts Centre, Menos é Mais by Arquitectos Associados with João Mendes Ribeiro Arquitecto, Lda; Heydar Aliyev Centre by Zaha Hadid Architects with DiA Holding; Museo Jumex, David Chipperfield Architects with Taller Abierto de Arquitectura y Urbanismo (TAAU); Stormen Concert Hall, Theatre and Public Library by DRDH Architects; and The Ring of Remembrance, International WWI Memorial of Notre-Dame-de-Lorette by Agence d'architecture Philippe Prost (AAPP).

www.architecture.com

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www.goat-story.com

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www.virb.garmin.com

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READS

PROTOTYPING FOR ARCHITECTS

JANE BURRY, MARK BURRY

THAMES & HUDSON

Prototyping is an essential part of designers' repertoires, allowing them to test their projects from structural, aesthetic and technical standpoints. *Prototyping for Architects* examines how architects are combining new digital design and fabrication technologies with traditional hands-on building techniques to gain more insight into the strengths and weaknesses of their designs. Jane and Mark Burry explain how prototyping at a miniature scale helps communicate complex spatial ideas, how prototyping empowers the architect-designer to test and prove a building's feasibility, and how additive (3D printing) or subtractive (robotic milling) prototyping can lead to exciting new design possibilities. Beginning with an introduction charting the rise of prototyping in design history, this cutting-edge volume for students and professionals presents an extensive range of prototyping techniques, followed by a selection of 30 projects by leading contemporary international architects.

ADVANCING WOOD ARCHITECTURE: A COMPUTATIONAL APPROACH

ACHIM MENGES, TOBIAS SCHWINN, OLIVER DAVID KRIEG (EDS)

ROUTLEDGE

In light of environmental challenges architecture is facing, wood is no longer regarded as outmoded, nostalgic and rooted in the past, but increasingly recognised as one of the most promising building materials for the future. Recent years have seen unprecedented innovation of new technologies for advancing wood architecture. *Advancing Wood Architecture* offers a comprehensive overview of the new architectural possibilities that are enabled by cutting-edge computational technologies in wood construction. It provides both an overarching architectural understanding and in-depth technological information through built projects and the works of four leading design research groups in Europe. Illustrated in full colour, the book showcases the latest technological developments in design computation, simulation and digital fabrication together with an architectural, engineering and manufacturing perspective, offering an outlook towards novel spatial and constructional opportunities of a material with unrivalled ecological virtues.

BIOMIMICRY IN ARCHITECTURE

MICHAEL PAWLYN

RIBA PUBLISHING

In search of genuinely sustainable building design and technology – designs that go beyond conventional sustainability to be truly restorative – we often find that nature got there first. Over 3.5 billion years of natural history have evolved innumerable examples of forms, systems and processes that we can now apply beneficially to modern green design. Aimed at architects, urban designers and product designers, *Biomimicry in Architecture* looks to the natural world to seek clues as to how we can achieve radical increases in resource efficiency. Packed with inspiring case studies predicting future trends, the principal chapters look at: structural efficiency, material manufacture, zero-waste systems, water, energy generation, the thermal environment and biomimetic products. An amazing sourcebook of extraordinary design solutions, *Biomimicry in Architecture* is a must-read for anyone preparing for the challenges of building a sustainable and restorative future.

LEAP DIALOGUES: CAREER PATHWAYS IN DESIGN FOR SOCIAL INNOVATION

MARIANA AMATULLO, BRYAN BOYER, LIZ DANZICO, ANDREW SHEA (EDS)

DESIGNMATTERS

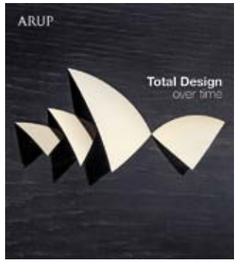
LEAP Dialogues: Career Pathways in Design for Social Innovation is a first-of-its-kind book that explores the new careers in the emergent field of design for social innovation with contributions from 84 leaders from across disciplines and sectors. These contributors encompass diverse points of view, stories and experiences about key issues, creating a multi-layered picture of how this field is being shaped. The book's distinctive framework, presented through a series of informal dialogues interposed with first-person essays, 'day-in-the-life' entries and case studies, addresses the spectrum of challenges and opportunities for those building careers in design for social innovation and for the organisations looking to support those careers. The unexpected pairings of perspectives in the dialogues push each other to uncover insights and ideas that are at times provocative, at times reflective, at times informative – but always engaging and accessible.

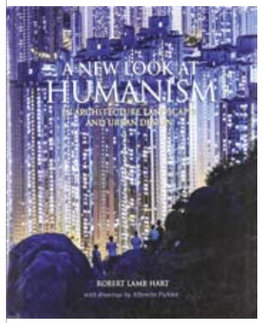
TOTAL DESIGN OVER TIME: ARUP DESIGN BOOK

ARUP

WARDOUR COMMUNICATIONS

Since it was established by Ove Arup in 1946, Arup has been the design, architectural and engineering genius behind many of the world's leading buildings and urban areas – from the groundbreaking Sydney Opera House to the unconventional Centre Pompidou in Paris and Crossrail, the largest construction project in Europe today. Beyond iconic buildings, Arup's influence is also evident behind the scenes. The hidden hand of the engineer has transformed many of our everyday experiences – often without us knowing. Arup has developed leading fire-safety systems in airports, cooling systems in museums to protect priceless artworks, and its experience with acoustics ensures every note is heard in the world's leading opera houses. This book focuses on some of the biggest global issues to arise over the past 70 years, including the population explosion and subsequent increase in city living, as well as changes in transport patterns that have fuelled the construction of airports, roads, rail and bridges, and even the democratisation of sporting events. Looking at Arup's work under the lens of these world-shaping events, we show how this is a firm that has not just responded to a changing world, but has anticipated and led many of those changes.





A NEW LOOK AT HUMANISM: IN ARCHITECTURE, LANDSCAPES, AND URBAN DESIGN

ROBERT LAMB HART, ALBRECHT PICHIER

ORO EDITIONS

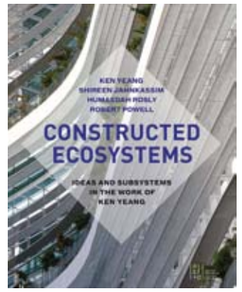
A New Look at Humanism is about enlarging the ways designers think about design, doing so by learning more about the maturing sciences of human life – evolution, ecology and the neurosciences – the sciences that explore how you or I actually experience the places being built for us and why we respond the way we do. The new insights are as revolutionary in their way as the rediscovery of ancient Greece and Rome by humanists in the Renaissance. That was a time of dazzling creativity, with new ways of thinking about human nature. We're facing that kind of opportunity again. The book starts with our 'Origins' as we evolved, immersed in the natural world. Then our actual experience is explored in 'The mind that encounters architecture' and 'The body that responds.' And then 'The languages of humanism' applies these ideas to design and the role of aesthetic experience.

CONSTRUCTED ECOSYSTEMS: IDEAS AND SUBSYSTEMS IN THE WORK OF KEN YEANG

KEN YEANG, SHIREEN JAHNKASSIM, HUMAEDAH ROSLY, ROBERT POWELL

APPLIED RESEARCH + DESIGN PUBLISHING

The fundamental underlying premise of ecoarchitecture is that, if it were to fully embrace the natural world, it must be designed to be 'living constructed ecosystems' and not inert denatured structures. Ken Yeang holds that green design today is still very much in its adolescence, requiring significant developmental work, particularly in architectural biointegration and aesthetic development. *Constructed Ecosystems* shows and explains the various invented devices that Yeang has adopted to technically advance his ideas from the abstract theoretical level, through concept architectural design to the level of microdevices and building sub-systems to achieve a better biointegration of our human built environment with nature.

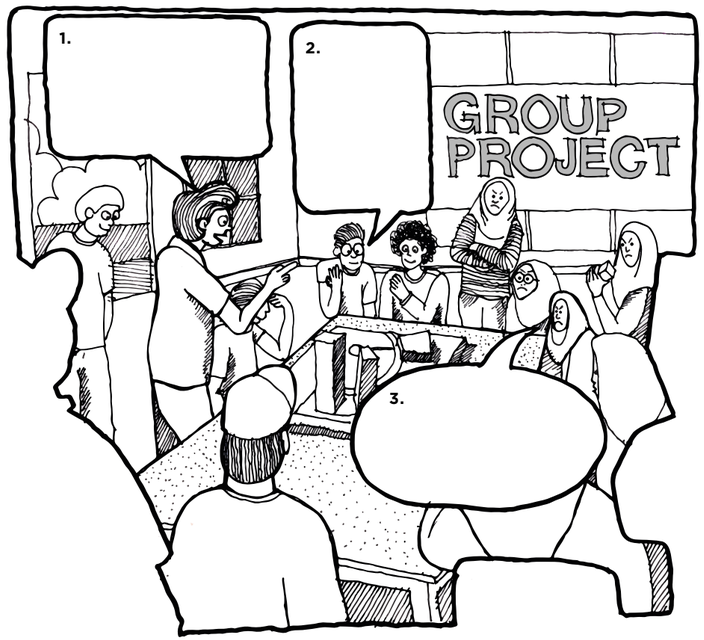


MAD WORKS: MAD ARCHITECTS

MA YANSONG

PHAIDON PRESS

The skylines of modern China are punctuated by architecture that amazes, inspires and awes. Many of these structures are the work of new, experimental practices like China-based MAD Architects. *MAD Works* not only documents the buildings of this group of avant-garde architects, but also traces the development of their ideas through associated practice including art, research and exhibition projects. Organised thematically, the book explores the underlying concepts of MAD Architects' work. *MAD Works* is illustrated with photographs, architectural drawings and 3D visualisations to provide a thorough exploration of MAD Architects' international portfolio of completed works, unbuilt projects and future ideas.



SKETCH BY FADZLAN RIZAN JOHANI FROM DIPAPANSEMBILAN STUDIO

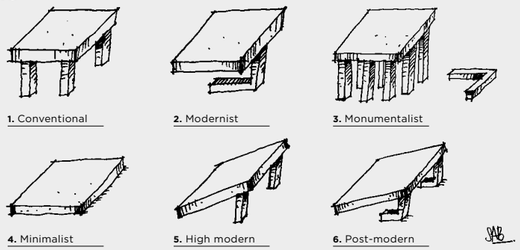
WHAT'S YOUR TAKE?

Every issue, there will be a cartoon in need of a caption. Readers are invited to send in their best caption of the cartoon above to us, and the winner will have their caption published in the next issue of AM, as well as a special surprise gift. Be funny, be bold, be witty, but above all, be creative!

Send your captions to am@memo.com.my with the title 'AM28-6 Caption Competition', including personal details such as name, address and contact number by **13 Jan 2017**. Only one caption per individual is allowed.

LAST ISSUE'S WINNING CAPTION!

ENGINEERING DESIGN



CONGRATULATIONS TO ONE PUNCH MAN FROM KUALA LUMPUR!

Your winning entry has won you a copy of **Malaysia's Architects: A History of PAM**, a beautiful coffee table book that details the journey of PAM from 1923 to 2013.

PAM CENTRE BANGSAR

A LANDMARK FIXTURE OF BANGSAR, THE NEW PAM CENTRE IS DESIGNED WITH CONSIDERATIONS FOR THE ENVIRONMENT, CULTURE AND SOCIETY WITH A TIMELESS AND MINIMALISTIC APPROACH IN OVERALL DESIGN AND DETAILING, BEFITTING PAM'S ASPIRATIONS AS A CENTRE FOR ARCHITECTURAL ADVANCEMENT AND DEVELOPMENT.

PAM CENTRE BANGSAR

5 KEY DESIGN FEATURES

1 TIMELESS
BASIC BUILDING FORM
NATURAL MATERIALS
QUALITY OF SPACE
BALANCE
SENSE OF PLACE
SIMPLICITY
SUSTAINABILITY
CULTURE

2 SUSTAINABILITY
LOW ENERGY CONSUMPTION
RENEWABLE ENERGY
ENVIRONMENTALLY RESPONSIVE
ECO-FRIENDLY MATERIALS
WASTE MANAGEMENT
WATER MANAGEMENT
RAIN WATER MANAGEMENT
PASSIVE DESIGN MEASURES

3 PRACTICALITY
SITE AND SPACE PLANNING
MAINTENANCE
HUMAN COMFORT
CIRCULATION
CLIMATICALLY RESPONSIVE
FACTORS THAT CONTRIBUTE TO HEALTH AND PRODUCTIVITY OF OCCUPANTS BY CONSIDERING:
THERMAL COMFORT
ACCESS TO FRESH AIR
ACOUSTIC PRIVACY
AESTHETIC VIEWS
FUNCTIONAL OUTDOOR SPACE

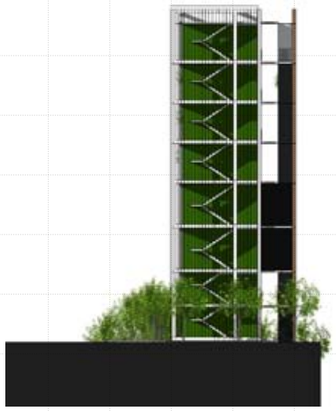
4 INNOVATION
FACADE TREATMENT
BREATHING SPACE
CASCADING ATRIUM
INTERACTIVE SPACES

5 ECONOMIC VIABILITY
FLOOR AREA EFFICIENCY
ROBUST SPACE DESIGN
SPEEDY CONSTRUCTION
LOW MAINTENANCE COST
LOW RUNNING COST
REPETITIVE ELEMENTS
MODULATION
COST-EFFECTIVE MATERIALS

Front Elevation

Rear Elevation

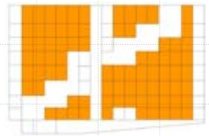
Side Elevation



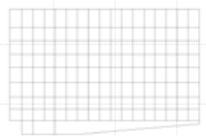
Side Elevation

Drawings as per competition submission

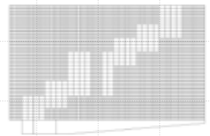
BUILDING SKIN PROGRAMME



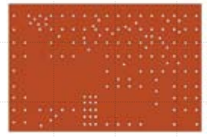
FRONT FACADE - 1ST LAYER
GLASS



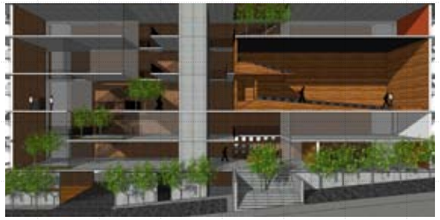
FRONT FACADE - SECOND LAYER
GALVANISED STEEL FRAMING

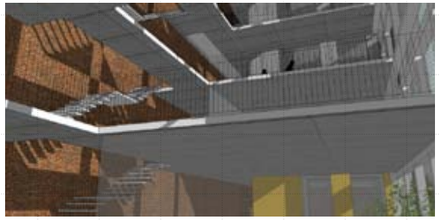


FRONT FACADE- THIRD LAYER
ALUMINIUM MESH / GALVANISED STEEL MESH



REAR FACADE
FAIR-FACED BRICK WALL RANDOMLY POSITIONED OPENINGS FOR CROSS VENTILATION





LOCATION
BANGSAR, KUALA LUMPUR, MALAYSIA

OWNER
PERTUBUHAN AKITEK MALAYSIA (PAM)

ARCHITECT
HMA & ASSOCIATES

PROJECT TEAM
Ar MOHD HEIKAL HASAN, HASAN MOHAMED

DESIGN PERIOD
2012-2013

CONSTRUCTION PERIOD
2014-2016

SITE AREA
1,120 SQM

FLOOR AREA
3,782 SQM

CONTRACTOR
AL-AMBIA SDN BHD

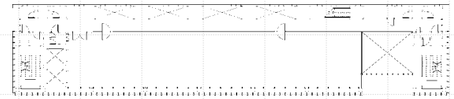
STRUCTURAL ENGINEER
T.Y. LIN INTERNATIONAL CO., LTD.

LANDSCAPING
IN-SITE DESIGN

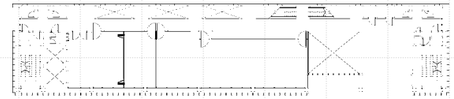
INTERIOR DESIGN
CHRIS YAP SENG CHYE

PHOTOGRAPHY
MOHD RADZI IBRAHIM

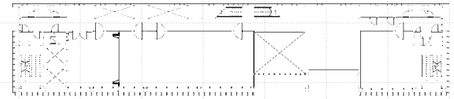
< THIS SECTION VIEW SHOWS THE ORGANISATION OF SPACES FROM THE MAIN ENTRANCE AT LEVEL 2 UP TO THE AUDITORIUM LEVEL AT LEVEL 5. THE ELEMENTS THAT ARE EXPRESSED ARE:
1) DIFFERENCE IN VOLUME OF SPACES.
2) RELATIONSHIP OF PUBLIC AREA AND PRIVATE AREA.
3) CASCADING VOIDS WITH LANDSCAPING.
4) UNOBSTRUCTED VIEWS FROM LEVEL 2 UP TO AUDITORIUM LEVEL.
5) STAIRWELL.
6) DOUBLE-VOLUME AUDITORIUM.



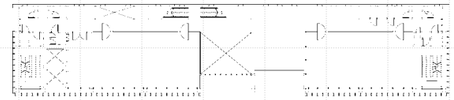
Level 7



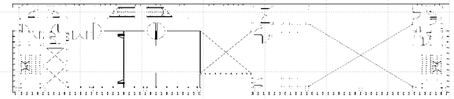
Level 6



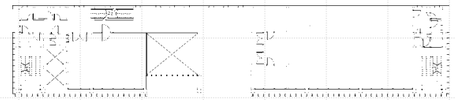
Level 5



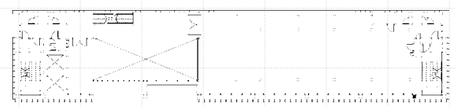
Level 4



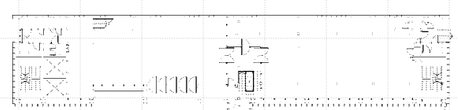
Level 3



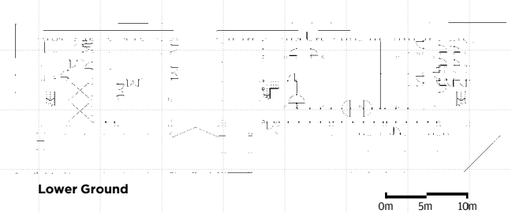
Level 2



Level 1

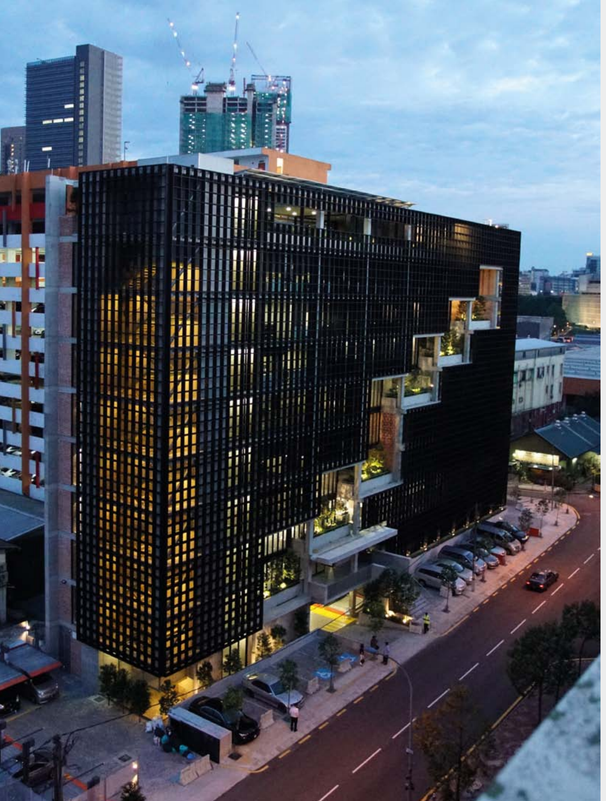


Ground



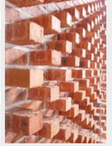
Lower Ground

Renders as per competition submission



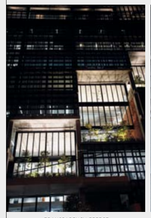
PAM CENTRE BANGSAR

SHADOW PLAY OF BRICK WORK



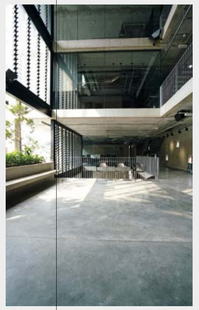
DIFFERENT BRICKLAYING TECHNIQUES RESULTING IN VARIOUS WALL TEXTURES

MALE AND FEMALE WASHROOM SIGNAGE



TRANSPARENCY EFFECT

ROOFTOP FUNCTION AREA

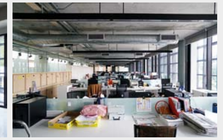


LAYERING EFFECT OF BREAK OUT SPACES

FROM TOP: FIRE STAIRS; SUNSHADING GRILLES

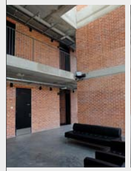
FROM TOP: ROOFTOP SPACE; STACKED COURTYARD; TRIPLE-VOLUME SPACE

LEVEL SIGNAGE



FROM LEFT: ROOF DECK FUNCTION ROOM; EXHIBITION SPACE; LEVEL 7 SECRETARIAT OFFICE

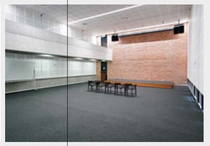
REAR CIRCULATION SPACE



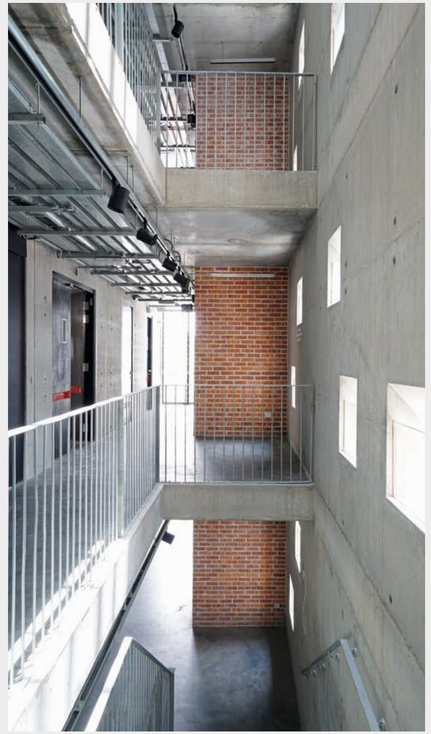
BREAK OUT SPACES

CONTINUOUS STAIRCASE

LIGHT WELL



FROM TOP (CLOCKWISE): PIGEONHOLE CLASSROOM; AUDITORIUM SEATING DETAIL WITH SKYLIGHT; SKYLIGHT



LIGHTING AND LAYERING OF CIRCULATION SPACE

PAM CENTRE BANGSAR

BACKGROUND

PERTUBUHAN AKITEK MALAYSIA (PAM), THROUGH THE PAM EDUCATION FUND (PEF), DECIDED IN OCTOBER 2010 TO PURCHASE A FOUR-STOREY BUILDING ON JALAN TANDOK, BANGSAR WITH THE INITIAL INTENTION OF DEVELOPING IT INTO AN ARCHITECT-DRIVEN CENTRE FOR CONTEMPORARY ARTS, IN THE SPIRIT OF THE NATIONAL ART GALLERY AND MUSEUM OF MODERN ARTS (MOMA) IN THEIR FORMATIVE DAYS.

HOWEVER, THE PLAN CHANGED WHEN DEWAN BANDARAYA KUALA LUMPUR (DBKL) ISSUED A NOTICE TO PAM TO VACATE THE PAM CENTRE PREMISES AT JALAN TANGSI BY JUNE 2012. THE PAM COUNCIL THEN DECIDED TO CHANGE THE INITIAL DESIGN BRIEF TO ACCOMMODATE A NEW PAM CENTRE AND CENTRE OF ARCHITECTURE INSTEAD.

AS PART OF THE EFFORT TO ENCOURAGE A TRULY COLLABORATIVE PROCESS, A SINGLE-STAGE COMPETITION WAS HELD AND OPENED TO ALL PAM CORPORATE MEMBERS TO SUBMIT DESIGNS OF WHAT THEY ENVISION THE NEW PAM CENTRE TO BE. AT THE CLOSING DATE OF THE REGISTRATION ON 9 MAY 2012, A TOTAL OF 55 SUBMISSIONS OF REGISTRATION WERE RECEIVED. AT THE CLOSING DATE OF THE DESIGN SUBMISSION ON 30 MAY 2012, A TOTAL OF 36 ENTRIES WERE RECEIVED. THE JUDGING OF THE ENTRIES WAS CONDUCTED ON 4 JUNE 2012.

THE WINNER, HMA & ASSOCIATES (Ar MOHD HEIKAL BIN HASAN) CAME UP WITH A DESIGN THAT WAS ELEGANT AND AN EFFICIENT SOLUTION ON A VERY TIGHT AND HIGHLY CONSTRAINED SITE. ITS EAST-FACING FRONT FACADE SHOWCASES A STRONG BUT SIMPLE GRID THAT CREATES A FLEXIBLE CANVAS FOR VARIOUS SCREENING DEVICES TO BE DEPLOYED. THE DIAGONALLY STACKED AND LANDSCAPED OPEN ATRIUMS ON THE STREET FACADE MAKE A DISTINCTIVE TROPICAL STATEMENT. THE STEPPED ATRIUMS ALONGSIDE THE LONG SINGLE-FLIGHT STAIRS OPEN UP THE STAIRS, CREATING A DRAMATIC CENTRAL CONNECTING SPACE TO UNIFY THE WHOLE BUILDING.

PASSIVE GREEN BUILDING STRATEGY

	INTENTION/PURPOSE	STRATEGY
1	To maximise the use of natural day lighting	The whole northwest facade from floor to soffit of slab is of clear glass. Skylights provided over the straight-flight stairs light up the area near the southeast facade.
2	To maximise natural ventilation/thermal comfort	Openings are provided on all sides of the building to allow for cross ventilation. Stack ventilation effect through the creation of stepped atriums with abundance of openings. All public and circulation spaces are naturally ventilated, including lift lobbies, escape staircases, toilets and sub-basement.
3	The reuse of existing structure	Retaining the four-storey existing structure and incorporating it with the new building reduce the amount of new building materials required. The cafeteria, exhibition spaces, auditorium, storage space, training room and prayer rooms occupy the existing structure.
4	To reduce heat gain and glare	'Egg crate' sun shading devices and blinds are provided at the northwest facade to prevent glare and heat from penetrating into the office spaces. The shading device negates 60% of solar radiation on facade glazing. Trees are planted at break out spaces to reduce glare and provice shade to the northwest facade. The cold air trapped at the concrete wall at the southeast-facing facade is released in the morning to cool down the building.
5	To maximise views/ visual comfort	Most of the spaces in the building are organised to have maximum views by providing floor to soffit glazing and voids across the buildings, thus creating indoor and outdoor relationship of spaces that provides comfort to the occupants of the building.
6	Greenery	Trees planted within the building on all floors help to absorb CO_2 and produce oxygen. Vertical greeneries and herb gardens are provided for human comfort and consumption respectively.
7	Innovation	On-site composting allows building users to be involved and educated in organic waste processing and to contribute to the building landscape sustainability.
8	Building materials	Recycled content materials, regional materials and low-VOC materials are used.

ACTIVE GREEN BUILDING STRATEGY

	INTENTION/PURPOSE	STRATEGY
1	Air conditioning system	High-COP Variable Refrigerant Flow (VRF) System to provide cooling with reduced energy consumption.
2	Lighting	Lighting zoning. Energy-efficient LED and T5 lighting.
3	Renewable energy	25kWp photovoltaic (PV) system.
4	Building automation	Building Automation System equipped with Energy Management System to improve building energy consumption and user-friendliness through control of general lighting via photo and motion sensors, energy monitoring via digital power metres, water usage monitoring via digital water metres, dynamic educational display and analyses of building energy performance.
5	Rainwater harvesting	Rainwater harvesting system to fully offset potable water requirement for flushing and irrigation.
6	Water-efficient fittings	WELS 3-ticks rated fittings.
7	Innovations	Hybrid vehicle charging stations and bicycle racks to promote greener modes of transportation.
8	Building Energy Intensity (BEI)	Combination of energy efficiency measures to reduce total building energy consumption, resulting in a BEI of <100.

BY Ar MUSTAPHA KAMAL ZULKARNAIN

DESIGNING THE MALAYSIAN ARCHITECTURAL BEACON

Back in 2012, Ar Mohd Heikal Hasan of HMA & Associates won the competition to design the new PAM Centre with his simple but elegant interpretation of what the PAM Centre should be. His honest-to-goodness design carried through to the final design stages, its built form now serving as the permanent headquarters of Pertubuhan Akitek Malaysia (PAM) and a Bangsar landmark in its own right. Ar Mustapha Kamal Zulkarnain sat down with Ar Heikal to discuss his approach to the winning design and the design decisions behind the PAM Centre that have culminated in the Malaysian architectural beacon that it is.

What compelled you to join the PAM Centre design competition?

MH: Since I was in university, I have always liked entering design competitions. I even won a couple of them during my university days. But I think design competitions are always a good platform to explore architectural potentials of the design topic and express it in a competitive manner. This definitely applies to the PAM Centre competition as well.

How did you feel upon learning that you have won the PAM Centre competition?

MH: I was excited to have won the competition. I didn't expect to win, as I only wanted to share what I thought the PAM Centre should be and express it through architecture. It was also interesting to know that the winning design would be implemented, as not all winning entries of competitions are realised. Knowing that the building was to be the institute for Malaysian architects was a really great challenge to undertake. More challenging than that was how to create an architectural piece or venue for architectural advancement and development in the country.

How would you define the Malaysian architectural identity of the PAM Centre?

MH: I believe that the identity of Malaysian architecture could be manifested in many ways, be it physically, environmentally, culturally or socially. As for the PAM Centre, the focus was on the use of local building materials, the provision of natural ventilation and the utilisation of natural lighting. I believe that these elements, if carefully utilised, are enough to translate what Malaysian architecture is. Building forms evolve with technological advancement, social development, cultural interfacing and climate changes.

What was your design approach of the PAM Centre?

MH: Knowing that the building was to be an institute for architects, we thought that the building should portray timelessness with a minimalistic approach in every respect, be it in its physical manifestation, spatial quality or use of materials. It has to be architecturally appealing, befitting a venue for architectural advancement and development.

The former Jalan Tangsi PAM building with its courtyard, internal spaces and verandahs was naturally ventilated and lit so much so that it has inspired us to adopt a similar quality of spaces but in a different manner and context.

The overall planning of the building was kept simple in order to allow for flexibility in space utilisation. The intention was to bring external spaces into the building as they are important elements in the urban environment. Having limited space for the courtyards and greenery at ground level, we had no choice but to bring in external spaces into the building at higher levels. We call them 'The Space Between', which also enhances the overall building mass. In order to create a dynamic flow of people inside the building and at the same time create drama, the external spaces were stacked diagonally from the ground level up to the topmost level of the building, which was done to also correspond to the sloping road fronting the building. These external spaces created within the building help segregate the private and public domains of the building, and can be utilised privately or publicly depending on circumstances.

In the context of urban design, linkages and connectivity are important features. The private and public spaces in the building are therefore linked and connected by bridges over these diagonal atriums, while connectivity between floors is via straight-flight staircases. These elements create an interfacing of space and form in a way that is fluid and transparent – fluidity in terms of people movement and transparency in terms of

> “FOR THE PAM CENTRE, THE FOCUS WAS ON THE USE OF LOCAL BUILDING MATERIALS, THE PROVISION OF NATURAL VENTILATION AND THE UTILISATION OF NATURAL LIGHTING. I BELIEVE THAT THESE ELEMENTS, IF CAREFULLY UTILISED, ARE ENOUGH TO TRANSLATE WHAT MALAYSIAN ARCHITECTURE IS. ”

visual connection. The subtraction of a series of squares that are arranged diagonally formed ‘The Space Between’.

A building should not stand on its own. It has to be physically and visually connected to its surrounding. ‘The Space Between’, which consists of pockets of greeneries, break out spaces, bridges, voids and staircases, are not only connected internally but also externally. Abundance of natural light and ventilation permeate the building freely through these spaces, which translate also into energy-efficient design.

There are four main elements of the building that could be easily identified or noticed. The first is the layering of architectural elements in linear forms. Starting from the rear facade, the off-form concrete shear wall was created to shield the building from the bulky carpark structure adjacent to the site and also to act as the feature wall or backdrop for the straight-flight staircases internally. The second element is the straight-flight staircases connecting the floors, and third is the stepped platforms. Finally, the aluminium sun shading screen functions as the heat and glare breaker, which alleviates the effects of the western sun which penetrates into the building in a 270° angle from the north. The layering of architectural languages expressed horizontally, vertically and diagonally formed through the interfacing of basic architectural elements is evident.

Were there any changes made to the original entry that you submitted that became the final completed building?

MH: Yes, as the winning design was to be implemented, I had to ensure that all the planning and by-law requirements were complied with. For that matter, some adjustments were made to the planning layout, but the original design intent and spirit remains. The two main changes were the lift core positioning and the off-form concrete wall that was originally intended as a facing brick wall.

Why was the lift core relocated?

MH: There were pros and cons of having the lift core in the centre or at the side. Originally, our intention was to have transparent elevators serving the 10 levels for people to experience the diagonally arranged stepped terraces while commuting up and down the building. Due to budget constraint, the lifts had to be changed to the ordinary type and therefore located at the side of the building next to the fire escape staircase.

How did you manage the submission of plans knowing that there was an existing building on site?

MH: We were informed that there was a plan submission made earlier for another proposal on the same site and the plans were approved. What we did was to submit amendments to the approved plans based on the PAM Centre proposal and surrender a five-feet wide land on one narrow side of the site as a condition for plan approval. We were restricted by the building height limit, plot ratio and the existing four-storey structure which was retained in order to maintain the existing building setback.

How did the building height limit affect the design of the building?

MH: Originally, the adjacent NST car park structure was about three storeys lower than the proposed PAM Centre building. But just before the PAM Centre was constructed, the NST car park building was renovated to include an additional four stories. Since there was a height limitation for the PAM Centre imposed by the local authority, the building could not go any higher.

How did you then merge the existing building and new building?

MH: The existing four-storey structure was not disturbed, except the roof structure and existing staircases that were demolished to allow for new addition and extension. The plastering of the existing columns was torn off in order to differentiate between the old and new portions of the building and also to remind us that there is an existing structure within the new building. The new structure and existing structure are both independent of each other.

What was the structural design adopted?

MH: The structural design concept was made simple. The intention was to have column-free spaces that are flexible and adaptable to changes and needs. A shear wall of approximately 55m long and 35m high was created as the rear facade of the building and a series of columns at regular intervals at the front of the building. The span of about 10m from the shear wall and the front columns allows for a 400mm thick bubble deck flat slab concrete floor system. In order to tally with the slab thickness, the composite steel/concrete columns at the front facade were sized at 400mm x 400mm. From the front elevation, you would notice that there is a consistency in size in slab thickness and column width.

The flat slab floor system provides a clean and uninterrupted soffit that allows services pipes to be installed close to it, thus minimising and reducing pipe bending.

Since the floor-to-floor height of the existing structure is 3,300mm, the proposed new columns at the front facade were distanced at 6,600mm to obtain a ratio of 1:2. This was to achieve a modular approach so that the sun-shading screens of 660mm in height and width could be arranged perfectly within the structural dimensions with five holes vertically and 10 holes horizontally. The internal aluminium and glass windows were also aligned with the external aluminium screens. All elements were properly coordinated.

How did you incorporate a communal aspect into the design of the building?

MH: Ample spaces were created for human interactions. I believe that the outdoor spaces created within the building and also at the roof terrace would encourage activities and functions. The off-form concrete shear wall also acts as a display backdrop or gallery wall for any art or architectural displays. The openness and voluminous spaces created throughout are among the criteria for a communal building.

How did you fulfill the fire requirements of the building?

MH: The building is equipped with a straightforward fire security system. We managed to do away with fire sprinklers as the building height was within the range where fire sprinklers were not required. The stepped atriums were also considered as external spaces as an abundance of openings was provided around it for natural ventilation, which again eludes the requirement for fire sprinklers.

How did you design the entrance of the building and determine its position?

MH: The entrance for the PAM Centre building is non-dominating as the focus of the design is on the overall mass rather than the entrance itself. Hence, the subtle entrance does not overshadow the overall building form. The positioning of the entrance was the result of the consideration made to the constraints of the existing four-storey building, the positioning of mechanical car parks, lift core, TNB substation, M&E rooms and the sloping road fronting the site.

How did you take into account the security of the building?

MH: There is only one entrance for visitors, which is via the stairs leading to the ground level. The other two entrances are for private use and the disabled, which are accessible from the lower ground level.

Natural surveillance is the strategy used to keep intruders under observation. It provides ample opportunities for legitimate users engaged in normal activities in the building to observe the spaces around. The use of glass, slim and sleek elements, see-through mesh and screens maximises visibility.

What were the green features you incorporated into the building?

MH: The building was designed to passively respond to the environment and allow for energy efficiency with maximised use of natural light and ventilation throughout. All public and circulation spaces are naturally ventilated through the spacious massing programme spanning across as well as from bottom to top of the building in a manner where double volume and triple volume voids are made to cascade in a dynamic fashion. These spaces allow for stack ventilation in addition to cross ventilation. It all depends on the natural wind velocity. The level of humidity can be lessened with assistance from mechanical means, but on windy periods, it could be said that comfort is achievable. The ‘egg-crate’ shading device on the front facade that aims to reduce the external heat gain negates 60% of solar radiation on facade glazing. The straight-flight stairs spanning from top to bottom of the building allows constant day lighting from the roof skylights through voids on every floor.

The existing structure that was retained also contributed towards the reuse of materials, thus reducing the amount of new building materials. All recyclable construction waste are also brought to recycling facilities to be repurposed. Vertical greenery and herb gardens are evident.

With the assistance of consultants and green experts, active sustainability features were also incorporated into the building, such as 25kW photovoltaic system, High-COP Variable Refrigerant Flow (VRF) air conditioning system, Energy Management System (EMS), energy efficient T5 zoned lighting, water-efficient sanitary fittings, rainwater harvesting system, hybrid vehicle charging station and others. These features have helped the building to achieve the highest green rating index in the country.

A small but notable feature is the narrow strip of glass panel at the bottom of the auditorium. What was the design logic behind it?

MH: In order to introduce some natural light into the auditorium, a narrow strip of horizontal glass panel is positioned at the bottom of the wall facing the main road. It creates a visual connection with the exterior and helps to reduce claustrophobia when in an enclosed space such as an auditorium.

Are there any comparisons between the RIBA 66 Portland Place and PAM 99L Jalan Tandok?

MH: I may say that both have more or less the same functions. In terms of building style, the RIBA 66 Portland Place, which was built in the 1930s, combines the classical and modernist approach. As for the PAM Centre building, it has been designed with considerations for the environment, culture and society with a timeless and minimalistic approach in overall design and detailing. It has to be architecturally appealing, befitting a venue for architectural advancement and development.

Are there any other areas that you would like to highlight?

MH: For decades, ‘form and space’ has always been the buzzword for architects. Personally, I believe that it literally relates to the phrase ‘body and soul’ in humans. Without the soul, our body will be dead. I believe when we design spaces in buildings, we are actually injecting soul into the building for which it should be alive and dynamic and influence the physical form. I hope that ‘The Space Between’ in the PAM Centre building becomes the soul of the building where human interactions take place.

Any lessons learned from the process of designing and building the PAM Centre that you would like to share?

MH: With cooperation from the structural engineer and builder, a good lesson learned was how to actually build an off-form concrete structure in terms of concrete design mix, formwork system, the construction built-up process and management, the planning of formwork joints and patterns, managing workmanship and concrete protective coatings.

How is the building exemplary to architectural students?

MH: When we design buildings, we normally apply architectural or design principles in our design, including principles such as shape, space, forms, order, hierarchy, scale, rhythm, unity, harmony, contrast, proportion, balance, coordination, articulation and integration, among others. Many of these principles are clearly applied in the building, and students can study and visualise it themselves.

The building also emphasises on architectural spatial organisation and treatment, which is another important aspect of the design. Spaces are made interesting by making them dynamic, non-static, interactive, free-flowing, etc. This is very important in architectural design. I believe that a building can take any form or style, but what makes it different is how well the design principles are applied and how well the spaces are architecturally formed and treated.

CYBERJAYA, SELANGOR

ATSA ARCHITECTS SDN BHD

MASJID RAJA HAJI FI SABILILLAH

The Masjid Raja Haji Fi Sabilillah aspires to take after the national spirit of the Masjid Negara, underpinned by a contemporary design approach and sustainability strategies that resulted in the first Platinum-rated mosque in Malaysia.

Mosque architecture in Malaysia has very much departed from its original spirit during the Merdeka Period. During the first 10 years of Merdeka, the emphasis was to produce a new architecture identity befitting of the newly independent country – an identity that is truly Malaysian in its essence, with Islam as its stake and official religion. Some of the early architecture in Malaysia exudes this spirit of national identity, which developed a sense of architecture that reflects the surrounding context, culture, society and aspiration.

One of the building typologies that commonly reflects this spirit during the time was locally inspired Islamic architecture. One of the most successful depictions of the Islamic mosque is the Masjid Negara that was built in 1965, designed by Dato' (Dr) Ar Hj Baharuddin Abu Kassim. At the time, the design of the mosque was inspiring and different from many of the local and international mosque designs. Since then, not many mosque designs have been able to follow in the same spirit that truly reflects the tradition, culture and architecture of Malay Islamic architecture.

Our design for the Masjid Raja Haji Fi Sabilillah was an attempt on our part to relive the once talked about approach, and to design a more progressive Islamic architecture and rethink the design of the mosque.

Work on the design of the mosque began in early 2012, following the award of the commission to ATSA Architects. The mosque's design was inspired by the bespoke design of the Masjid Negara in Kuala Lumpur. Coincidentally, the Masjid Raja Haji Fi Sabilillah was completed in 2015, which coincided with the 50th anniversary of the iconic Masjid Negara.

With a capacity of about 8,300 people, the mosque is

CLIENT
CYBERVIEW SDN BHD

LOCATION
CYBERJAYA, SELANGOR

YEAR COMPLETED
JANUARY 2015

ARCHITECT
ATSA ARCHITECTS
SDN BHD

PROJECT PRINCIPAL
Ar AZIM TAN SRI A. AZIZ

PROJECT TEAM
ATSA ARCHITECTS
SDN BHD

SITE AREA
70,819.99 SQM

BUILT-UP AREA
11,158.36 SQM

C&S ENGINEER
INGENIUR BERSEKUTU

M&E ENGINEER
SAGA JURUTERA
PERUNDING SDN BHD

CONTRACTOR
KORIDOR PADU SDN BHD

QUANTITY SURVEYOR
PERUNDING KOS PUTERA
SDN BHD

GREEN BUILDING CONSULTANTS
TERRA VIRIDIS
(HYDERABAD)

LIGHTING / ELECTRICAL EQUIPMENT
LED – HI-BEAM LIGHTING
(M) SDN BHD

CURTAIN WALL / CLADDING
FAIRON COMPOSITE –
FAIRON ALUMINIUM
SDN BHD

LANDSCAPING
ATSA ARCHITECTS
SDN BHD

designed to be more than a place of worship, as it will also be used as a local centre for Islamic activities. It is situated on a 100-acre site which will eventually become an integral part of the new Islamic University of Malaysia campus designed by W&W Architects.

The goal of the design is to portray Islam as a progressive religion, as well as to reflect the simplicity and purity of modern Malaysian mosque architecture. Therefore, the design focuses on a more modern approach rather than the conventional post-modern typology, emphasising the building's sustainability elements, but retaining the spiritual design essence of Islam.

The ethos behind the mosque's design is to ensure that it will be a truly sustainable building and ultimately become a model for the design of future mosques in Malaysia. As such, the design adheres to the highest rating level, namely the Platinum rating of the Green Building Index (GBI) standard, through the incorporation of recyclable materials and energy efficient equipment that minimises energy consumption and reduces running costs. It will be one of the first mosques in the world to use solar panels to generate electricity and subscribe to a Feed-In Tariff (FIT) scheme, in which the energy generated and supplied to the national grid will contribute to the country's supply of renewable energy.

The mosque's main prayer hall is designed to be air-conditioned for two hours during Friday prayers and during prayers of other special Islamic occasions. At other times, it is envisaged that fans and ventilators will be sufficient to sustain an average daytime temperature of 26°C within the mosque's main prayer hall. A large central courtyard with a tall signature tree situated before the main prayer hall facilitates both natural ventilation and natural lighting to the floors above.

The mosque's unique dome is perhaps one of its most innovative elements. The single dome is situated over the enclosed main prayer hall, formed by the use of double glazed low-E glass, which provides both shade and a source of natural light. Rising hot air is extracted and released through ventilators positioned at the top of the dome's underside and just below its pinnacle, thus releasing trapped hot air and reducing the temperature in the prayer hall. Retractable blinds provide further shade when needed, so as to prevent direct sunlight in the main prayer hall.

Low-E glass panels are used throughout the mosque to minimise the heat from the sunlight from heating up the interior of the mosque. Natural cooling is also provided by the slightly elevated water feature surrounding the exterior walls of the mosque facing the *qiblat*, which can be seen from inside the hall. A sloping feature wall behind the pool allows water to cascade down gently, creating soothing, therapeutic sounds.

One of the first mosques in Malaysia that has a covered rooftop prayer area, much of the rooftop area are covered with solar panels, which will generate renewable energy and provide shade during occasions when the area is in use for prayers. As well as supplying electricity, it is envisaged that the energy generated by the solar panels will be profitable to the mosque to sustain its running costs. An arabesque pattern in glass reinforced concrete (GRC) is used as its primary wall, which acts as ventilator blocks and sunscreen devices. This allows natural wind to flow through the building and at the same time prevents direct sunlight from entering the building.

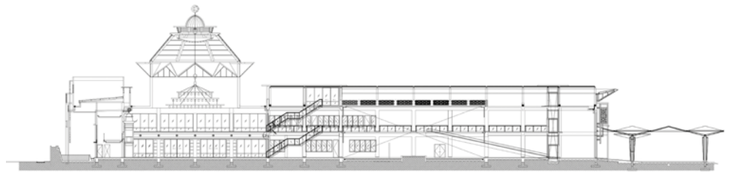
To supplement the mosque's natural lighting, LED light fittings and low-energy lighting are used during the evenings and at night. Light sensors are installed throughout the building so that artificial lighting can be controlled and switched off automatically when not in use.

A water harvesting system is integrated into the building for its landscape irrigation and grey water usage.

The mosque is accessible via three entrances, including a dedicated VIP entrance on the southwest side, a 'drop-off' area on the eastern side and a pedestrian entrance on the south side. In addition to the main building, the mosque also incorporates a multi-purpose hall, a banquet hall with a seating capacity of 800 people and an area designed for staff housing.

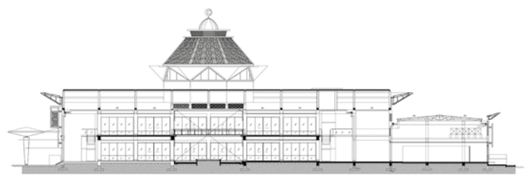
The mosque complex is designed to revolve around the main prayer hall. As the main feature, it is the most ornate part of the mosque, featuring an intricate facade with Islamic geometric motifs. Accommodating a capacity of up to 1,200 worshippers, it stands at twice the height of the surrounding structures and is enclosed to allow for air-conditioning whenever required.

A semi-enclosed 'overspill' prayer area is cooled with the use of natural ventilation and fans. The upper floor is accessible via a moving walkway or travellator, as well as staircases and a glass lift. A green rooftop area finished with artificial turf has the potential to accommodate a further 1,800 worshippers, and will be developed once the mosque ap-



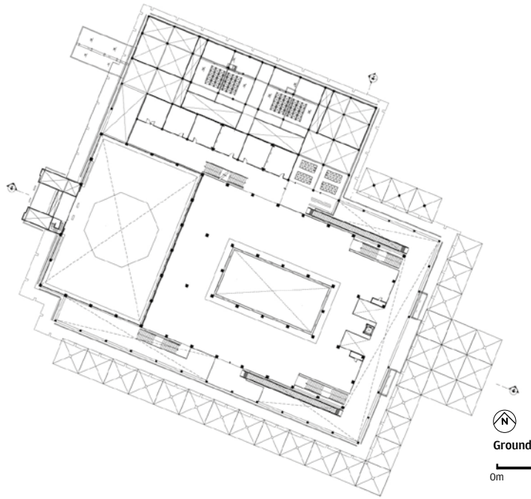
Section X-X

0m 12m 24m



Section Y-Y

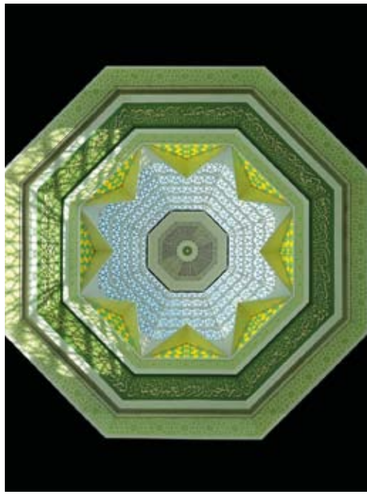
0m 12m 24m



Ground floor plan

0m 10m 20m

FROM LEFT: The dome; View of the GRC wall panels; Central courtyard; The minaret; View from below the glass dome

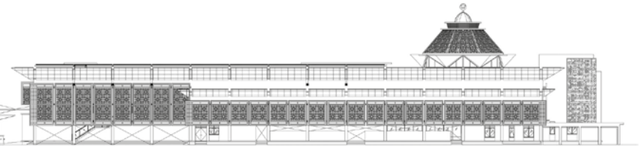


FROM TOP: The main prayer hall; The inverted canopy

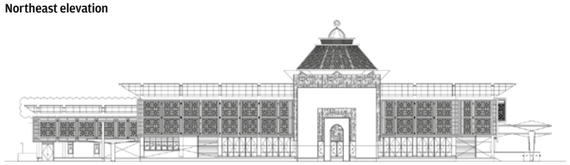
proaches its current capacity.

An iconic, five-tiered, slender minaret made of steel standing 27m-high is situated at the front of the plaza, with an ablution area located below. The five tiers of the steel structure symbolise the five pillars of Islam.

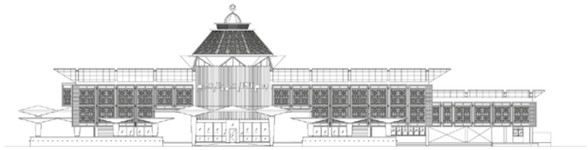
As requested by DYMM Tuanku Sultan Selangor, the *mihrab* and *mimbar* incorporate elements of traditional Malay woodcarving done by local craftsmen. The *mihrab* is formed by a pointed arch with a wooden frame at the centre, flanked by a larger square frame featuring geometric patterns and the names of God and the Prophet. A raised, wooden *mimbar* platform is placed to the right, surmounted by a dome with similar patterns to that of the mosque's building. The wooden elements symbolise Malaysia's heritage and pay homage to its traditional art and design.



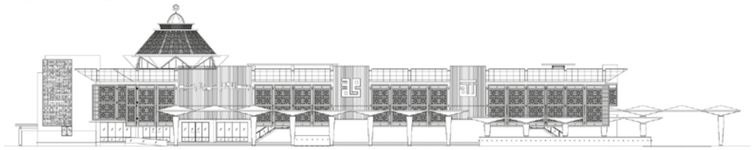
Northeast elevation



Northwest elevation



Southeast elevation



Southwest elevation

0m 12m 24m

ABOVE: Night view of the mosque; BELOW, FROM LEFT: View from the main prayer hall towards the *mihrab* wall; Night view of the mosque from compound area

PLAZA VADS

Originally the IBM Plaza, the Plaza VADS Tower is essentially the renovated and upgraded version of the IBM Plaza with a new Annexe Building that is a seamless extension and contemporary evolution of the tower's original design concept and foray into bioclimatic design.

LEFT: The refurbished Plaza VADS Tower on the left and new Annexe building on the right

Located in an affluent major township in Kuala Lumpur, Plaza VADS, formerly IBM Plaza, is an endeavour to establish a durable connection and identity to the place in two ways – firstly by a critical regionalist bioclimatic response to the locality in connection to the hot-humid tropical climate of Malaysia, and secondly by means of abstraction in which the symbolic pitched roof of the traditional Malay house is taken to be reinterpreted as a louvred roof at the top of the Plaza VADS Tower.

Construction of the 24-storey iconic office tower was completed in 1985. Shortly after, it received the PAM Awards in 1989. Close to three decades later, its owner, Pelaburan Hartanah Nasional Berhad (PHNB) appointed the original architect T.R. Hamzah & Yeang to upgrade and renovate its facade and interior spaces. This gave the landmark building a new shine and transformed the tower into a Grade A office tower.

Plaza VADS was designed as a bioclimatic tropical tower with naturally ventilated elevator cores and staircases located at the hot east and west sides of the floor plate.

CLIENT
PELABURAN HARTANAH NASIONAL BERHAD (PHNB)

LOCATION
TAMAN TUN DR ISMAIL, KUALA LUMPUR

YEAR COMPLETED
JANUARY 2016

ARCHITECT
T.R. HAMZAH & YEANG SDN BHD

PROJECT PRINCIPAL
DATO Dr Ar KEN YEANG

PROJECT TEAM
ANDY CHONG, MARIANI ABDULLAH, CHONG SUE MAY, FAIZAH RAHMAT

SITE AREA
6,217 SQM

BUILT-UP AREA
32,310 SQM

C&S ENGINEER
WAN MOHAMED & KHOO SDN BHD

M&E ENGINEER
NORMAN DISNEY & YOUNG (M) SDN BHD

CONTRACTOR
SIAB (M) SDN BHD (TOWER), CONSOLIDATED LEGEND SDN BHD

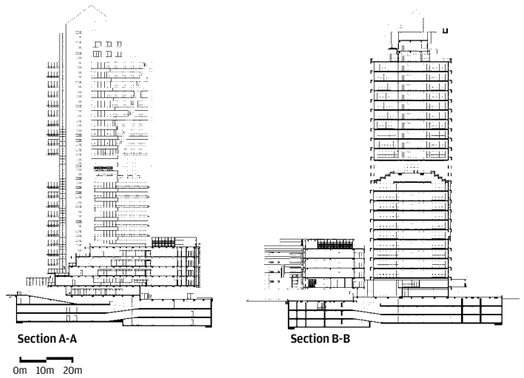
QUANTITY SURVEYOR
JUBM SDN BHD

LIGHTING CONSULTANT
NORMAN DISNEY & YOUNG (M) SDN BHD

LANDSCAPING
T. R. HAMZAH & YEANG LANDSKAP SDN BHD

OTHER BUILDING CONSULTANT
MEINHARDT (M) SDN BHD

PHOTOGRAPHY
CREATIVE CLICKS SDN BHD



It features a diagonal vertical planter that climbs on one side of the building to a landscaped deck on the 14th floor. Crossing this space, the garden then ascends diagonally towards the roof, resulting in a continuous vertical landscaped building, encouraging biodiversity.

In 2013, building works for a new extension to the existing tower commenced. The new Annexe Building derives its design concept from the existing tower, but further translates its concept and sustainable features into the next decade. Instead of employing a stepped planting system as per the original Plaza VADS, the Annexe Building uses a combination of vertical travel planter boxes and trellises. It succeeded in being Green Building Index (GBI) certified.

Several main sustainable design features of the Annexe Building are its ventilated facade with an integrated system of horizontal sunshades and continuous vertical green walls that meander around the building. They act as living habitats and as a means of filtering and improving ambient indoor air quality. Together with other shading devices, they also help reduce solar heat gain and building energy consumption costs. The vertical green walls bring nature into the building and provide visual relief when working in the corporate life.

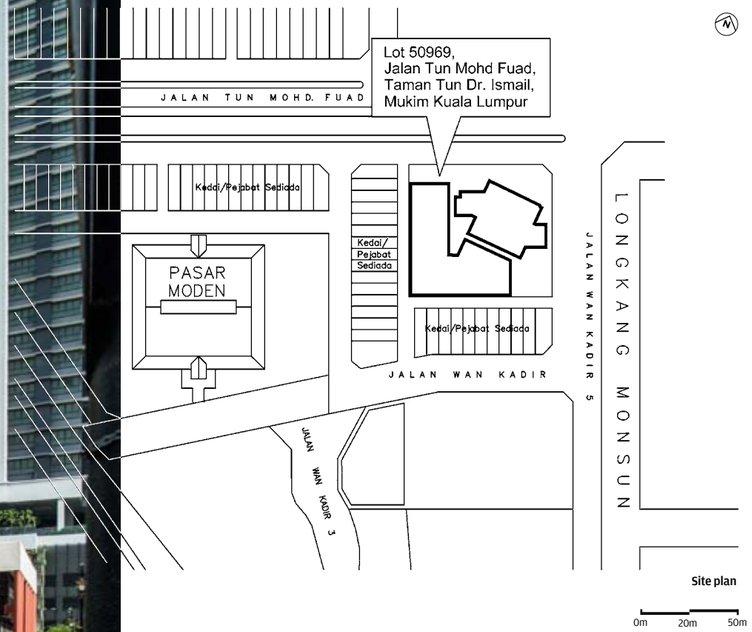
The benefit of designing to the climate of the locality is that the Plaza VADS becomes a very comfortable building for users. Appropriate solar orientation of the building by intentionally positioning the widest building floor plate to face north and south whilst locating the service cores at the hot east and west sides resulted in optimum solar shading for human thermal comfort. In addition, there is provision for natural ventilation opportunities to the elevator lobbies, staircases and toilets, further enhancing human comfort.

A canopy physically links both the Tower and the Annexe Building. Along this sheltered route, retail spaces and a food court activate the adjacent public plaza areas in between the two buildings, enlivening the local atmosphere. Suppose the Tower stood to symbolise the modernism of Malaysian vernacular architecture in grandeur and height, then the Annexe Building now becomes its seamless extension of an evolution with the times, bridging the vertical gap, acknowledging an intimate human scale as it extends harmoniously horizontally towards its neighbouring shophouses.

FROM LEFT: The subtly revamped and refreshed Plaza VADS; Archive photo of the former IBM Plaza

FROM TOP: Entrance canopy; Shadow of vertical trellises on the interior floor

The stepped facade of the Annexe building



Site plan
0m 20m 50m

VILLA SANTUBONG

Nestled amidst the verdant vegetation of Belum Rainforest, Villa Santubong is a journey in exploring limits and pushing the boundaries of forest construction, building around natural topography and encapsulating the spirit of the forest even from within the confines of the villa.

CLIENT
MKN GROUP SDN BHD

LOCATION
PULAU BANDING, PERAK

YEAR COMPLETED
JULY 2015

ARCHITECT
YELILL ARCHITECT

PROJECT TEAM
CH'NG SAO INN, KAMELIA JAMBARI, NAADIYA H. MOKHTAR, MUTHU, YONG POH YEN

SITE AREA
18,615.40 SQM

BUILT-UP AREA
557.40 SQM

C&S ENGINEER
KAL & PARTNERS SDN BHD

M&E ENGINEER
JKM M&E ENGINEERING

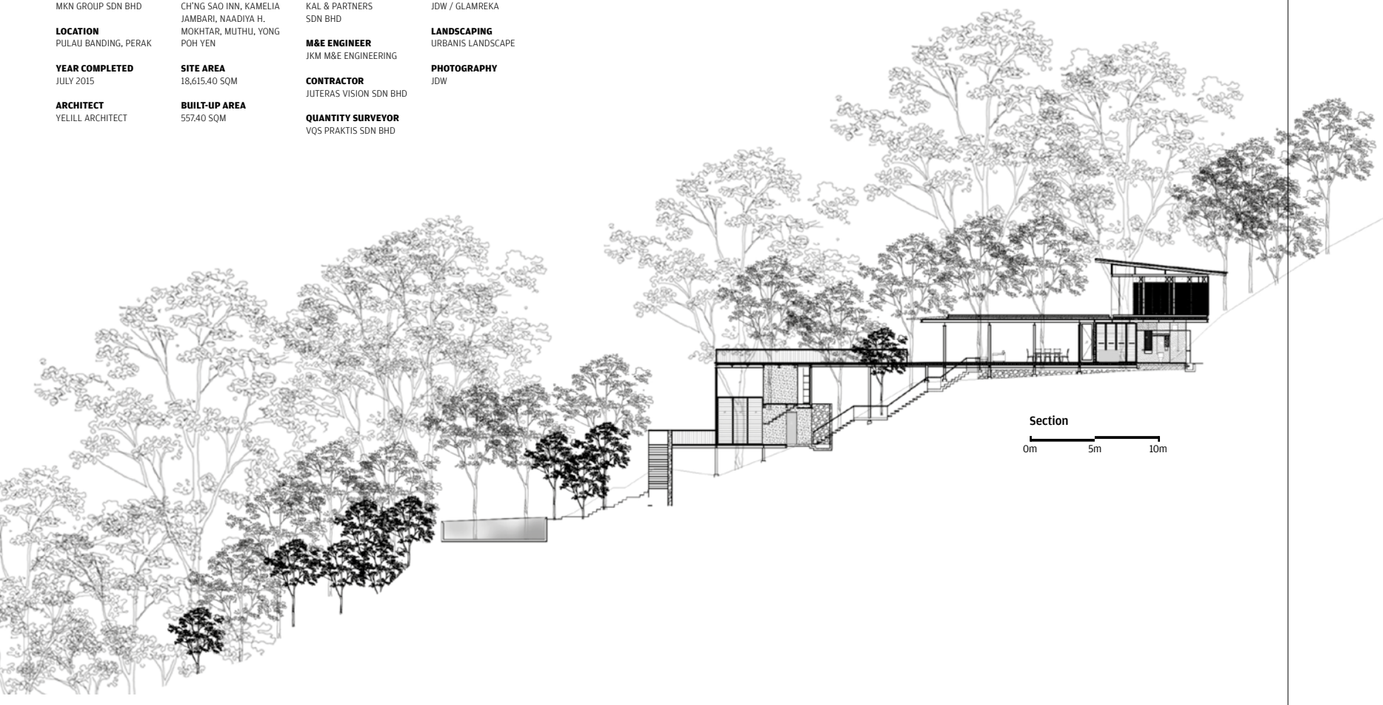
CONTRACTOR
JUTERAS VISION SDN BHD

QUANTITY SURVEYOR
VQS PRAKTIS SDN BHD

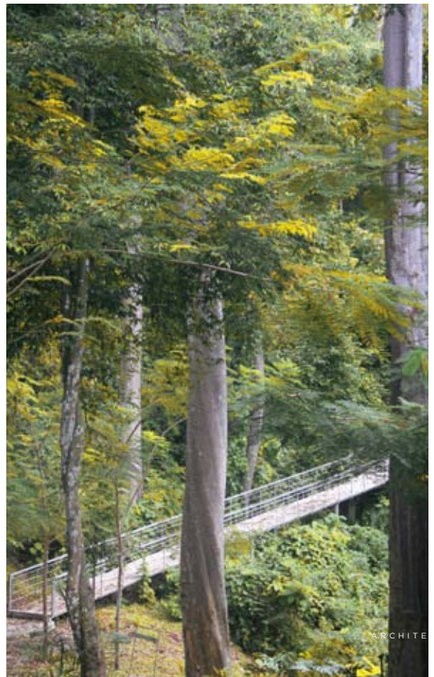
LIGHTING
JDW / GLAMREKA

LANDSCAPING
URBANIS LANDSCAPE

PHOTOGRAPHY
JDW



FROM LEFT: Facade exterior; Entrance bridge; External open deck



The fact is, trees do not grow straight. Their trunks and branches bend and curve with a mind of their own. Their canopies spread into the horizon in all its glory as mother nature rules the land in all its might. Who'd have known that the trees in the forest would change our perspective in space-making entirely? The normal architectural and construction practices from our regular built environment did not apply to this wild Banding Island as we embarked on a journey to learn about architecture through the rule of nature that is Belum Rainforest.

The programme was simple – a small 6,000sqf footprint amongst the four-acre Belum Rainforest jungle with three pavilions to cater for visiting families – but the intention was grand and noble. This building was devised as a medium to raise funds for the Belum Rainforest Research Centre in order to realise the hopes of leaving a legacy of the forest heritage behind. A prototype from a series of projects that has been established for the past 10 years, it aims to break through design and engineering feats beyond traditional boundaries in the forest without being intrusive to the natural environment, climate and resources.

Realising that trees are wild, ever-growing organisms that no map in the world can mark, an insitu design approach became the preferred strategy. Understanding the existing trees on site was fundamental for the project. Hence, a detailed tree mapping plan which documented important tree species, sizes and locations was carefully studied during the design stage. Grounds were marked with lines, mature trees were measured and countless steps were retraced. We wanted the ecological aspect of the nature to be part of the architecture.

Placing the building within the dense vegetation sounded ideal in mind but proved to be challenging on site – there

Exterior staircase

Circular outdoor pool surrounded by the natural environment

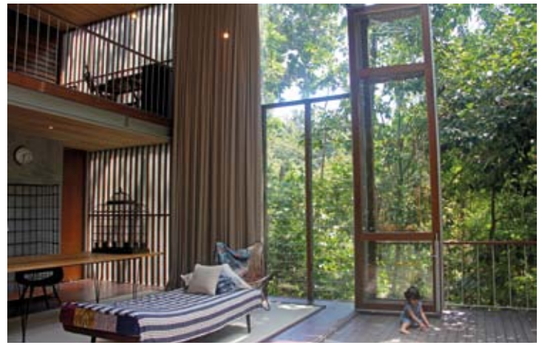
were limitation of access for materials and workers, trees were not to be touched and grounds were not to be changed, and voices of owners, botanists, architects, engineers and contractors echoed the forest as we solved design issues on site one by one. Dialogues that were drawn from the insight of experienced minds eventually drove the construction from start to finish.

The clever play of levels in the undulating topography created a wonderful dimension of spaces, letting the architecture take shape on its own with the natural contours of the land. Spaces extended beyond the edges of the slope created surprise as levels change without the shifting of floor planes. The architecture and engineering took advantage of the changes in landform, creating grand spaces of its own by simply playing with volumes and openings.

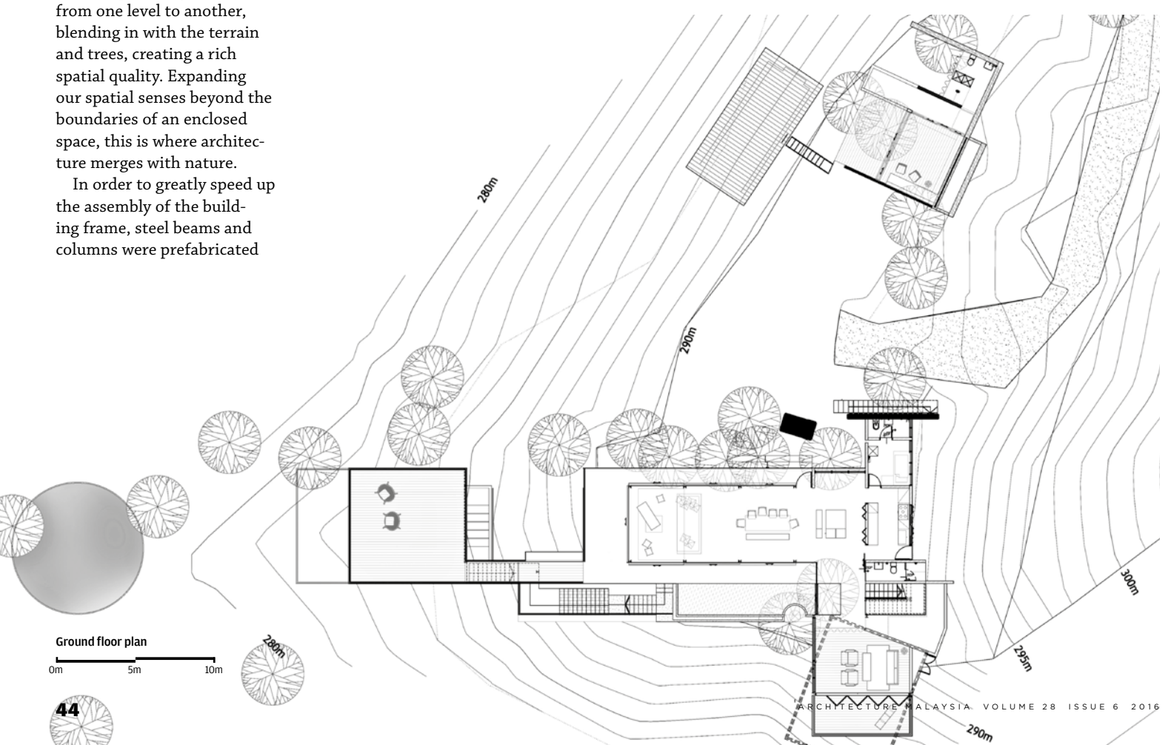
Taking a cue from the existing landform, the building took shape in a dynamic form from one level to another, blending in with the terrain and trees, creating a rich spatial quality. Expanding our spatial senses beyond the boundaries of an enclosed space, this is where architecture merges with nature.

In order to greatly speed up the assembly of the building frame, steel beams and columns were prefabricated at the factory and assembled on site. Inclusion of design details of the facade enriched the space inside without being overpowering to the landscape outside. Openings and enclosures were delicately defined with vertical timber louvres and glass windows. A vernacular and timeless beauty, the renewable and locally sourced timber highlights our appreciation of the works of local carpenters and craftsmen.

The round cast-in concrete swimming pool was the first structure to be constructed on site to allow a controlled cleared area for materials, equipment and workers' access. It sits at the tail of the slope like a hidden jewel, as the rest of the building started to take shape. The first to be built but last to be discovered, orientated towards the view of the lake and the forest, the swimming pool is the grand finale to 'our story' in the forest. A story that makes us switch off our electronics and truly appreciate nature; a journey absolutely worth having.



ABOVE: The living space that opens up to a deck overlooking the pool below; RIGHT PAGE: Timber and concrete furnished kitchen, showcasing the natural and raw beauty of the materials



GEORGE TOWN, PENANG

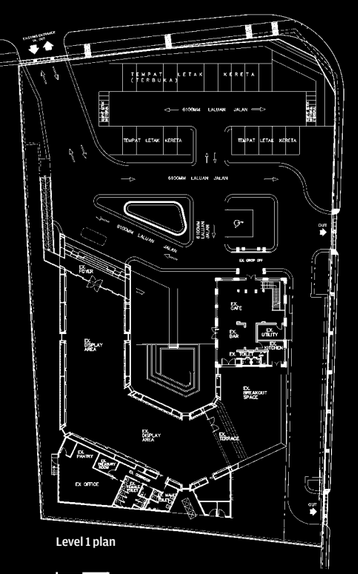
BYG ARCHITECTURE SDN BHD

With a heritage building on site, the Ecoworld Gallery is an intersection of old and new, successfully melding a colonial heritage building with a respectful new extension that carries through similar aesthetics that combine the two structures into a single cohesive structure.

ECOWORLD GALLERY

Intersection where the new building meets the existing building

Level 2 plan



Level 1 plan

0m 4.5m 9m

Ecoworld Gallery is a boutique development located in a small plot of land that strategically fronts the intersection of Macalister Road and Anson Road in George Town. The site was once within the buffer of the Conservation Zone of George Town. Now a significant landmark, the gallery stands as a subtle gateway that beckons the anticipated approach into the George Town World Heritage Site.

Even though classified Category 2 under the Conservation Guideline, historical records of the existing building on site were not readily attainable. The original two-storey bungalow had gone through numerous renovations over the years, but still retained recognisable accents of Straits Eclectic Architecture with influences of Southern Chinese Eclectic style.

The project brief called for the restoration and adaptive reuse of the existing building as an office with a new wing that functions as a large double-volume gallery suitable for launches and promotions. The new wing is required to pay homage to the heritage building in scale, proportion and outlook.

While BYG Architecture was appointed as Project Architect, the design of the scheme involved two parties – BYG Architecture for the adaptive reuse of the existing Category 2 Heritage Building and Ministry of Design for the design of the new wing. For the existing heritage building, the outlook of the building was required to be restored as close to its original facade as possible.

The conservation approach taken was also to acknowledge the evolution of spaces over the years by rebuilding over elements that depict original would-have-been spaces. These show pieces help users establish an understanding of the past usage of spaces within the building. Construction materials adhere to original building materials such as lime plasters, timber floor boards and clay roof tiles. However, structural steel framings supported by new foundations were introduced to help sustain floor and roof loadings whilst reducing stress on the original load bearing walls.

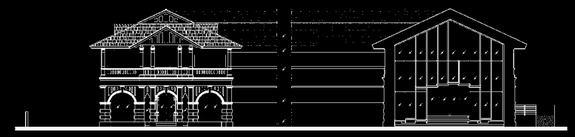
The design approach of the new wing attempts to complement the heritage building instead of mocking or compromising its ingenuity. The new wing was designed as a linear space and covered with clay roof tiles as an extension of the existing heritage building. It forms a triple bend around a courtyard plaza to form a U shape with the section of its entrance sharing the same frontage as the heritage building towards Macalister

The U-shaped connected buildings with a central courtyard in between

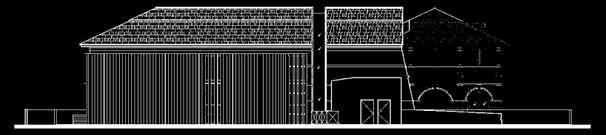
FROM LEFT: Immaculately manicured greenery at the back lane; Courtyard

ABOVE: At the bend of the roof and walls, a continuous strip of skylight helps to bring natural light into the space

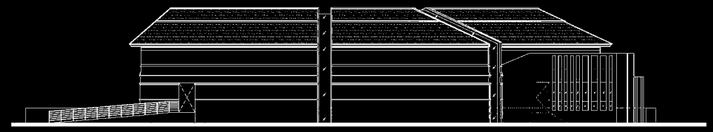
The interior finishing of the gallery is reminiscent of a time in the colonial era



Front elevation

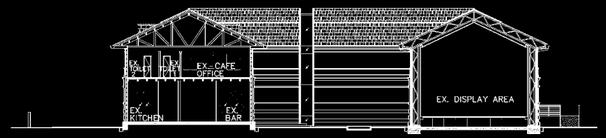


Rear elevation

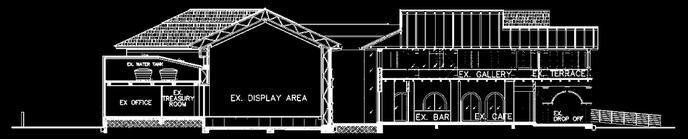


Left elevation

Right elevation



Section 1



Section 2

0m 4.5m 9m

CLIENT
ECO MACALISTER DEVELOPMENT SDN BHD

LOCATION
GEORGE TOWN, PENANG

YEAR COMPLETED
DECEMBER 2014

ARCHITECT
BYG ARCHITECTURE SDN BHD

PROJECT PRINCIPAL
Ar MICHAEL ONG CHIN KEONG

PROJECT TEAM
CLIFFORD LOH, NG KOK MENG, KHAW POH SUAN

COLLABORATING ARCHITECT
MINISTRY OF DESIGN

SITE AREA
4,486.51 SQM

BUILT-UP AREA
1,346.50 SQM

C&S ENGINEER
TEAM PDB SDN BHD

M&E ENGINEER
GH TAG CONSULTANCY

CONTRACTOR
TAN NGEE HONG CONSTRUCTION SDN BHD

QUANTITY SURVEYOR
BYG ARCHITECTURE SDN BHD

LANDSCAPING
ESH LANDSCAPING SDN BHD

PHOTOGRAPHY
ZAKEEMAN

Road. The roof and walls at every bend are inserted with a continuous glass panel as skylights to dramatically bring in natural daylight and outdoor view into the gallery.

From the exterior, while the heritage building and the gallery display contrasting features, their exterior walls are consistently lined with a series of horizontal decorative cornices which meld the two built forms into one. Although overlapping at a transitional point, both structures are seemingly covered by a single roof.

The final outcome is the creation of an integrated building, one that may seem to express the same architectural identity by using two different idioms. As one, it is an articulation of progression that emanates from a heritage structure, both elements bringing out the best in one another, standing in equal distinction.

KUALA LUMPUR

GDP ARCHITECTS SDN BHD

UTUSAN MELAYU

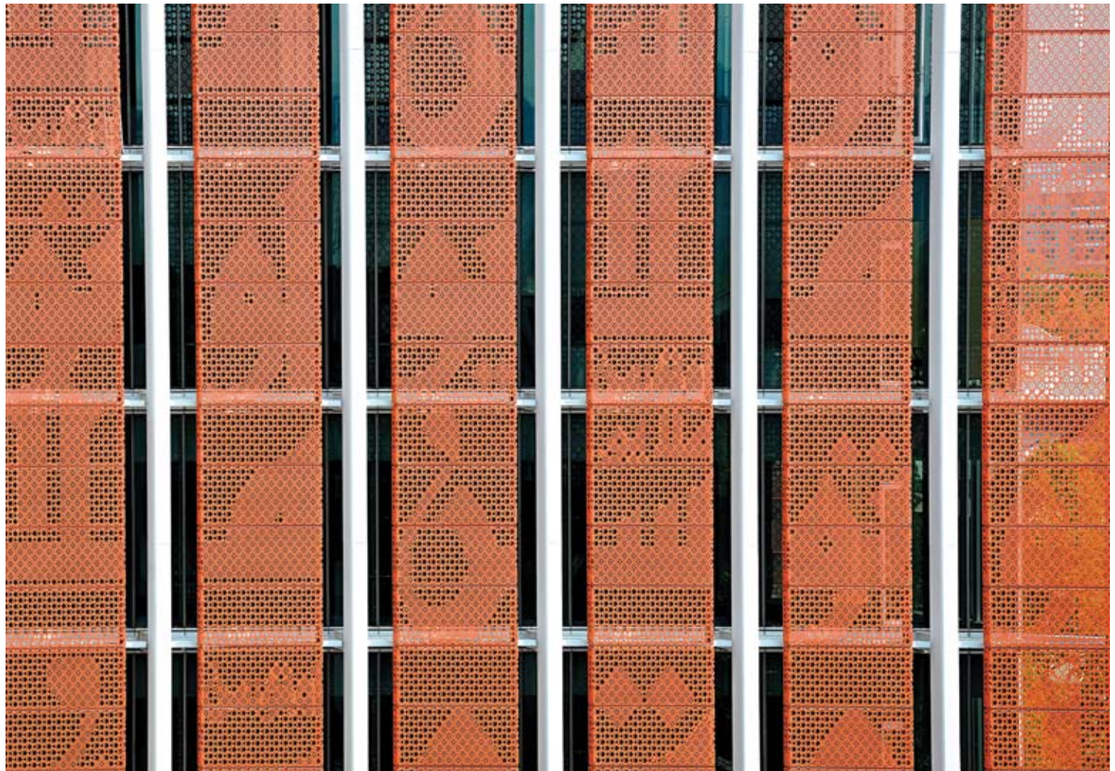
HEADQUARTERS

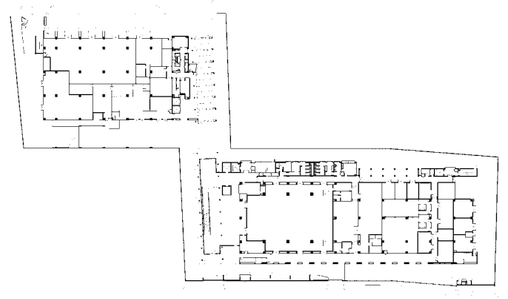
Derived from the form and spatial quality of traditional Malay houses, the headquarters of the national daily aptly represents the social aspirations and values of Malaysia's cultural heritage, a contemporary adaptation of vernacular sensibilities incorporated with climate-responsive design.

When the opportunity arose in 2008 to design the headquarters for the well-established Malay-language newspaper Utusan Melayu, the architectural team speculated on what could be the best trait of its possible architecture. The traditional Malay architecture was the character of interest. Notably recognised by their houses, it is arguably one of the richest components of Malaysia's cultural heritage. It is a product of community effort where houses were designed and built by the villagers themselves, a showcase of creative and aesthetic skills. In addition, the design is appropriate to the local climatic conditions and exhibits the life of its inhabitants – the family.

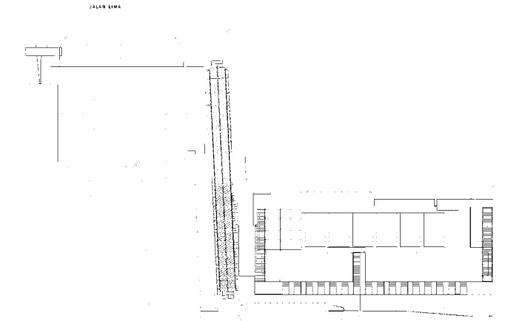
Located along Jalan Chan Sow Lin, Sungai Besi, an area dominated by industrial and automobile businesses, the proposed scheme unifies the different entities by applying an 'introverted' concept. Surrounded by commercial

ABOVE, FROM LEFT: The main boardroom at the topmost floor of the Atrium Lobby; Night view of the main Atrium Lobby, illuminated from within; BELOW: The 'Utusan Melayu' word in jawi is used as the main motif of the facade





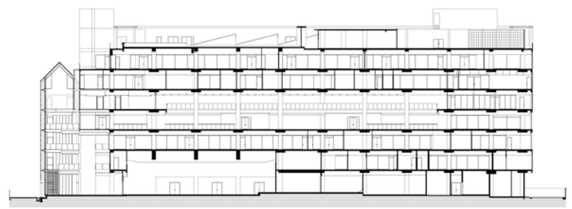
Level 1 plan



Site plan

0m 10m 20m

Section GG



Section AA

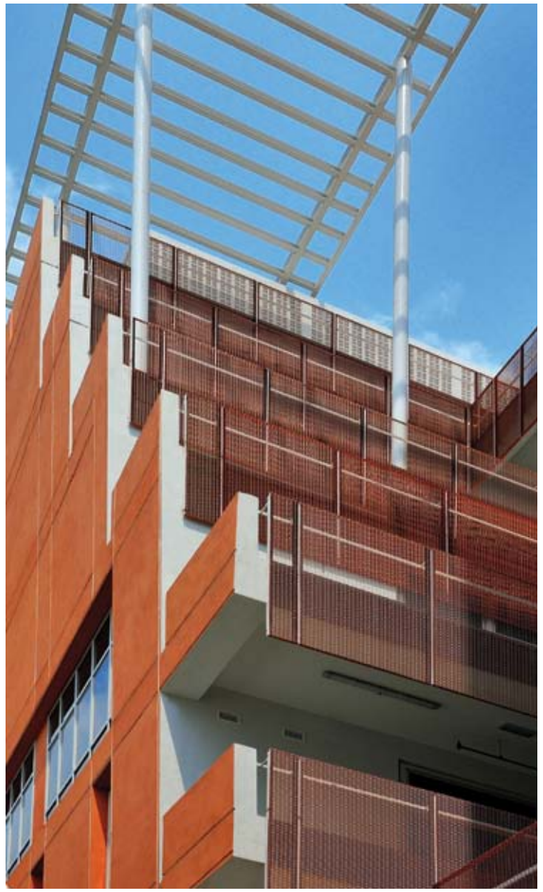
0m 10m 20m

CLIENT UTUSAN MELAYU (MALAYSIA) BERHAD	**PROJECT TEAM** HAFIZ, ZAINUDDIN, ZHAFRAN, AZAH, SHUHADA, ELIN, RAZAK, HISHAM, KORINA, IQLIL	**CONTRACTOR** JOHAWAKI SDN BHD
LOCATION JALAN CHAN SOW LIN, KUALA LUMPUR		**QUANTITY SURVEYOR** AMER & ASSOCIATES
YEAR COMPLETED APRIL 2013	**SITE AREA** 8,814 SQM	**LANDSCAPING** SHAH, PK & ASSOCIATES
ARCHITECT GDP ARCHITECTS SDN BHD	**BUILT-UP AREA** 21,187 SQM	**FACADE CONSULTANT** FENESTRA (M) SDN BHD
PROJECT PRINCIPAL KAMAL LATIF	**C&S ENGINEER** KL PRIMA CONSULTS SDN BHD	**PHOTOGRAPHY** NIK FAIZAL NIK YAAKOB
	M&E ENGINEER PERWIRA AL-SHURA CONSULTING ENGINEERING SDN BHD	

buildings, the building was designed to look inwards, where focus is given to the spatial relationship of the inhabitants and their daily activities. The main block (Block A) consists of a seven-storey office building that provides spaces for all departments under the Utusan Melayu group. The ground floor is devoted to a main entrance lobby, a 400-pax function hall, a photography studio and a gallery. Spatially, it is a celebrated workspace that accommodates as well as exhibits. The first floor presents a dedicated public space comprised of the Main Library and Archive. Looking up, bridges crisscross each other, animating the active daily communications within. The core businesses of publishing, printing, advertising and online services are centrally located on the floors above. Main functions such as the CEO and Chief Editor's offices are integrated within the same locality. Additional support facilities such as meeting rooms, discussion areas, restrooms and pantries are provided at each level.

Block B consists of the lobby and connects the main entrance to the existing Utusan Melayu office at Jalan Lima. Measuring 8m in width and 80m in length, the building emerges from the ground to reveal a triple-volume glazed lobby, gallery and offices, permeating the space with natural daylight. Meeting rooms are *songkok*-like (cap worn by Muslim men) pods, placed in an informal setting. The block's outer form is reminiscent of a traditional Malay house, featuring a pitched roof as its main symbolic element. The tall columns are marching pillars of steel, a modern interpretation of *Tiang Seri*, an element found in traditional Malay houses. On the facade, there are intricate patterns of the 'Utusan Melayu' words in Jawi, architecturally translated as perforated screens that shade and allow light to pass through. These are designed as small diamond-shaped perforations, instead of the usual circular and square patterns, inspired by the delicate carvings in Malay houses. Conceptually, the glass lobby is established as a dialogue between the greater volume of Block A and Block C, and the lightness of Block B. While these elements integrate the separate buildings and their diverse functions, they also represent the group as a part of the larger community, symbolising the organisation's desire for transparency and accessibility to the public.

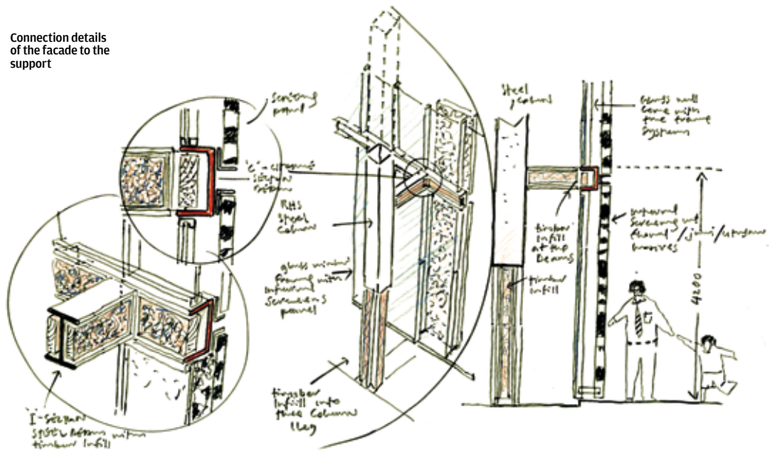
The architecture of the Utusan Melayu Headquarters may be best seen as a depiction of communal living, a



FROM LEFT: The open terraces that connect to the main office; The surrounding context of the Utusan Melayu building is made up of old warehouses

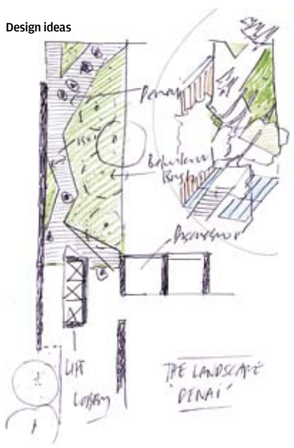
trait that we have embraced and grown up with by living in traditional Malay houses. The construction of an identity in the realm of architecture has very little to do with naming a certain style, just as little as a name does to a person – a series of arbitrary alphabets. What is at the heart of the question is perhaps, the identification of characters that are embedded within the architecture. In this case, a building that epitomises the progress of our civilisation, where cultural protocols, social observances and etiquette exist harmoniously within.

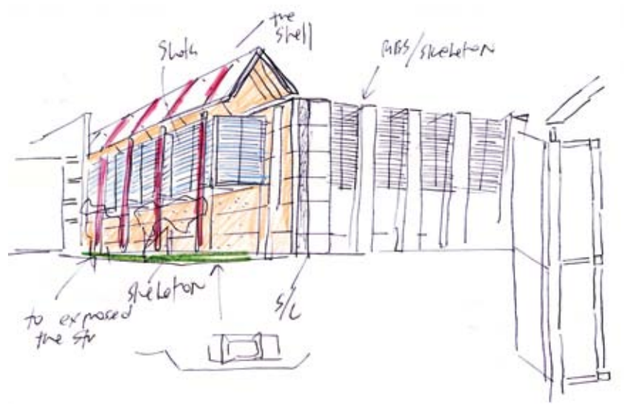
Connection details of the facade to the support

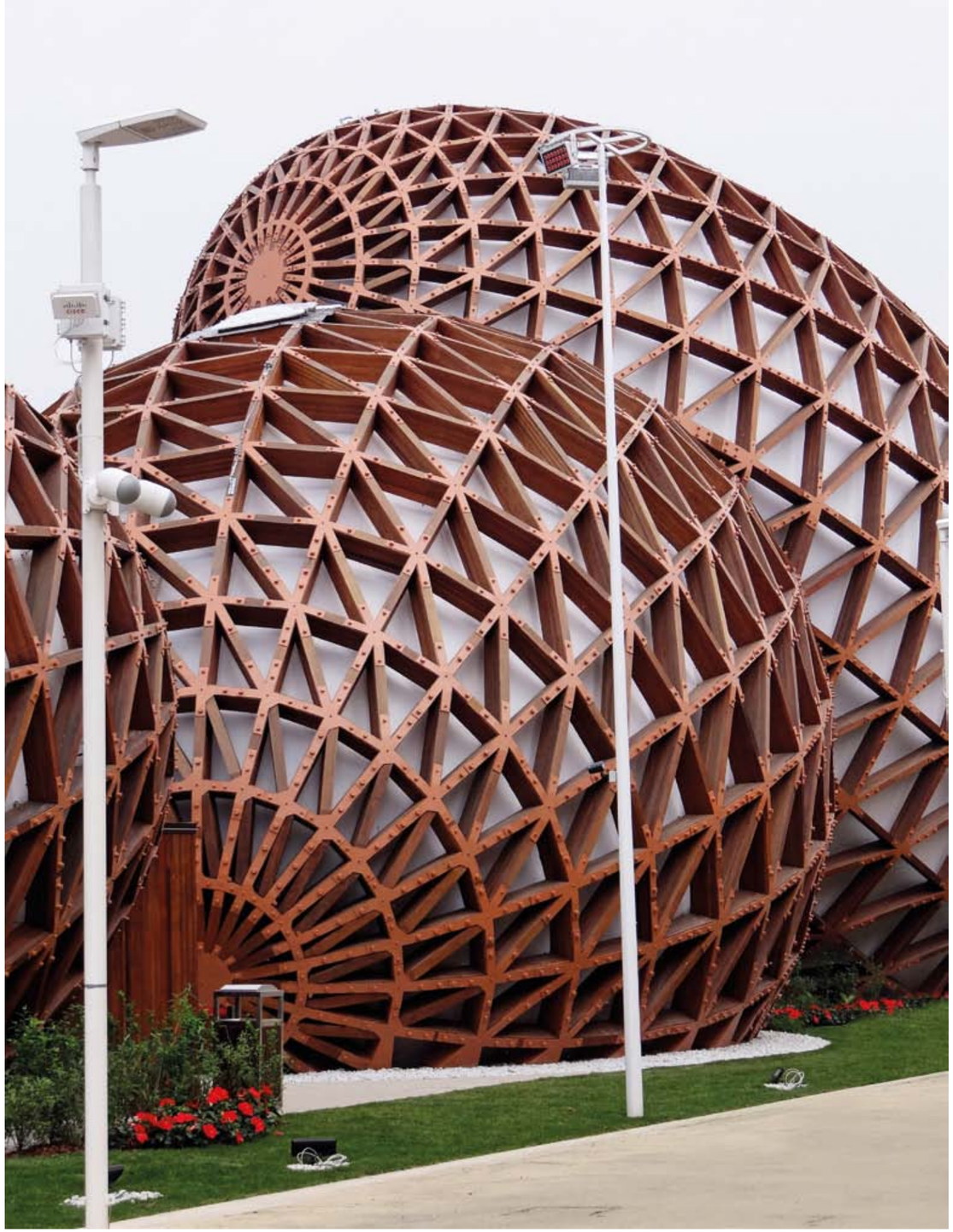


The vertical fin acts as a sunshade and thus a screen to the carpark

Design ideas







MALAYSIAN PAVILION, MILAN EXPO 2015

The design of the Malaysian Pavilion is intended as an architecture that not only emphasises better and more advanced sustainable food practices but at the same time celebrates the country's rich food culture, gastronomical diversity and health benefits from our food source.

The theme of Milan Expo 2015, *Feeding the Planet, Energy for Life*, is a clear and succinct call to the world to rethink the way food is produced, and to recreate healthier and more sustainable farming and food production for the benefit of mankind. It is a humble theme that is intrinsic in its respect for Mother Earth, one cognisant of the unsustainable consumption of the world's resources in its demand for food, seeking a redress to ensure that the ability of future generations to feed themselves will not be compromised.

This powerful statement underpins the design of the Malaysian Pavilion – to create a visually distinctive and highly recognisable Malaysian Pavilion that provides a memorable experience for the visitors of Milan Expo 2015, as well as a lasting impression of Malaysia as a centre of sustainable agriculture and food practice.

As the country's primary resource, the rainforest plays an important role in the lives of all Malaysians. The use of a broad variety of rainforest seeds dates back to hundreds of years ago, and to this day is prepared and served in innumerable recipes that natively reflect the gastronomically diverse backgrounds of Malaysia's multi-ethnic diaspora.

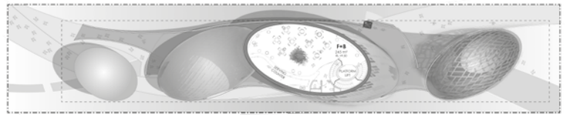
Conceptually, the building's seed form expresses the food source of our nation derived from the rainforest seeds, and celebrates the rainforest seeds and its rich biodiversity.

The formation of the four seeds takes us through a kaleidoscope journey of Malaysia, with each seed encapsulating visitors with a different experience and level of engagement, while at the same time bringing their attention to the symbiotic relationship we have with the rainforest.

Seed 1 – Communicate

The first seed communicates to the world the diversity of Malaysia's food and cultural heritage due to its unique position as a tropical ASEAN country. This forms an important introduction to Malaysia.

Inside, an 'immense cinema' with multi-layered documentary films projected onto the inner surface of what is essentially a black box theatre space showcases the diversity of a contemporary visualisation of Malaysia and its role in sustainability, and communicates the people, food and geographical attributes of the nation.



Mezzanine level plan

Upper concourse plan

Lower concourse plan

Ground floor plan

0m 5m 10m

FROM TOP: Glulam diagrid structure system; View of Malaysian pavilion from Seed 3 to amphitheatre

Seed 2 – Heal

The rainforest, or 'lungs of the world', plays a crucial role in ensuring our continued existence. Malaysia is home to rich tropical biodiversity – rated as one of the 12 'mega biodiversity' nations in the world. Tropical rainforests have long been recognised as one of the most productive types of forests in the world. The rainforests of Southeast Asia are believed to be the oldest and among the most biologically diverse in the world.

This seed showcases the Forest for Life Program, a sustainability measure Malaysia is undertaking to protect its rainforest while visitors walk through an interpretive sculpture in a rainforest biosphere.

Seed 3 – Food Trails to Sustainability

Malaysia has chosen strategic measures to reach its objective of a sustainable food ecosystem. Seed 3, the largest of four seeds, comprises two levels of exhibition space with a variety of interactive mediums that encourage people to play and engage with the stories and communication messages.

The food trail takes visitors through a journey from poverty eradication programmes such as 'smart village' and 'greening the economy' as well as a 360° overview of the lifecycle of the Malaysian food process from seed to plate. The food trail continues at the mezzanine level with an exhibition of research and development programmes and business strategies that propel Malaysia along the road to achieving a sustainable food ecosystem.

Seed 4 – Inspire

This amphitheatre seed is an exoskeletal structure with a seating capacity of up to 100, which is home to specially choreographed performances of dance and music to celebrate the diversity of Malaysia's creative industries and the richness of our cultures and traditions.

The Malaysian Pavilion draws upon the humble rainforest seed as its inspiration, symbolising its high cultural and dietary value to Malaysians, as well as its growing importance on the world food stage. The architecture of the pavilion is interwoven with myriad of carefully curated exhibitions and performances to emblazon what is uniquely Malaysian.

Wood in Poetic Structure

Much thought was given to creating a visually distinctive and highly recognisable symbol that can be immediately associated with Malaysia. Next was the choice of material for the structure; one that would reflect the beauty of the seed's texture, yet durable and Malaysian-made.

A decision was made to use glue laminated timber, or Glulam. The choice of Glulam, combined with the structurally complex design of the pavilion, was deliberate so as to showcase Malaysian capabilities in both design and innovative materials.

Glulam is a highly innovative structural timber product manufactured by gluing together individual pieces of dimension lumber under controlled conditions. It is one of the most versatile construction materials as it can be manufactured in uniform or varying depth to give it the strength required. Glulam can create structural features in an almost limitless variety of straight and curved configurations.

Stronger than steel, Glulam has greater strength and stiffness than comparable size dimensional lumber. The Glulam used for the Malaysian Pavilion is from a variety of sustainably sourced hardwood, pieced together with the utmost care and precision.

Each member of the laminated wood is manufactured in Malaysia, then packed and shipped to Italy, to be cut into specific sizes and planed, and finally brought to the site to be carefully pieced together, one wood beam at a time.

A team of architects, engineers and contractors from Malaysia and Italy were on hand to ensure every step was exact and accurate. About 50,000 pieces of nuts, bolts and screws, over 3,000 pieces of steel joints and 800 pieces of concrete joints were required to create the seed's structure of the Malaysian Pavilion, and all in under five months – an unprecedented feat of engineering and collaboration.

The Malaysian Pavilion showcases the artistry in wood and held its own in a crowded field of outstanding pavilion designs in the Milan Expo 2015. ✈

LEFT: 3D renders of the pavilion from various perspectives

CLIENT
MINISTRY OF INTERNATIONAL TRADE AND INDUSTRY (MITI)

LOCATION
MILAN, ITALY

YEAR COMPLETED
MAY 2015

ARCHITECT
HIJJAS KASTURI ASSOCIATES SDN BHD

PROJECT PRINCIPAL
HIJJAS ARCHITECTS + PLANNERS

PROJECT TEAM
Ar SERINA HIJJAS, Ar AHMAD SHUHEMI, CHIUN WEE LIM, ATISHAY JAIN, STUDIO LOCATELLI RIZZ

SITE AREA
2,047 SQM

BUILT-UP AREA
1,846 SQM

C&S ENGINEER / M&E ENGINEER / CONTRACTOR / QUANTITY SURVEYOR / LIGHTING / LANDSCAPING
PICO INTERNATIONAL (M) SDN BHD

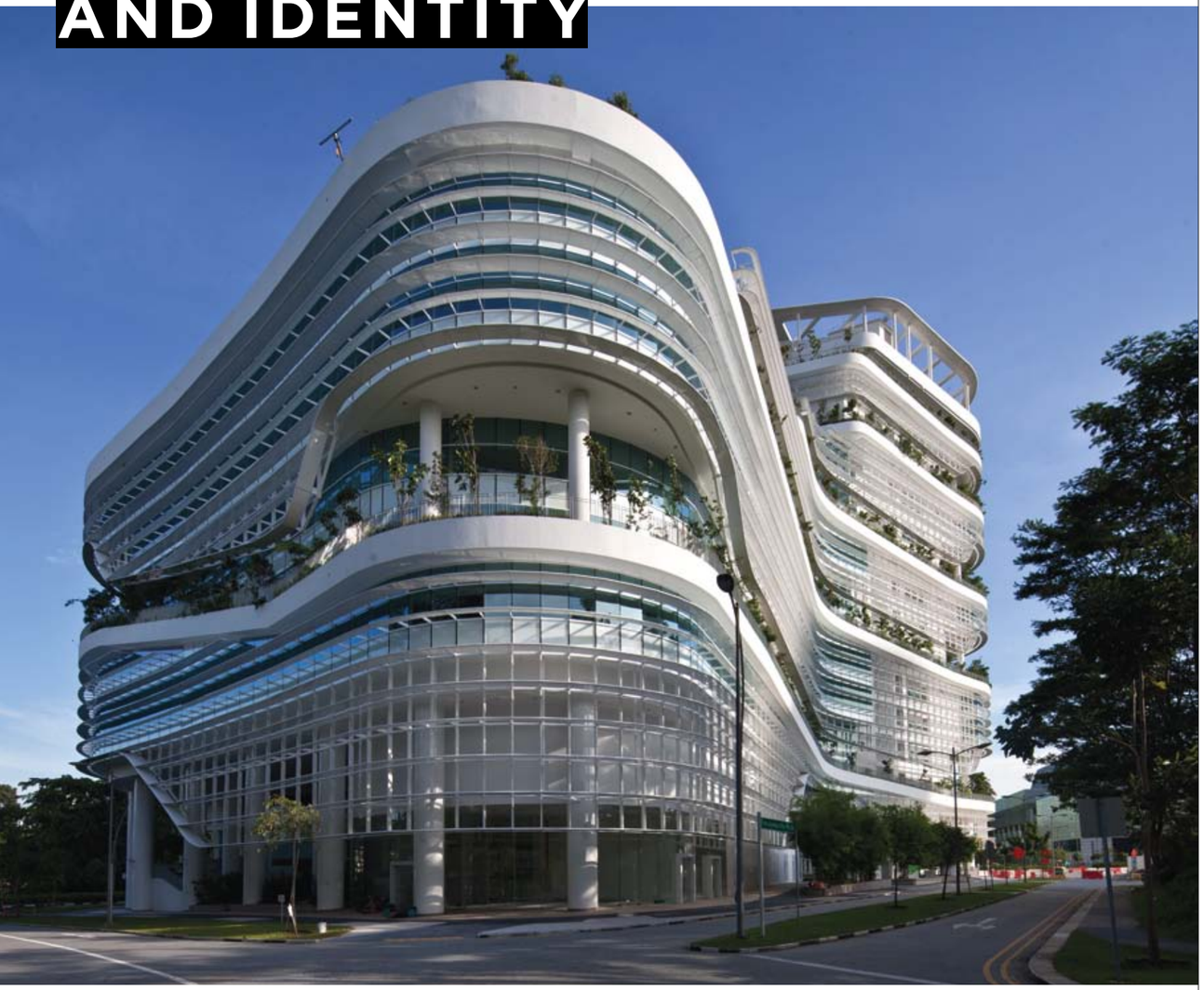
GLULAM CONSULTANT & SPECIALIST
WOODSFIELD GLULAM MANUFACTURING SDN BHD

Seed 2 of the pavilion, which showcases Malaysia's Forest for Life Program

DATO' Dr Ar KEN YEANG

In this exploration of architectural identity, Ar Ken Yeang revisits the purpose and meaning of architectural identity. True to his pursuit of eco-architecture, he opines that identity is not rooted in style, but derived from a set of situational strategies that help one to design according to the locality, seeking to derive deeper meaning and identity through architecture that belongs to a place.

ARCHITECTURE AND IDENTITY



Aesthetic styles, especially in the fashion world, go through cycles of revival every few years, sometimes emerging in a diluted version of the original, other times as a parody of it, albeit usually with well-meaning intentions. For instance, the music, fashion, film and graphic styles of the 60s resurface every so often, whereupon everyone will briefly leap about singing The Beatles' songs (*she loves you, yeah, yeah, yeah*...), wearing bell-bottoms and flower-power shirts, and watching Antonioni's *Blow-Up*. This habitual revival applies in architecture too, such as the revival of Modernism as Neo-Modernism, and subsequently as Neo-Neo-Modernism or even Neo-Post-Modernism.

What is current in Malaysia is the revival of interest in the pursuit of 'identity in architecture', which rears its head again after 30 years or so since the proposition was first mooted around the mid-80s in PAM (Pertubuhan Akitek Malaysia). The topic then was prevalent not just in Malaysia, but became a topic of anxious preoccupation among architects across the Asian region, verging on a collective hand-wringing angst over the issue of 'identity in architecture'. Almost every institute of architects from India to China to Japan had their annual conferences dwell on this topic, like a hot potato. One Japanese architect's paper was entitled, *Glocal Architecture*, which proposes architecture as a combination of the 'global' with the 'local', expounding the dialectic between the 'international' style and the 'vernacular'. The portmanteau 'glocal' is already a mouthful to pronounce, and with the Japanese architect mispronouncing it in his presentation as 'grocal', it sounded like the last gasp of a drowning man. Some architects just need a 'security blanket', as a 'hook' to hang their architecture, and for many then this was it – 'identity' became the 'hook' of the day.

By the 90s, like a transient flicker of style in fashion, the Asian architectural community's interest in the topic disappeared almost as quickly as it had surfaced, whereupon Malaysian architects just got on with their work. But now in the noughties (2000s), there is a renewed interest and newfound angst among some Malaysian architects regarding the 'Malaysian identity', whether driven by new anxieties over the fear of loss of social and cultural identity, or perhaps by feelings of alienation by the rapidly urbanising Malaysian cities which are becoming increasingly homogenous in international culture and appearance, or just an ongoing insecure need for a 'hook', or some other motivation that could perhaps be a politician's urging, or whatever.

What is 'identity'? 'Identity' is defined as "the conception, qualities, beliefs and expressions that make up a person's or a social group's self-concept" or a "collection of beliefs about oneself that includes elements such as academic performance, status in society, gender roles, sexuality, culture and racial identity".

Self-concept embodies the answers to 'who am I?' Besides this socio-psychological issue in perhaps a segment of society, there are similar issues of 'identity' in the arts, such as literature, music, contemporary art, architecture, etc. The particular question posed here is, 'what is Malaysian identity in architecture?', and subsequently one might wonder 'why is it resurfacing now after all these years?'

If we start with personal identity, then it is clear that most people do not have any issues with their personal identity. Most have a deep-rooted self-concept and sense of personal identity and being. Most people know who they are. They find identity in their status in life and achievements, lifestyle, work, hobbies or recreation, holidays, families, religion, language and culture. All these aspects enable people to affirm and assert their sense of self, and know for themselves what makes them 'who they are'.

You will find that most people, in effect, do not ponder too much about their identity, simply because most are generally confident about themselves. They are happy with their own identity, with their lives, with their inner self, and have come to terms with themselves. So occasionally when you hear someone say, 'I am in search of my own identity', then oh dear, that person is lost and can be regarded as being in an 'identity crisis', with feelings of self-doubt about himself as a person – surely a terrible condition to be in.

By correlation, most good Malaysian architects are confident of their own work, and most simply do not lose sleep over their personal or cultural architectural identity. Most just do it intuitively or consciously, and in the process of designing, seek to deliver something of lasting physical and cultural value that is authentic and whose built form is appropriate to its place and time.

But when an architect starts asking, 'I am looking for my architectural identity', then he (or she) is surely going through a similar personal 'identity crisis' and in this instance in his own architecture, with feelings of self-doubt about how and what he should be designing and how he can assert his sense of self-concept or cultural concept in architecture. That architect is similarly lost in an architectural identity crisis – a similarly terrible condition for an architect to be in.

Trellis Apartments is an example of bioclimatic-based approach and pitched roof to establish a link to the locality

It can be contended that it is not the case with the majority of good Malaysian architects, but those who are not confident about their own architecture and are seeking their own architectural direction that now becomes the 'identity hook' to hang their architecture. Looking abroad, this predicament of identity (where overseas it is mostly a personal predicament rather than a collective cultural one) is similarly evident with architects elsewhere in the world. Many architects elsewhere have similar issues of searching for their own architectural identity, which is evident if we just look at the non-entity architecture built all around the world. This feeling of not knowing what to design is internationally prevalent, but in any event, we should not expect every architect to have his or her own sense of architectural identity, likewise with personal identity – we cannot expect everyone to have a brilliant personality. Some people are interesting while some are not, some people are kind while some are not, and some people are interesting while some are simply boring. To be fair to everyone, we should not be judgemental. This is after all the way of the world – the same applies for architecture and architects.

However, most architects do not like to be told this. They abhor being told that their architectural design has no character or identity whether personal, cultural or national and whether rightly or wrongly. It is akin to Ayn Rand's *The Fountainhead* (1943) syndrome – the inherent stubborn pride being the universal issue.

Back in the 80s in a conversation discussing the question of 'what is our Malaysian identity in architecture?', a famous Singaporean architect lamented in a xenophobic moment that the anxiety of searching for an 'architectural identity' is a condition that is "foisted upon us Asian architects by Western architects". He went on to say that, "Western architects ridicule Asian architects' work and say, 'Where is your own identity in architecture? You are just copying us.'"

But by the same token when we ask these same Western architects, for instance a British architect, 'what is British architecture?' or an American architect, 'what is American architecture?', they will both be dumbfounded to answer adequately. Is British architectural identity to be derived from the traditional vernacular thatched-roof cottage from the Cotswolds, or is American architecture to be derived from the traditional log cabin first built in the Delaware River district? So if neither Western architects, whether British or American or anywhere for that matter, can effectively define their own identity in architecture, then why should we Asian architects be taken to task to do so? My Singapore architect friend may have a good point here – why should we?

In any case, most architects are simply not particularly bothered by issues of architectural identity. Of course, there are the occasional provincial types, such as the Welsh architect who sought to assert his Welsh identity in the UK by having the dragon from the Welsh flag imposed in his architecture. This can get hilarious, for example, should Scottish architecture have the mandatory tartan and from which clan? In the same way that we cannot expect every person to have a strong sense of personal identity, we cannot expect every architect to have a strong sense of architectural identity, whether it be personal, cultural or national.

We also need to differentiate whether this pursuit is for a personal or collective cultural identity, or is it for a 'national' identity? If we are referring to architectural identity with the 'national' adjective, then the pursuit takes on another dimension and shifts to the political realm, wherein the architecture has the status of a 'national' character, like a national anthem. There is nothing wrong with this aspiration if done with thoughtfulness and inventiveness and without chauvinism, otherwise the good intention quickly becomes a slippery slope for architecture, which in principle should not be denigrated to a superficial style, or worse still, a pastiche. It is generally held that architecture must be truthful to itself where the form follows function, and certainly not form and function follow style.

The contention here is that our 'designing to place' is a considerably more authentic approach, without pursuing just a superficial 'style'. The endeavour should be one of seeking a 'link' to derive a deep connection for an 'architecture that identifiably belongs to its place'. But what does this mean?

The fundamental premise here is that every place is different and every place has something unique and valuable to offer. The architecture of that place must bring out what that place has to offer, and at the same time be a design that engenders in people a sense of 'where they are', 'who they are' and 'when they are'.

A sense of 'where they are' simply means creating a design that engenders a crucial awareness of the locality's uniqueness, whether physically, culturally, ecologically, socially, etc. The premise is that every place is unique and the design needs to reflect this uniqueness. A sense of 'who they are' means designing to enable people to be aware of their own endemic culture and that of the locality, a common feeling that is felt even by a person who is from elsewhere. A sense of 'when they are' means designing to enable people to be aware of the temporal aspect, recognising that they are now living in the 21st century and certainly not in some heritage era in the past.

Designing in this way, the local cultural imperative emerges in a profound meaningful way, beyond superficial styling. What is most important is to avoid creating a sense of alienation and disconnection to the place. 'Connection' means a sense of belonging, as a living experience with people and land, and with an understanding of the cultural patterns and processes in time and space. Creating a 'sense of place' here could mean the subtle incorporation and respect of the local endemic (Malay) context of the place. Every locality has a deep cultural history as well as a more recent history. Only by recognising and understanding these can we then create a place that is truly tied to its locality, without resorting to superficial devices and ornamentation.

Crucial then is making this vital connection to the place. It is important

Roof-Roof House, an example of bioclimatic-based approach to establish a link to the locality

"THE CONTENTION HERE IS THAT OUR 'DESIGNING TO PLACE' IS A CONSIDERABLY MORE AUTHENTIC APPROACH, WITHOUT PURSUING JUST A SUPERFICIAL 'STYLE'. THE ENDEAVOUR SHOULD BE ONE OF SEEKING A 'LINK' TO DERIVE A DEEP CONNECTION FOR AN 'ARCHITECTURE THAT IDENTIFIABLY BELONGS TO ITS PLACE'."

to design with the link to the nature of the place, in which Kenneth Frampton (1981) refers to as Critical Regionalism and defines as responding to 'topography, context, climate, light and tectonic form' being more durable aspects of place in creating a physical architectural realm where the architectural form, its spatial configuration, orientation and features leave no doubt in anybody's mind that the built form belongs to the nature of that locality and nowhere else. Designing to have a link with the nature of the place is an architectural response that is not exclusive. In addition, the architectural design can establish a connection to the locality for people based on either one or a composite of the following range of possible design strategies:

- Design as systemic connection
- Design as reinterpretation
- Design as abstraction
- Design as neutrality
- Design as 'genius loci'
- Design as replication

The design approach then is not a singular fixed approach but a 'situational' one that essentially means ascertaining which of these design strategies, whether singular or in composite, are best and appropriate for the design situation at hand. The 'situational regionalist' approach is about being selective and using the strategy appropriate for its situation and location. This 'situationalist' approach also gives the architect a certain level of permissiveness, and we know all too well that architects, being the creative types that they are, resist being shoehorned to follow a set of mandatory directives.

Systemic design is already discussed above as Critical Regionalism, being designing to connect the building to the climate, ecology and geography of the locality. With the current topical concern for green design, our design needs to connect the building with the unique ecology of the locality. As a result, the outcome is a building that is closely tied to the locality with a systemic regionalist ecological connection.

Reinterpretation is designing to make the connection with the place by reinterpreting aspects of traditional vernacular architecture in a contemporary context. Aspects of traditional architecture could, for example, be an interior spatial concept, a built form or a device but now interpreted in a contemporary way.

Abstraction means taking an abstraction of a traditional iconic aspect of the locality's culture, then using it in a powerful contemporary way in the built form. An excellent example is the China Pavilion at the Milan Expo 2010, with its visually powerful signature form of oversized stacked red roof beams with traditional U-shaped brackets.

Neutrality is designing to provide a neutral space, for example as a multi-functional plaza, for the locality's cultural and festival activities to take place and then programming these cultural events to take place regularly over the year. By enabling the locality's cultural activities to happen, the space itself becomes a cultural zone with a strong connection and memory to the culture of the place.

Genius loci is designing a space to have an aesthetic (experiential) feeling reminiscent to that found in a traditional place, but reinvented in a contemporary way, without replication of the traditional built forms. An example is designing to recreate the sense of community and coherence found in a traditional *kampung* (village).

Replication is designing to have a replicated aesthetic connection. It means faithfully replicating the traditional architecture of its locality. This may be a reasonable approach in certain circumstances such as in building conservation or building in a historically sensitive location like the Forbidden City in Beijing, China. However, it is irrational to replicate traditional architecture in a contemporary commercial urban setting. Replication can also be an anomaly. For instance, the traditional Chinese shophouse in the Far East built hundreds of years ago had no modern toilets. The human night soil disposal then was essentially a 'bucket system'. So if we were to be truly authentic in replication, does that mean that the building will not use the modern commode?

The above provides a set of strategies that is a framework for architects to use as a situational design approach. To be authentic, we should first start by designing with a systemic connection to the place as a critical regionalist climate and nature-responsive design, and then where appropriate, incorporate other strategies, such as by reinterpretation or abstraction, or neutrality or 'genius loci', or if the situation demands, by replication. Generally stated, a systemic connection as a climate-responsive design results in a more durable and passive low-energy structure that provides an ideal starting armature for subsequent developments into an ecological architecture.

The architect needs to be careful of falling into the trap of the simplistic and reductionist facile pasting of cultural symbols and devices onto the architecture without any inventive retranslation or reinterpretation. By unthinkingly adopting or pasting a symbol or device, architecture can turn into a fake stage set, without any deep meanings. Worse, it can make a total mockery and gross simplification of the locality's deep culture by superficial styling.

Our design must create a sense of place that engenders a deep-rooted sense of belonging for that locality. In doing so, we avert alienation which may have been the cause of the angst in the revived pursuit of identity and self-concept in architecture. We need then to move away from superficial styling and pursue instead a much more deeper way to express a sense of belonging and connection to the culture of the place. An Egyptian architect who is a well-known authority on Islamic architecture once said: "An Islamic architecture can have any shape and form, but it must at all instances engender the deep feeling in everyone who uses or visits the building or place an awareness of the greatness of Islam". ☪

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Ar AHMAD NIZAM RADZI

MALAYSIAN IDENTITY: AN ARCHITECTURAL PARADOX?

Ar Ahmad Nizam Radzi reflects on the Malaysian architectural identity history and finds that much of his thoughts from years ago are still relevant and applicable in pursuing identity today.

Prologue

The topic of 'Malaysian identity' has always been an issue very close to my heart. I first tackled this subject exactly 30 (that's right people, three-zero) years ago, almost to the month, in 1986. At the time, I earnestly thought that I had to undertake this topic for my final year Option Study (Dissertation) at Huddersfield School of Architecture in West Yorkshire, from which I graduated with a Graduate Diploma (Arch) – equivalent to PAM Part II – in the autumn of 1987.

There were three reasons that made me choose that subject. Firstly, publicity on Western post-modernism (by Terry Farrell, Michael Graves, et al) or British hi-tech modernism (Richard Rogers, Norman Foster, et al) at the time had been bled to death by architectural journals and RIBA (Royal Institute of British Architects) talks that there was nothing left that had not been said! Secondly, by doing a topic that was so far removed from the Western architectural interest at the time, it could be an advantage for me in making a good grade, provided of course, I could write it as well as Charles Jencks! Charles who? Go figure, guys! Thirdly – the strongest reason – was that back home in Malaysia at that particular time in history, a heated architectural debate on the elusive 'Malaysian identity' was going on among the local architectural circles and within the academic fraternity.

So I thought since my studio colleagues, who were mostly British and European, would probably not do a topic outside of their hegemony, then maybe I should do something that would be refreshingly new to the lecturers. It was also a strategy on my part – if my dissertation was well written and I could have it published later in Majalah Akitek, I could attract the attention of the architectural big boys and probably, just probably, get a job from them? As it turned out, one of the big boys actually did offer me a job but that's another story.

And so that was how I decided on the title, *Learning from the Past – The Quest for a Malaysian Architecture.* With virtually no reference in the school library and the internet not yet invented, I strived hard to achieve what I wanted to achieve. I came back to Malaysia in the summer of 1986 for two months to gather as much logistics and material I could get my hands on because once I returned to Huddersfield, there was no turning back. Henceforth, I worked on the structure, contents, illustrations, and the painstaking explanation of various terms and arguments.

Fast forward 30 years later, I have been asked to reprise my thoughts and opinions on the 'Malaysian identity' for this issue of Architecture Malaysia. Now, however, within the context of a transformed, internet-linked and politically correct world we currently live in, the quest has become just a bit more complex and harder in some ways. It is no longer straight forward like it was 30 years ago.

Bank Negara by Jabatan Kerja Raya (JKR)

BY KAHSUTA (OWN WORK) [CC BY-SA 3.0 (HTTP://CREATIVECOMMONS.ORG/LICENSES/BY-SA/3.0) OR GFDL (HTTP://WWW.GNU.ORG/COPYLEFT/FDL.HTML)], VIA WIKIMEDIA COMMONS

With the imminent independence of the Federation of Malaya in 1957 from British rule and subsequently the formation of Malaysia in 1963, the then Prime Minister Tunku Abdul Rahman had envisaged a new aesthetics of architecture for the country. It must reflect the new spirit of the new nation, and Tunku was the single most important driving force behind this new emerging architecture. Kuala Lumpur, being the capital of Selangor at the time, was made the new capital of the nation. It was imperative that the new architecture for these new public projects shed all reconnections with the British colonial style while maintaining a modern yet nationalistic look. Singapore had all the great monumental civic and administrative buildings in place, inherited from the days of being a British Crown Colony. Kuala Lumpur however lacked such buildings, with only the Railway Station Buildings and the FMS Government Offices (now Bangunan Sultan Abdul Samad) as outstanding legacies from the colonial era.

Post-Merdeka Malaysia (or rather, Malaya until 1963) had a few private architectural firms although British architects originally helmed most of them as there were very few locally bred Malaysian architects. PAM was established in 1967, which followed an earlier society called Federation of Malaya Society of Architects (FMSA). FMSA was established in 1949 and mostly comprised of expatriate architects as members. Some of the more prolific architectural firms were almost exclusively expatriate in composition, and the responsibility to carve out a 'Malayan' identity through their works fell on them. In the absence of local practising architectural firms in the 1960s, it was Jabatan Kerja Raya (JKR, or previously Public Works Department) that gave us some of the most memorable buildings that we see today.

This topic of 'Malaysian identity', a kind of architecture that 'belongs', has been a well-debated subject by architects, artists, politicians and the (learned) public throughout the decades, ever since Merdeka. From what we could see of new buildings constructed in the 1960s in Kuala Lumpur, the architectural language seemed very consistent, with some very heavy modernist influence of the International Style. The Parliament House (1963, JKR), Bank Negara Headquarters (1970, JKR) and Masjid Negara (1965, JKR) were towering examples, with the latter virtually revolutionsing the design of mosques for many years to come.

"The advent of International Modernism, which truly was the earliest product of what we now term as globalisation, has taken significant root in post-Merdeka Malaysia. Oscar Niemeyer's designs for the new Brazilian capital city of Brasilia and Le Corbusier's work in the Punjab capital of Chandigarh triggered similar architectural sentiments in newly independent countries, including Malaysia. Not surprisingly, the prevailing tendency among the newly graduated Malaysian architects (and a few expatriates who had stayed on following Merdeka) revolved around Le Corbusier's 'brise soleil' and 'breton brut' as facade articulation."
– 'New Directions' by Ahmad Nizam Radzi, *80 Years of Architecture in Malaysia* (PAM, 2000)

The Corbusier influence was so great that several buildings manifested themselves almost as products of the Master himself! Some of the most obvious examples were the Menara UiTM Shah Alam (1972), Kuala Lumpur General Hospital (1966-74, Wells & Joyce Architects), University of Malaya Teaching Hospital (James Cubitt & Partners), and the most elegant of them all, Dewan Tunku Canselor of the University of Malaya (1972, BEP Akitek Sdn Bhd). All these buildings were in a very universal language as advocated by Corbusier, Niemeyer and their disciples – sometimes brutalistic to the extent that the walls were not painted, skimmed or even plastered. However, they were well-designed for the tropical climate, and for a while, it did not matter that there were no 'cultural' influences being incorporated in the design. Amongst all these internationalism, one example stood above the rest in attempting to highlight the Malay cultural identity in a modern way. Tunku himself took special interest in the Muzium Negara (1963) design and engaged an obscure but talented architect, Ho Kwong Yew (assisted by his sons), in interpreting the modern Malay vernacular. In 1963, Muzium Negara was a shining example of this new 'identity', especially with the facade mural designed by artist Cheong Laitong in Italian glass mosaic, depicting the historical passage of the new nation towards independence.

"The urge to carve an identity for an individualistic Malaysian architecture led to blatant cultural references being somewhat uneasily infused with the modern designs. It seemed almost necessary at the time to have such stylised forms and elements, if only to inculcate a sense of pride, belonging and self-esteem. The Muzium Negara (1963), built to replace the old but elegant Selangor Museum which was mistakenly bombed by the Allied forces during the Japanese Occupation, was an early attempt to incorporate metaphors of the Malay vernacular."
– 'New Directions' by Ahmad Nizam Radzi, *80 Years of Architecture in Malaysia* (PAM, 2000)

In the 1960s up to the early 1970s, two private architectural firms deserved mention – Booty, Edwards & Partners (BEP) (later to be transformed to the present BEP Akitek Sdn Bhd) and Malayan Architects Co-Partnership (MAC) (later to become Architects Team 3) were the leading references. BEP's greatest work at the time was the design of the new Subang International Airport (1965) while MAC's refreshing, modern circular design for the State Mosque in Seremban (1967) transcended all preconceptions of the mosque typology.

Menara Maybank by Hijjas Kasturi Associates

BY AZREEY (OWN WORK) [CC BY-SA 3.0 (HTTP://CREATIVECOMMONS.ORG/LICENSES/BY-SA/3.0)], VIA WIKIMEDIA COMMONS

BY DANIEL BERTHOLD (OWN WORK) [CC-BY-SA-3.0 (HTTP://CREATIVECOMMONS.ORG/LICENSES/BY-SA/3.0)], VIA WIKIMEDIA COMMONS

National Library by Kumpulan Akitek

"... Malaysian architects knew the expressive advantages of concrete very well. Two exceptional legacies that epitomised the great Modernist tradition had to be the State Mosque in Seremban and the Subang Airport. The former is unprecedented even by today's standards, with its complex nine-sided umbrella roof, departing absolutely from the stereotype of domes, minarets and decorative patterns. That bold vocabulary unfortunately however did not prove contagious and the status quo remained, giving it the prestige of being the only one of its kind, perhaps in the world."
– 'New Directions' by Ahmad Nizam Radzi, *80 Years of Architecture in Malaysia* (PAM, 2000)

"When the Minister of Works and Public Utilities Tun VT Sambanthan appointed BEP Akitek in 1963 to design a new international airport in Subang, Dato' Kington Loo (the firm's principal partner) described it as a commission that comes once in a lifetime. Despite the sudden decision by Prime Minister Tunku Abdul Rahman to slash the original budget of RM12 million to RM7 million, the project was nevertheless completed in 1965, minus the air-conditioning. Inspired by the Spanish architect Felix Candela, whose concrete shell-vaulting works had been internationally acclaimed, BEP Akitek sought the engineering expertise of one Hans Goldstein of the firm Steen Sehested & Partners to design the hyperbolic paraboloid concrete roofs. It remained the most handsome airport building this side of the world until massive expansion and renovation works in 1983 altered the original forms significantly."
– 'New Directions' by Ahmad Nizam Radzi, *80 Years of Architecture in Malaysia* (PAM, 2000)

The 1980s was the last decade of the 'identity' fever pitch amongst big-time architects in Malaysia. Symbolism and nationalistic pride became almost an obsession at a time when the country began to take to the world stage as an economic tiger of South East Asia, as high-rise buildings flood the skyline of Kuala Lumpur. The Bank Bumiputra Tower, Putra World Trade Centre and National Library (all by Kumpulan Akitek, 1980-85) had some Malay cultural metaphors transposed into a modern building while the Menara Maybank (1987) and the LUTH Tower (1986) by Hijjas Kasturi Associates followed abstract interpretations of well-known cultural forms. Those buildings were impressive in their own right but it was a case of one too many – there had to be another way of achieving 'identity' in our built forms than merely adapting traditional, physical forms!

"Discussions on 'appropriate identity' were, however, not subdued, but the focus shifted to more pertinent solutions rather than pure ornamentation. The firm TR Hamzah & Yeang probably stood out as the most 'unswerving' in nurturing a modernist approach, consistent with the prevalent socio-climatic factors for a valid tropical design. Beginning with a prototype house built by Dr Kenneth Yeang (now Dato') for himself in 1984 to Menara Mesiniaga (1992) – his interpretation of a 'tropical skyscraper' which won the Aga Khan Award for Architecture – to his recent landmark Guthrie Pavilion (1997), the endeavour to innovate through design and technology is apparent and ought to be recognised."
– 'New Directions' by Ahmad Nizam Radzi, *80 Years of Architecture in Malaysia* (PAM, 2000)

But then again, what is meant by 'architecture of identity', especially in the Malaysian context? Is there a need for one? Does form follow function? Or does symbolism and iconography supersede all functional elements of a building? Does every culture or country need an 'architectural identity' to be relevant? Has the world not changed now that we are borderless and almost universal in our acceptance of human values? There are many questions but very little (if ever) convincing answers. Let me conclude this topic by extracting the Epilogue from my final year dissertation mentioned in the Prologue. Remember, the following was my view 30 years ago, and perhaps, still a valid food for thought (for good or bad) in the context of today's transformed world of immense technology, architectural complexities and political correctness.

Epilogue (from 30 years ago)

"It is absolutely vital, in view of the massive construction and urbanisation currently happening in Malaysia, that architects heed the call for more caution and sensitivity in the architecture that they are producing and experimenting with. Our design thinking must be primarily aimed towards an architecture that would be relevant not only in the contemporary context but also in the next few decades. The failure of our present architecture would mean that the future generations of architects (and indeed, society) would view this prolific time as a completely futile period.

The development process towards generating an acceptable Malaysian architecture involves fusions and mutations of our own typologies and modern technology. It must also involve thought, experiment and refinement. Domestic architecture must possess criteria such as a layout plan that is a physical translation of our lifestyle and the articulation of fenestration that responds to the microclimate. Urban high-rise architecture, in which the process of injecting a national identity is more complex, could be looked at in the way in which less energy consumption could be achieved.

Our architectural past can teach us a great deal about designing tropical buildings if we care to examine and learn. Awareness towards conservation and preservation of old buildings must be generated. We cannot afford to lose our heritage. They must become the basis of our continuing development process. However, this does not mean we have to copy. Modern technology and new building materials can be employed to translate past architectural typologies to suit contemporary situations.

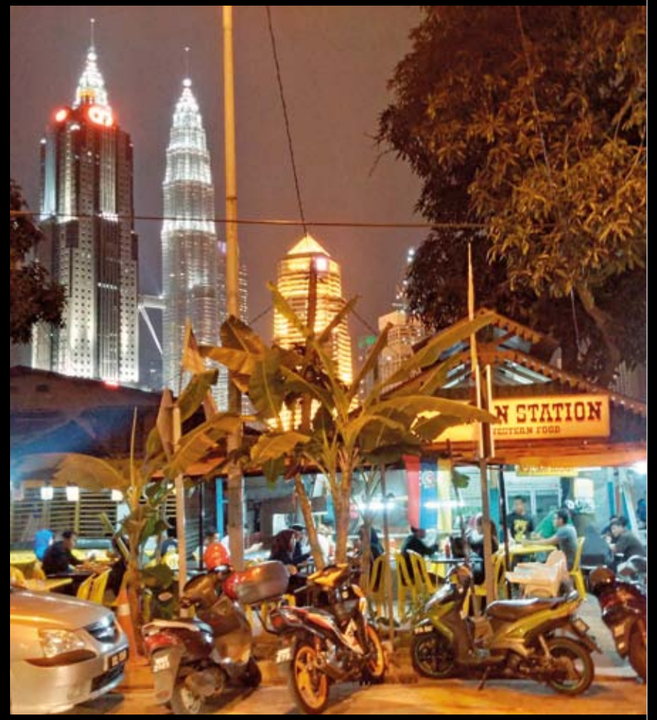
The tropical aesthetic in Malaysia has been gradually lost. Our built environment must be saved from losing its sense of place and belonging. Architects have the responsibility to give society the architecture they rightly deserve. The quest for a Malaysian architecture must ultimately begin with the awareness that the past must not be ignored or forgotten. The ideas and proposals mentioned here may not be the answers to all the questions. It is not the aim of this study to do so. It aims to stimulate our conscience towards solutions that have been used successfully over the decades. Perhaps through such understanding and awareness, we can learn and use them as the basis for our aspirations." ✍

SYED NABIL AHMAD

KL AND KAMPUNG BHARU: THE GLOBAL CITY AND THE LOCAL KAMPUNG

With the overdeveloped city of Kuala Lumpur on the verge of saturation, Syed Nabil discusses the erosion of real architecture and placeness, the debilitating effects of gentrification on the old fabric of Kuala Lumpur, and the importance of salvaging the only living heritage left in the capital's core - Kampung Bharu.

FROM LEFT: Old village houses in Kampung Bharu; A traditional wooden eatery under a shady tree



At any time of the day, at the intersection of Jalan Ampang and Jalan P Ramlee, there would always be tourists taking selfies with the Petronas Twin Towers as the backdrop. A legacy from Tun Dr Mahathir's tenure as Prime Minister, its recognisability as an icon is testament to the successful rebranding of the country and the political will in the utilisation of a building as a national identity marker.

But apart from the successful iconography-scape of KLCC, KL Tower and a slew of starchitect skyscrapers, Kuala Lumpur (KL) has spatially eroded from that of an amalgamation of urban *kampungs* (villages), as observed by Ziauddin Sardar's book *The Consumption of Kuala Lumpur*, to today's disconnected patchwork of endless high-rise apartments and podium-based shopping malls.
The city public realm has become more privatised with gated communities, each with the requisite roof top infinity pools and guarded by professional Nepalese security guards. The seemingly only public realms available are the endless retail malls, typologically centred around the same atrium and its retail units filled with the same brands. Beneath all the busy construction, there seems to be a blasé sameness to the current built environment, the various over-complicated facades just a thin veil over the banal replication. To put it simply, there are lots of buildings and constructions, but not much architecture.

Gentrification

The recent rash of redevelopment in Kuala Lumpur has too often included the destruction of old buildings and the dismantling of close-knit communities, which are then relocated and packed into cheap housing. This is unfortunate as, had there been a bit of imagination and will, these old structures could have been reutilised and potentially slow down the 'generic-tification' of the city. A prime example was the demolition of the old Pudu jail, whose rich spatial quality could have been incorporated into any future developments, as with the demolition of the railway staff quarters in Brickfields. Sadly, with values driven only by monetary concerns, pressured by time and unabated by an absence of intelligent planning policy, it is standard operating procedure here in Malaysia for new development constructions to start from a clean slate, in which any pre-existing physicality be destroyed and the site wiped anew. This tabula rasa practice too often also includes the cleansing of any site-specific cultural memory, compounded by the marketing department's cliché-ridden rebranding of the place. And so, the community of Kampung Kerinchi was redeveloped and rebranded as the more foreign sounding name, Bangsar South.

Other vibrant local places with a rich history, such as Petaling Street and Brickfields, are falling victim to Disney-fication, becoming less of an actual working, living neighbourhood but more of a spruced up tourist destination.

With the fluid flow of borderless capital, the city often becomes a clash between the global and the local. The global financial marketplace and its state of permanent transitory have emasculated the very idea of the residential tower unit not as a lifetime investment and a place to call home, but instead as a financial investment and speculated future sale profit, to be 'flipped' when the prices go up. The living unit today is only living for a higher monetary return and has become an immaculate example Karl Marx's "value exchanger". Architecture in KL today, as in most global cities, is a facilitator in the transitory global workforce society. Manuel Castell postulated in his *Space of Flows* that "(t)he global city is not a place, but a process".

As is such, the new architecture of KL, especially the gleaming new ones popping up around the Golden Triangle, reflects this sense of placelessness. The city is simply caught up in the new millennium urban condition, its identity a side effect from growing fat on the architecture of Marc Augé's "space of non-space".

Compare this with the modernist architecture of post-Merdeka construction, such as the Masjid Negara, Bank Negara and the original Subang Airport, these buildings speak not only of a sense of place, values but also identity. They are – were – public buildings, its concrete aesthetics grounded in the Now, its spatiality for the public, aspiring to a seemingly promising future.

But it is a different society now, no more the value-pregnant, ideologically bipolar viewpoint of a Cold War world. The world is now very much flatter and very much Now.

We live in a hyper-consumerist, short-attention span, internet-based society, where speed and the need for experiential intensity are the drivers. Urbanist and theorist Paul Virrolio wrote about the "Speed of Things" and the impact of the ever-increasing speed of progress on society: "The invention of the ship is also the invention of the shipwreck". With technology, its disasters are pre-loaded into the system. Society's current speed has devolved our ability for contemplative reflection and deep thought. Decisions that affect everyone, such as the recent demolishing of an important public artwork, are made rashly. And this is what we need to be acutely aware of – this speed of progress and its ramifications.

Just as children can identify with a virtual Pokemon, the current global city that constitutes non-spaces will have its identity defined with that of the non-identity. Rem Koolhaas wrote of the Generic City as the current condition of the typical global city, its characterlessness a kind of freedom from the shackles of character and specified identity that too often becomes a deterrent to building and progress, especially with historical European cities.

In short, globalisation and fast-paced progress are synonymous with loss of the local, an absence of (previous) identity.

Development of Kampung Bharu

However, the area of Kampung Bharu deep within KL is the one anomaly still doubly resistant to these changes. Formed in the 1900s as a Malay agricultural settlement, it is today a rich mix of low-rise residential homes, small businesses and famed eateries. There are exquisitely made Malay homes, cheaply made ones and dying ones. To see for oneself the juxtaposition of a well-loved *rumah Melayu* (Malay house) against the backdrop of faceless new apartments blocks is especially poignant. Its urban quality is humane, a *kampung melayu* (Malay village) retelling of the ideals of Jane Jacobs. Here, the car is not king. The winding narrow roads are instead conducive to people sitting outside in the evenings, having a chat.

Despite numerous attempts at massive redevelopment, Kampung Bharu is the local space fighting the final battle against the onslaught of the generic global.
The Board of Management that runs it under the name of Lembaga Pentadbiran (M.A.S.) Kampung Bharu has been critical of the many proposals to redevelop Kampung Bharu. Its Secretary, Tuan Haji Shamsuri, said that Kampung Bharu should be seen as "the heart and soul of the city"; a place of heritage and any proposed development should preserve and enhance this.

However, there have been recent developments. The Urban Development Authority of Malaysia's (UDA's) Legasi project, to be made up of a Malay cultural centre and a new economic hub with 1,900 hotel rooms, 30mil sqf of office space,

A traditional Malay *kampung* house, juxtaposed against the modern skyscraper skyline behind

17,500 residential units, and 12% green and water feature space, is currently under construction. What was demolished to make way included a vibrant market place square called the Pasar Minggu, probably the only example of a village square in Malaysia, with a Minangkabau-roofed performance stage. Will this new Malay cultural centre provide the same level of spatial adaptability that is critical for the continuation of the vibrant community? Or will it just be another expensive white elephant, ill thought-out and unsuitable for its intended use? The Warisan Residence across at Jalan Raja Muda Aziz invites contemplation. Despite the name Warisan (Malay for 'heritage'), it says nothing architecturally or spatially of its immediate locality. Gurkha security personnel stand guard and the flags of numerous nations unintentionally remind everyone of the generic placelessness of the typical global residential tower as a borderless financial investment machine.

These developments, including the proposed so-called Ferris Wheel Tower, is in danger of removing the primary uniqueness of Kampung Bharu – its pedestrian connectivity, its relaxed ambiance, its ability to adapt.

There is one particular Thai restaurant here that is built under the shade of a massive bamboo tree. It is the perfect vision of green architecture, more so than the vogue-ish, pastiche, green-walled office blocks. From within, one may have the pleasure of seeing the KLCC walls turn golden at sunset, over a sea of *kampung* roofs.

Kampung Bharu represents potential but not one envisioned by profit-oriented developers. In an age where global cities inevitably fall victim to both gentrification and generic-tification, Kampung Bharu offers what the city denies – a place to pause, where the car is subservient to those on foot, where there is a traditional communal rural vibe yet still resolutely urban. It is a resilient place, imperfect and messy, alive and self-aware, unwilling to compromise. Further social and anthropological analysis of the place should take precedence before any generic masterplan is made. One should not destroy and replace it with more formulaic tabula rasa masterplans that are atypical of destructive *en vogue* China New Township-type planning. Neither should it be preserved in *cuka* (vinegar) as that has happened to Kampung Jonker in Malacca, a theme park toy village masquerading as heritage.

The potential of Kampung Bharu should also be a model to the world, that there is another better urban possibility, not dictated by global finance, high returns, pastiche imagery and lazy design by numbers. Who would imagine that a colonial attempt at racial control would somehow give rise to a freedom to withstand unimaginative development and instead create a different world? ✍

HAZWAN ARIFF HAKIMI

ORIENTING ARCHITECTURE: MASJID NEGARA, KUALA LUMPUR REVISITED

Hazwan Ariff Hakimi deconstructs the conventional thinking of scholars responsible for the conflation of Masjid Negara with the International Style and recommends a 'tapestried orientation' and reconstruction of inclusive historical and theoretical ideas and methodologies, accentuating their latent potential as resources for rethinking the past, understanding the present and reimagining the future.

IMAGE COURTESY OF HAZWAN ARIFF HAKIMI (2016)

> "WE NEED TO DECOLONISE THE MIND WITHOUT DENYING OTHER IDEOLOGIES OR METHODOLOGIES (INCLUDING FROM THE WEST) AND CRITICALLY ASSESS THEIR LEGITIMACIES AND CONTEXTUALITIES TO LOCAL OR REGIONAL FRAMEWORKS WITHOUT ESSENTIALISING THE LATTER."

Colonial Mentality

Being one of the seven national symbols conceived by the postcolonial government which attained Malaya's independence in 1957 and later formed Malaysia in 1963, Masjid Negara was emblematic for several reasons. First, it was a "fitting adjunct to the dignity of the Malayan Nation with the advent of Merdeka."[1] Second, it was "a monument to the freedom of worship" as proclaimed by the Yang di-Pertuan Agong (the Malaysian King).[2] And third, it was a reinstated symbol of Islam in post-independence Kuala Lumpur. The mosque was deliberated by Tunku Abdul Rahman, Malaysia's first Prime Minister, and its realisation was overseen by (Tun) Abdul Razak Hussein as Chairman of the Mosque Committee. The latter was instrumental in selecting the mosque design team, which consisted of architects from Jabatan Kerja Raya (JKR, Public Works Department) viz. Howard Ashley, Ikmal Hisham Albakri and Baharuddin Abu Kassim. Upon its opening in 1965, the mosque received scant, if any, critical appraisals from architectural commentators. Over the years, apart from the very few inclusive critiques linking the mosque design with regional knowledge and practices, exclusive critiques associating Masjid Negara with the International Style have subjugated the canon of Malaysian architectural history.

The characteristic thinking of commentators adopting an International Style perspective could be rationalised by several reasons. The homogenisation

The circular aluminium rosette with a verse from the Holy Qur'an (35:41) gilded in gold on the pleated roof of Masjid Negara is analogous to the rosette on the central dome of the Sultan Ahmed Mosque in Istanbul. Not only do they bear a striking resemblance in form and inscription, the 16 sharp spokes of the former's pleated roof pay homage to the 16 stylised branches decorating the latter's central dome interior

> A 'TAPESTRIED ORIENTATION' IS ACCORDINGLY A CONCEPTUALISATION OF MODERNITY AS AN OPEN-ENDED TAPESTRY WHERE MULTIPLE FABRICS ARE SEEN AS INTEGRALLY ENTANGLED IN ITS PRODUCTION TO SHIFT THE NORMATIVE ORIENTATION OF DOMINANCE AND DEPENDENCE TO ONE OF BALANCE AND INTERDEPENDENCE.

through generalisation illustrated in the use of the International Style principles by commentators as a universal manual which has to be subscribed to in order for non-Western modernist architectures to gain legitimacy generates effects of homogeneity, coherence and timelessness vis-à-vis heterogeneity, variety and synchronicity reflective of the experiences of modern societies outside the West.[3] Furthermore, Westcentricity and the false sense of confidence portrayed in the ideology of the West as a tacit referent in the dynamics of knowledge production where "third-world historians feel a need to refer to works in European history; historians of Europe do not feel any need to reciprocate"[4] has led to the uncontested perpetuity of dominance of the West in charting a single chronicle of "modernity" as opposed to other "modernities." Finally, the superiority-inferiority complex demonstrated in the wholesale degradation of regional knowledge and practices deemed "primitive" and "inferior", and the uncritical exaltation of modern science and technology seen as "civilised" and "superior" has effectuated the neglect and decline not only of indigenous systems but also the ways in which they could be contemporarily reimagined.

Scholars have theorised about the psychological dynamics of oppression and the manufacturing of colonial mentality as a by-product of decolonisation. Edward Said's *Orientalism* (1978) underlined credos the colonists created and substantiated their image of the Orient through four central dogmas along with a new imperial mode lingering today.[5] Said's conception was accentuated by Ashis Nandy's "second colonisation" in which he claimed: "The West is now everywhere, within the West and outside; in structures and minds."[6] The credulous reception of Western ideologies by non-Western people expresses subservience to their colonial masters. This "intellectual bondage" according to local scholar Syed Hussein Alatas represents not only the West's colonisation of indigenous epistemological space but also renders non-Western people who attain Western tenets and uncontextually emulate and circulate them as "captive minds."[7] Sanguinely, former performers have demonstrated how these restricting orientations have been overcome at Masjid Negara, but due to space constraints in this article, I only discuss a pair (or rather, group) of them.

Performers Entangled in a Narrative

One of the performers entangled in the narrative is Masjid Negara's architect. At the outset, Baharuddin applied to study architecture in the UK because he had no other choice. The RIBA-validated training courses in Malaya were intended to produce technicians instead of architects before the late 1950s.[8] Baharuddin's orientation to challenge the West and its negligences was triggered upon the rejection of his final year design thesis proposal by the Dean of Manchester School of Architecture in 1956 as none of the studio tutors were knowledgeable on mosque design and so rendered his proposition esoteric. The Dean recommended Baharuddin to investigate cathedrals instead since they are ubiquitous in the West.[9] The refusal must have frustrated him, but he was resolute in pursuing the mosque design project to the extent that he produced a thesis on the typology for the Dean's consideration. The Dean's subsequent approval was an instrumental leap of faith. Encouraged by the confidence given to him, Baharuddin completed his project which became the only Malayan student work published in the school prospectus two years after his graduation.[10]

Having graduated at the dawn of Malaya's independence, Baharuddin was given the opportunity to test and implement his ideas as he was commissioned by Tun Razak together with Ikmal Hisham and Ashley to design Masjid Negara when he least expected it. His earlier research on mosque designs sourced from books and photographs in London was supplemented when Tunku arranged for the design team to be sent to study prominent mosques in the Islamic world for two months.[11] This visit would buttress the entanglements between Masjid Negara and mosques in Saudi Arabia, India, Turkey and Spain. Additionally, Baharuddin was practising as an architect in JKR during the transition period of its Malayanisation in which some expatriate staff such as Ashley were limitedly retained for their expertise "until an increasingly Malayanised public service becomes a cohesive whole and its members gain experience and confidence in their new tasks."[12] In the Architects Department of JKR, this phase of continued employment of expatriate staff was stipulated up to 1962,[13] which explains Ashley's withdrawal from the design team before the mosque was completed. Ikmal Hisham left the team for further studies in 1961, leaving Baharuddin to lead the mosque project from conception to construction.

When Masjid Negara was completed in 1965, during which JKR has been fully Malayanised, the success of Baharuddin's orientation reinforced by the Government's commission was rightly expressed by the first Malaysian chairman of the JKR Magazine editorial board in 1966:

"[O]fficers of all grades have, in spite of increased responsibilities, carried out their duties with commendable competence. There were doubts in the minds of some skeptics of the ability of the 'local boys' to maintain the standard of efficiency but it has since been proved that Government's confidence in the local officers has been amply justified."[14]

Nonetheless, Baharuddin was not unaccompanied in his orientation. By 1957, some Malayan architecture students had returned upon finishing their studies abroad. They were insistent in realising their potential to develop a more inclusive architectural practice and discourse.[15] Not only was Baharuddin one of their contemporaries, he was also an instrumental character in articulating "a homegrown architecture"[16] through the development of a cross-cultural synthesis between regional and supra-regional models without abandoning inherent ideologies as evidently demonstrated with Masjid Negara.

Of equal importance in the narrative is the orientation of new citizens of Malaya/Malaysia. The mutual mood then was one of anticipation and proliferating nationalism,[17] which explains the self-congratulatory comments flooding contemporaneous local newspapers and publications. Although some scholars have claimed that Masjid Negara publicised the political hegemony of Malay Muslims to the country's Chinese and Indian minorities,[18] the evidence shows otherwise. In fact, a substantial amount of the funds raised for Masjid Negara came from non-Muslim individuals, associations and organisations such as the Social & Welfare Services Lotteries Board and Shaw Foundation.[19] Not only did non-Muslims offer monetary aid, they also lent a hand to erect the mosque complex.[20] These efforts have rendered Masjid Negara a noble manifestation of the religious tolerance of the people and "a focus for their unity and solidarity."[21] The reasoning for this noteworthy orientation was succinctly enunciated by Tunku in his speech at the mosque opening:

"They gave willingly and with good grace because they realised that the principle in the Constitution of freedom of worship was respected and upheld. Moreover, this Government has given financial aid to the extent of many millions of dollars to help Christians build churches and Buddhists and Hindus to build temples, as well as to provide schools."[22]

Tapestried Orientation

The narratives presented hitherto are sufficient testimonies of a multiplicity of orientations intertwined at Masjid Negara. They also reveal the possibility to reverse colonial mentality and the many detrimental effects it has on the psychology of the formerly colonised. This article offers several recommendations to supply visibility and vocality to these people through the theorisation of a "tapestried orientation." Firstly, we need to decolonise the mind without denying other ideologies or methodologies (including from the West) and critically assess their legitimacies and contextualities to local or regional frameworks without essentialising the latter. Secondly, we need to deconstruct and re-evaluate indigenous knowledge and practices previously delegitimised by Western colonisers and generate meaningful dialogue in encouraging mutual recognition and respect of interactive individual experiences and realities. Thirdly, we need to construct a more inclusive architectural production and pedagogy where knowledge and practices are not exclusively owned or controlled but shared and disseminated through flexible and sustainable avenues in which they could be reimagined and reinvented.

If we recognise the present as a continuity of the past, then modernity is just "another" project of hybridity, "another" piece of tapestry. An emphasis on this anotherness is because hybridity, to quote Jan Nederveen Pieterse, "is as old as the hills, so the roots themselves are mixed."[23] Rather than being an exclusive experience privileged to the West, it is a collective condition that precedes both colonialism and postcolonialism.[24] Resuming this metaphor, it is impossible for any single pattern to materialise without stitching together different fabrics, just as no single modern society can flee from the polycentric flows of the global field. A "tapestried orientation" is accordingly a conceptualisation of modernity as an open-ended tapestry where multiple fabrics are seen as integrally entangled in its production to shift the normative orientation of dominance and dependence to one of balance and interdependence. The open-endedness is derived from the mélange of visual and material organisations effectuating a pluralisation of hybrid patterns. While the canvas of the mosque typology remains irreversible, reading the Masjid Negara through the lens of the International Style entirely overlooks the rich tapestry formed by the disparate fabric of historical and theoretical ideas, styles, materials, technologies and contexts interwoven through borrowings and transfers that reveal familiar but dissimilar patterns. One can only speculate about the patterns designed in today's complex ultra-hybrid reality.

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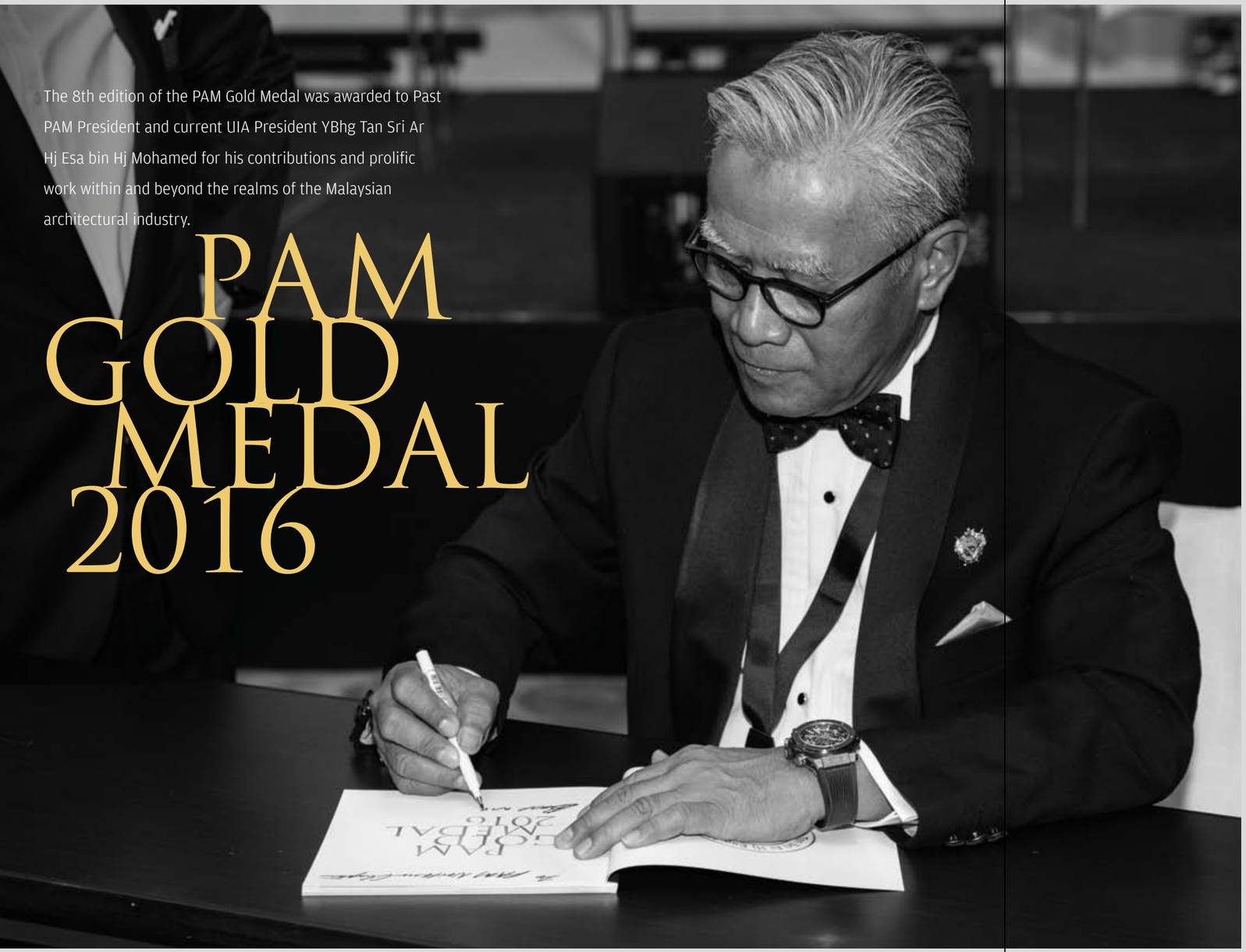
Footnote

[1] WONG, P. N., 1959. *Appeal Letter for National Mosque Funds*. [letter]. 1986/0006256. Kuala Lumpur: Arkib Negara Malaysia. / [2] ABDUL RAHMAN, T., 1977. *Looking Back: Monday Musings and Memories*. Kuala Lumpur: Pustaka Antara, p. 114. / [3] ABU-LUGHOD, L., 1991. 'Writing Against Culture.' In: FOX, R. G. ed., 1991. *Recapturing Anthropology: Working in the Present*. Santa Fe, NM: School of American Research Press, p. 156. / [4] CHAKRABARTY, D., 2008. *Provincializing Europe: Postcolonial Thought and Historical Difference*. Princeton, NJ: Princeton University Press, p. 28. / [5] SAID, E. W., 1978. *Orientalism*. London: Routledge and Kegan Paul, pp. 300-1. / [6] NANDY, A., 1988. *The Intimate Enemy: Loss and Recovery of Self under Colonialism*. Delhi: Oxford University Press, p. xii. / [7] ALATAS, S. H., 1974. 'The Captive Mind and Creative Development.' *International Social Science Journal*, 26 (4), p. 691. / [8] CRINSON, M., 2003. *Modern Architecture and the End of Empire*. Aldershot: Ashgate, p. 172. / [9] ABDUL JAMAL, H., 2009. 'PAM Gold Medal Award 2008.' *Architecture Malaysia,* 21 (3), p. 20. / [10] DEPARTMENT OF ARCHITECTURE, 1957-8. *Prospectus 1957-58*. [prospectus]. School of Architecture Prospectuses 1923/24-1963/64. Manchester: University of Manchester Archives. / [11] STRAITS TIMES, 1965. 'An Experiment that Became a Reality.' (editorial comments). *Straits Times,* 27 August 1965. / [12] FEDERATION OF MALAYA, 1956. *Report of the Committee on Malayanisation of the Public Service*. [report]. Colonial Office Collections, CO 941/29. London: The National Archives, p. 18. / [13] FEDERATION OF MALAYA, *Report of the Committee*, pp. 6-7. / [14] PUBLIC WORKS DEPARTMENT, 1966. *JKR Magazine 1966*. [magazine]. General Reference Collection P.P.8002.sm., BLL01002353168. London: British Library, p. 5. / [15] YEANG, K., 1987. 'A Review of Malaysian Architecture 1957-1987.' In: CHAN, C. Y. ed., 1987. *Post-Merdeka Architecture: Malaysia 1957-1987*. Kuala Lumpur: Pertubuhan Akitek Malaysia, p. 19. / [16] ABDUL JAMAL, H., 'PAM Gold Medal Award 2008,' p. 22. / [17] YEANG, K., 'A Review of Malaysian Architecture,' p. 19. / [18] HOLOD, R. and KHAN, H. U., 1997. *The Mosque and the Modern World: Architects, Patrons and Designs since the 1950s*. London: Thames & Hudson, p. 68. / [19] A. AZIZ, A., 2015. *50 Years National Mosque, 1965-2015*. Kuala Lumpur: ATSA Architects Sdn Bhd, p. 38. / [20] JABATAN PENERANGAN MALAYSIA, 1968. *Masjid Negara* – Jun 1968. [publication]. 2006/0021758. Kuala Lumpur: Arkib Negara Malaysia, p. 17. / [21] JABATAN PENERANGAN MALAYSIA, 1965. *Speech by the Prime Minister, Tunku Abdul Rahman Putra at the Opening of the National Mosque (27.8.1965)*. [press release]. 1957/0000306. Kuala Lumpur: Memorial Tunku Abdul Rahman Putra, p. 2. / [22] JABATAN PENERANGAN MALAYSIA, *Speech by the Prime Minister*, p. 3. / [23] PIETERSE, J. N., 2006. 'Globalisation Goes in Circles: H*ybridities East-West.*' In: SCHIRMER, D., SAALMANN, G. and KESSLER, C. eds., 2006. *Hybridising East and West: Tales Beyond Westernisation*. Berlin: Lit, p. 22. / [24] PIETERSE, J. N., 2009. *Globalisation & Culture: Global Mélange*. Lanham, MD: Rowman & Littlefield Publishers, p. 91.



The 8th edition of the PAM Gold Medal was awarded to Past PAM President and current UIA President YBhg Tan Sri Ar Hj Esa bin Hj Mohamed for his contributions and prolific work within and beyond the realms of the Malaysian architectural industry.

PAM GOLD MEDAL 2016

The awarding of the PAM Gold Medal to any of its member during his or her period of being a PAM member marks the highest level of award that an Institute can give to its member. It marks the person's achievement in the Institute towards great distinction in architecture through a body of works which demonstrate the highest level of design excellence as well as a lifetime contribution which has promoted the advancement of architecture in Malaysia or internationally.

On 8 October 2016 at the Grand Ballroom of the Grand Hyatt Hotel, Kuala Lumpur, PAM through its jury, unanimously awarded its 8th PAM Gold Medal to YBhg Tan Sri Ar Hj Esa bin Hj Mohamed. The event was graced by Guest of Honour Sultan of Johor, Kebawah Duli Yang Maha Mulia Sultan Ibrahim Ismail Ibni AlMarhum Sultan Iskandar Al-Haj, and witnessed by 500 invited guests.

His nomination was submitted by two PAM members, Ar Mustapha Kamal bin Zulkarnain and Ar Erdayu Os'hara Omar, and was justifiably deserved for the following reasons:

1. He has exemplified how an architect really works hand in hand with other allied consultants as well as clients in order to realise high-quality end products that serve the users well such as the Kuala Lumpur International Airport project.

2. He has also adopted successful collaboration efforts with the best consultants around the world and have them work under his direction in order to deliver a world-class facility such as the Kuala Lumpur International Airport project.

3. He has also demonstrated the constructive spirit of local architectural collaboration in order to deliver high-quality projects such as the development of the Putrajaya New Federal Administrative Centre.

4. He has explored beyond just merely architecture, but assisted in the fruition of a public facility through good design skills and business acumen in developing the new Sungai Buloh Hospital.

5. He has also demonstrated that nature and physical development are best developed in symbiosis rather than in isolation, as shown with The Datai Langkawi.

6. As in many instances, one cannot separate politics from architecture. Architecture needs to be politically sensitive, and an architect needs to work with the system in order for his creation and architecture to be relevant. He has demonstrated this in many of his projects such as the Subang Jaya master plan, Tun Razak Exchange, as well as the Kampung Bharu redevelopment.

7. His embodiment of works as well as his good understanding of business when designing retail malls have made some of his designed malls avant garde, such as the Mid Valley Shopping Centre, Subang Parade and Sunway Pyramid Mall.

8. Tan Sri Esa's works should be seen as a single body of work that is holistic. He is an all-rounder architect who does best when he can play multiple consultative roles either as an end user or a business promoter, as architecture serves three-pronged objectives that are beauty, delight and commodity.

9. Flexibility and reputation due to international and local exposure have resulted in him being able to successfully work internationally to promote Malaysian architecture.

10. The international recognition of his actions is testament of his quality of character, design completeness, as well as quality deliverables.

11. In short, he needs to be seen as a total package rather than a certain part of the whole.

We are proud to publish herewith the full text of Tan Sri Esa's PAM Gold Medal 2016 speech. We hope that Tan Sri Esa's prolific journey will inspire you.

PAM Gold Medal 2016 Speech

Assalamualaikum WBKT and good evening.

First of all, I wish to record my sincere appreciation of your presence here tonight to celebrate the PAM Gold Medal 2016 awarded to me. Thank you all for coming from far and wide. I wish to thank PAM, the jury and particularly the nominators, Ar Mustapha and Ar Erdayu, for selecting me to be the eighth recipient of this most distinguished award. Certainly this would not have been possible without the tremendous support of my family, business partners, staff and friends. I shall cherish their contributions forever.

I came back to Malaysia in March 1976 after completing my studies in Australia. It was my perception that things were entirely different here from my experience in Australia. It seemed promising, as the country was embarking on a new era of growth and development. The situation in Australia was the opposite, with the credit squeeze and economic slowdown. While there was an opportunity for me to have a permanent position in a leading architecture firm, Suters Architects in Newcastle, the city where I did my studies, it was time for me to return home to pay my dues.

As a young student at Maktab Sultan Abu Bakar (English College) Johor Baru, I was considered a talented artist although I was also good in maths and science. This earned me the nickname of 'artistic scientist' among my peers and also the foreign Peace Corps teachers from the USA. My humble beginnings from Kampong Semerah, Batu Pahat had an impact on my upbring-

PAM President Ar Zulhemlee An delivering his opening speech

ing. We were not well off and life was a real struggle. I owe it to my late father who really believed that education was the key to our escape from severe economic challenges. He made a lot of sacrifices to ensure that I had the opportunity to be educated. He made the bold move of leaving the *kampung* (village) and settling in Johor Baru searching for odd jobs to support our family. It wasn't a big one with me as the only son and an adopted sister.

After successfully completing my HSC, I managed to win a MARA loan to study Architecture at the University of Newcastle, Australia. I didn't know what architecture was then, but managed to read about it at the public library to prepare for my interview with the MARA Scholarship committee. Despite the tough interview, with reverse psychology interview techniques, I secured the loan to proceed with the architectural course in Australia. *Alhamdulillah*, I was regarded as an excellent student at the Architecture Faculty, University of Newcastle, Australia, scoring high marks and prizes for proficiency annually. This culminated in the award of B. Arch (1st Class Honours) University Gold Medal in Architecture (1973) – the first Asian and foreign student to gain the award then. 32 years later in 2005, the University honoured me with the Honorary Doctorate of Architecture.

Upon my return, I set out to find a job. Having also obtained a post-graduate degree, Masters in Town & Country Planning from the University of Sydney, I applied to lecture at the Faculty of Building Housing and Planning at Universiti Sains Malaysia (USM), Penang. I had a successful interview with the Dean and was giving the post a serious consideration. However, the challenges that were promised by Mr Goh Hock Guan in Kuala Lumpur persuaded me to join him. He was a legendary figure in Malaysian politics, and his visionary ideas about the future of Kuala Lumpur lured me to his office in the UMBC building in Kuala Lumpur.

My first job with Mr Goh was to take charge of the development of Subang Jaya, which had been saddled with administrative land problems in Selangor. As it turned out, I spent most of my early years working on the development of Subang Jaya housing projects and various phases of link houses, terrace houses, semi-detached, bungalows, shophouses, offices and more. They were the standard products that were marketed to meet demands for housing whether in need or speculation. The practice has not changed until today. We are still facing the challenge of housing the lower income groups in society. While the middle and upper income demands for housing kept the property sector growing, the lower and lower middle-income groups remain marginalised.

In the early 80s, we embarked on a compact link house design in Subang Jaya that was sold at a much lower price than the normal market price. It was a hit at RM50,000 against the normal RM70,000 for a double-storey link house. Subang Jaya was gaining popularity as more and more facilities were developed after the restructuring of the company with the entry of Sime Darby and the exit of the Hong Kong-based development and management company Goodyear Management Ltd.

Subang Jaya was the earliest comprehensive township development with a projected population of 75,000. However, the area has expanded to include USJ with a much larger population now. The earlier plan of Subang Jaya incorporated designed open spaces and parkland fronting the township for the entire northern stretch along the Federal Highway. Additionally, at the neighbourhood level, pocket parks were planned and provided. Some of these parks are now gone and have made way for apartments and retail complexes.

We ought to be conscious of the needs for greenery and parks to enrich the life of inhabitants. At a time when the world is battling the impact of climate change, it is crucial that we adopt a more sustainable development that includes allowing inhabitants to have easy access to parks and open spaces to recreate and interact with each other. This is a basic planning requirement and principle.

Subang Parade was the first shopping mall of its kind to be developed in Subang Jaya. It was dubbed the longest mall in South East Asia then (800 metres). The design was modelled from successful malls in USA. It was a game changer for the shopping patterns of the Malaysian community. To be able to shop for various products in a controlled environment was ideal.

The spatial dynamics of the interior made it easier for the shoppers to relate spaces and functions at various floor levels. The activity is continuous horizontally and vertically with inter-connections at various levels by ramps criss-crossing them. Users seem to have full control of the fluid space within the mall. This is in total contrast with Sunway Pyramid, which was designed as a thematic destination mall. A caricature of the lion dominating the entrance to the Pyramid heightens the Egyptian theme. We had begun to specialise in shopping mall design with more projects later on.

In 1978, I was seconded to Dewan Bandaraya Kuala Lumpur (DBKL or Kuala Lumpur City Hall) to prepare the Kuala Lumpur Structure Plan, which was dubbed the 1st Structure Plan under the new Act 172, Town & Country Planning Act and the new enabling Act 267, Federal Territory Act. This involved the introduction of architecture and urban design inputs in planning regulations for Kuala Lumpur. As someone who graduated in Architecture with a post-graduate degree in Town and Country Planning, I was suited for the job as Architect-Planner in DBKL. Policy guidelines and framework were formulated to govern the Local Plans and the Action Area Plans. However, the gazette of the Structure Plan and Local Plans in KL was a challenge due the dynamic nature of the developments in the Federal Capital. Today, Kuala Lumpur is still morphing into a world-class city with new pockets of mega urban developments such as the TRX, BBCC, Menara Wawasan and Bandar Malaysia.

In the early 80s while I was still reviewing the draft KL structure plan, the government thought of the idea of relocating the capital outside the current boundaries. Together with the late renowned Japanese architect Kenzo Tange, I had the opportunity to work on a location in Janda Baik as it was thought that the higher altitude would have been ideal where the temperature would be cooler than the current valley. That didn't materialise. We also prepared a proposal to DBKL to pedestrianise Jalan Tuanku Abdul Rahman from Dataran Merdeka to Dang Wangi. That didn't materialise either.

During the same period, I also proposed the redevelopment of the Klang and Gombak Rivers to turn it into a viable commercial and recreational space that would have connected the city of Kuala Lumpur to Port Klang. The Greater KL would have been a riverine metropolis. I am thankful to Allah SWT that within my lifetime these visions may be taking shape now. The river reserve would have also presented opportunities for housing developments, and the rehabilitations of the rivers could be the route for the mass rapid transit systems. This was earlier envisioned by my partner Goh Hock Guan, a prolific architect-planner and political thinker. Water, which is essential to life, also enhances the vitality of cities as evidenced in all great cities such as London, Paris, Melbourne, Seoul, St Petersburg and many more. Kuala Lumpur has just woken up to this and embarked on the River of Life (ROL) project. I hope that the objectives will materialise soon as it will really transform Kuala Lumpur.

Priorities were different then. Some 250,000 informal settlers that were scattered around Kuala Lumpur nudged the government's political machinery to deal with them and it became a major objective. It was timely, given the new move of the government to embark on privatisation as the means to realise infrastructure and social projects. It was also another turning point for the country in the industrialisation process besides the establishment of HICOM in 1980 and the venture into the car manufacturing industry.

I was instrumental in a series of informal settlers resettlement projects that targeted several disused mining lands in Kuala Lumpur. This scheme called for developers to provide housing for informal settlers, and as consideration the developers were given the vacated land to build normal market housing and commercial buildings. This mode of cross-subsidy delivery was widely practised nationwide successfully.

Mid Valley City is one of the earlier privatisation schemes in which I was involved from inception to finish. It started in 1986 and opened its doors in 2000. There was a lot of apprehension as it was the biggest shopping mall in the country then. Designed and planned on 52 acres of disused mining land on the fringe of the Kuala Lumpur CBD, it took years of analysis and design proposals to give confidence and boldness to the developer, IGB Bhd, to embark on the construction.

The final design accommodates 4.5 million sqf of commercial space complex of shopping, offices, hotels and residential apartments that capitalise on the accessibility of the road and rail transportation network. It is one of the earliest comprehensive multi-use development complexes that is sub-divided based on strata titles on a large scale. With the Klang River sandwiched between Mid Valley and KL Eco City (Kg Abdullah Hukum, a former informal housing area), it is logical that the river is revitalised as a feature to both developments. This area has transformed the economic vitality of Kuala Lumpur with connections to all parts of the metropolis. The ROL project will be a boon to this area.

The period of 1976 to 1986 was the grounding of my career with attempts to discover the various aspects of practice, business in architecture and the industry. I engaged myself actively in Pertubuhan Akitek Malaysia (PAM), sitting in and chairing various committees. I volunteered to lecture at the institute a few evenings a week to the technical and drafting classes.

I also recall that the housing development delivery process was confused with the interpretation of the progress claims schedule at the behest of the developers. Interpretations of progress stages were not standardised which led to numerous complaints to the Controller at the Ministry of Housing and Local Government regarding wrongful certification. I initiated the establishment of the PAM Housing Committee and developed the detailed interpretation of the schedules for adoption by the Ministry of Housing and Local Government. These schedules were further developed over the years to include sub-divided buildings.

YBhg Tan Sri Ar Haji Esa's speech presentation to a full house audience at the Grand Ballroom of the Grand Hyatt Hotel

For a period of more than 10 years, I was involved in the Part III Professional Practice Examination under the Education Committee. This experience in dealing with education and professional practice helped me understand the complexities of combining academic and professional practice. Interacting with the local universities as an external examiner and lecturer was an advantage.

Universities enrich the profession of architecture with intervention from research. Students present the potential wealth of ideas in design and research. Young architects and students infuse innovations in design. They bring energy. I wish and hope that the trend to closer cooperation between academia and practice would continue and flourish. This is the practice overseas.

With PAM's involvement in international organisations including the Architects Regional Council Asia (ARCASIA), International Union of Architects (UIA), Association of Southeast Asian Nations (ASEAN) and Asia-Pacific Economic Cooperation (APEC) architects projects, I initiated the International Affairs Committee. This was also catalysed by Malaysia's economic presence in World Trade. With the liberalisation of services trade under the General Agreement on Trade in Services (GATS) and the World Trade Organization (WTO), Malaysia had to position itself against foreign competition globally. This includes trade in architectural services. As a fraternity of architects, PAM has maintained its stance against the indiscriminate practice of foreign architects in the country. There should be protocols observed for foreign consultants to practice beyond their home jurisdictions.

The consultative system that is adopted by the government is lauded where the private sectors are engaged in developing policies on international trade through the Ministry of International Trade and Industry (MITI). Hence, the LAM-PAM International Affairs Committee is the body that advises the government to observe these protocols where foreign architects must collaborate with local architects in executing projects locally.

Architecture is universal and with the digital age, designs traverse borders. In the late 1990s, I worked together with the British and Japanese consortium to develop the master plan for the new international airport to move their activities from Subang, which had become congested. It was an opportunity for Malaysia to establish an iconic gateway to the country, making it a major airport hub for the region.

The Anglo-Japanese Airport Consortium (AJAC) was keen on my concept of integrating the greenery of the tropics into the high-tech structure. I chose the late Japanese Professor Kisho Kurokawa as a partner in the development of the design of the new Kuala Lumpur International Airport. Professor Kurokawa was promoting his Philosophy of Symbiosis in design with nature and technology, which was aptly applied to the Kuala Lumpur International Airport (KLIA), while we base our designs on the precept of 'man and man, man and his creator, and man and his environment'. So we introduced the courtyard of forest with local trees into the buildings, which became the unique feature of KLIA's 'Airport in the Forest and Forest in the Airport' design concept. Together, we developed the typology of the building to make it unique to Malaysia. The use of conical columns and the vast expanse of the hyperbolic-paraboloid roof structure conjures the canopy of palm trees widely cultivated in Malaysia or the wings of a bird. The collaboration between the renowned Japanese architect, founder of the Metabolist movement in Japan, and Akitek Jururancang Malaysia (AJM) was exemplary. We established a Special Purpose Vehicle (SPV) called Malaysia-Japanese Airport Consortium (MJAC) to provide architectural design and engineering management services to the KLIA project management group.

MJAC was an exemplary form of collaboration of local consultants and their foreign counterparts – 60% local consultants primarily from AJM, SSP and Ranhill Engineering, and 40% from Kurokawa Associate Architects and Pacific International Consultants from Japan were the shareholders. It was a real challenge for me to assume leadership of this consortium to build the biggest and most complex airport building project in the country then. It was one of the earliest and most successful designs and build contracts that the government has undertaken, which was also completed on time and within budget.

It was a period of excitement for the nation that transcended into a new era of industrialisation and modernisation. The Vision 2020 was the target, and the 'Malaysia Incorporated' approach to developments was the key for advancement in the economy. New ideas for developments were welcome with privatisation and corporatisation. The mood was set with the privatisation of the North-South Highway, which spurred other privatisation projects including housing, ports and towns. It not only opened up new urban areas but also new businesses and creative corporate expansions in the country.

While the construction of the KLIA was in full swing, the government finally decided to establish a new capital or 'administrative capital city' in June 1993. The group Kumpulan Perunding Kota Bistari (KPKB) was established as a consortium of local architects and engineering firms to come up with a proposal for a new city. The group included AJM, Hijjas Kasturi and Associates, Perunding Alam Bina, BEP Akitek Sdn Bhd and Reka Rancang Sdn Bhd. Initially, the Economic Planning Unit (EPU) requested for a design competition among these firms. But I talked it over with members of the group, and we decided to pool our resources and arrived at five different solutions for the Cabinet to deliberate and choose. In this way, the resources and expertise of five firms would not be wasted but continue through the design development stage of what you see today. It was one of the schemes that the Cabinet chose. KPKB also geared up to proceed with the detailed designs with the participation of the Federal Town and Country Planning Department. There was excitement when the Prime Minister launched it on 22 February 1995. A time capsule was officially buried in the foundation of the monument to mark the ground breaking.

In 1995 too, an independent study conducted by the Ministry of Health on the state of the health facilities found a dire need for improvements and increased capacity of hospitals in the country. The conditions in KL Hospital were undesirable and needed expansion and upgrading. Initially, a privatisation proposal was made to the government to develop a comprehensive hospital that is capable of dealing with disasters at Sungai Buloh. The current site of KL Hospital would then be surrendered to the developer for commercial and other mixed uses in exchange. However, the scheme didn't materialise and was deferred due to the Asian Financial Crisis in 1997.

The government saw the acute shortage of health facilities and decided to proceed with the project under a turnkey design and build contract. I had earlier initiated the consortium company to propose the scheme and was given the opportunity to negotiate further with the government to proceed with the project.

The designing, constructing, equipping and commissioning of Sungai Buloh Hospital (620 beds) and college of Allied Health Sciences (3,000 trainees) was awarded to the consortium under my leadership on 1 November 2000 and was to be completed on 31 October 2004. It was a turning point in my career as an architect as I had engaged myself to be fully responsible in financing and managing the construction and delivery of a highly sophisticated facility – perhaps the biggest hospital in the country.

Despite the complexities, physical infrastructure impediments and large number of rooms, the design of the hospital successfully maximised the natural ventilation of the major public circulation areas. A majority of the areas have external windows for natural lighting through large courtyards that also function as relaxation and therapy for patients and to provide a healing environment. This project was completed on schedule.

The hospital, which caters for emergency and mass disaster, has spurred other medical-related facilities in the area. The UiTM medical faculty was subsequently developed in the vicinity which was also under our consultancy and management in a design and build contract.

In 2011, I initiated a project together with Sime Darby to develop a University City in Pagoh, a knowledge hub, centre of teaching, learning, research and development facilities. This was to be a catalyst for the development of the surrounding areas to become a growth centre based on knowledge economy. Developed in phases, it consists of three (3) universities, one (1) polytechnic, and shared facilities such as sports, library and convention facilities and visitor's accommodation. The project was implemented under the Private Finance Initiative (PFI) system, and is in the final stages of handing over and ahead of schedule.

This PFI is becoming popular in government infrastructure projects, as it spreads the government's financial burden over a long period. The financial institutions are amenable to this approach and a number of overseas governments are looking at embarking along a similar concept.

I am pleased to see that our group has managed to deliver not only mega projects in nation building but also master plans at national, state and local levels in the country including the KLCC Convention Centre and The Datai Langkawi that won the Aga Khan Award for Architecture. Apart from Putrajaya, we have been involved in the urban development plans for the Iskandar region, Sungai Buloh Township, Desaru, and Structure Plans for KL, Johor Baru, Penang, Labuan and others. After successfully developing the Master Plan for Kazan Smart City, the government of Tatarstan, Russia has engaged us further to prepare the Kazan Financial District. Our experience in preparing the development master plan of the TRX is going to be helpful. Our firm has also won several competitions and awards that include the Aga Khan Award for Architecture in 2000, 1st Prize architectural design competition for the Selangor State Secretariat extension, and many more. All these were the result of dedication and hard work of our team in the AJM Architecture and Planning Group.

The Asian Financial Crisis of 1997 was also the wakeup call for the nation to review its vision 2020 to be a developed nation. The services sector was then brought into focus. There were numerous dialogues between the government and the private sector to restructure the economy and move it back to recovery. We turned down offers from the International Monetary Fund (IMF) for bailouts and chose to manage the economy on our own internally, with capital controls and pegging the Ringgit at a fixed rate of RM3.80 to the dollar. We managed to get out of the crisis although some corporate entities had to be sacrificed. Professional services were also given attention. We saw the importance of the services sector as the driver of the economy henceforth. My interest was to promote the export of our professional services.

I have been given exposure at the UIA Professional Practice Commission since 1995 to draft guidelines and policies governing the movement of architectural services across borders. It was also a period when there was a lot of apprehension after the Final Act of the Uruguay Round in Marrakech in April 1994 and the signing of the GATS by members of the WTO that swore to liberalise world trade in services. Governments promised to open up their domestic markets and observe set protocols. Professional services were one of the many sectors included in the GATS. I volunteered to deal with this to ensure that there were proper protocols to be observed when services are to be imported to the country. The National Professional Services Export Council was established in 2000, and I was nominated to co-chair the council with the senior executive from MATRADE.

The council comprises of members from the private sector and government agencies to promote Malaysian professional consultants and service providers to export. Now it has further expanded with the establishment of a SPV in November 2015, the Malaysian Services Bhd, that will pool Malaysian consultants, contractors, investors, bankers,

FROM LEFT: YBhg Tan Sri Ar Haji Esa with the award; Members of the PAM Council past and present and VIP Guest Sultan of Johor pose for a picture with the man of the hour

etc, as a cohesive group to tackle projects abroad. It is important that Malaysia maintains its active participation in the global arena, especially in the services sector. A number of Malaysian companies and individuals have made successful inroads overseas. We need to increase the share of the services trade from the current 50% of GDP to at least 75% to be considered as a developed nation. Our treaties in the regional economic cooperation aim to do that. We are active in the ASEAN and APEC economic caucus.

My contribution to the professional services sector is by being active in these areas, such as being the inaugural Chairman of the ASEAN Architects Council in 2011 and a continuing member of the Central Council for the APEC Architects project, both of which are special international affair activities jointly undertaken by Lembaga Arkitek Malaysia (LAM) and PAM. Beginning next Monday [at the time of speech], Malaysia will host the APEC Architect Central Council meeting here in Kuala Lumpur. It will discuss issues regarding reciprocal recognition and to practise across borders for architects in the Pacific region.

These international experiences were assets in my foray in the UIA since 1995, the only world body that unites all architects worldwide – some 1.3 million of us. It was established in 1948 in Lausanne, Switzerland and headquartered in Paris.

After being elected as a Council Member in 2008 in Turin followed by the elected post of Vice President in 2011 in Tokyo, I was elected as its President in 2014 in Durban, South Africa. I have to thank PAM, as well as member institutes of architects in ARCASIA, for giving me such strong support. The election procedures and process of the UIA were rigorous. The international delegates were very discerning and wanted a dynamic and progressive union.

At the UIA, we are now very concerned with the impact of climate change and sustainability in our rapid urbanisation. I will be attending the UN Habitat III conference in Quito, Ecuador on 17 to 20 October next week, representing the UIA to discuss the New Urban Agenda. Following that, there will be the COP22 in Marrakech where UIA has organised a forum on the role of architects in dealing with the climate change impact. The experience that I had having served on the Board of Advisers in DBKL for several years has been invaluable in the discussions on urbanisation, community engagement and responsible architecture. Architecture belongs to the community and not to a few select groups of society that can afford to be patrons. Engaging the community, students and schools by architects will change the wrong perception of architects.

I must reiterate my appreciation of PAM, which has always been ahead of the game with respect to professional association of architects in this region. It has been vocal on many matters that affect the building industry and environment, but has brought positive outcomes that help the government. It has successfully inculcated a sense of responsibility and belonging among the young members. They are ever willing to volunteer and come forward to contribute for the betterment of the profession. Its contribution has been recognised internationally with the various regional activities and annual conventions, exhibitions, public lectures, as well as the Kuala Lumpur Architecture Festival. We have here with us tonight students from six local schools who have successfully participated in a workshop on the future of Kuala Lumpur with PAM.

The UIA presidency is not an easy position but at the same time is very rewarding for having to travel and deal with the different cultures and social conditions of each member country. I have managed to travel across the globe from Asia, Europe, Africa and America to deal with issues that affect the architects, environment, sustainability, climate change and urbanisation. Certainly, the knowledge gained and the opportunity to carry the Malaysian flag are well worth the effort. It has earned the Malaysian architects' fraternity respect globally. I will hold this position until September 2017 when the World Congress of Architects will be held in Seoul followed by the UIA General Assembly for the election of the new administration.

The promotion of services exports also gave me the opportunity to lead Malaysian delegates overseas to look out for projects where Malaysian professionals could participate. For the development of Jabal Omar in Makkah, I brought Malaysian professionals to Makkah to provide project management services. Some of them have stayed on to work and now call Makkah their home. Our firm has also ventured into China, Pakistan, India, Indonesia and Russia. I hope that through the Malaysia Incorporated Services Bhd, I will be able to engage more Malaysian professionals to export their services and expertise abroad. We are now seriously looking into Africa and India to provide assistance and consultancy services. Malaysia's development model has been the envy of the emerging economies in Asia and Africa. These will be our future markets.

I believe that Malaysians are highly trained and capable of facing challenges in the foreign market. Several countries have expressed their keen interest to engage Malaysian expertise so that they can emulate the success of Malaysia's development. We have highly qualified and talented professionals within our nation.

Credit should be given to Malaysians who have given their dedication and paid their dues in whatever form to develop this blessed nation.

Finally, I am proud and honoured to have a friend who is not an architect, but passionate about design that goes beyond boundaries. His in-depth knowledge about equipment, machines, utensils, aviation, maritime, cars, you name it, is amazing and inspires unthinkable design feats. He is none other than His Majesty the Sultan of Johor who is here with us tonight. I am fortunate to be able to work with His Majesty in building an iconic palace inspired by the cartoon character Fred Flinstone in Mersing out of 20,000 pieces of discarded railway sleepers. Now, that's sustainability! It started with the dismantling of the log cabin clubhouse in Desaru. His Majesty personally supervised the workers on site to attain the highest quality craftsmanship and ventured to acquire artifacts and collection of antiques to furnish the palace. If you think Antonio Gaudi had it in Barcelona, wait till you see this monument that can never be replicated.

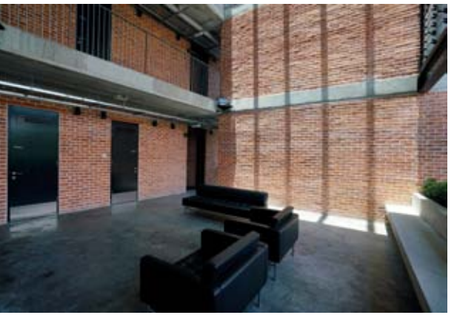
Thank you all for your indulgence and presence, and for sharing this memorable occasion with me. I seek your forgiveness for any shortcomings in the course of the evening.

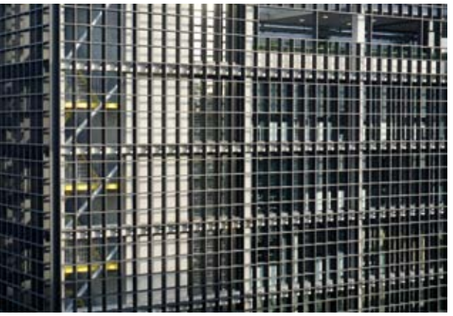
Wabillahi Taufik Wal Hidayah Waasalamualaikum WBKT.

YBhg Tan Sri Ar Haji Esa and PAM President Ar Zulhemlee An escorting the Sultan of Johor to the Grand Ballroom

BY Ar MUSTAPHA KAMAL

DETAILS OF THE PAM CENTRE: FROM THE EYES OF Ar HEIKAL





FROM TOP LEFT (CLOCKWISE): Concrete and brick wall finishing; Brick wall detailing; PAM concrete imprinted logo at the entrance; Planter box seating area; Gridded facade

In architecture, details are used to create aesthetics in order to achieve notional aspects such as firmness, beauty and commodity. While interior designers often use artificial or synthetic materials, architect of the new PAM Centre Bangsar Ar Heikal prefers using natural materials for architectural detailing and to be truthful even though the detailing may appear brutalistic. His approach towards architectural details leans towards timelessness and simplicity of forms.

According to Ar Heikal, the PAM Centre building itself is where the details lie. Of course, there are other smaller details such as aluminium screens, staircases, feature walls and staggered planter boxes in the sky courtyard.

Bricks are easily available in Malaysia, so Ar Heikal incorporated bricks and concrete into the design as part of the green strategy. He used them raw and unplastered. This helps in the accumulation of Green Building Index (GBI) points. Although, there were some areas where bricks were painted grey in order to complement the concrete at certain parts of the building.

Ar Heikal also noted that he was more interested in details such as the relationship between spaces and how to connect spaces within the building, which is more important than the choice of materials for the building. These include the coordination of the structural elements, design concepts and green solutions in order to achieve a well-balanced and cohesive design.

The modular system creates pleasantness in the design as the proportions of the elements, materials and spaces are well coordinated. By being a well-planned building, the PAM Centre becomes an example to teach students some major ideas of architecture. These may include, but are not limited to, the study of forms, repetition, rhythm, proportions, scale and layering.

Ar Heikal thought hard about the details for the PAM Centre, and he concluded that the reason why the PAM Centre is very simple in form as well as its language is how he has put on a complex thinking methodology in order to break down all the detailing elements into reasonable proportions and scales. He gave the following example:

- The grid system of the building is 6,600mm centres
- The floor-to-floor height is 3,300mm
- The column size is 400mm by 400mm
- The slab and beam are 400mm thick
- Ingeniously, the wall segmental lines are broken into five 660mm sections from floor to floor
- The pigeonhole sunshades are also 660mm centres, spanning 10 pigeonholes from column to column.

As a result, we can see from the rooms of 3,300mm width, that there are five pigeonholes through the sunshades. There are also five pigeonholes through the sunshades that span the height of floor to floor.

All are sheer perfection, accurate and precisely designed to create a minimalistic design. As his mentor Tadao Ando once said, "You need to create a series of complex thinking methodology in order to achieve simple design and minimalism." ☘

BY Ar LEE CHOR WAH

MUCH ADO ABOUT NOTHING

Lately, there seems to be a shift of focus in architectural students' projects. The focus is seemingly on site context research, rather than research on the architecture itself. Ar Lee Chor Wah breaks down the common mistakes made by students as a result of this imbalanced emphasis and why it is important to shift the emphasis back to the architecture proper.

From the numerous architectural design crits I have attended of late in various schools of architecture in the Klang Valley, there seemed to be an overemphasis among students on site analysis, research on history, socio-economic and cultural background, planning and urban design, instead of the architecture project proper. This could have a negative impact on the quality of architecture graduates.

Many students, perhaps encouraged by some lecturers, have forgotten that when clients engage architects, they want us to design if not a spectacular building, at least a functional and efficient building that is fit for its intended purposes. They would not care much, if at all, about the socio-economic or cultural impacts of their building on the site, let alone the catalytic consequences or the now famous 'Bilbao effect' of the building on its surrounding. Yes, granted that as academic projects, we must broaden students' horizons to address concerns and issues beyond the site, but the current situation appears to be that students seemed to revel on all other issues outside the building proper, except the building itself. This lopsided emphasis has resulted in many architectural designs that are incomplete or inadequate in addressing the architectural brief. For example:

1. Buildings that are sited on external socio-cultural factors rather than sustainable design principles.

2. Massing that responds to the surrounding site context but compromises the functional requirements of the building type.

3. Buildings made excessively public or porous for pedestrian accessibility in the name of more socially responsive architecture or for contextual ideas, to the detriment of their proper functioning, efficiency, privacy and security.

4. Office or residential towers designed with no understanding or consideration on the efficiency of the floor layout at all.

5. For special-purpose spaces such as auditorium and multipurpose halls, very little attention, not to mention research, is evidenced on the working of these spaces such as sight lines, seating arrangements, on-stage and backstage facilities, ingress and egress for both audience and performers, and facilities for performers, VIPs and Guests of Honour, etc.

6. There has also been very little attention accorded to the scale and facades of immediate adjacent neighbouring buildings. Students often draw their proposed project buildings as if they are in the middle of nowhere, not acknowledging the presence of their immediate neighbouring buildings which physically and architecturally would have more impact on the new proposed buildings than all the economic and cultural background information would. Architecturally, it would be more instructive for the design of the project to have the adjacent buildings' facades drawn and responded to instead of responding to tomes of research information on the site and context.

7. And of course, the resolutions on the fire escape provisions and constructability of the buildings also leave much to be desired as very little research are evidenced to have been carried out by students on the services, structure, construction, details and finishes of the building they are designing.

Currently, these students seemed to spend about 80% of work on site context research and analysis, and only about 20% of research on the building proper. This trend should be reversed to 20% on the site context and 80% on the actual building from site planning, car parking to floor layout, efficiency, spatial quality, functionality of the spaces and even workability of toilets.

Architecture, after all, is about people and for people. No grand and lofty socio-cultural ideas external to the buildings could ever save any buildings that are badly designed internally from being condemned by their users for being non-functional and impractical. I am not saying that you shouldn't do in-depth research on site context and derive design concept from it, but what I would like to highlight is the apparent overemphasis on site context research to the neglect of more building-related architectural research. Therefore, if we were to shift our focus back to architecture proper, there may be fewer complaints on our graduates for not knowing how to design and construct buildings. ☘

EMERGING VOICES

STUDENT WORKS & EVENTS, EDUCATION, RESEARCH

[FROM THE EDITOR]

With the introduction of professionally taught Master of Architecture programmes (Part II) in the last few years, one of the fundamental questions that shape the development of its curriculum is: "how does the post-grad programme differ from the Bachelor of Architecture programme?" One response to that question is that Master is underpinned by research. The term 'research' refers to the dichotomy and relationship between research and the production of architecture resulting in a creative intervention generated through a systematic inquiry.

At the School of Architecture, Building and Design of Taylor's University, each student undertakes an Architectural Design Thesis – a final year research-based design thesis that involves an in-depth study on an architectural subject of the student's choice, linked thematically to the research explored in the dissertation. Collectively, they form a culmination of the Master of Architecture where students demonstrate methodological and theoretical rigour within their proposed topic, resulting in a resolved architectural design outcome.

While architecture is a broad domain of study, the thesis preposition stems from the purpose of solving contemporary issues of the Asian city and the built environment such as climate change, globalisation, urban-rural migration, heterogeneity of cultures, urban morphology, social well-being, the tropical condition, environmental sustainability, housing and humanitarian architecture. The scope of study is framed by contemporary issues such as:

- **Urbanity and Content:** Explorations on how architecture plays a role in resolving contemporary issues, needs and aspirations of Asian cities, while taking key consideration of the context. It focuses on engaging with the real world through content-driven design method in which architecture becomes a purposeful endeavour.
- **Community and Place:** Explorations on community-based architecture through experiential and service learning opportunities, while taking into consideration the 'power of place' and local identity. It focuses on the integrated approach with the local community through the consideration of identity and place making values.
- **Green and Technology:** Explorations on the relationship between architecture and environmental sustainability, in particular how the inter-relations offer socially, culturally and/or economically enriching spaces and places. It focuses on the holistic design approach to (re)create built environment that protects the natural environment through consideration of social and ecological conditions.

The sampling of Architectural Design Thesis works in this Emerging Voices section reflects a cross-section of architectural prepositions in these three different domains by three recent graduates of the Master of Architecture programme.

Ray's work re-imagines the form, function and place of the factory beyond its mono-functional use, contributing to an alternative typology of urban factory that reflects new technologies, system and fabrication flows, and changing workforce. The industrial landscape within the urban centre is shifting, and for Ray, the question explored is: "how can a contemporary factory reflect the technological and societal conditions in the current urban industrial landscape?"

Jia Pey's work explores the notion of liminality as an urban spatial condition within the Asian city. The urban gaps within the city offer transitory and in-between spaces that form the central exploration of her work. It celebrates thresholds and leftover spaces within the urban space and performs the act of 'stitching' to produce an urban form that dematerialises the interior and exterior.

Arista's work examines the notion of museumisation with a central focus on the dialogue between the physical landscape, memories and built form of a museum. Her work is an outcome of negotiations, dialogues and contestations between memory and architecture, culminating in the design taxonomy of memory-making through architecture.

Dr VERONICA NG
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THE INTERTWINE: RETHINKING OF THE MANUFACTORY

[STUDENT'S STATEMENT]

This thesis project is envisioned as a vertical factory that focuses on integration between the industrial sector and living neighbourhoods to create new urban conditions. To address the issue of 'deindustrialisation', the project introduces a new industrial scene in living neighbourhoods by providing a smaller, taller and greener industrial building that creates reinforced synergism in the cycles of making, consuming and recycling. Instead of the typical industrial building that is isolated, the design is founded on the notion of 'intertwining' – interconnecting the spaces of machines with human beings and the environment. Consequently, the design proposal strives to be a new model that can be replicated and incorporated in city planning to achieve a self-sufficient city in the near future.

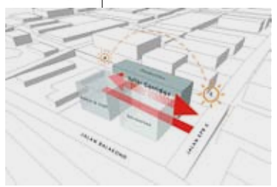
Overall perspective

Frontage and pedestrian entrance

BELOW, FROM LEFT: Interactive landscaping; Spectacle display

Vertical volume

Space zoning



Vertical production

Connectedness and human scale

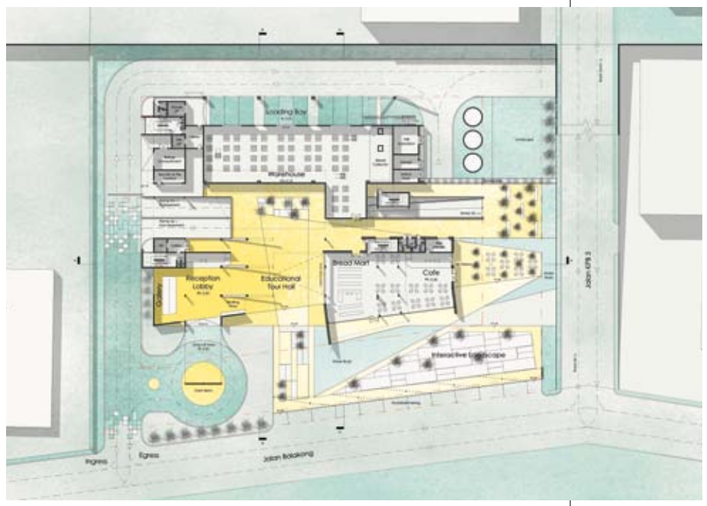
Section AA

Section BB

Front elevation

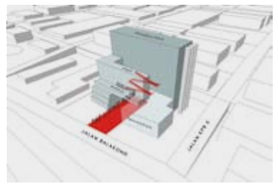
Rear elevation

Ground floor plan



The bakery square

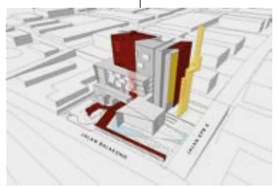
The living room



Permeability

Open spaces and greenery

Spectacle



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URBAN STITCH: STITCHING LEFTOVER SPACES

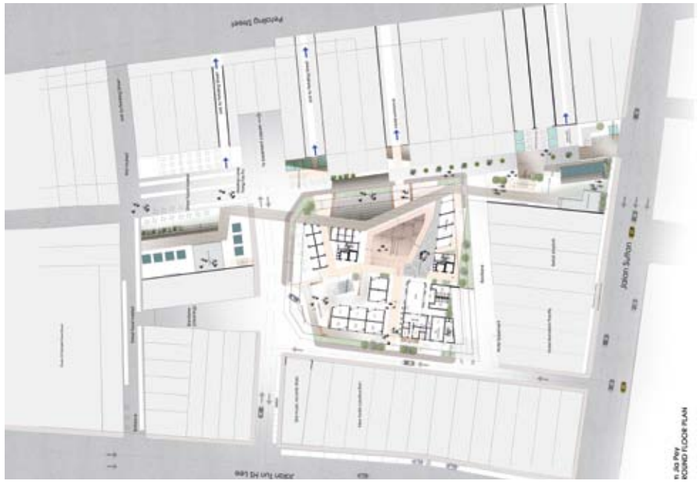
[STUDENT'S STATEMENT]

The significance of this design thesis explores the idea of urban stitching to position its concept in relation to the context of architecture and built environment, drawing potential from the concept of exploring conditions of thresholds, in-between and transitional spaces between and within buildings. To accomplish this significance, this design thesis is framed based on the growing character of an urban contemporary city in Petaling Street, Kuala Lumpur.

The urban morphology of Kuala Lumpur has resulted in myriad scales of planned and unplanned spaces that are in-between (and left-over) spaces that eventually become a part of the urban landscape. Therefore, the primary goal was to design a cultural hub that supports the idea of an inviting public space that is accessible and affordable, catering to users' needs. It serves as a reflection of Kuala Lumpur's street life and cultural activities, where in-between spaces are seen as links to stitch the existing and new fabric of the urban city together.

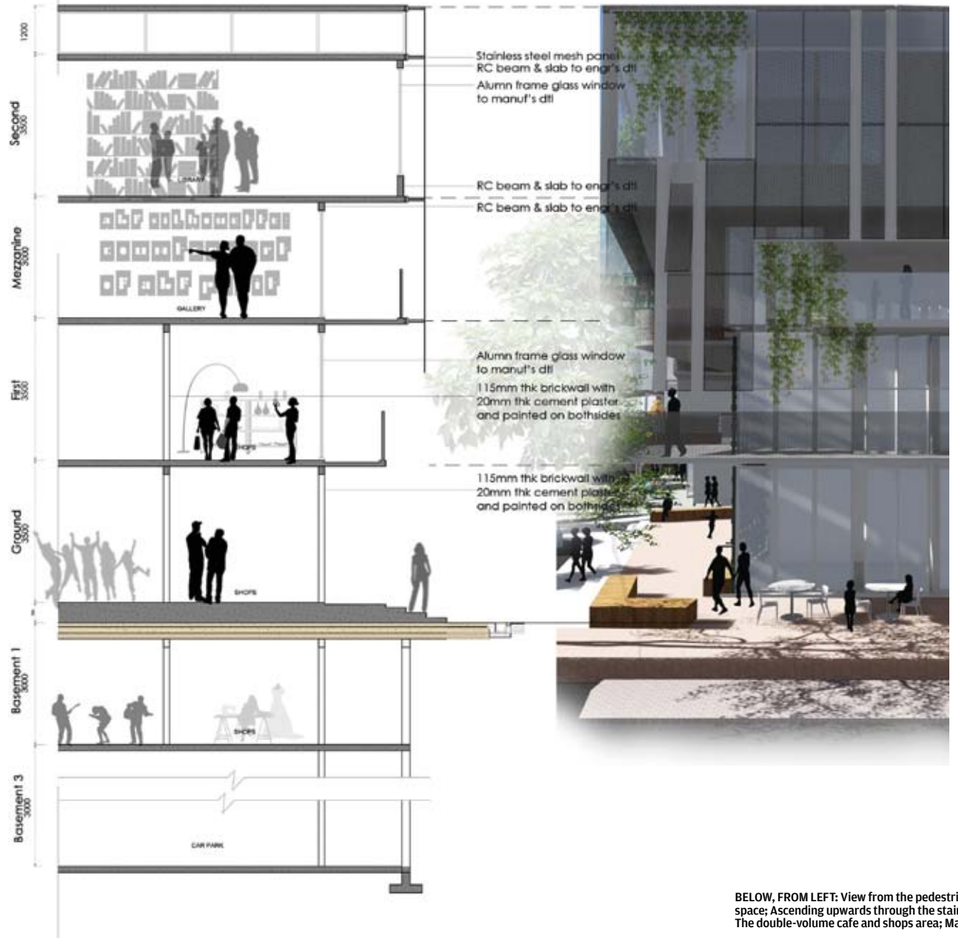
Section C-C

Jalan Sultan elevation



Ground floor plan

Section detail



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BELOW, FROM LEFT: View from the pedestrian streetscape to the open space; Ascending upwards through the stairs from the basement retails; The double-volume cafe and shops area; Main perspective

MEMORY OF A MINE

[STUDENT'S STATEMENT]

'Architecture as artifact' is an idea that embodies and triggers the memory of a particular site. The memory is acquired by spatial experiences of places, and is referred to as the 'Spirit of Place' or 'Sense of Place'. It is what gives 'life' to a place.

The town of Sungai Lembing in Pahang was a thriving town in the late 1800s with a population of close to 30,000, consisting mainly of miners, mining expatriates and local communities. In its heyday, the Sungai Lembing Mill was the largest, longest and deepest underground tin mine in the world but it ceased operations in 1990. The existing structures of the mill are in ruins and will slowly be forgotten if nothing is done.

Therefore, the project proposes a new Tin Mine Museum and Hotel to preserve the memory of the mining culture and to revitalise the town. The design aims to layer 'Visible Memory' and 'Invisible Memory' elements with new interventions based on specific codifications. The overall design intent is to mimic the idea of the mine through bridges, platforms and towers to celebrate its 'Sense of Place'.

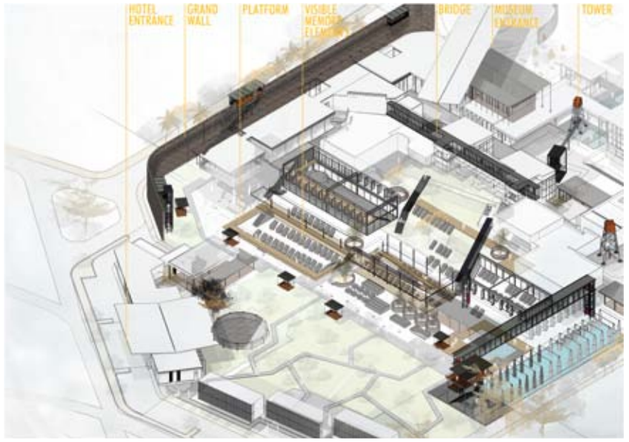
FROM TOP (CLOCKWISE): Entrance of museum; Outdoor exhibits; Central open space; Bridges

FROM LEFT: Platform; Tower

Spatial typology

Long section

Bird's eye view of the museum



Site plan

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EVENTS CALENDAR

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02 JUN 2016 – 02 DEC 2017
ARCHITECT @ WORK: EXHIBITION FOR ARCHITECTURE & INTERIOR DESIGN
Venue: France
www. architectatwork.fr

21 OCT 2017 – 22 JAN 2017
THE ECONOMIC TIMES ACETECH
Venue: India
www.etacetech.com

27 OCT 2016 – 26 FEB 2017
SINGAPORE BIENNALE 2016
Venue: Singapore Art Museum, Singapore
www.singaporebiennale.org

02 – 04 DEC 2016
HOMELOVE MID VALLEY
Venue: Mid Valley Exhibition Centre, Kuala Lumpur
www.homelove.com.my

PAM

03 DEC 2016
PROFESSIONAL PRACTICE FORUM (PPF)
Venue: Nexus Bangsar South, Kuala Lumpur
www.pam.org.my

08 DEC 2016
ZONING AT NEW HEIGHTS: SUPERTALLS AND THE ACCIDENTAL SKYLINE
Venue: Museum of the City of New York, New York, US
www.mcny.org

23 – 25 DEC 2016
ABI EXPO
Venue: Chennai Trade Centre, India
www.prompttradefairs.com

23 – 26 DEC 2016
MALAYSIAN FURNITURE & FURNISHINGS FAIR
Venue: Kuala Lumpur Convention Centre, Kuala Lumpur
www.mf3.my

16 – 21 JAN 2017
BAU 2017
Venue: Munich, Germany
www.bau-muenchen.com/en/Home

16 – 22 JAN 2017
2017 TORONTO DESIGN OFFSITE FESTIVAL
Venue: Toronto, Canada
www.todesignoffsite.com

23 FEB – 14 MAY 2017
YAYOI KUSAMA: INFINITY MIRRORS
Venue: Hirshhorn Museum and Sculpture Garden, New York, US
www.hirshhorn.si.edu

08 – 11 MAR 2017
DESIGN SHANGHAI 2017
Venue: Shanghai Exhibition Centre, Shanghai, China
www.designshanghai.com

16 – 19 MAR 2017
MEGABUILD INDONESIA 2017
Venue: Jakarta Convention Center, Jakarta, Indonesia
www.megabuild.co.id

12 – 14 APR 2017
ECOBUILD SOUTHEAST ASIA 2017
Venue: Kuala Lumpur Convention Centre, Kuala Lumpur
www.ecobuildsea.com

28 APR – 01 MAY 2017
HOMEDEC 2017
Venue: Kuala Lumpur Convention Centre, Kuala Lumpur
www.homedec.com.my

03 – 05 MAY 2017
DESIGNBUILD 2017
Venue: International Convention Centre, Sydney, Australia
www.designbuildexpo.com.au

19 – 22 JULY 2017
ARCHIDEX 17
Venue: Kuala Lumpur Convention Centre, Kuala Lumpur
www.archidex.com.my

04 – 06 OCT 2017
ARCHXPO 2017
Venue: Marina Bay Sands, Singapore
www.archxpo.com.sg

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