



Nguyen Van Ninh, Ho Chi Minh's house, Hanoi, Vietnam, 1958. © Ana Tostões, 2017.

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Parallel Modernities: Architectural Narratives on Southeast Asia

Following the challenges traced by the MASEANA Project (2015-2020), with the collaboration of **docomomo** International, the aim of this DJ is to discuss the Modern Movement in the Southeast Asian countries [Cambodia, Indonesia, Malaysia, Myanmar, Philippines, Singapore, Thailand, Vietnam], addressing the course of the built environment and architectural development of each country, through its practice and discourse.

Coming from a common goal of preserving and promoting a sustainable future, a platform has been created to discuss documentation, conservation and reuse of modern architecture based on three main concepts: regeneration, equality and openness. Regeneration by, through training and education, involving the younger generations in the process of recognition and conservation. Equality, based on the respect for difference with no imposition of ideas or methodologies. Openness by promoting exchange through thoughtful cooperation.

Although ASEAN is coming to be united in terms of politics, economy and culture, the background of its member countries is varied, having experienced diverse European colonization. In an increasingly global world, these nations are facing changes in the significance of their colonial past in relation to the postcolonial present. Between identity and nationalist demand, local knowledge and universal education, modern materials and tropical climate, different architectural discourses have been produced showing that the most interesting way to approach the postcolonial issue is through the idea of exchange².

One of the most central questions in the debate on modernity has been the tension between a pretentious universality of the scientific-technological rationality of a so-called international format and the specific particularities of places and traditions. The homogenizing effects or the threat of the old over the new have informed different discourses on values such as authenticity, regionalism or identity³. In parallel, the history of Modern Movement architecture has been written from a Eurocentric perspective although deeper studies on concepts such as hybrid or the otherness have recently promoted a nuanced analysis on architecture and politics beyond the Eurocentric framework.

In fact, the MAAN declaration (2001) stated that “Modern Asia has not developed in a vacuum but has evolved through sustained interactions with the West, which has had a constant presence in our collective consciousness. The history of dealing with the West, with our [their] neighbors and with ourselves [themselves], is manifested in the myriad forms of our [their] architecture. The history of modern architecture in Asia is the history of how Asians have become modern”. Modernity

is envisaged as a process of modernization which stands, as J. Widodo sustains, “when the spirit of freedom, progress and innovation flourishes”⁴. In postcolonial circumstances “the discourse on the tropics reached a pivotal point when it coincided with the success of the modern architecture turning global and adapting to suit all climate and cultures”⁵. The promise of a sustainable world based on urban regeneration future has a lot to do with S. Muramatsu’s theory on using natural and cultural resources to fulfill the “heritage butterfly”⁶. As one of the first efforts to develop a common understanding of the architectural development in the Southeast Asia, this DJ reveals the most up-to-date research on modern heritage in the different countries. The aim is to challenge initiatives as the MASEANA Project to keep working towards the preservation of this legacy for future generations, “dealing with issues common to everyone in a way that might transcend national borders in the future”⁷.

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The Olympic National Sports Complex, Phnom Penh, on the cover, pays homage to Vann Molyvann, who passed away this September at 99 years old. Finally, **docomomo** remembers Ruy Jervis d’Athouguia born in Macau 100 years ago.

Notes

- 1 MASEANA stands for modern ASEAN architecture. It was created in 2014, by **docomomo** Japan, in collaboration with **docomomo** International and MAAN (modern Asian Architecture Network). ASEAN is the Association of Southeast Asian Nations, set up in 1967, to promote cultural, economic and political development in the region.
- 2 A. Tostões, “How to Love Modern [Post-]Colonial Architecture: Rethinking Memory in Angola and Mozambique Cities”, *Architectural Theory Review*, v. 20, n. 3 – Africa Critical, 2017; Ana Tostões (ed.), *Modern Architecture in Africa: Angola and Mozambique*, Casal de Cambra, Caleidoscópio, 2013.
- 3 P. Ricoeur, *Histoire et Vérité*, Paris, Seuil, 1955.
- 4 J. Widodo, “Modernism in Singapore”, *docomomo Journal* n. 29 – Modernism in Asia Pacific, Paris, **docomomo** International, 2003.
- 5 S. Sopandi, A. Armand, *Tropicality: Revisited*, Jakarta, IMAJI, 2015.
- 6 S. Muramatsu, “Why and How We Should Inherit Urban Environmental Cultural Resources: Identifying, Listing, Evaluating, and Making Good Use of Urban Environmental Cultural Resources in Asia”, in Fujino Y., Noguchi T. (ed.), *Stock Management for Sustainable Urban Regeneration*, Tokyo, Springer, 2009.
- 7 Yoshiyuki Yamana, 15 IAE – the Japan Pavilion, La Biennale di Venezia, 2016.

Modern Architecture in Southeast Asia, an Introduction. Asia, North-South-West-East

BY SETIADI SOPANDI, YOSHIYUKI YAMANA, JOHANNES WIDODO, SHIN MURAMATSU

In the summer of the year 2000, a group of like-minded architectural scholars and practitioners gathered in Guangzhou, The People's Republic of China, to discuss what constituted common concerns about the recent rapid economic growth and physical development of Asian cities and landscapes. New opportunities in the early 2000s seemed to be promising Asian countries a new start after the 1997 Asian financial crisis. By then, Southeast Asian economic powerhouses such as Thailand and Indonesia (along with South Korea), were badly shaken by the currency crisis (which eventually led to a political crisis), gasping for bailout from the International Monetary Fund. The crisis also affected Hong Kong, Laos, Brunei, China, Taiwan, Vietnam, Malaysia, Singapore, the Philippines, Mongolia as well as Japan.

The Asian economy began to rebound in the early 2000s. Cities were, once again, expanding along with the population and industrialization. Architectural projects, after having halted for a few years, were coming back providing new opportunities for Asian practices. Sharing optimism as well as anxieties, Asian architects and scholars were looking forward to the future as well as once again taking a glimpse back at their recent architectural past, roughly from the late 19th century and throughout the 20th century. With this opportunity, they decided to take a moment to reflect on how Asian cities, landscapes, and their architectural heritage were shaped, altered, grown in the process of Asian societies embracing modernity. The group, namely the modern Asian Architecture Network (MAAN), agreed to establish a common platform enabling scholars, practitioners and students to reflect and to build knowledge of homegrown Asian modern architectures. "MAAN", with lower case "m", reflected their intention to open the debates on modernism, modernity, and modernization processes especially in Asian contexts. The network was set up with the spirit of equality, friendship, freedom, and openness – modeled after a Chinese dining table or like an Asian food-court, where people with similar intentions and goodwill may come together – to exchange ideas and to push forward the discourse into new theorization through comprehensive inventories, seminars, workshops, critical exchanges, researches, education, outreach, and publications.

The founding MAAN conference was held in Macau, July 2001. Building on a nascent idea, the second conference in Singapore, September 2002, went ahead by declaring the

members' strong will to discover ideas and stories behind the multifaceted architectural developments in Asian countries. The 3rd conference in 2003 was hosted in Surabaya, Indonesia, focusing on the importance and challenges of documenting the Asian built environment. After this conference, **docomomo** International was invited to participate, with Maristela Casciato (as chair back then) as one of the keynote speakers in the subsequent MAAN annual conferences.

An important milestone happened in 2003, when MAAN, **docomomo** International, and the UNESCO World Heritage Centre, supported by the Chandigarh Administration, joined hands together in Chandigarh (India) for the UNESCO World Heritage Centre 2nd Regional Meeting on "Modern Heritage in Asia". This historical meeting was followed up with the publication of **docomomo Journal** 29 on "Modernism in Asia Pacific", September 2003.

The 4th MAAN conference in Shanghai in 2004 was focused on how the network could contribute to safeguard, to revitalize, and to map Asian historical districts, industrial heritage, and 20th century architectural modern heritage and its historiographies. Shanghai also set a stepping stone for MAAN's wider engagement with architectural pedagogy and hands-on experience by holding an international design workshop to revitalize an ex-industrial site in the heart of the city. Some of the ideas were strengthened in the 5th conference held in Istanbul, Turkey, 2005.

In November 2006, Tokyo hosted the 6th conference with respect and sensitivity to what is particular – and maybe peculiar – in Asian urban heritage. In this conference, **docomomo** International stressed the necessity of MAAN and **docomomo** have a common platform for discussing modern architectural heritage beyond boundaries, in order to have a critical re-appropriation of modern discourse in architecture. The discourse on the "otherness" was raised further by **docomomo** International in 2007 with the publication of the **docomomo Journal** 36 with the theme "Other Modernism: A Selection from The Docomomo Registers".

In Indonesia, MAAN went further by engaging local communities (in several cities) to build up urban architectural inventory activities as well as stirring up discourse on the bases of heritage listing. The years of 2007-2008 also marked MAAN's further involvement in documenting and preserving an archive of modernist Indonesian architects. In the 7th

conference, in New Delhi, 2009, **MAAN** continued to discuss Asian cities as legacies of modernity as well as of recognizing Asian communal lifestyles, sustainability, and future challenges. Inspired by the Shanghai workshop, **MAAN** was invited to host a similar activity in 2009 to preserve and to revitalize the Indarung cement plant owned by Semen Padang, the oldest Portland cement factory in Southeast Asia (established in 1910).

In 2010, Singapore hosted slightly a different **MAAN** conference by bringing much younger participants to exchange creative ideas about the future of the historic Kallang airport site and to talk about empowering “the city makers” in Asia. In 2011, **MAAN** was also invited by PT Timah – Indonesia’s tin mining company – to provide ideas and a working plan on how to revitalize the historic tin mining city of Muntok through the company’s historic assets. **MAAN**’s experiences in industrial heritage sites provided the network with a rich social and historical context, thus, in turn, providing interesting insights on how **MAAN** perceives sites and architecture in Asia. In 2011, **MAAN** explored even further the uncharted vast terrain of Asian modern heritage by visiting and rethinking the Union Carbide factory site and the city of Bhopal in India where the Bhopal gas tragedy happened in 1974. The tragic event sets a very strong gravity to our understanding of what we consider as a “heritage site” and further enhances the way we anticipate “modernity” in Asia. The 2011 **MAAN** conference took place in Seoul, consequently taking the theme “industrial heritage” as the main focus.

Asia, Southeast

In 2015, born out from **MAAN**, a new initiative called The **MASEANA** Project was created by **docomomo** Japan, with the collaboration of **docomomo** International, to continue bringing the focus back on architecture and architects. “**MASEANA**” stands for “modern ASEAN architecture” with a lower case “m” and “a” standing for the 10 members of the Association of South East Asian Nations (Indonesia, Malaysia, Singapore, Thailand, Philippines, Cambodia, Laos, Vietnam, Brunei Darussalam, and Myanmar). The **MASEANA** Project sets out to form a 5-year collaborative platform for researchers working on the documentation, inventory, historiography, as well as preservation of modern Southeast Asian architecture and architects’.

The challenge of the **MASEANA** Project lies in the very essence of Southeast Asia as a historical and a socio-political entity. Geographically, Southeast Asia consists of a vast region made up of an archipelago and a peninsula. Being part of the Asian continent, the peninsular part is occupied by most of the Southeast Asian countries, including the few countries formerly grouped as Indochina. The archipelago comprises a vast territory held by Indonesia and a portion at the northeast by the Philippines.

Historically the region was considered “Greater India” from as early as the 5th century BC due to strong Hindu-Buddhist cultural influences lasting until the rise of Islamic influences in the 12th century. Despite the strong influence of Indian culture on the Southeast Asian kingdoms,

the vast territory still hosts thousands of tribal communities living their indigenous lifestyles. Among them, tribal maritime communities consist of sea nomads and sojourners that have been roaming the waters since as early as 10,000 BC. Waterways act as bridges to form a population as well as cultural exchange, and help to form linguistic genealogy that spans from Madagascar to Polynesia, from Taiwan to New Zealand. Even after the massive spread of Islam and Christianity, many of these communities retain their thousands-of-years-old social structures and customs; some retain a simpler form of communal life while others have turned into more sophisticated societies.

Climate is the common feature of the area. The region is dominated by an equatorial climate which is generally hot and humid with little variations of temperature during day/night throughout the year. In the northern-most tip of Laos, Myanmar, and Vietnam there may be a wet and chilly winter due to the humid subtropical climate. Torrential rainfall could happen almost anytime, but more at the beginning of the year, according to the monsoonal cycle. Lush vegetation dominates the natural landscape, while wet-rice cultivation is the common view in inhabited fertile volcanic regions. Communities residing in the hinterland enjoy slightly cooler temperatures than the ones in the coastal regions. The eastern tropical savannah islands generally have more dry months compared to the western part, and consequently people tend to develop different cultures.

Responding to the climate, Southeast Asian communities developed specific lifestyles and dwelling types. Elaborate and extensive roof types dominated the overall expression of Southeast Asian traditional dwellings. The use of hardwood timber for primary columns and beams is common, while soft and flexible materials, like bamboo, are employed for roof coverings, ties, and tensile elements. Dried grass and leaves are common materials for roof coverings, while terracotta tiles are popular only in some regions. Building floors are commonly raised at considerable height, away from the frequently wet (or even flooded) ground; some even have their houses on stilts above rivers, lakes, and sea. Livestock is kept below, while the spaces between the buildings are usually considered immediate extensions of the living activities of each household. People generally do almost all activities outside or under the shade of trees and roofs. Indoor spaces are commonly occupied only at night time, during heavy rain, or restricted to storing food supplies.

Heavily influenced by Indian culture, early states were comprised of maritime kingdoms like Funan, Champa, and Srivijaya. These “centers” created “concentric realms” with subordinate states around the metropole. This political system was very dynamic and unstable, as smaller kingdoms could break off and join other centers accordingly. Throughout two millennia, Southeast Asian waters witnessed political and cultural dynamics through maritime trading activities. Similarly, land-based agrarian societies developed advanced hydrological engineering to utilize the wet lands for rice growing. Channels, moats and man-made lakes along with vast rice fields, elaborate temples, and ancient settlements are evident in the ancient remains of

Angkor, Singhasari, Majapahit, Pagan, and Ayudhya. Masonry – stones and bricks – were commonly reserved for the temples and other political-religious edifices.

The region was also subject to “foreign” territorial claims. Southeast Asia was once associated with a Sinocentric label “Nanyang”, literally meaning “South Seas”, indicating the growing political influence of China and the massive emigration of Chinese which lasted until the early 20th century.

During the early 16th century, Portuguese maritime explorations persistently pushed the eastward-bound route to the east, passing the Cape of Good Hope to Asia and consequently setting the course of European presence – Spanish, Dutch, and British – in the region. Much later, the era of colonization divided the region into parts which eventually, in the mid-20th century, became separate nations. In the 19th century, colonialism became a state-enterprise, resulting in each “colonial nation” becoming increasingly conscious of themselves as members of territorially defined nations. The colonial territories eventually led to the demarcation of sovereign national territories. The vast territory of the former Dutch East Indies became Indonesia, while British Borneo – the northern side of Borneo Island – now largely belongs to the federation of Malaysia, joining the peninsular territory. The Philippines territories reflect the former possession by Spain – and afterwards, the United States, while the eastern tip of Timor island ruled by Portugal became Timor Leste. The division of Papua is a result of occupation of the island by the Dutch in the western half and the Germans and Australians in the eastern half and, after WWI, by Australia governing the entire eastern half.

The European rule imposed decision to grab further potential natural resources, land and minerals. To support the distribution of commodities and services, the European rulers invested in transportation infrastructures and industrialization. By the early 20th century, European settlers – firstly men and later women – were coming with private corporations seeking opportunities in the colonies. Roads and railway lines were built to connect cities and ports with production centers, which in turn also mobilized populations to cities. Laborers were deployed in remote mining areas creating new immigrant communities, while natural landscapes were changing drastically into production sites. Southeast Asian cities were expanding and equipped with modern amenities like offices, factories, banks, post offices, schools, satellite towns, “garden cities”, restaurants, hotels, railway stations, hospitals, and public services. This was the point in history when Southeast Asian colonies were exposed to the massive influx of buildings, modern infrastructures and modern lifestyles.

White plastered façades were becoming common, and slowly replaced the humble look of the 19th century verandah of plantation houses. Particular building types and elements, then, were no longer confined to particular communities. Newly introduced materials such as cast and wrought iron, even steel, were available for those who were willing to pay. The shipping of building materials from the metropolises was common practice by the early decades of the 20th century. The development of reinforced concrete in

Europe and the United States was soon applied globally, and raised the demand of Portland cement and steel bar imports. The standardized techniques of construction were employed by agencies like the colonial public works department, employing European-educated engineers and (later) architects. Urban sanitizing and rationalization were deployed to maintain orderliness and hygiene in public as well as private spaces to prevent epidemic tropical diseases like malaria.

Being introduced to such unprecedented changes, the landscape and society were set in motion. Colonial society was formed as stratified society, topped by the European ruling class and sometimes accompanied by the aristocratic elites. Along with a socially mobile merchant class, children born to aristocratic elites could enjoy a European education, learn European languages and vocational skills for modern professions. Exposed to liberal thinking and growing self-consciousness, some of these Western-educated elites then became revolutionary in thinking and further developed national awareness among their fellow citizens. The growing popularity of socialist ideologies provided a headwind for emancipation in the colonies. Religious figures and elites were also often playing important parts in developing national awakenings among the native populations.

Nations, Struggles

Until the mid-20th century, Southeast Asian countries and communities had shared an arguably similar fate in modern history. They went through a phase when nationalism grew among the native population which eventually demanded independence from the foreign ruler. The relatively short occupation of Southeast Asian countries by the Japanese armed forces during WWII set a new course for the region. The Japanese campaign of the so-called “Greater East Asian Co-Prosperity Sphere” was seen as a promising alliance to end European colonialism, as well as a path towards independence. However, as the Japanese became more oppressive and directed resources to the cause of war, nationalist revolutionaries became increasingly impatient and demanded independence even more. The Japanese occupation was then challenged by rebellions by the Japanese-trained armed forces as well as political activities by the native elites.

Following the defeat of Japan and the end of WWII, some Southeast Asian countries took the momentum by declaring independence or by negotiating the possibility of self-governing status. These were proven far from simple. The devastated European countries were losing their sovereignty in the region and giving way to the victors of WWII – namely the United States, the Soviet Union, and China – who were contesting their way in. These countries paved their way to win sympathy by providing economic aid and military support, while at the same time being involved in creating embargoes, stirring up conflicts among the factions and, in many instances, being directly involved in armed conflict. For the second half of the 20th century, Southeast Asian countries embarked on a bumpy journey as self-governing entities marked with economic and political crises, coup d'états, political repression, corrupt governments, insurgencies, violent humanitar-

01 1st MASEANG Meeting – "Conservation Action Priorities for Twentieth Century Heritage. Sharing experience of ASEAN Countries and Japan", Tokyo, Japan, 30 October-2 November 2015.



02 2nd MASEANG Meeting – "Pioneers of Modern Architecture", Hanoi, Vietnam, 12-14 January 2017.

ian crises as well as industrialization, prosperous economic development, and worrisome democratization.

Generally speaking, despite the recent relative peace and prosperity, Southeast Asia nations are still showing the trail of scars and tears from the calamities of 20th century events. This includes the dissociation of the region inherited from the height of the Cold War era when countries were polarized and oriented towards the two ideologies. Southeast Asian countries with liberal market-oriented economies enjoyed the early start of global consumerism and economic growth following the economic boom of the 1970s. Political stability and rich natural resources were the key factors that attracted foreign investment. Some suffered the violent and harrowing fate of being in prolonged conflicts and political crises, causing setbacks in human and economic development.

The struggle for independence in the Philippines started very early. The country had initially proclaimed independence in 1898 but was only granted independence from the United States in July 1946. The Philippines suffered great physical damage during the war between the Japanese and the Allied forces, leaving the city of Manila in ruin. With close ties with the United States, the Philippines developed liberal democracy in appointing the leaders and the representatives. However, during Ferdinand Marcos' (1917-1989) early years of his second term as the president (started in 1969), the Philippines suffered an escalation of crime and civil disobedience. Several separatist movements broke out resulting in Ferdinand Marcos declaring a state of martial law in 1972-1981. During his reign, Ferdinand Marcos ruled the country oppressively, curtailing press freedom, abolishing Congress, arresting opposition leaders and militant activists. Ferdinand Marcos' rule was ended following the successive events triggered by the assassination of an opposition leader, Benigno Aquino, Jr. (1932-1983). A peaceful civilian-military uprising sent Marcos into exile and installed Corazon Aquino (1933-2009) as president in 1986. Since 1986, the Philippines has continued to struggle for political stability, in the midst of natural disasters, corruption, drug wars, and separatist insurgencies.

Despite never been officially occupied by foreign powers, Thailand has been living a precarious political life since the abolition of the absolute monarchy in 1932. Adopting constitutional monarchy, Thailand has been through several coups and conflicts throughout the century as well as adopting a fascist ideology at the dawn of WWII. Despite acknowledging the constitutional monarchy as the form of governance, Thailand had been ruled by a series of military governments with brief democratic periods in between numerous coups. During the late 1960s and 1970s, despite the continuous political instabilities, Thailand went through steady economic growth and enjoyed intensive exposure to American culture and the rise of an educated urban middle class.

After 1945, Malaysia went through several changes before being constituted as it is now. Starting out as the Malayan Union proposed by the British Empire in 1946, Malaysia was restructured as the Federation of Malaya in 1948 to restore the autonomy of Malay states under British protection. Later in 1957 Malaysia was declared an independent nation within the Commonwealth of Nations. The process continued by incorporating the North Borneo territories and federal republican states and sultanates under a federal constitutional elective monarchy.

Singapore's separation from Malaysia in 1965 started as a harrowing process. Following the uneasy union with the Federation of Malaya, the relationship between Singapore – as a state – and Malaysia was filled with problems smeared with racial tensions. Singapore, as an island nation, started its early years of independence by restoring economic and political stability and was very determined to reposition itself in the region by increasing its capacity in shipbuilding and the shipping industry. This resulted in significant economic growth from the 1970s and made Singapore one of the "Four Tigers" (along with Hong Kong, Taiwan, and South Korea) during the Asian economic boom.

Indonesia declared its independence in August 1945, but had to resist Allied-backed invasions. Through diplomatic negotiations, the Netherlands finally recognized Indonesia's sovereignty in 1949. Indonesia only managed to gain the territorial sovereignty of the easternmost province of West Papua in the early 1960s through several armed conflicts with the Dutch and after mediation by the United Nations. The political climate remained precarious throughout the 1950s and reached a climax in 1965 when a major revolution broke out causing atrocities, including the purging of communist loyalists, racial persecution of the Chinese, and overthrowing a civil dictatorial rule only to be replaced by a repressive military regime for the next three decades. Under the oppressive military regime, Indonesia enjoyed unprecedented economic growth and urban development before finally succumbing to a free fall during the 1997 Asian monetary crisis. After 1998, Indonesia embarked on an open ended economic reform, democratization in politics, and massive anti-corruption campaigns.

Ho Chi Minh (1890-1969) declared the independence of Vietnam in September 1945 which was followed by a prolonged war against France. The conflict resulted in France's

defeat and was concluded by the Geneva Accords of 1954 which acknowledged the independence of Vietnam. The accord effectively separated the country into two: North Vietnam and South Vietnam. The interference of American foreign politics led to a prolonged armed conflict between the two countries from 1955 until 1975. Following the victory by North Vietnam, the country was unified as the Republic of Vietnam. After reunification, Vietnam remained involved at the center of global Cold War politics. Until the 2000s, Vietnam remained in isolation to many pro-USA countries as well as having constant disagreements with China. For the last 20 years Vietnam has been opening up her economy and encouraging the establishment of private businesses and initiatives. As a result, Vietnam is one of the most rapidly emerging economies in the world.

The Kingdom of Cambodia was formed amidst the political turbulence in the Indochina War (1946-1954). The fight was largely caused by the conflict between the French forces and Viet Minh involving the neighboring French Indochina territories of Laos and Vietnam. Cambodia became independent from 1953 and its status was then ratified in the Geneva Conference in 1954 along with peace agreements among the conflicting territories. From 1966, Cambodia fell into disarray due to military coups and conflicts. In 1970, a coup by the right-wing element toppled the government and led Cambodia into a military dictatorship, resulting in the formation of the Khmer Republic. In 1975 another coup by the pro-left element, the Khmer Rouge, successfully overthrew the government and formed Democratic Kampuchea. During the reign of the Khmer Rouge, Cambodia went through the worst political purges and violence. The atrocities by the Khmer Rouge were ended after the invasion led by the Vietnamese army and the Kampuchea United Front for National Salvation. In 1993 the United Nations initiated a ceasefire and an authority to lead the country through a peaceful transition. In 1993 Cambodia held an election, successfully decided on a new constitution, and elected Hun Sen and Norodom Ranariddh to be the second and first prime minister respectively. Another coup in 1997 managed to oust Norodom Ranariddh that resulted in Hun Sen remaining in power until now.

Myanmar went through a bloody transitional period before becoming fully independent in 1948 as the Union of Burma. Between 1948 and 1962 the country was torn by internal conflicts between political groups which ended in the 1962 military coup. From then on, Myanmar was governed by a repressive military rule which lasted from 1962 to 2011. Under central planning, many aspects of society were under strict government control. Sporadic protests and uprisings were almost always violently suppressed, while steps closer to democratic society were taken slowly. The military junta was abolished and paths toward reconciliation were taken. Nowadays, despite the promising future towards democracy, Myanmar is still facing worrisome internal conflicts involving ethnic and religious groups.

Laos is a landlocked country surrounded by neighboring Vietnam, Thailand, Cambodia, Myanmar, and China. Once part of the French protectorate, Laos was granted auton-

omy by France in 1949 and declared her independence as a constitutional monarchy in 1953. As the result of the 1955 election, Laos formed a short-lived coalition government led by a monarch prince. After the 1960 coup, Laos was unable to form a stable government and succumbed to a long civil war. Laos adopted one-party socialism controlled by military figures in 1975. Until 1991, Laos was heavily influenced by Vietnam and received aid from the Soviet Union. After the dissolution of the Soviet Union, the Laos government no longer maintained centralized control and has shown significant economic progress in recent years.

Amidst the on-going problems and conflicts, steps towards future development and shared economic prosperity have been taken by the Southeast Asian countries. Motivated by the common fear of communism during the height of the Cold War, the Association of Southeast Asian Nations (ASEAN) was established in 1967 by Indonesia, Malaysia, the Philippines, Singapore, and Thailand. Over the years, following the economic liberalization in communist countries, ASEAN has recently incorporated Brunei, Cambodia, Laos, Myanmar, and Vietnam. The bond grows stronger with the signing of the trade bloc agreement, ASEAN Free Trade Area (AFTA, first signed in 1992)², the association maintains good relations with India, China, Bangladesh, Timor Leste, Papua New Guinea, Australia, South Korea, and other communities.

Architecture, Culture

Despite a common history and cultural background, Southeast Asian countries are far from being homogenous. The region hosts hundreds of ethnic groups living in different localities, governed by different rules and different paces of life. Southeast Asia is also the home of cultural paradox.

Some of the world's fastest growing metropolises perform as the economic machines of the region, while some remote villages still maintain natural lifestyles inherited from thousands of years ago.

Within the last two decades we are witnessing an intensifying exchange in architectural ideas within the region, especially the ones that cater for the growing tourism industry. The infrastructure for Southeast Asian tourism includes the design and idea development for specific types of accommodation – hotels and villas – as well as airports and cultural tourism attractions, and the restoration and preservation of important historic sites and cultural properties. Architects have been experimenting with so many ideas to cater for the growing demands of tourism in Southeast Asia, including exploring how to bring “authentic” local experiences to the visitors. The wealth of Southeast Asian vernacular architecture serves as the reference: Balinese houses and temples, Thai vernacular houses, Malay platform houses, Chinese urban shop houses, ancient Buddhist and Hindu monuments, and many variations of “primitive huts”. Forms and materials are appropriated into modern hotel designs, and transplanted into different localities. The tropical climate and beaches serve as the common dominating theme for Southeast Asian tourism. Publications on “tropical” architecture and interior design in the 1990s

03 3rd MASEANA Meeting - "Modern Architectural Heritage in ASEAN and Japan" - Workshop, Tokyo, Japan, 13 March 2017.



helped feed the idea back to the professionals who in turn appropriated the idea into projects outside the tourism industry³. Amidst this trend, reflections on Southeast Asian architecture as a unified cultural expression, as well as individual national ones, emerged from architects and scholars. The Aga Khan Awards for Architecture (AKAA) – started in 1977, and awarding from 1980 – has put the region onto the global stage engaging academics and professionals in (but not limited to) Southeast Asia. In its early years, the AKAA focused the discourse of architecture, not only as space and language, but also as an expression of identity. This was extended through publications and conferences. AKAA established Concept Media, a publication house based in Singapore. Concept Media published *Mimar: Architecture in Development*, the architecture journal of the AKAA, which consistently covered and promoted the wide range of practices on regionalist approaches between 1981 and 1992. The journal helped to counterbalance the dominance of European-American architectural publications and spread architectural developments in non-European/American countries. *Mimar* published 43 issues over the years and gained readership among students, academics, architects in the region and among other developing countries.

In 1983 the AKAA invited prominent architects and scholars from nine Southeast Asia countries to discuss the discourse on identity in architecture at an international conference held in Kuala Lumpur, Malaysia. It turned out to be an inspiration from where further publications and exchange of ideas were developed not only among the Southeast Asian countries but also in the African continent, South Asian subcontinent, and the Middle East. A special proceedings publication was issued to document the discussion highlighting concerns and exploring ideas from well-known Asian (primarily Southeast Asian) architects. From then on, the AKAA continued to provide a good resource for Southeast Asians to know more about their own traditional and modern architectural developments. Between 1986 and 1989 Udo Kultermann (1927-2013) contributed several architectural surveys on inventories of four "Southeast" Asian countries; Indonesia and Thailand were published in 1986, Malaysia in 1987, and Hong Kong in 1989.

The term "critical regionalism" was an overwhelming professional discourse in the early 1980s, especially among Southeast Asian architects⁴. They were having a moment of reflection on their current practices by looking back at

04 3rd MASEANA Meeting - "Modern Architectural Heritage in ASEAN and Japan" - Workshop, Tokyo, Japan, 13 March 2017.



05 3rd MASEANA Meeting - "Modern Architectural Heritage in ASEAN and Japan", Tokyo, Japan, 12 March 2017.



recent decades of architectural developments in the region. Renowned Malaysian architect, Kenneth Yeang (1948-) grounded his practice on such a stepping stone. He published *Tropical Urban Regionalism* and *The Tropical Verandah City* in 1987 discussing the inevitable climatic nature of the changing Southeast Asian cities and the local architectural traditions as his source of inspiration. Apart from conceptual sketches, thoughts on technical skill were also deemed an important aspect to bring the idea of regionalism into practice. In *Architectural Detailing for The Tropics* (Singapore University Press, 1988), Evelyn Lip and Bill Lim from the National University of Singapore collected architectural detail solutions on dealing with the hot-humid tropical climate from the works of Singaporean and Malaysian architects⁵. Sumet Jumsai na Ayudhya (1939), a prominent Thai architect and painter, took a more philosophical approach by considering the mythical dragon-like serpent figure "Naga" as a symbol of a common cultural "roots" among the Southeast Asian communities, which governs the many ways of living adopted into so many traditions of architecture, crafts, and arts in the region⁶. Johannes Widodo in *The Boat and the City* (2004) explores the common urban and architectural roots shared widely by almost every Southeast Asian city⁷.

Apart from being attentive to the vernacular tradition, some Southeast Asian architects and scholars cover architectural works, especially the ones originating from the 19th century and early 20th century. Exemplary projects on architectural restoration in Southeast Asian old port "colonial" cities – from Singapore, Bangkok, Jakarta, Malacca, Manila, and others – set the momentum further for historic urban preservation initiatives. Sharing common cultural roots and historical events, we cannot afford to isolate our architectural and urban knowledge only to particular spots and simply ignore the intertwining course of history. A common thread of cosmopolitanism and European interference are imbedded in those cities. We learn that the nature of "colonial" architecture was initiated as an act of recreation of familiar environments in alien locations; as something that was dislocated and relocated in the process of cultural exchange. Equally this idea also applied to the later form of architectural exchanges. In the past 10-15 years, the attention spans even wider to cover the formative historical periods of many Southeast Asian countries, mainly in the period between the 1950s and the late 1970s.

This historical period comes with a special gravity that puts almost every single architectural project from the time in an even wider global cultural exchange framework. With the aforementioned national histories, Southeast Asian countries embarked on a self-conscious mission to modernize many aspects of life through architectural discourse, conceptualizing modern cities, creating monumental buildings, and all forms of appropriated modern aesthetics. Ideas of modern architecture were imported, transplanted, adapted, and eventually gained a new “existential foothold”⁸ in Southeast Asian grounds. These grounds are, of course, not neutral, instead they are full of subjectivities and contradicting values; pride, honor, respect, claim, fear, suspicion as well as prejudice and allegation. Essays presented here are gathered from various researchers working under a similar theme but with a wide variety of intentions, social-political backgrounds and exposure to theoretical or historical resources.

In this volume of the *docomomo Journal*, MASEANA are exploring what has been carefully recognized, acknowledged, identified, documented, and analyzed in Southeast Asian countries. Some authors may begin with some architecturally-aesthetically interesting objects while some opt for more historically-charged monuments. Some essays put extra emphasis on the role of “Western” educated figures in the narrative over the “home-grown” talents to build their stories. Many extend to a wider time frame than others to pull the string between the objects discussed. Contributing as representatives of respective countries, some essays inescapably have to deal with a nationalist undertone to address the important themes given in the essays. For the cases presented here, some are quite distanced to present a wider context to enable us to be free from the danger of the overtly subjectified views of the authors, but some might still be immersed in a national context of the case studies. Some readers might feel that particular presentation insinuates a particular point of view to appreciate projects or narrative. As myopic as those might seem, here we would like to bring what MASEANA has on the table whilst paving the way for a shared platform about architectural development in the region. Consequently, here, we are not necessarily sharing a common understanding on ideas contained in terms like “modern”, “modern architecture”, or even “architecture”. Thus, at first, this seems to be an editorial nightmare. However, as clichéd as this may sound, this can also be a good chance to expand our horizons or simply a pause to see a world from a different point of view.

For many Southeast Asian countries, due to their nationalistic and patriotic symbolic values, many modern architectural monuments are protected and highly regarded as one of the countries’ cultural treasures. But for some others, the political changes and rapid urban developments had been diminishing the value of modernist buildings and monuments. Unprotected and despised by successive political regimes, many are in a state of neglect and disrepair. Some countries began to notice this crisis and promote evaluation, documentation, and preservation of the mid-century architectural heritage – exactly what MASEANA is doing. After

decades promoting and supporting the restoration and reuse of numerous colonial-era buildings, now more attention is seemingly given to the buildings done in the late 1950s and 1960s. Many ground-up initiatives managed to bring modernist architectural works to the public discourse and resulted in heritage protection listings.

We are more than happy to take the readers on a tour of the region through these essays and a selection of monographs produced on Southeast Asian architectural development. Pen Sereypagna explores the extent of the so-called “New Khmer Architecture” within the time frame of 1953-1970 as a bold movement in the Cambodian search for national identity and cultural engagement. Setiadi Sopandi presents the search for national identity in Indonesian architecture not as an institutionalized movement, but rather as a recurrent underlying obsession among architects practicing in the country. While providing us a rich listing of notable monuments, Gerard Lico exposes the dynamic stylistic development in the Philippines parallel to the important historical events of the 20th century. Pham Thuy Loan and Troung Ngoc Lan systematically provide us with key political events linked with notable architectural projects, enabling us to clearly see how political dynamics and alliances shaped the development of Vietnamese modern architecture. Chang Jiat-Hwee stretches the timeline of the course of modern architecture in Singapore far back from the roles of British and overseas-trained Singapore-born architects in the 19th century and the early decade of the 20th century, thus providing us with information on the introduction of modern materials from Europe to Singapore. The essay from Myanmar is the result of an extensive inventory led by Su Su, Swe Swe Aye, and Win Thant Win Shwin covering the role of British architect Raglan Squire (1912-2004), the establishment of the first architectural training in the country, the importation of Soviet buildings, as well as the design and building of religious architecture, public spaces, and mausoleums. Pongkwan Lassus from Thailand takes a longer introduction to give the readers a wide-reaching narrative she presents as “pre-modernism”. Lassus’ essay generously provides us with key events and many noteworthy monuments not only up to the 1970s, but also from the 1980s and 1990s. Nor Hayati Hussain discusses the formation of a distinct “national” architectural language produced in Malaysia surrounding the formation years of the Federation of Malaya in the late 1950s. With this breadth of information in a single volume, we humbly hope that *docomomo Journal* 57 will serve the readers as a proper introduction to the course of modern architectural development amidst the rich and dynamic background of the Southeast Asian countries.

Notes

- 1 So far, MASEANA organised four meetings:
 - "Conservation Action Priorities for Twentieth Century Heritage. Sharing experience of ASEAN Countries and Japan", Tokyo, Japan, 30 October-2 November 2015.
 - "Pioneers of Modern Architecture", Hanoi, Vietnam, 12-14 January 2017.
 - "Modern Architectural Heritage in ASEAN and Japan", Tokyo, Japan, 12 March 2017.
 - "Modern Architectural Heritage in ASEAN and Japan" – Workshop,

- Tokyo, Japan, 13 March 2017.
- 2 ASEAN Free Trade Area was first signed by six countries – Indonesia, Brunei, Malaysia, Philippines, Singapore, and Thailand. Vietnam, Laos, and Myanmar joined in 1997, and later Cambodia in 1999. AFTA's primary goals are to increase ASEAN competitiveness as a production base in the global economy and to attract foreign direct investment to Southeast Asian countries.
 - 3 Architect & architectural photographer, Tan Hock Beng, published a bestselling book of the subject of tradition-inspired contemporary architecture and interior design in four Southeast Asian countries. The book was published by Page One, Singapore in 1994. Tan's selection is dominated by hotels and resorts that emerged in the late 1980s and early 1990s from flourishing tourism spots in Indonesia, Malaysia, Singapore, and Thailand. The book captures romantic aesthetic ideas of "tropical" designs. He focuses on how particular building elements – "imagery", roofs, landscape, gardens, water features, courtyards, "in-between realms", openings, interior, and details – were developed to particular aesthetic qualities and experiences inspired by the traditional and vernacular lifestyles. The publication features at least nine luxurious resorts and private houses: Amanpuri (Ed Tuttle, Thailand, 1988), Club Med (M.L. Tri Devakul, Malaysia and Bali, 1980), Amanusa (Kerry Hill, Bali, 1989), Amandari (Peter Muller, Bali, 1990), Tandjung Sari (Wija Waworuntu, Bali, 1960s), Rantau Abang Visitor Centre and Tanjung Java Beach Hotel (Wimberley Whisenand Allison Tong & Goo, Malaysia, 1980), Precima House and Eu House (Jimmy Lim, Malaysia, 1990), Reuter House (William Lim, Singapore, 1990). This book is the predecessor of the similarly themed publications – on Southeast Asian residential/hospitality architecture and interior design - in the following years.
 - 4 First coined by Alexander Tzonis and Liane Lefaivre in 1981, the term "critical regionalism" was developed further by Kenneth Frampton in 1982 and 1983 suggesting critical practice in architecture. Alexander Tzonis initially wrote it in an essay (in collaboration with Anthony Alofsin), "The Girl and the Pathway" published in the book *Architecture in Greece*. Tzonis and Lefaivre continued writing in the subject, publishing *Critical Regionalism, Architecture and Identity in Globalized World* (Pres-tel, 2001) and *Architecture and Regionalism in the Age of Globalization, Peaks and Valleys in the Flat World* (Routledge, 2011). Kenneth Frampton wrote an article on critical practice in architecture, published in *Perspecta* (1982) and revised in the collection *The Anti-Aesthetic: Essays on Postmodern Culture* edited by Hal Foster. In "Towards a Critical Regionalism: Six Points for an Architecture of Resistance", Frampton suggests that a critical practice in architecture should remove itself from dependency on the optimization of advance technology and the tendency to regress into "nostalgic historicism".
 - 5 The publication features specific architectural details such as roofs and ceilings (including jack roof, gutter, "chinese tiled roof", ridge detail, jack rafter connections, lean-to-roof, secondary roofing, etc.), windows, doors, skirting and wall finishes, stairs, and other specific elements.
 - 6 Sumet Jumsai published his reflection on "Naga: Cultural Origins in Siam and The West Pacific", Oxford University Press, 1990.
 - 7 Widodo, Johannes, *The Boat and The City*, Singapore, Cavendish Square Publishing, 2004.
 - 8 A term coined by Christian Norberg-Schulz in *Genius Loci: Towards a Phenomenology of Architecture*, New York, Rizzoli, 1980.

References

- The European Voyages of Exploration: The Fifteenth and Sixteenth Centuries*. https://web.archive.org/web/20100822072508/http://www.ucalgary.ca:80/applied_history/tutor/eurvoya/index.html (accessed September 5th, 2017).
- ABEL, Chris, *Architecture and Identity: Responses to Cultural and Technological Change*, Oxford, Architectural Press, 2000.
- HALL, Daniel George Edward, *A History of South-East Asia*, New York, St. Martin's Press, 1981 [1955].
- HEIDHUES, Mary Somers, *Southeast Asia: A Concise History*, London, Thames & Hudson, 2000.
- JUMSAI, Sumet. *Cultural Origins in Siam and The West Pacific*, Oxford, Oxford University Press, 1990.
- LICO, Gerard, *Siglo 20: A Century of Style and Design in the Phillipines*, Manila, National Commissions for Culture and the Arts, 2016.
- KULTERMANN, Udo, "Architecture of South-East Asia: Indonesia", *Mimar* 21: Architecture in Development (edited by Hasan-Uddin Khan), Singapore, Concept Media Ltd., 1986.

- KULTERMANN, Udo, "Architecture in South-East Asia: Thailand", *Mimar* 20: Architecture in Development (edited by Hasan-Uddin Khan), Singapore, Concept Media Ltd., 1986.
- KULTERMANN, Udo, "Architecture In South-East Asia: Malaysia", *Mimar* 26: Architecture in Development (edited by Hasan-Uddin Khan), Singapore, Concept Media Ltd., 1987.
- KULTERMANN, Udo, *Architecture in South-East Asia: Hong Kong*, *Mimar* 33: Architecture in Development (edited by Hasan-Uddin Khan), London, Concept Media Ltd., 1989.
- MRAZEK, Rudolf, *Engineers of Happy Land: Technology and Nationalism in a Colony*, Princeton, Princeton University Press, 2002.
- POWELL, Robert (ed.), *Architecture and Identity*, Singapore, Concept Media/Agan Khan Award for Architecture, 1983. Proceeding from a regional seminar organized by the AKAA in Kuala Lumpur, Malaysia, 1983.
- REID, Anthony, *Southeast Asia in the Age of Commerce, 1450-1680: The Lands below the Wind*, New Haven, Yale University Press, 1988.
- REID, Anthony, *Southeast Asia in the Early Modern Era: Trade, Power, and Belief*, Ithaca, Cornell University Press, 1993.
- ROBSON, David, *Beyond Bawa*, London, Thames and Hudson, 2007.
- WIDODO, Johannes, *The Boat and The City: Chinese Diaspora and the Architecture of Southeast Asian Coastal Cities*, Cavendish Square Publishing, Singapore, 2004.

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Vann Molyvann, Chaktomuk Conference Hall, Phnom Penh, Cambodia, 1961. View from the front of the Hall along the Preah Sisowath Quay. © Vann Molyvann Private Collection.

New Khmer Architecture: Modern Movement in Cambodia between 1953 and 1970

BY PEN SEREYPAGNA

This essay will exam the Modern Movement in Cambodia through architecture, known as New Khmer Architecture, from 1953 to 1970, that has distinct continuum characteristics from vernacular architecture, like other Modern Movement architecture in Southeast Asia, because of socio-political movements and cultural engagement.

Introduction

After 90 years of French colonization, Cambodia received its independence in 1953. During the post-independence period, as a contrast to French ideas on art and culture, Cambodia created new forms of art and culture to define a new national form towards modernization, thus creating a blend of Western modernization and Khmer culture. Those forms included “New Khmer architecture, speaking theatre, Khmer film, modern music, and modern painting”. At the same time, national identity was taken into account regarding how to re-imagine new forms of the arts and culture in the context of existing local tradition and how to introduce these new movements into Cambodia, the Southeast Asian region and the world.

In this essay, I review the Cambodian Modern Movement in architecture, known as New Khmer Architecture, which reflected the social and political movements after the French colonial period by proposing four aspects: firstly, a brief introduction to the era of the 1960s in Cambodia, known as *Sangkum Reastr Niyum*, giving a general overview of the movement. Secondly, an examination of the definition and origin of New Khmer Architecture, the Modern Movement in architecture in Cambodia between 1953 and 1970. Thirdly, highlighting the national identity and cultural engagement in the design of modern buildings in the style of New Khmer Architecture with three examples: The White Building (1963), the Olympic National Sports Complex (1964) and the Institute of Foreign Languages (IFL, 1972). Finally, a review of the political ideology of Prince Norodom Sihanouk’s (1922-2012) post-independence regime regarding New Khmer Architecture will be provided.

Norodom Sihanouk’s Era

After independence, Prince Norodom Sihanouk abdicated the throne to his father His Majesty King Norodom Suramarit (1896-1960) in order to enter politics. He formed his own party in 1955 (*Sangkum Reastr Niyum*) and won the

national election in the same year. Sihanouk became the first Prime Minister of Cambodia (figure 01) and he began to build his vision of a new nation.

The meaning of *Sangkum Reastr Niyum* is difficult to translate. In Ross and Collins’ book, *Building Cambodia: ‘New Khmer Architecture’, 1953-1970*, the monthly pictorial, *Cambodge d’Aujourd’hui*, is quoted as defining *Sangkum Reastr Niyum* not as a political party, but rather as a group of Cambodian people who had a mission for their own country². The name, *Sangkum Reastr Niyum*, was later adopted by Cambodians to refer to the post-independence period between 1953 and 1970. *Sangkum Reastr Niyum* is a Khmer term which comes from the words “*Sangkum*”, meaning “Society”, “*Reastr*” meaning “People” and “*Niyum*” meaning “Determination”. The combination of the Khmer terms *Sangkum Reastr Niyum* corresponds to “socialism” in the Western sense. At that time, Cambodia enjoyed an unprecedented era of economic and social development, associated with a renaissance of the arts and architecture. Countrywide modernization and construction works were undertaken by national and international experts in urban planning, architectural design and engineering. Domestic and foreign financing was available for major construction works like roads, airports, hospitals, universities and factories, that were often staffed and fully equipped upon completion. Norodom Sihanouk also asked other countries to provide aid in the form of technical assistance and buildings.

The cosmopolitanism and the visual order of Phnom Penh in the 1960s allowed the city to gain a reputation as the “Garden City of Southeast Asia”. Urban planning employed devices such as boulevards and monuments – traces left by the colonial regime – as anchors to establish a system of urban order. Expansion of the city to the west was facilitated by the construction of dikes which were an extension of colonial planning and formed a series of concentric arcs for the city’s major boulevards (figure 03).

01 Norodom Sihanouk of Cambodia, Cambodia, 1960. Sihanouk was at the meeting with local Cambodians. © National Library of Cambodia.



Under the leadership of Norodom Sihanouk, Cambodia focused on large national infrastructure projects such as national sports complexes, apartment buildings, as well as universities. Cambodia has several thousand buildings for both the public and private sectors, which were built between 1955 and 1972 and which were influenced by the style of New Khmer Architecture.

New Khmer Architecture

New Khmer Architecture is an architectural movement, combining Western modern ideas with traditional Cambodian architecture³. It was mostly on display in public buildings which were inspired by Angkorean architecture and the lifestyle of the Cambodian people.

New Khmer Architecture first appeared in the 1960s in magazines and books which were published by the state at that time. All the documents were written in French and English, perhaps for two reasons. Firstly, this term probably circulated only in diplomatic circles, amongst politicians, educated Cambodians and introduced the idea of New Khmer Architecture to the international community. Secondly, New Khmer Architecture was set as the center of the Modern Movement in Cambodia in the 1960s as a political statement that modern Cambodia had arrived (figure 02).

In an introductory text, written by Dr. Roger Nelson, an art historian on Cambodian modern and contemporary arts, about the Modern Movement in architecture⁴, New Khmer Architecture was characterized as being based on four elements:

- the use of new construction materials, chiefly reinforced concrete;
- the visual and structural references to pre-existing Cambodian construction techniques, especially the raising of buildings on stilts;
- a sensitivity to the tropical climate, expressed in the creative use of natural airflow and shading;
- the sparing use of ornamentation, chiefly bas reliefs inspired by Angkorean temple decorations.

New Khmer Architecture engaged diverse international architects, urbanists, and engineers from Japan, Europe, the former Soviet Union, the United States, and elsewhere, and they were joined by Cambodians on many major projects. The team was led by the well-known Cambodian architect Vann Molyvann (1926-2017), who was awarded a scholarship to study architecture at the *Ecole Nationale Supérieure des Beaux-Arts* in Paris from 1947 to 1956. After he came back to Cambodia in 1956, he held many important positions in the Cambodian government, including the establishment of the Royal University of Fine Arts, the first arts university in Phnom Penh, in 1965. He designed many public buildings including the Olympic National Sports Complex, the Independence Monument and one hundred houses. Vann Molyvann was also an urban planner who oversaw the expansion of Phnom Penh as well as the establishment of the sea-port at Sihanoukville.

New Khmer Architecture as National Identity and Cultural Engagement

In an interview, in 2012, Vann Molyvann expressed:

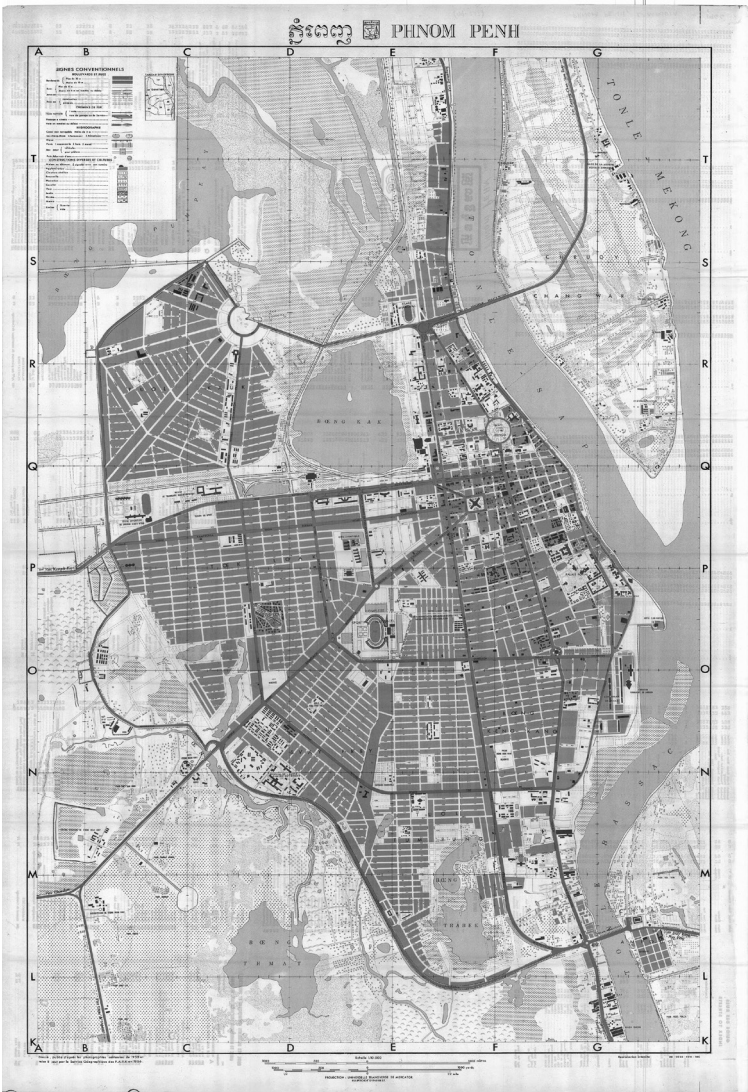
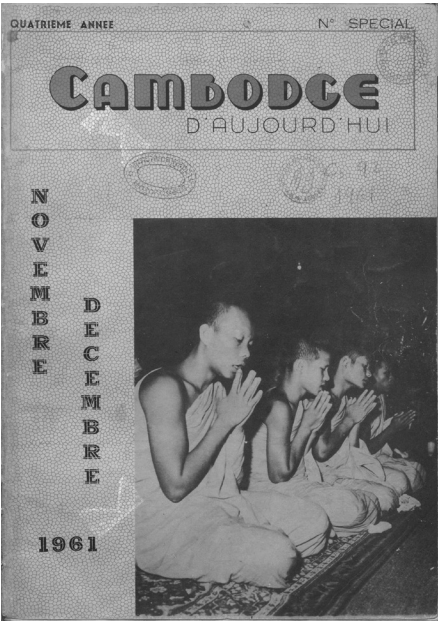
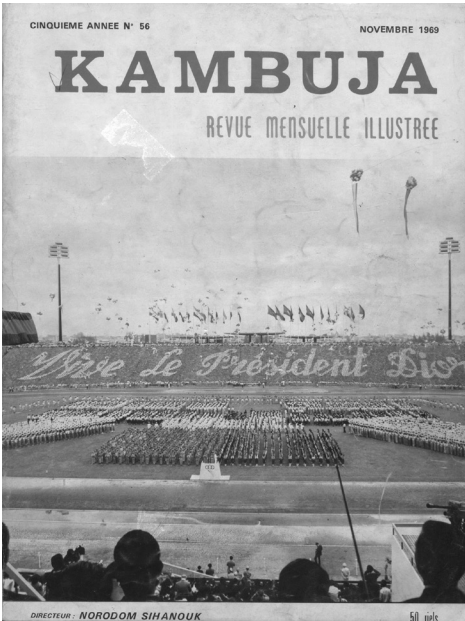
In the current redevelopment of Phnom Penh, many foreign developers, especially the Chinese and Koreans, are imposing their own urban forms and ways of life on the city. Unlike the current development, in the 1960s, while Phnom Penh urban planning followed traces left by the colonial regime, the architects and government sought to invent their own styles of design and techniques that suited and were representative of the Cambodian people and culture⁵.

We can see this determination in the White Building (figure 04). The design of the White Building sought to combine Western modern and Khmer ideas of living. The apartments are clearly separated into two spaces inspired by Khmer timber houses. The living area and sleeping area comprise the primary space, and the cooking and toilet areas are the secondary space located at the back of the house. These two spaces are separated by a door, so as to prevent cooking fumes and bad smells from entering the living space from the kitchen and toilet (figure 05). The open space at the back allows light and ventilation to go through the apartment. The building was designed to mimic the traditional Khmer house elevated on stilts, thus keeping the ground floor as an open space for various community activities and parking and to protect the building from flooding. The building is about 300 meters in length and comprised 6 smaller blocks. Each block is connected by an open staircase and about the size of a small village in rural areas in Cambodia.

In Ross and Collins' book *Building Cambodia: 'New Khmer Architecture', 1953-1970*, Vann Molyvann said:

You can find all Khmer architectural characteristics in the new public buildings, constructed during the 60s (like Chaktomuk, Ministry of Finance, Chamkar Mon) as well as in private houses. But the work which best characterizes the Cambodian architectural renaissance is the Olympic National Sports Complex,

02 1960s journal and magazine, Cambodia, 1960s. Two examples of journals and magazines in Cambodia in the 1960s.
© National Library of Cambodia.



03 Phnom Penh map, Phnom Penh, Cambodia, 1966. Map showing the grid system in Phnom Penh.
© National Archive of Cambodia.

which was inspired by the great principles of the Khmer tradition but built using the most modern construction techniques⁶.

The Olympic National Sports Complex was constructed by request from Sihanouk. An international team of architects and engineers, led by Vann Molyvann, was formed. The construction began in 1962, with the intention of finishing in 1963, to host the Southeast Asian Games. The games never came to fruition, overshadowed by Jakarta's GANEFO Games of the same year, and the National Sports Complex was instead completed a year later in 1964.

The site has a compact arrangement of three main building elements and other secondary elements. The three main built elements are the indoor and outdoor stadium and the swimming pools which are conceived as united and integrated facilities. The three main elements were designed with suitable access for the public and were integrated with the street pattern, so they can be used at one time or separately. Around the complex, there were moats, a water tower, and the tennis and basketball courts (figure 07).

Cambodian architecture was heavily inspired by Indian ideas and concepts of universe and cosmology, in which Indians mainly favored forms which are regular and classical. All Cambodian temples are square or rectangular in plan. So maybe there is a link between the Indian concept and the Cambodian concept. Similar to all Khmer temples based on a square plan, the stadium was designed on composition rules which were extremely rigid and classical, and it was orientated to the cardinal axis points which had a precise symbolism: the symbolism of the four directions that create the Earth (North, South, East, and West).

Moats and hills were used by ancient Khmer people to build temples as sacred places. The moats were built in order to deal with the agriculture and protect against the annual flooding, whereas the hills were made for building the temple on the top. In the ancient period, the Khmer people believed that high places, such as the hill and mountain, were the places that had supernatural powers, and the places where the king could communicate with God. Learning from those two ideas, the National Sports Complex was designed to have moats around the complex to act as reservoirs for rainwater, so that the playing areas would never flood. In addition, the water can cool down the campus and create a waterscape for the city. The outside elliptical crown was designed by using earth to build up the seating and the multi-activities areas, consisting of 50,000 seats and space for 10,000 people standing on the top at a height of 12 meters.

Vann Molyvann stated:

The National Sports Complex derived its rigorous composition from Angkorian temple ensembles. The complex consisted of a stadium surrounded by sloping embankments with a principal grandstand integrated onto the Palace of Sports (the Indoor Sports Hall). A swimming pool and a set of playing fields for various sports were arrayed in the surrounding park. A series of water surfaces recalled the characteristic moats of Khmer settlement

and assured the required drainage⁷.

He added in an interview with Khmer Architecture Tour:

It is a combination of concrete and earth architecture. Because we needed to achieve the site in a very short time (the construction period was 18 months), we decided to create the stadium by digging all around and creating moats exactly like Angkor Wat. Around Angkor Wat, you have moats (huge moats), we dug and then filled up inside to build Angkor. That is the same. So, the first idea is coming from Angkor, for the whole, and then the rest is interpretation. The basic idea is to dig the moat and to build up the building, and to try to separate completely the concrete/stone building from the outside: as the two cannot be mixed⁸.

The National Sports Complex was used for important national and international sports events during the 1960s. Furthermore, it was used as a place for national independence celebrations, ceremonies to welcome foreign heads of state (like Charles de Gaulle in 1966, criticizing in his speech the American policy towards Vietnam).

Nowadays the daily use by a large public (especially during weekends) indicates the good reception of the complex by the public where they can have entertainment, exercise, dance, and watch football matches and other sports. Unfortunately, the modifications to the complex were already undertaken as part of today's tendency to open the doors of Phnom Penh to national and international investment. Parts of the stadium have been leased to a Taiwanese Corporation which erected buildings for shops and apartments within the complex area, and its moats were transformed into development land.

Another good example of how Cambodian architects in the 1960s interpreted Western modern architecture to be suitable for Cambodian culture, while showing national identity, is the Institute of Foreign Languages. The project is one of the many of Vann Molyvann's masterpieces, and it was part of the larger project to extend the city to the west to Pochentong International Airport along Russian Boulevard (figure 08).

Initially intended as a teacher training college, the institute was built between 1965 and 1972 and was Vann Molyvann's last work before he fled to Switzerland in 1971, following the rise to power of the Khmer Rouge.

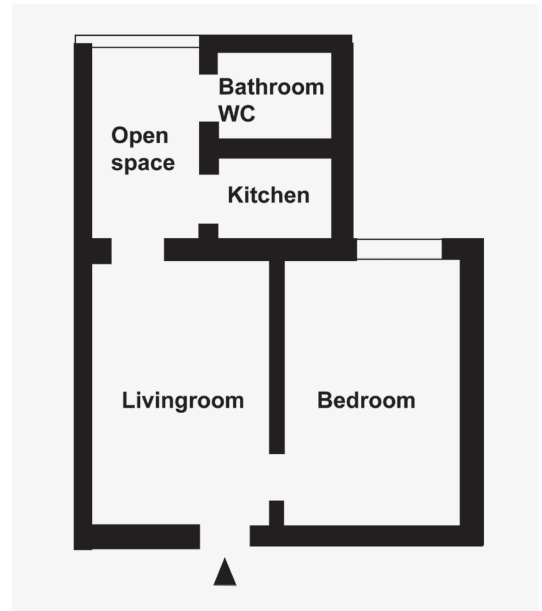
Referencing the traditional Khmer temples of the Angkorean period, the institute is composed of three buildings connected by a Naga walkway bridge: the main central building, the circular library building (which is in the position of a Khmer temple's library), and the teaching rooms building to the west.

The entrance sequence from the road is over a causeway bridge that, as well as bringing people to the main hall in the central building, provides shade and rain protection for those walking under it. The Naga bridge spans a number of water features while there are also two ponds located on either side of the causeway bridge next to the road. As with a wooden Khmer house, two of the institute's buildings are erected on pillars to avoid flooding and to create beneath them functional space. These exposed reinforced concrete

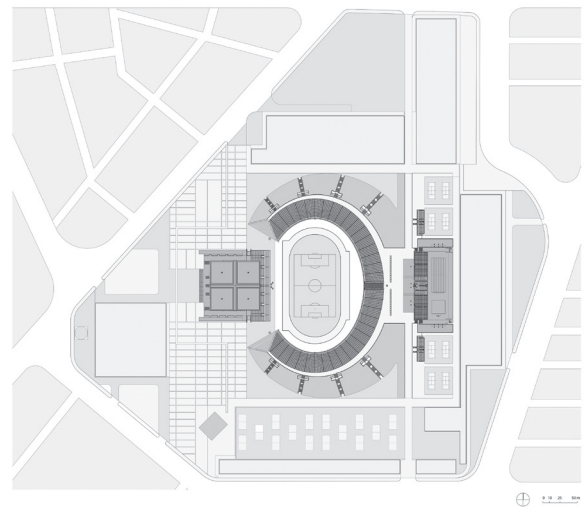
04 Lu Ban Hap, White Building, Phnom Penh, Cambodia, 1963. View from the garden in front of the building. © Vann Molyvann Private Collection.



05 Lu Ban Hap, White Building, Phnom Penh, Cambodia, 1963. One-bedroom unit apartment of the White Building. © Pen Sereypagna.



06 Vann Molyvann, Indoor Stadium, Phnom Penh, Cambodia, 1960s. The outside view of the main building of the Olympic National Sports Complex. © Vann Molyvann Private Collection.



07 Vann Molyvann, Master Plan of the Olympic National Sports Complex, Phnom Penh, Cambodia, 1962-1964. Master plan showing all the elements including the surrounding moats. © The Vann Molyvann Project.

post-and-beam structures are another reflection of traditional wooden buildings (figure 09).

The main building is of four stories and was designed as an inverted pyramid, with the upper floors overhanging – and shading – the ones below. The roof is expressed as a honeycomb structure of concrete hexagonal tubes designed to allow the circulation of air from inside to outside and to let soft light enter the main hall. Walls are composed of red brick panels, reinforced concrete, and vertical concrete louvers. Large steel window shutters open the view to the outside also allow air to enter the building. The external stairs and striking internal scissor-staircases are both practical and sculptural elements of the composition.

The teaching rooms building is comprised of pod-like lecture halls on one side, and classrooms on the other. Lecture halls are suspended on sloping and tapered columns that give the building a dynamic look, like an animal poised to leap. The walls of the central corridor are made up of perforated screens that allow light to enter and air to circulate. In addition, the building's many large windows and vertical concrete panels provide, respectively, for the transfer of air and shading from the sun.

The roof of the teaching rooms employs more of the hollow honeycomb tubing that reduces heat gain from above. Solid sloping slabs act as gutters to bring rainwater from the roof to the underground drainage. Double-layered walls of brick insulate the building from the western sun while the sides of each room are fully glazed with adjustable glass louvers.

According to Vann Molyvann, the distinct shape of the library building – which suggests a secular and rational view of knowledge, and provides a calm and focused space for study – was inspired by a traditional straw hat. Set inside a square pool of water, which facilitates natural cooling and acts as a reservoir, the library is ringed by a rib-like series of folded and tapered concrete columns. Between them are glass windows and honeycomb louvers. Built over two stories the library has office space on the ground floor and a reading space above it. Though it has only a small area for desks and shelving the reading room raised circular platform at its center is ringed with steps that act as additional seating.

The three buildings that make up the IFL engage with their social and natural setting, and they remain innovative, modern and explorative. And, like sculptures, their architectural form is expressed with openness and transparency. They remain a prime example of Vann Molyvann's work and the merging of past and present that took flight during what was later coined the New Khmer Architecture movement.

New Khmer Architecture as Political Ideology

From 1953 to 1970, Phnom Penh accommodated an explosion in its population from 370,000 to 1,000,000⁹. Public experiments in housing and cultural buildings were a key feature which were designed in the style of New Khmer Architecture in this period. New Khmer Architecture proved to be a golden age of optimism and experimentation in which new creative movements flourished. This gave rise to ideas of the modern Cambodian of the future, who strived

to develop their country, based on cultural fundamentals in which new buildings merged European modernism with Cambodian vernacular architecture.

In the Cold War period, Cambodia was a neutral and developed country in Southeast Asia which attracted attention from both the former Soviet Union bloc and the United States bloc. There was a lot of funding from these two blocs in Cambodia for infrastructure and the cultural sector in order to gain a reputation with the Cambodian head of the state, Norodom Sihanouk. To respond, New Khmer architecture was put at the center of attention.

Ingrid Muan, an art historian who has expertise in the Cambodian arts, in "Playing with Powers: the politics of art in newly independent Cambodia", wrote:

It was exquisitely appropriate, perhaps, that Vann Molyvann chose to design such a Cold War aid-sponsored auditorium as a structure with "all faces" and "no back". Although he linked his design for the Chatomuk Theater to its site at the "four faces" – the intersection of the Mekong, Tonle Sap and Bassac Rivers in downtown Phnom Penh – the Conference Hall in a sense embodies the position of neutrality by which Sihanouk's Cambodia attempted to face in all directions during the polarized decades of the 1950s and 60s. Inundated by Cold War image campaigns, Sihanouk's government produced and projected its own image of a newly independent, neutral and flourishing nation, setting Vann Molyvann's building projects at the center of its picture¹⁰.

New Khmer Architecture was often featured in films and photographs made by Prince Sihanouk to celebrate Cambodia's modernization during the post-independence period (1953-70). Foreign state visits were an opportunity to showcase the kingdom's new-born architecture in which New Khmer Architecture was on display. The state leaders were often taken along the main boulevard where there were many iconic modern examples of architecture to show that the new modern era of Cambodia had arrived. However, by the late 1960s Cambodia was a financial wreck and domestic politics were turning against Norodom Sihanouk. The *Sangkum Reastr Niyum* regime collapsed in 1970.

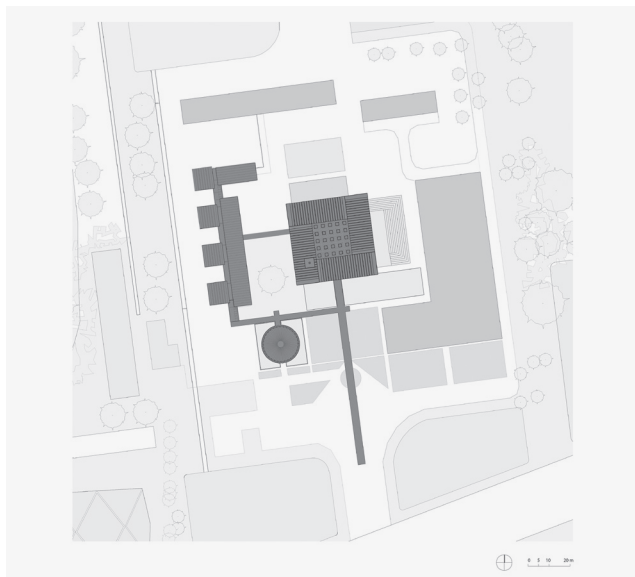
The Modern Movement in Cambodia in the 1960s is comparable to other movements in Southeast Asia which were learned from Western ideology, local lifestyle, and socio-political movements in the region. By studying some of the foregoing points, New Khmer Architecture is not only significant for its unique architectural style and representation of a Cambodian identity, but also it was the political statement for the *Sangkum* era.

From 2000 the economy has boomed in construction which has led to many building projects in the city. At the same time, the government has had no intention to support urban heritage preservation. Phnom Penh does not have a proper plan for the city and any laws to protect heritage buildings, especially 1960s architecture. Instead of focusing on protecting them, the primary focus, for the state, is globalization and the development of private enclaves. Many heritage buildings were privatized and demolished to make way for commercial and apartment buildings. In addition

- 08 Vann Molyvann, Institute of Foreign Languages, Phnom Penh, Cambodia, 1970s. Photo showing IFL with Phnom Penh city in the background.
© Vann Molyvann Private Collection.



- 09 Vann Molyvann, Master Plan of the Institute of Foreign Languages, Phnom Penh, Cambodia, 1972. Master plan showing three buildings connected by the bridge including the front moats. © The Vann Molyvann Project.



to neglect by the state, people lack knowledge about urban heritage, thus making preservation more difficult. The Preah Suramarit National Theater was an icon in the cultural landscape of Phnom Penh, host to the National Conservatory of the Arts and the crown of the Bassac riverfront development. A fire during 1994 renovations severely damaged the auditorium and roof. The remaining building continued to be used by artists and dancers until it was demolished in 2008. Like the Theater, the White Building was demolished in July 2017 to make way for new development. The loss of both buildings, under the name of development and beautifying the city, was not only a loss of iconic modern works of architecture, but also the loss of history of the city as the whole. For these reasons, in 2004, Khmer Architecture Tours (KA-Tours) was established. KA-Tours is a non-profit organization aiming to raise awareness and promote heritage buildings in the historical context of Phnom Penh by conducting tours and research. Beside touring and researching, KA-Tours engages with local students by making presentations and holding events related to heritage buildings in the French colonial and the 1960s periods. In a similar initiative, the Vann Molyvann Project was formed in 2009 by a group of international and Cambodian students with the purpose of education and documentation focusing on the extraordinary works of Vann Molyvann and his peers in the context of architecture and socio-political movements in the 1960s in Cambodia. The project runs as a form of education by going to the site with students, surveying the architectural plans of the buildings with them, interviewing people who use the buildings, and sharing drawings freely online. In addition to that, the project held exhibitions at numerous venues inside and outside Cambodia and lectured at many local universities in Cambodia. Because of the lack of support and collaboration from the government,

both organizations only operate through their own funding or through other short-term funding from other international institutions.

Notes

- 1 Ly Daravuth, Ingrid Muan (ed.), *Cultures of Independence: An Introduction to Cambodian Arts and Culture in the 1950's and 1960's*, Phnom Penh, Reyum, 2001, vii.
- 2 Helen Ross, Darryl Collins, *Building Cambodia: 'New Khmer Architecture' 1953-1970*, Bangkok, The Key Publisher, 2006, 50.
- 3 *Id.*, 4.
- 4 The Vann Molyvann Project, "New Khmer Architecture", accessed on July 12, 2017 [www.vannmolyvannproject.org/the-movement].
- 5 "Concrete Visions" (Vann Molyvann interviewed by Nico Mesterharm, 2007), accessed on July 12, 2017 [<https://www.youtube.com/watch?v=6zgJq1P6GwE>].
- 6 Helen Ross, Darryl Collins, *op. cit.*, 229.
- 7 Vann Molyvann, *Modern Khmer Cities*, Phnom Penh, Reyum Publishing, 2003, 157-160.
- 8 Vann Molyvann, Personal Interview with Khmer Architecture Tours, 29 Feb 2004.
- 9 Helen Ross and Darryl Collins, *op. cit.*, 135.
- 10 Ingrid Muan, "Playing with Powers: The Politics of Art in Newly Independent Cambodia", *Udaya Journal of Khmer Studies*, n. 6, 2005.

References

- DARAYUTH, Ly; MUAN, Ingrid (ed.), *Cultures of Independence: An Introduction to Cambodian Arts and Culture in the 1950's and 1960's*, Phnom Penh, Reyum Publishing, 2001.
- MOLYVANN, Vann, *Modern Khmer Cities*, Phnom Penh, Reyum Publishing, 2003.
- ROSS, Helen Grant; COLLINS, Darryl Leon (ed.), *Building Cambodia: 'New Khmer Architecture' 1953-1970*, Bangkok, The Key Publisher Ltd., 2006.
- The Vann Molyvann Project: www.vannmolyvannproject.org
- Khmer Architecture Tours: www.ka-tours.org

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Abel Sorensen, Hotel Sorensen, Jakarta, Indonesia, 1956-1962. © BODMER, Frank, Ali, Mohammad, Djakarta Through the Ages, Jakarta, Government of the Capital City of Djakarta, 1970.

Modern Indonesian Architecture: a Cultural Discourse

BY SETIADI SOPANDI

The paper highlights the course of Indonesian architectural development through the narrative of national and cultural identity which prevailed almost consistently from the early years of the 20th century. Despite the various contexts and the involvement of participants from different eras, the question of identity recurs among architectural practitioners, political figures, as well as the general public in Indonesia. In this light, architects are perceived as active agents continually contributing models of national identity through architectural forms, expressions, materials, and narratives.

Identities

Indonesian architectural historiography has been overwhelmed by the recurring questions of a national identity¹. Starting from the early 20th century, there is a continual tendency to drive architectural works and discourse in search of a self-cultural and national expression. Despite being irrelevant to architectural project commissioning, this had become a nation-wide obsession shared by other professionals: archeologists, historians, writers, poets, artists (especially painters), and performance artists.

Starting from the 1920s-1930s, “Dutch” architects working in the Netherlands East Indies had been actively conversing and experimenting with ways to express a new “national” identity. The spirit grew out of the midst of the global clash between the new progressive European modernity and the seemingly dormant old splendor of the “East”. Since the last decade of the 19th century, professionals – including engineers, pharmacists, as well as architects – had been dealing with the introduction of new materials and building techniques, building standardization, the problem of urban sanitation and public hygiene, as well as the hot-humid tropical climate. Many considerable urban architectural – and infrastructural – works are depicted as a cultural modernizing agency during the last decades of the Netherlands East Indies as well as in the early Indonesian independence period. In this light, architecture serves as a beacon of cultural development while, on the other hand, provides pragmatic problem-solving strategies and technical art. However, the issue of national identity reemerges and intertwines with other narratives, making it the only dominant theme.

A Synthesis

The year 1909 is marked by a few works done by the earliest professional architects practicing in the Netherlands East Indies. As the profession grew in the modernizing society, some architects actively engaged themselves in debates and investigation on how to represent a national (colonial) architectural identity within their works. Some started

debates by criticizing the newly-built structures dressed in “neo-gothic” or “neo-classical” fashion, and preferred fresh and exciting modern architectural expressions. A few went further and involved themselves by doing archaeological investigations, pioneering anthropological studies, and engaged in archaeological restorations. They also began promoting new models as the result of “synthesis”. This view was affirmed by a “suggestion” by Hendrik Petrus Berlage (1856-1934), made during his journey through the Netherlands East Indies in 1923, where he told “young” (Dutch) architects to support a kind of sympathy for “local” traditions as well as to embrace European modernity, and to try to create a “synthesis”, namely “Indies architecture”.

The architectural standpoint of Henri Maclaine Pont (1884-1971)² occupies a unique place in Indonesian architectural history not only because of his striking designs, but because he had come to represent the form of critical practice of that period by addressing his works and writings in the cultural discourse. His best-known works are those which feature creative interpretations of traditional roof forms, blending different roof types in a single building supported by a creative structural support system. Henri Maclaine Pont deliberately liberates himself from customs and available typologies, and freely uses both local organic materials and modern industrial products. In addition to that, he had been actively researching and writing about various archaeological sites. Henri Maclaine Pont discovered that local carpentry/craftsmanship deserved to “move forward”, by not stopping at the refined traditional techniques and local materials, but to also master modern European techniques and to create new forms that are simultaneously “modern” and “local”. His works – such as the grand hall of Technische Hoogeschool/Institut Teknologi Bandung (1920) and Pohsarang Catholic Church (1939) – are interpretations of traditional buildings realized through modern construction and structural experimentation. Technische Hoogeschool in Bandung features laminated-plywood-arches supporting innovative multi-tiered roofing that resembles a blend of

various Indonesian traditional roof forms. Henri Maclaine Pont designed the original masterplan of the campus, including the monumental axis and gates leading to the twin halls [*aula*] and their supporting buildings. The west hall [*aula barat*] was built first and personally supervised by Henri Maclaine Pont himself. The east hall was built afterwards – almost identical in form and structure – to host slightly different functions. After more than 90 years, the structure remains in excellent condition thanks to the recent full restoration effort initiated by the Institut Teknologi Bandung in 2013. Bambang Setia Budi, the architect who led the restoration project, faithfully followed the design and structural principles prescribed by Henri Maclaine Pont in his original drawings. The restoration architect removed minor additional elements and returned the spaces according to the original intentions. The laminated-wood arches were still in very good condition and only needed minor restoration work. Bambang Setia Budi decided to remove layers of paint that covered the timber structural elements and to show the original materials and how they are composed. The shingle roof tiles were cleaned, and replaced whenever necessary. Extra care was also given to the rough rusticated stonework which made up the bottom part of the façades and verandah columns. The whole original complex of the Institut Teknologi Bandung remains the most venerated piece of architecture in the whole campus and was listed in 2011 as one of the most important architectural heritage buildings in Indonesia.

In the Pohsarang Church, Henri Maclaine Pont went further by creating a very innovative tensile structure. The structural system employs laminated-plywood arches to form a vault which is tightly held by steel rods. The roofing surface is strikingly covered by custom-made terracotta tiles strung together by cables. The spaces and the “Javanese-Gothic” expressions of Henri Maclaine Pont’s works clearly show his architectonic idea, which can be considered as a way to “guide” and “elevate” existing carpentry skills and local materials. The architect’s role and position, as formulated by Henri Maclaine Pont, is that of a conscious and confident agent of change – as a “mentor” who works behind the veil of rationality. The forms and spaces of his architecture are proof of his attempt to transcend those that have come before, to achieve a new height in terms of structural and architectural integration (figures 01-02). In the mid-1990s a team of architect and contractor was commissioned by the acting bishop to renovate the whole church complex, including to expand its seating capacity anticipating the growing number of pilgrims. The renovation retains the original form and the tensile structure intact, including the brickwork that dominates the interior. Unfortunately, the renovation architect failed to recognize the important presence of the laminated-plywood arches and replaced them with steel truss arches assuming that wood would erode sooner than steel. The team also built a hall close to the original church using the identical form and tensile principle of hanging the terracotta roof tiles deployed by Henri Maclaine Pont. However, the choice to use steel instead of laminated-plywood arches is regretted as

the action erased an important part of the genuine architectural quality.

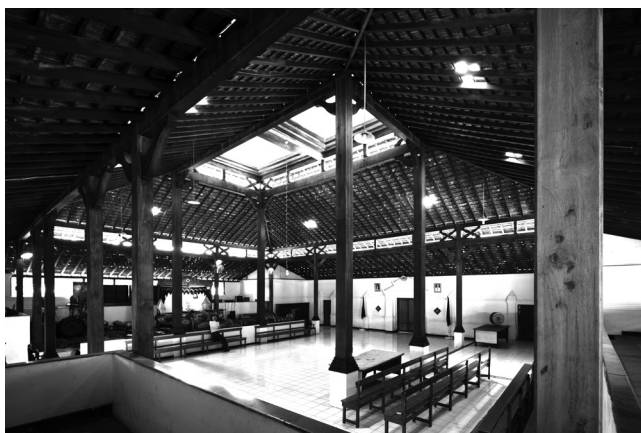
Architect and town planner, Herman Thomas Karsten (1884-1945)³, took a slightly different approach than Henri Maclaine Pont. Thomas Karsten believes that particular forms contain meanings and cultural significances that should be maintained or carefully reinterpreted. Some “Javanese” forms should be reserved for particular functions, as should “modern” forms. Thomas Karsten was commissioned by the Java Instituut (est. 1919) – a society focused on Javanese culture, in which he was also a founding member – to design the Sonobudoyo Museum (1919-1935) within the precinct of the Yogyakarta royal palace compound. The museum collects and shows artifacts related to Javanology – a study of Javanese numismatic objects, documents, ceramics, fine arts, technical objects, geological artifacts, paleontological remains, and ethnographic articles. Being a core member of the Java Instituut, Thomas Karsten carefully designed the museum complex based on traditional types that prevailed and in accordance with the Javanese palace setting. Similarly, Thomas Karsten was also involved in the initiation and the design of Sobokartti Folk Theater (1930) in Semarang. The theater is a dedicated space to show traditional Javanese performances. Thomas Karsten combines three-sided viewing areas orientating towards the center stage under a multi-tiered Javanese roof supported by simplified Javanese timberwork. Currently the theater still functions as it was intended, but it is in need of extra care. The building still continues to house and revitalize Javanese folk performing arts and it is protected as one of many works of architectural heritage by the municipality of Semarang. The challenge lies in the fact that the city of Semarang has been troubled by the annual flood caused by the flat topography of the city and the rapid sedimentation of the estuary. The city ground level also is being raised in anticipation of the flood and sea water intrusions. The area surrounding Sobokartti has been elevated more than 40 cm higher than it was in 1930s, and has been threatening the theater. To protect the building, the caretaker has installed ground drainage inside the periphery of the building and, in the event of rising ground water, two small water pumps work hard to pump the water out of the property. This act will protect the building, but not for long.

Thomas Karsten’s other well-known work, the Johar Market (1938-1942), utilizes reinforced concrete extensively, employing mushroom-shaped column capitals that support flat slabs of concrete roofing. The roof slabs are placed high above and are arranged to allow hot air to escape from the voids. Thomas Karsten also sensitively shapes the floor and kiosks which enable local peddlers carrying heavy loads on their backs to comfortably put their goods right on the display table. Thomas Karsten moreover anticipated the local “wet” market behavior by carefully considered floor channeling to keep the floor dry and clean. Johar Market is listed as one of Semarang’s protected buildings. Despite its status, Johar Market is currently in a very appalling condition, closed down and left empty, due to a major fire that broke out in 2015. Many of the mushroom reinforced

01 Henri Maclaine Pont, Technische Hoogeschool, Bandung, Indonesia, 1919.
© Indonesia Pavilion for the 14th International Architecture Exhibition La Biennale di Venezia 2014, Paul Kadarisman.



02 Henri Maclaine Pont, Pohsarang Church, Trowulan, Kediri, Indonesia, 1937–38.
© Indonesia Pavilion for the 14th International Architecture Exhibition La Biennale di Venezia 2014, Paul Kadarisman.



03 Thomas Karsten, Sabokartti Folks Theater, Semarang, Indonesia, 1930.
© Indonesia Pavilion for the 14th International Architecture Exhibition La Biennale di Venezia 2014, Paul Kadarisman.



04 Thomas Karsten, Johar Market Hall, Semarang, Indonesia, 1938-1942. © Indonesia Pavilion for the 14th International Architecture Exhibition La Biennale di Venezia 2014, Paul Kadarisman.

concrete columns are in very bad condition and barely support themselves. The municipality engaged architects and conservationists in a team to guide the restoration effort. Despite the skeptical opinions among observers, a full restoration project has been planned to take place by the end of 2017 (figures 03-04).

A Global Face

During the mid-20th century, architecture slowly became a chosen face of world politics. New nations emerged and began demanding various architectural attributes to complete their social and cultural cohesions, so as to exist in a new political world order. The first president of the Republic of Indonesia, Sukarno (1901-1970), trained as a building engineer, was a product of the Netherlands East Indies higher education system and a student of Charles Prosper Wolff Schoemaker (1882-1949) in the Technische Hoogeschool in Bandung. Sukarno had a keen understanding of this late colonial architectural discourse, and was aware of how architecture could benefit his campaign of “nation building” for the newly independent Indonesia. During the early

independence period, Indonesia was constantly overshadowed by the threat of national disintegration: territorial disputes, civil unrest and rebellions. In modern architecture, Sukarno had found a solution for “nation building”, and a way to overcome the “worrisome diversity” of Indonesia.

Toward the end of the 1950s and the first few years of the 1960s, Sukarno began several major infrastructure projects, including the construction of various architectural monuments, especially in Jakarta. Sukarno developed a massive urban planning scheme for the south of Jakarta, virtually carving a north-south axis. Sukarno personally ordered the dismantling of particular colonial heritage sites, and encouraged the construction of modern buildings. Nationwide competitions were initiated to seek ideas for these architectural projects. Sukarno thought that the characteristics of modern architecture – clean, open, dynamic, and neutral – could act as Indonesia’s new symbol of national identity, free from the cultural burdens of the past and the specter of colonialism. Sukarno began building various “monuments”, from obelisks and statues, government offices, road infrastructure projects, and sport stadiums.

The Medan Merdeka [Independence Square] is the showcase for architectural symbols. Once named as Koning-splein, it was an area to be developed as a new city center for Batavia, it was designed to hold public buildings, parks, and other services. Since the early 1950s Sukarno attempted to redesign the area, from a colonial town center into the ground zero of the young nation. The square was then renamed as Medan Merdeka; and rising from its center was a monument – Tugu Nasional [The National Monument] (1961-1975)⁴ – surrounded by new, important buildings and landmarks such as Bank Indonesia building (1958) and the national mosque, The Istiqlal Mosque (1954-1978). The involvement of architect Friedrich Silaban (1912-1984)⁵ became more intensive when he won commissions for those three projects through national competitions, which evolved into frequent appointments by the President to tackle other national-scale projects.

Deemed as appropriate for the state, Friedrich Silaban's architectural principle was straightforward, simple, but grand, monumental, modern, and climate-responsive, providing ample shelter from either rain or sun. He openly refused to refer to particular traditional architectural forms and opted for a modern vocabulary. Throughout his career, Silaban consistently held to his principles in every single project he did. His works are far from gimmicky and are very attentive to scale and proportion. He always strove for clean lines and ensured perfect protection from the rain and sun while allowing the breeze to go through the spaces. He protected and expanded indoor spaces with generous verandahs – a kind of space that he declared as “truly Indonesian” – because they are regarded as essential to everyday life in the tropics and is unmistakably evident in almost every traditional dwelling in the region (figures 05-06).

Sukarno also commissioned other architects and artists to design and build landmarks for the expanding Jakarta. Indonesia received a gift from the Soviet Union in the design and construction of the Asian Games Complex (1959-1962) – named as Gelora Bung Karno complex – located at the southern end of Thamrin-Sudirman Street. The vast sports complex triggered the physical development of Jakarta southward; integrating the Kebajoran Baru satellite town into the capital. The Gelora Bung Karno complex is currently having a major overhaul to host the 18th Asian Games in 2018. Six listed buildings, including the Main Stadium and the iconic Sports Palace, are undergoing a major renovation to incorporate new requirements and demands as well as to enhance the integrity of their original architectural characteristics.

To mark the end nodes of the monumental streets linking the monumental venues, Sukarno commissioned Henk Ngantung (1921-1991) and Edhi Sunarso (1932-2016) to build bronze “realist” monumental statues, symbolizing abstract ideas of modernization, patriotism, and struggles against colonialism. He also deliberately used various funding sources to support his ambition of crowning Jakarta with modernist architecture imports. Sukarno took advantage of the late 1960s Cold War contestation between the Western and Eastern Blocs by accepting offers of gifts, loans, and

economic cooperation from the United States, Bulgaria, the United Nations, and others.

A portion of Japanese War reparation funds went into building Indonesia's first International Style tall buildings: Sarinah department store (1961-1966), Hotel Indonesia (1956-1962), and Wisma Nusantara skyscraper (1964-1972) in Jakarta, Samudra Beach Hotel (1962-1967) in the seaside town of Sukabumi, West Java, and Bali Beach Resort (1965)⁶ in Nusa Dua, Bali. Sarinah department store, Hotel Indonesia, Wisma Nusantara, and other modernist tall structures adorning Thamrin Street, the most celebrated streetscape of Jakarta, acted as splendid greeting to the new incoming urbanites as well as foreigners (essay cover).

Hotel Indonesia was designed by Abel Sorensen, a Danish born American-educated architect. The project was intended to be the first international standard hotel accommodation in Indonesia, which was expected to be fully operating by the time Indonesia hosted the 4th Asian Games in 1962. The Selamat Datang [Welcome] statue, by Henk Ngantung, surrounded by a pond in front of the hotel was intended as a warm greeting for the visitors during the event. The iconic hotel underwent a major facelift in the mid-2000s. Hotel Indonesia has operated since 2008 is now operating after being incorporated into a superblock comprising the original hotel, a luxury shopping mall, an office tower, and an apartment tower. The new design retains most of the shape and distinct characteristics of the original building.

Sukarno was using architecture to bring nationalistic sentiments to his subjects as well as to grow sympathetic gestures among what he called “new emerging forces” in global politics. Following the confrontation over the formation of Malaysia (1963) – backed by the British and the USA – Indonesia withdrew from the United Nations (1965) and immediately formed the Conference of the New Emerging Forces (CONEFO, 1965). However, the construction of some of these monumental structures was halted due to the 1965-1966 major political and economic crises. After the fall of Sukarno and during the early years of the New Order regime, Jakarta had many unfinished projects devoid of activities. The capital looked dim and a seemingly dangerous place to live. The Istiqlal Mosque project only gained significant progress after the early 1970s when the main dome was finally set in place. The project continued slowly and only reached completion in the early 1980s (figure 07). The imposing steel skeleton of Wisma Nusantara was left exposed and rusty, and was only fully completed after 1972 thanks to a new investment plan. Despite no longer being iconic or monumental, the skyscraper is still in good condition.

The CONEFO Project designed by Soejoedi Wirjoatmodjo (1928-1981)⁷, started in 1965, shared a similar fate. It was only fully realized in 1983 with a new function as the home for the Indonesian Parliament. The project comprises the main assembly hall – roofed by a concrete shell construction – and a medium-rise office block on top of a podium. The objects are arranged in a dynamic sculptural composition held together by a monumental axis leading to the main assembly hall. The original parliament complex is kept intact while the rear portion of the plot had been built up

05 Friedrich Silaban, Bank Indonesia, Jakarta, Indonesia, 1958-1961. © Friedrich Silaban Archive, via arsitekturindonesia.org.



06 Friedrich Silaban, Istiqlal Mosque, Jakarta, Indonesia, 1954-1982. © Setiadi Sopandi, photography by William Sutanto.

to accommodate additional office space in the last couple of decades. In the last couple of years there has been an unresolved debate on the need to massively expand the complex with a high-rise tower joining the original protected buildings. The debate, however, has learned towards politically charged issues – involving corruption allegations and inappropriately luxurious facilities for the parliament members – rather than about the technical problems of preservation and redevelopment of the complex.

Tourism and Ethnicity

The progress seen in the early 1970s has helped Indonesia find a new optimism. The country began experiencing a time of relative peace, and soon found itself in the midst of rapid economic growth thanks to the open global economy. However, Indonesia was also ruled by a government that repressed the people's freedom of expression. The flow of capital, goods, services, and labor empowered and built the upper and middle classes in large cities, while at the same time creating pockets of poverty, seemingly neglected/disregarded by economic development. Several state corporations were given monopolies over various strategic commodities, as well as mandates to build an economic power that could sustain Indonesia's developmental costs for the next few decades.

From the early 1970s, Bali became an international tourist destination, promoted as the total cultural tourism package. Bali shared in the economic boom caused by the flood of capital that came with business people and expatriates. With such an opportunity, hotel development in Bali began to revitalize discourses in traditional architecture and craft to “celebrate” their “Balineseness”, to support the tourism industry. Expatriate artists and entrepreneurs also contributed their influence to the development of hotel aesthetics and architecture during the 1980s. Wija Waworuntu (1926–2001), an art dealer turned hotelier, gradually developed his own family house in the Sanur area into one of Bali's first boutique hotels and set the very first example on a new trend in hotel designs. Hotel Tanjung Sari remains in Wija Waworuntu's family ownership and management and continues to provide services to a small niche market of tourists. The hotel retains most of the original characteristics with small improvements over the years. Despite being a commercial entity, Hotel Tandjung Sari continues to play a significant role in the preservation and development of the neighborhood of Sanur to keep the environmental quality and characteristics unchanged, and to keep Sanur from overdevelopment. Nowadays Sanur still retains most of its one-story buildings and greenery, and keeps restricting business owners in the area from bringing large crowds of tourists into the neighborhood.

Waworuntu played a pivotal role in the regional architectural scene when he invited Sri Lankan architect Geoffrey Bawa (1919–2003) to design the Batujimbar resort complex which influenced the tourism industry in the region. Then, hotelier Adrian Zecha (1933–) began his chain of elite boutique hotels – Amanresorts – in Bali: offering guests the “authentic” experience of living in Balinese traditional

houses without sacrificing a luxurious modern lifestyle. The effect of these developmental projects was far-reaching. Craftsmanship and the use of local-organic materials took a central role in architectural designs, even dominating the architectural façade of urban houses in large cities. Centers for woodcrafts, stonemasonries, and marble crafts provided diverse creations to support the style market.

As Bali began to affirm its identity, the State began to influence the compartmentalization of rigid regional identities based on provincial administrative territories. Rather than promoting International Style architecture, the New Order regime (1967–1998) opted for a more localized, tradition-based regionalist formal architectural vocabulary⁸. A cultural theme park, Taman Mini Indonesia Indah [Beautiful Indonesia in Miniature Park], was initiated by Tien Soeharto – the first lady – to promote this idea. Indonesia's cultural diversity was classified and reduced to 27 provincial administration entities – represented by 27 traditional houses and 27 pairs of traditional dresses – and 5 official religions – represented by 5 religious buildings. In this scheme, Indonesian national identity is formulated as a synthesized mosaic of the “finest” examples of regional traditional cultures. The attention towards tradition was also warmly greeted by professional architects and became a nation-wide movement in the 1990s. Seminal works by foreign architects were also praised for their “regionalist” sensitivities, employing familiar forms and materials for seemingly modern building types. Paul Andreu (1938–) employed multi-tiered and gable roof forms with terracotta tiles to shelter the new international airport of Jakarta, Soekarno-Hatta terminal 1 and 2 (1977–1985). Paul Rudolph (1918–1997) designed Wisma Dharmala skyscraper resembling juxtaposed traditional tropical roof forms to protect the tower from excessive rain and sun, resulting in a very expressive, complex, stand-out and yet beautiful structure (figure 08).

For Greater Purpose

During the 1980s, there were critical practices that responded to how the “formal” economic development potentially marginalized small and informal segments of the growing urban populations. Yusuf Bilyarta Mangunwijaya (1929–1999)⁹, a Roman Catholic priest and architect, tried to advocate for a marginalized community on the banks of Kali Code, Yogyakarta, during the late 1980s. Once an illegal squatter settlement, the Kali Code community was subject to eviction by the local government. With the help of local informal leaders and officials, Yusuf Mangunwijaya elevated their living standards by providing the settlers with better access to the urban infrastructure and facilities, including basic education, water supply, sanitation, and community activities. Yusuf Mangunwijaya conducted social outreach and encouraged the improvement of the inhabitants' social resilience, in addition to repairing environmental facilities. The architecture of the area was designed as part of an independent construction effort by the community itself, with guidance provided by the architect, and with additional help or involvement by many social and education workers. This outreach came to the attention

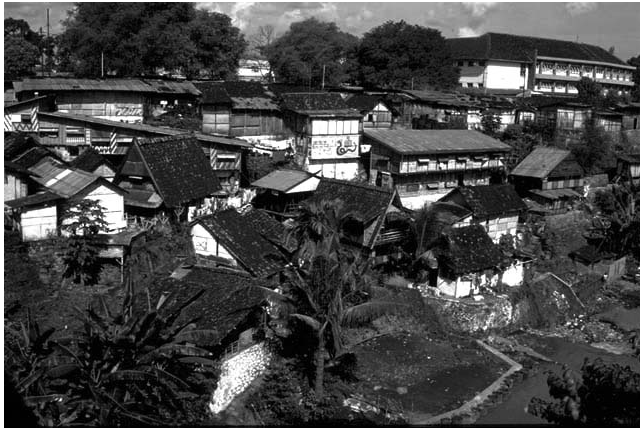
07 Soejoeadi Wirjoatmodjo, CONEFO or DPR/MPR RI, Jakarta, Indonesia, 1965-1983. © Public Domain, Wikimedia Commons, Davidelit, 2008.



08 Nusa Consultants, Beautiful Indonesia in Miniature Park, Jakarta, 1972-1975. © Apa dan Siapa Indonesia Indah, Jakarta: Our Hope Foundation, 1975.



09 Y. B. Mangunwijaya, Sendangsono Pilgrimage Site, Yogyakarta, Indonesia, 1974-1980s. © Indonesia Pavilion for the 14th International Architecture Exhibition La Biennale di Venezia 2014, Paul Kadarisman.



10 Yousef B. Mangunwijaya, Kali Code Settlement, Yogyakarta, 1980s. Aga Khan Award for Architecture (1992). © Yousef B. Mangunwijaya & Koperasi Permukiman dan Lingkungan Hidup Code Gondolayu.

of the wider public, when it received the Aga Khan Award for Architecture in 1992 (figure 09).

Yusuf Mangunwijaya's other notable commissions included a pilgrimage site – Sendangsono – and his own residence – Wisma Kuwera. For both projects, Yusuf Mangunwijaya employed and coached his carpenters/craftsmen to create and to express their individual skills using easily-accessible materials. Mangunwijaya provided ample opportunities for them to express their craftsmanship, while pioneering the architect's role as someone who encourages skills development and construction training for the craftsmen. An architect becomes a "leader" with particular ideas and political strategies, while architecture (form, space, material, construction) is "merely" a medium of such development. Yusuf Mangunwijaya has left a deep impression in Indonesian contemporary architectural discourse, by linking the search for a national identity with personal conscience, professional ethics, and a political stance among Indonesian architects. For him, architectural expression should be "honest" and "true". Architecture, in this light, could not have an exclusive agenda and should be directed to serve "greater" purposes.

Yusuf Mangunwijaya depicts "honesty" as something pragmatic and unpretentious, echoing one of the key dictums of the Modern Movement in architecture. Structural integrity and materiality should be expressed by the way a building looks as well as by how the structure, materials, and labor are sourced and employed. Being immersed in their contexts, Yusuf Mangunwijaya's architectural expressions are often liberated from formalism and strict geometry, and show rather freely flowing space and very crafty ornamental construction details. Introducing a "weak architecture", Yusuf Mangunwijaya's teaching¹⁰ became far reaching thanks to his seminal book *Wastu Citra: Pengantar ke Ilmu Budaya Bentuk Arsitektur, Sendi-Sendi Filsafatnya Beserta Contoh-Contoh Praktis* [lit. *Wastu Citra: Introduction to Cultural Studies, Architecture Forms, its Philosophical Foundations, as well as Practical Examples*]. The book summarizes Mangunwijaya's views on how Indonesian architects should behave toward their own cultural identity in the midst of

global cultural exchanges and respond to current social and economic problems of the have-nots.

In recent years, there have been some concerns about how to "preserve" Mangunwijaya's legacy. Some of his built works, despite showing a very strong personal character, are difficult to preserve. In the case of the Kali Code settlement, Mangunwijaya's buildings were meant to be many things other than permanent architectural monuments. The multipurpose hall, library, and houses he designed were to facilitate the immediate needs of the community, as well as a protest statement to the authorities. The architectural values he added were to loudly refute the stigma about Kali Code settlement as an eyesore, disease-ridden, unhygienic, uncivilized place for a community. Apart from providing physical shelter and space for activities, Mangunwijaya worked with activists and the community on how to empower the unskilled and unemployed people in the neighborhood. It was clear that Mangunwijaya's main point was to help the community to survive and to improve their livelihood, therefore the architectural pieces that he produced were intended to serve only that purpose.

There are other concerns about the churches and the pilgrimage sites Mangunwijaya designed. Some of the caretakers of the properties raised issues on how the properties are no longer easy to maintain, and may need to be upgraded to serve more people. Apart from being poorly maintained, there were also unsightly additions. Few have uttered their concerns to the authorities and consulted Erwinthon Napitupulu¹¹ for advice.

Epilogue

For more than a century, the discourse on national identity has remained an unfinished business. After a decade of administration and economic decentralization, Indonesians are now facing some new challenges. Amidst stable economic growth, Indonesian architects are becoming aware of the fact that our cities are threatened by global cultural homogenization due to massive capitalist development. Moreover, after the recent national religious, political, and ethnic frictions, the cry for a "new" national integration is hitting the surface again. Therefore, the question of a national identity for Indonesian architects is still very much a moral gravity that works against the creative freedom we enjoy.

In order to do that, there are several attempts by individuals and groups to identify, investigate, and to document Indonesia's architectural heritage. Until a few years ago, research, documentation, and preservation efforts had been heavily directed towards building and monuments from the colonial periods. However recent attempts and rapidly growing awareness amongst the professionals and government institutions had been very promising. Exhibitions and publications on modern Indonesian architects were launched, thus filling in the blank spots in the course of modern architectural development in Indonesia. Recent attempts to restore and revitalize the 1960s sport stadium complex undertaken by the Ministry of Public Works and Housing – in co-operation with the Indonesian Institute of

Architects – is a huge step in this process. The Institute has also been a keen guardian of modern architectural heritage by providing assistance to guide and to host architectural competitions for the Indonesian Parliament Complex, the ASEAN Secretariat Building, and several other restoration/revitalization/renovation projects. Recently a non-profit on-line initiative – arsitekturindonesia.org – launched its web-based architectural archive providing digitized archives related to Indonesian architectural practices. Other attempts are not necessarily related to modern architectural works, but also cover the documentation and preservation of vernacular traditions from tribal communities. Architecture is once again becoming a potential contributor to national identity, representing an important phase when architects and architecture employed the language of modern architecture for the nation.

Notes

- 1 This is, of course, not unique. Most postcolonial nations share this common trait due to the globalizing world, the growing empathy of the colonizers, and the increasing consciousness among the colonies since the early 20th century. For the first account to critically examine the history of architectural discourse in Indonesia, see Iwan Sudrajat, *A Study of Indonesian Architectural History*, unpublished PhD dissertation, Sydney, University of Sydney, 1991.
- 2 Born in Jatinegara, Batavia, Maclaine Pont spent most of his life in the Netherlands Indies. He received his training in civil engineering in Delft – Technische Universiteit Delft, known as Polytechnische School van Delft during Maclaine Pont's study. The school was established in 1842 as a Royal Academy for the purpose of training civil servants to work in the Dutch East Indies – and soon after graduating he moved back to the colony. In 1911, he received his first major work to design the headquarters for the Semarang-Cirebon Railway Company in Tegal and thereafter established his private practice in Semarang.
- 3 Thomas Karsten was initially trained as a mechanical engineer before he finally shifted his major to structural engineering during the major institutional reform of Polytechnische School van Delft. Escaping WWI, Thomas Karsten moved to the Dutch East Indies at the invitation of Maclaine Pont. Though never formally trained as a town planner, Thomas Karsten was exposed to the social reform housing planning discourse and became a member of a socialist planners association in Amsterdam. Eventually he was hired as an independent planning consultant for the Public Works Department on major cities in the colony.
- 4 The National Monument project was a long process. First started as a national competition in 1954, the ground breaking was only started in 1961. The first competition failed to appoint the winning entry, so was the second competition. Friedrich Silaban was named as the second prize winner in the first competition, and later became a dominant figure among the jury panel in the second competition (held in 1960). Friedrich Silaban was appointed to produce a second proposal which also failed. Sukarno then appointed architect Sudarsono (1912–?) to work under his personal direction and produced the built design.
- 5 Friedrich Silaban was trained in a vocational school, Koningin Wilhelmina School (KWS), between 1927–1931 in Batavia, Dutch East Indies. The technical education provided him with the necessary practical skills to serve in the Public Works Department as a draftsman or as an overseer in construction projects. But Friedrich Silaban was very determined to be a professional architect, like those who graduated from higher education institutions. Upon graduation, he actively participated in and won design competitions, and eventually was awarded his first major commissions in the late 1940s. He attended the architectural course at the Academie van Bouwkunst te Amsterdam in 1950 before he returned and continued his professional practice in Indonesia.
- 6 Now renamed as Inna Grand Bali Beach Resort.
- 7 Soejoedi Wirjoatmodjo initially studied architecture at the Institut Teknologi Bandung before he was granted a scholarship to study in the *École Nationale Supérieure des Beaux-Arts* in Paris. Before finishing his

studies, he moved to Delft. During the worsening diplomatic relationship between Indonesia and the Netherlands, Soejoedi Wirjoatmodjo and his fellow Indonesian students moved to Germany. He moved and finished his studies at the Technische Universität Berlin. Upon his return to Indonesia, he was appointed as the head of the architectural department of the Institut Teknologi Bandung. He was also appointed to consult to the government on opening new architectural schools in major Indonesian cities. During the short span of his career, Soejoedi Wirjoatmodjo managed to influence the course of modern Indonesian architecture by designing numerous institutional buildings dressed with streamlined compositions of cubic forms. Among his best-known works are the Association of South East Asian Nations (ASEAN) Secretariat Building (1973), Ministry of Agriculture complex, Ministry of Forestry (1977), Ministry of Transportation, the French Embassy in Jakarta (1971, demolished in 2012), and Indonesia's embassies in Kuala Lumpur, Belgrade, and Colombo.

- 8 President Suharto rarely expressed his view on architecture. However, in a keynote for the inauguration of Wisma Nusantara (2 December 1972), he uttered his endorsement of the use of “genuine personality” to cater for the development of tourism industry.
- 9 Yusuf Mangunwijaya (popularly known as “Romo Mangun” or “Father Mangun”) was ordained as a priest in 1959 by Archbishop Albertus Soegijapranata who suggested Yusuf Mangunwijaya train as an architect. He was 30 years old when he was enrolled as an architecture student at the Institut Teknologi Bandung. The following year, he transferred his training to Rheinisch Westfälische Technische Hochschule in Aachen, Germany. He returned to Indonesia in 1966 and began his service as a priest. Apart from his main duty as a Catholic priest, he worked in various fields, including producing literary works, essays on culture, religious affairs, and technology. Since the early 1980s he started his involvement at Kali Code.
- 10 *Pengantar Fisika Bangunan* is a technical book that outlined a wide array of basic technical skills for architects and construction workers, from utility, construction and structure, to matters related to climate. The book garnered a lot of interest when it was published, as it emerged during a time when architecture publications in Indonesia mostly featured discourses on identity and style – coinciding with the rise of “postmodern architecture” as a trend.
- 11 Erwinthon Napitupulu was educated as an architect and he spent several years studying, collecting, and documenting all of Yusuf Mangunwijaya's architectural projects. Erwinthon Napitupulu's archive remains the most trusted source for this purpose, and his insights on what is the essence of Yusuf Mangunwijaya's projects, and how to properly preserve and maintain his works is unparalleled.

References

- BERLAGE, Hendrik Petrus., *De Indische Reis van H.P. Berlage*, Rotterdam, Brusse, 1931.
- BODMER, Frank, ALI, Mohammad, *Djakarta Through the Ages*, Jakarta, Government of the Capital City of Djakarta, 1970.
- MANGUNWIJAYA, Yusuf, *Wastu Citra: Pengantar ke Ilmu Budaya Bentuk Arsitektur, Sendi-Sendi Filsafatnya Beserta Contoh-Contoh Praktis*, Jakarta, Gramedia, 1988.
- DARLING, Diana, *Tanjung Sari: A Magical Door to Bali*, Singapore, Editions Didier Millet, 2012.
- PASSCHIER, Cor, “Mencari Arsitektur Indonesia yang Utama pada Masa Akbir Kolonial”, in *Tegang Bentang: Seratus Tahun Perspektif Arsitektural di Indonesia*, Jakarta, Gramedia Pustaka Utama, 2012, 26–39.
- SOPANDI, Setiadi, *Friedrich Silaban*, Jakarta, Gramedia Pustaka Utama, 2017.
- SUDRAJAT, Iwan, *A Study of Indonesian Architectural History*, unpublished PhD dissertation, Sydney, University of Sydney, 1991.



Ikmal Hisham Albakri, the National Mosque, Kuala Lumpur, Malaysia, 1965. © MASSA, 2007.

Nation Building and Modern Architecture in Malaysia

BY NOR HAYATI HUSSAIN

This paper explores the historical development of modern architecture in Malaysia, which is evident in the emerging architectural language; the efforts of the Federation of Malaya Society of Architects (later known as the *Pertubuhan Akitek* Malaysia); as well as the direction taken by the architectural practice in the country; all of which were driven by the prevailing political, economic as well as the socio-cultural attributes of the new nation, and the vision on Tunku Abdul Rahman, the first Prime Minister of the Federation of Malaya. The outcome of all these is an architecture that speaks of the nation's modern society's values and identity.

Nation Building and Modern Architecture in Malaysia

The period after the WWII saw Malaya attempting to cope with problems of independence, nationalism, language, Malayisation and education. The existing diversity established during the colonial periods had to be ended to produce a unified national system. The post-war reconstruction effort was aimed at unifying all the people in Malaya into a nation. Many buildings were constructed to meet public needs and, at the same time, express a national vision for the future, an indication that architecture was seen as a means to unite the people. One of the common strategies employed by a nation in its pursuit of a single national identity is the construction and dissemination of a certain "image" of the nation, which, in most cases, is evident in its sheer size and lasting impression. It would be constructed to "portray images referencing ethnic, cultural or religious belief in order to potentially evoke the nationalistic sentiments among the masses"¹. This notion is further strengthened by Amos Rapoport, who stated that architecture "occupies and shapes the physical social context as well as influencing the perceptual nature of human behavior"² thus, mirroring the spiritual and physical values, political ideology and technological achievement of a society³. Be it through its function or expression, architectural design carries messages that identify the building with the nation and society at a particular time. It is a common practice of the leaders of a nation, as well as politicians, to determine the direction of the nation's political agenda in suiting the aspiration of its people. As seen in many great civilizations, monuments and landmarks were constructed by their leaders, as an indication of the nation's achievements and progress. It would also serve as indicators of their performance while in power.

"Works of architecture become the major focus for political leaders to render their national ideologies. Architecture is the best tool as it metaphorically communicates to the masses through scale, form and other elements"⁴.

Before going further into the history of the architectural development of the country, it is important to understand the prevailing circumstances that influence it. In a relatively young nation, one of the most influential figures that steered the direction towards unity was its first Prime Minister, Tunku Abdul Rahman (1903-1990)⁵. As previously mentioned, the greatest challenge towards unity was to bring together the three main ethnic groups that were divided by the British colonists, and this division was strongly evident in various aspects such as cultural identity as well as language. Policies, legislation and the administration had to be molded to address the aspirations of all three groups, and to reflect the characteristics of democracy, a governance system that the leaders had collectively adopted, as highlighted by Cheah Boon Kheng⁶. Abdul Rahman strongly believed that unity, as well as every individual's commitment towards it, would guarantee liberty, security, prosperity and happiness in the future⁷. Though strong in its quest to become a united nation, its leaders as well as its people were challenged by a number of significant events that have left deep impacts and affected many aspects including architectural practice and the development of the country.

As early as the mid-1950s, the transformation of style from neo-classical architecture to modern architecture was obvious, particularly in major cities such as Kuala Lumpur, Singapore and Penang. Among significant buildings constructed in Kuala Lumpur are the Federal House [Iversen (1906-1976) and Van Sitteren (1904-1968), 1954], the British Council building [Kenneth Charles Duncan⁸ (1898-1983), 1956] and the Institute of Language and Literature Malaysia [Lee Yoon Thim (1905-1977), 1959]. The Federal House, an 8-story administrative building, contains offices with an adjoining block to house other public spaces; staircases, lift lobbies and an entrance hall that links the two blocks. The façade of the slab block is treated as a thin frame filled entirely with screens of metal-framed glass and green vitrolite panels, making the Federal House one of the earliest International Style buildings in Kuala Lumpur and

01 A stamp to commemorate the Independence Day with picture of Tunku Abdul Rahman. © National Museum, 1957.



02 Tunku Abdul Rahman waving to the public with a clinched finger on the eve of the Independence Day. © National Museum, 1957.



a construction that uses plastic as a building material. The British Council building was designed to house a cultural center, a library and the offices of the British Council. It was constructed in a reinforced concrete post-and-beam system with a unique granite decorative external wall finish. It won the RIBA Bronze Medal in 1959 for the integration of modern and indigenous architectural design. Designed in a true modernist style, with v-shaped struts featuring on the façade, the Institute of Malaysian Language and Literature, comprised a large block containing offices and a concert hall that is raised on columns to allow for a covered entrance and through driveway. The end wall of the concert hall features a colourful mosaic mural designed by Ismail Mustam (1944-) depicting various national themes.

The abstract and neutral qualities of modern architecture were favorable since they allowed for reinterpretation and disassociation with specific references to ethnicity and beliefs. As modern architecture emerged as a response to the era of industrialism, function and economy were the two main design considerations in order to serve people in a poor economy. In addition, the new architecture emphasized integrity and honesty, parallel to the peoples' aspiration for a democratic and righteous way of living. Modern architecture was to take heed of the development of society, and was meant to be responsive in its design. Modern architecture merged the philosophical, economic, historical and socio-cultural factors in constructing a new architectural design in parallel with contemporary architectural thought⁹.

The Federation of Malaya Society of Architects (FMSA) established in 1923 (later changed to *Pertubuhan Akitek Malaysia*, PAM, in 1967), representing the professionals in Malaya (later Malaysia in 1963), took the role of supervising and determining the direction of architectural development in the newly established nation. The Society's concerns and

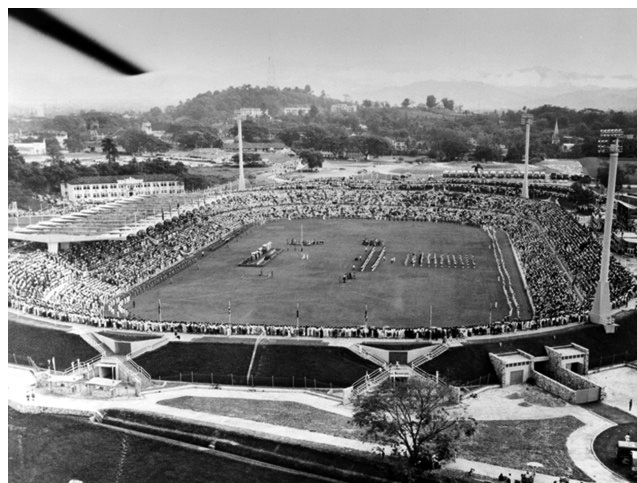
attempts in creating an architecture befitting the identity; values and meaning of Malaya were evidenced in their activities, discourses and publications, as well as the efforts in making the voice of local architects heard, and therefore, can be considered as a direct reflection of the local architects' thoughts and concerns. With the establishment of the Society, architects in Malaya were optimistic about the future of new construction in Malaya¹⁰. New urban centers were developed with large scale construction of new building typologies such as shops, schools, offices and mansions. Petaling Jaya (1952), one of the first satellite towns, was established with the aim of solving the problem of overcrowding in the city of Kuala Lumpur. The development was initiated by the Selangor State Government who entrusted the Kuala Lumpur District Office and Petaling Jaya Board to manage it. In late 1954, a statutory body, Petaling Jaya Authority, took over the responsibility and, by January 1, 1964, the State of Selangor gazetted a municipal board to govern the city. The development included residential areas, employment and recreation areas in a number of connected neighborhood units, as well as land set aside for commercial purposes, government buildings, public facilities and other uses. The city was planned to be a model for Malaya's future new town developments that featured better housing designs integrated with proper town planning organisation, modelled after similar developments in Britain.

The promising economic development in Malaya and Singapore after WWII was an attraction for foreign architects, particularly the British, to come and set up their practices. By the time Malaya gained its independence in 1957, the number had reduced, as some of these foreign architects had decided to leave the country, while the remaining stayed on and contributed to the development of the architecture for the new nation. At the same time, the first generation of Malayan architects, who graduated from

- 03 A local newspaper headline featured the independence celebration with picture of Tunku surrounded by the public. © National Museum, 1957.



- 04 Stanley E. Jewkes of PWD, Merdeka Stadium, Kuala Lumpur, Malaysia, 1957. The stadium was considered the first modern building of the new nation by UNESCO in 2008. © National Museum, 1957.



abroad, particularly Australia and the United Kingdom, came back after completing their studies.

Generally, there were three types of practices at the time: first, independent practices which were set up by local architects, namely, T. S. Leong, Lee Yoon Thim (Y. T. Lee) (1905–1977) and Fong Ying Leong; and the second were partnerships between local graduates such as Chung & Wong, Ho Kwong Yew (1903–1942)¹¹ & Sons, Alfred H. K. Wong (1930–) as well as the Malayan Architects Co-Partnership (MAC, 1960–1967). The firm MAC was one of the earliest local firms, founded by three Western educated architectural graduates; Lim Chong Keat a graduate of the University of Manchester (1930–), Chen Voon Fee (1931–2008) and William Lim Siew Wai (1932–), both graduated from the Architectural Association School of Architecture (AA) in London. The third type comprised practices which were set up through collaborations between foreign architects and locals such as Booty, Edwards and Partners (Est. in 1923, renamed as BEP in 1969), and Swan & Maclaren architects (1892–). With the return of the local practitioners from abroad, the engineering and architectural disciplines became professional¹². They brought with them knowledge and experience which they gained abroad such as standardization and modularization of materials, design and building processes, together with the application of modern products and systems.

According to Ken Yeang, a majority of architecture firms, expatriates and locals were very much influenced by contemporary architectural ideas prevailing in Europe at that time. In his opinion, they were “considerably influenced by contemporary British architecture: the work of the Smithsons, Lasdun (1914–2001), the brutalist movement in the 1950s and the hi-tech influences of the early 1960s”¹³. The architectural ideas were based on a strong sense of rationality as well as functionalism, as were advocated by the Modern Movement. Typically, the architectural features were simple, with no ornamentation and totally utilitari-

an. However, Ken Yeang also remarked that, though they were excited by opportunities to experiment, the architects in Malaya were fully aware of the need to respond to the tropical climate.

In preparation for the approaching independence celebrations and associated soccer match, the Public Works Department designed and built a stadium named Merdeka Stadium (Independence Stadium, 1957), as the largest stadium in Southeast Asia in the late 1950s. It was constructed using a reinforced concrete structure and was ready for the most historic event in Malaya: the Declaration of Independence on 31 August 1957. The stadium has a thin shell roof, and arches over the grandstand. Four prestressed concrete pylons supporting the corner floodlights were cast on site and lifted into position.

Another example of early modern architecture in Kuala Lumpur is the Kuala Lumpur International Airport [Kington Loo (1930–2003) of BEP, 1965] located in Subang. The airport features a hyperbolic paraboloid shell roof with mushroom columns which remind visitors of the country's lush tropical forest. In 1965, the airport had the longest runway in Southeast Asia at 3,474 meters. The design sits within a modern architectural language while responding well to Malaysia's tropical climate with open balconies and wide cantilevered roofs.

The post-independence period provided an opportunity for architects in Malaya to reflect on its past and envision the future. According to Ngiam, “there was a hive of activity to cater for the needs of a newly formed nation together with the demands of a growing commercial sector. It was an exceedingly busy period for the small community of architects”¹⁴. Chen Voon Fee remarked that the period after independence was conducive to experimentation: “The country had just gained independence, and the mood was one of optimism. We were on the threshold of a new life, and we felt that anything was possible”¹⁵.

To show the support of the society towards this national agenda and the appreciation of the architects who were in the process of developing an architectural identity, FMSA started a series of discourses to discuss the issue of national architecture in Malaya through its official publication, PETA. From 1955 to 1958, under the theme “Towards Malayan Architecture”, articles were written to provide historical information on the development of architecture and the articles’ intention was to educate members of the society as well as the public. PETA also featured an article by Julius Posener entitled “Architecture in Malaya: Impressions of a Newcomer”¹⁶, proposing a review of housing design based on those built before the war. He expressed his concern over the rapid development of Malayan architecture that was strongly influenced by the styles from the West and the East. He stressed that, with the intention to capture modernity, Malayan architects, at the time, had forgotten the traditional architecture which is well suited to the climate and culture of Malaya. Therefore, it was his sincerest hope for Malayan architects to produce architecture that suited the Malayan context whilst being aware of the variations that the 20th century would pose.

In its June 1960 edition, PETA published an article by Raymond Honey entitled “An Architecture for Malaya”, in which architects in Malaya were reminded to design for their times, nevertheless not to ignore their locality. He also emphasized the importance of the effort to search for a national architecture and that architects should not resort to mere decoration. In the endeavor of searching for a national identity in architecture, Raymond Honey stressed that it is a process which is “an evolving one and inevitably there must be a phase of experiment and inevitably the phase will produce some deviations”. The experiments, according to him, should take several contributing factors into consideration such as “cultural background, existing tradition in architecture, climate, locally produced material and craftsmanship, and architects’ own craft”¹⁷.

Designs of two major national projects demonstrated two different approaches undertaken by architects in Malaya at that time. The Parliament building (1963), a project by the Public Works Department, led by William Ivor Shipley (1915-1995) has given a reinterpretation of modern architectural language in a tropical setting. Ivor Shipley credited his experience “of maintaining and designing buildings” in Malaya on his sensitivity “to local conditions and attentiveness to climatic adaptations and cultural attenuations”¹⁸. On the other hand, the architect for the second project looked further into local traditions for inspiration. The National Museum (1963), designed by Ho Kok Hoe (1922-2015) and supervised by Mubin Sheppard (1905-1994) reflected an adaptation of traditional Malay architecture to modern design. The design, which is dubbed as “a revision of the local traditional palace symbolizing the nation’s sovereignty integrated with functionalism, provided a new solution on how to marry the past and the present”¹⁹.

In general, the trend and efforts made by architects towards an architecture with a national identity were noted by many. Posener stated that architecture in 1961 began “to

swerve towards the direction of nationalism in an attempt to promote a new identity for the new nation”²⁰. While Phillip Goad, in his observations of Malaysian architecture since 1957, highlighted that there are two aspects that were continuously pondered upon by Malaysians: architecture and identity, he praised the design of the Parliament House and the National Mosque (1965, by Ikmal Hisham Albakri, 1931-2006, a graduate of Sheffield University, 1956) as the best buildings which, to him, demonstrated “convincing statements of independence and of abstracted cultural reference”²¹. This is in line with the design intent of the National Mosque, as elaborated by Ikmal Hisham Albakri, one of its architects:

Our approach to the design of Masjid Negara was definitely a departure from the normally accepted perspective of adapting the traditional Islamic architecture style of Middle East. We set out with a conceptual approach based on three main objectives:

- a) It must reflect its function as an Islamic religious building of prayer.*
- b) There must also be a need for a building to have a national (Malayan) character or identity.*
- c) At the same time, it must be contemporary in appearance”²².*

Similarly, Maxwell Fry (1899-1987), in his article entitled “First Impressions of Kuala Lumpur”, in PETA, June 1962, commended the architecture of the Parliament House and its landscape. One of the most fascinating features for him was the de-centralized approach, which he considered as monumental yet modern. He felt “the setting was so perfect in its tropical character, that nothing should be allowed to impede its absolute consummation: for it is not often that the intentions of a government are so beautifully embodied in point not of architecture alone”²³, but also in landscape.

A competition for a great hall for the University of Malaya Kuala Lumpur was held in 1961 (The Chancellery Hall, 1966). The university needed a 300 seat hall mainly



05 Kingston Loo of BEP, Kuala Lumpur International Airport, Subang, Malaysia, 1965. With a hyperbolic paraboloid concrete roof and the longest runway in Southeast Asia at the time of its construction, the airport was as one of the most modern airports in the region in the 1960s. © National Archive, 1960s.

- 06 Kington Loo of BEP, *Dewan Tunku Canselor* [The Chancellery Hall], *Universiti Malaya*, Kuala Lumpur, Malaysia, 1966. The Chancellery Hall is one of the first modern buildings in the city with a strong resemblance to Le Corbusier's Brutalist architecture. © Nor Hayati Hussain, 2017.



- 07 An aerial view of Petaling Jaya, one of the modern satellite cities serving Kuala Lumpur developed in 1952. © National Archive, 1960s.

for the purposes of convocation and public events. The winner, a scheme by the BEP *Akitek*, demonstrated a strong brutalist architectural language with an exposed raw concrete finish and an expressive mass. However, it responds well to tropical climate with the use of deep overhangs, the *brise-soleil* and angled openings to reduce the amount of direct sunlight into the building. The arrangement of the *brise-soleil* has a great impact on the massing of the hall, as it tones down the scale of the building and acts as ornamentation to the façade of the hall. The design is a unique example of an adaptation of modern architectural idioms to the local context of climate and culture.

On 20th January 1967, FMSA ceased operation and was replaced by the *Pertubuhan Akitek Malaysia (PAM)*²⁴. Its first president was Ikmal Hisham Albakri, the first fully-qualified Malay architect in Malaya. The architectural aspiration in the 1960s was to develop an architecture for Malaya that was part of its own culture. Raymond Honey stated that the desire was not only to echo the independence from the former colonial power, but also for the new nation to develop “in ways that adequately reflect the various cultures represented in its citizens”²⁵. It is a fact that the evolution of a Malaysian culture, which inevitably mirrors the identity of Malaysia, is not a process that can happen within a specific period, but requires a prolonged assimilation and integration of the people which is comprised of different ethnic groups. The way of life of the people in Malaya in the 1960s changed dramatically as the political and economic conditions presented different sets of challenges.

FMSA has played a major role in promoting the efforts of reshaping the national architectural identity in Malaya and then Malaysia in the 1960s. In great part, this was done by providing the direction and organizing events towards reshaping the identity of Malaysian architecture. Modern design fits the modern Malaysian political and economic aspects as outcomes of a new society, a new era and new opportunities. Architecture became the visual symbol of the economic, political and socio-cultural development while, at the same time, provided the challenges and opportunities for architects in Malaysia to experiment within that brief period of time in the history of Malaysia.

Presently, many works of modern architecture of the late 1950s and 1960s in Malaysia are at risk due to urban redevelopment and modification for new uses. Some of them have been demolished and replaced for more lucrative gain. Due to their “young age”, unimposing and modest character, modern architecture is considered less attractive and of less significance, therefore many are unappreciated and left abandoned. Among those demolished and replaced are the first modern international Kuala Lumpur Airport at Subang (demolished in 1998) and the Pudu Jail, the first and only fully equipped penitentiary facilities in Kuala Lumpur in late 19th century (demolished in 2008). Urgent action is needed to create a comprehensive inventory and record of modern architecture in Malaysia to facilitate educational and scholarly opportunities, also to promote appreciation towards our modern architectural heritage. Governmental agencies, such as the Department of Heritage, and private

organisations, such as Badan Warisan (The Heritage of Malaysia Trust), and PAM could collaborate, lead and support the effort. As part of a city, modern architecture provides a reference to its history and character that identifies the place, nation and country.

Notes

- Some part of this paper was extracted from the author's PhD thesis *Thoughts on Malaysian Architecture Identity and Design Principles of Malaysian Architects Co-Partnership*, unpublished PhD thesis, Johor Bahru, Universiti Teknologi Malaysia, 2015.
- 1 Ernest Gellner, *Nations and Nationalism*, Ithaca, Cornell University Press, 1983.
- 2 Amos Rapoport, *The Meaning of the Built Environment: A Non-Verbal Communication Approach*, Tucson, University of Arizona Press, 1990.
- 3 Ikmal Hisham Albakri, “Persejarahan (Menyentuh Aspek-aspek Seperti Bahan, Teknik, Konsep dan Sosial)”, *Seminar Ke Arab Identiti Kebangsaan Dalam Senibina*, Kuala Lumpur, Kementerian Kebudayaan, Belia Dan Sukan, 1981, Lampiran 1.
- 4 Lawrence J. Vale, *Architecture, Power and National Identity*, New York, Routledge, 2008.
- 5 Tunku Abdul Rahman referred as Tunku from this point onwards
- 6 Cheah Boon Kheng (ed.), *The Challenge of Ethnicity Building a Nation in Malaysia*, Singapore, Marshall Cavendish Academy, 2004.
- 7 Excerpted from the speech made by Tunku on receiving the Freedom of the City of London, NST June 19 1968, as published in Zainul Ariffin Mohammed Isa (ed.), *Tunku in His Own Word*, Kuala Lumpur, New Straits Time, 2009.
- 8 Australian modernist architect known for his Western Australian architecture until 1970s. Studied at Perth Technical College (1917).
- 9 Walter Gropius, *The New Architecture and the Bauhaus*, USA, MIT, 1965.
- 10 Ngiam and Lillian Tay, *80 Years of Architecture in Malaysia*, Kuala Lumpur, Pertubuhan Akitek Malaysia, 2000.
- 11 Ho Kwong Yew was the first local-born Asian to become a registered architect in Singapore. His son, Ho Kok Hoe, designed the National Museum in Kuala Lumpur. Well known for Haw Par Villa (1937), Singapore.
- 12 Lai Chee Kien, *Building Merdeka Independence Architecture in Kuala Lumpur 1957-1966*, Malaysia, Petronas, 2007.
- 13 Ken Yeang, “A Review of Malaysian Architecture 1957-1987”, *MA*, 1987, 24.
- 14 Ngiam and Lillian Tay, *op. cit.*
- 15 Chen Voon Fee, “Houses: 1957 – 1987 (or 30 Years of Dreams fulfilled?)”, in Chan Chee Yoong (ed.), *Post-Merdeka Architecture Malaysia 1957-1987*, Kuala Lumpur, Pertubuhan Akitek Malaysia, 1987, 31.
- 16 Julius Posener, “Architecture in Malaya: Impressions of a newcomer, Towards a Malayan Architecture”, *PETA* 2 (1), 1957, 1-9.
- 17 Raymond Honey, “An Architecture for Malaya”, *PETA* 2 (2), 1960, 1-3.
- 18 Lai Chee Kien, *op. cit.*
- 19 Nor Hayati Hussain, *Muzium Negara MASSA Monographs*, Malaysia, Taylor's University, 2010.
- 20 Julius Posener, “Malaya”, in J. M. Richards (ed.), *New Buildings in the Commonwealth*, Ipswich, Architectural Press, 1961, 193-202.
- 21 Phillip Goad, *Culture at the Crossroads: recent Malaysian Architecture*, Kuala Lumpur, Pertubuhan Akitek Malaysia, 2007, 8-25.
- 22 Ikmal Hisham Albakri, “PAM Gold Medal Address (Part 1)”, *Majalah Akitek*, Vol.5, no. 2, P53, Mar/Apr 1993.
- 23 Maxwell Fry, “First Impressions of Kuala Lumpur”, *PETA*, vol. 4, no. 1, 1962.
- 24 Malayan Institute of Architects.
- 25 Raymond Honey, *op. cit.*

References

- ALBAKRI, Ikmal Hisham, “Persejarahan (Menyentuh Aspek-aspek Seperti Bahan, Teknik, Konsep dan Sosial)”, *Seminar Ke Arab Identiti Kebangsaan Dalam Senibina*, Kuala Lumpur, Kementerian Kebudayaan Belia Dan Sukan, 1981, Lampiran 1.
- FEE, Chen Voon, “Houses: 1957 – 1987 (or 30 Years of Dreams fulfilled?)”, in YOONG, Chan Chee (ed.), *Post-Merdeka Architecture Malaysia 1957-1987*, Kuala Lumpur, Pertubuhan Akitek Malaysia, 1987, 31.



FRY, Maxwell, "First Impressions of Kuala Lumpur", *PETA*, vol. 4, no. 1, 1962.

GELLNER, Ernest, *Nations and Nationalism*, Ithaca, Cornell University Press, 1983.

GROPIUS, Walter, *The New Architecture and the Bauhaus*, USA, MIT, 1965.

GOAD, Phillip, *Culture at the Crossroads: recent Malaysian Architecture*, Kuala Lumpur, Pertubuhan Aritek Malaysia, 2007, 8-25.

HONEY, Raymond, "An Architecture for Malaya", *PETA* 2 (2), 1960, 1-3.

HUSSAIN, Nor Hayati, *Muzium Negara* MASSA Monographs, Malaysia, Taylor's University, 2010.

ISA, Zainul Ariffin Mohammed (ed.), *Tunku in His Own Words*, Kuala Lumpur, New Straits Time, 2009.

KHENG, Cheah Boon (ed.), *The Challenge of Ethnicity Building a Nation in Malaysia*, Singapore, Marshall Cavendish Academy, 2004.

KIEN, Lai Chee, *Building Merdeka Independence Architecture in Kuala Lumpur 1957-1966*, Malaysia, Petronas, 2007.

NGIOM; TAY, Lillian, *80 Years of Architecture in Malaysia*, Kuala Lumpur, Pertubuhan Aritek Malaysia, 2000.

POSENER, Julius, "Malaya", in RICHARDS, J. M. (ed.), *New Buildings in the Commonwealth*, Ipswich, Architectural Press, 1961, 193-202.

RAPOPORT, Amos, *The Meaning of the Built Environment: A Non-Verbal Communication Approach*, Tucson, University of Arizona Press, 1990.

VALE, Lawrence J., *Architecture, Power and National Identity*, New York, Routledge, 2008.

YEANG, Ken, "A review of Malaysian Architecture 1957-1987", *MA*, 1987, 24.

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Raglan Squire, University of Medicine-1, Yangon, Myanmar, 1956. © Su Su, 2017.

Modern Movement in Myanmar

BY SU SU, SWE SWE AYE, WIN SHWIN*

This paper highlights the course of the development of modern architecture in Myanmar, a country with an original and vital architectural tradition. There are case studies of well-known foreign and Myanmar architects who dealt with the relationship of spatial, cultural and environmental factors of modern architecture. Some architectural masterpieces created during the second half of the 20th century between 1950 and 1970 in Yangon are presented in this article in order to highlight the inspiration, imagination and limitation of these pioneer architects. The main reason for selecting these case studies are not only because of the influences from the outside world occurred in the post-independence period, but they can reveal the intertwined logic of the nation's identity-building. They reveal the new consciousness of globalization as well as the development of regionalism.

Myriad of Forms from Colonial to Post-Independence Periods

Myanmar passed through various political stages with difficulties during both the pre-independence and post-independence periods. There were many trends, not only in national aspirations, but also in physical appearances. However, it could be said that "Myanmar architecture" is still in a stage of flux with a myriad of forms.

The British came in the years 1829, 1852 and 1885 and the Pan-Asiatic development of ancient Myanmar architecture was fused with Western architecture. The British began to build offices and public buildings in their Western style. Then, slowly, but persistently more scientific and functional Western architecture began to replace the traditional and symbolic Myanmar architecture.

In parallel, Oriental style buildings for Myanmar elites and immigrant merchants became a trend in major cities like Yangon, Mawlamyine, Patheingyi, Taunggyi, Thibaw and the last dynasty's capital city Mandalay.

Since then, there has been hardly any serious attempt either to revive or modernize the old Myanmar architecture. Our city hall, the Myoma High School building and the Yangon Railway station were attempts made by Myanmar national architects, with a memory of towers and taking features from ancient palaces.

When the age of independent Myanmar was reached, citizens regarded colonial buildings as being illustrative of colonialism and the glory of imperialism. They tended not to appreciate them even though they were valuable examples of architectural heritage.

The new government of independent Myanmar wanted to build up an inclusive state with a modern ideology and to establish rules which had many differences between social and political relations. The leaders of modern and independent Myanmar, with ambitions to lift their country onto the

world stage, tried to keep abreast of other countries. Their efforts can be clearly visible today through the buildings which were erected after 1948.

Before and during the development of the architectural program at the Yangon University, more than twenty Myanmar architects were educated abroad, mostly in India, the UK, and the US. In 1954, at Rangoon University, the architectural profession of independent Myanmar originated with the introduction of an architecture degree program. After years, the first five architect students graduated; U Tun Than, U Myint Thein, U Myo Myint Sein, U Tin Tun Khin and U Tin Maung Yin. During 1958-1964, the architecture education program was based at the Engineering College on Pyay Road. Starting from 1965, pioneer architects launched the architecture education program at the Department of Architecture of the newly established Rangoon Institute of Technology (currently known as the Yangon Technological University).

In order to select the best representative groups of modern buildings of the period, the following criteria are considered – diversity in building typologies, architectural concepts and principal architects (foreign or local, where and how they were trained), reflections of political and diplomatic relationships with other countries, representation of the country's prominent position in Southeast Asia at that time, and last but not least, a building with traces of Myanmar ornamentation.

Modern Architecture Buildings Designed by Raglan Squire

The first prime minister of independent Myanmar, U Nu (1907-1995), communicated with both the US and the Soviet Union. America supported new nations to repel domestic communist armed forces through the provision of large amounts of funds. Benefits obtained by the Myanmar government's policy can be seen in the development of

01 Raglan Squire, University of Medicine-1, Yangon, Myanmar, 1956.
© Su Su, 2017.



02 Raglan Squire, University of Medicine-1, Yangon, Myanmar, 1956.
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the nation. Some of the examples were the Technical High School (1956, currently known as Singapore – Myanmar Vocational Training Institute, SMVTI), and the Engineering College at Rangoon University (1956, currently University of Medicine I), and these reveal that engineering and technical education for the young generations was a top priority of the new government. Both the university and high school were designed by the British architect, Raglan Squire (1912–2004). He graduated in architecture from Blundell's School in Tiverton, Devon County, England. Raglan Squire was a British architect known for his building designs in London and many parts of the world. He was also one of the chief architects of the Royal Institute of British Architects (RIBA). In 1952, Raglan Squire was authorized to design the Engineering College at Rangoon University, (now University of Medicine-1), in Myanmar. It was his first major overseas project.

University of Medicine-1

Engineering College (currently used as University of Medicine-1, 1952–1956) is located on Pyay Road, in Yangon. Pioneer Myanmar architects knew Raglan Squire who built this building complex.

University of Medicine-1 is a high-rise complex. Initially, there was the main library building and an assembly hall. Nowadays, the assembly hall has been demolished and only the main library building remains. The 3-story building was constructed to the side of the main library building. It is just like Raglan Squire's Technical High School, which was a high cost building for poverty-stricken post-independence Myanmar. Raglan Squire had a large team of experienced architects and engineers from the UK and the total employees totaled more than 100 people as it was inflated due to widespread use of local staff. For this complex building, funds were received from the Colombo Plan¹ and were also indirectly supplied by the Americans.

The main library building rests perpendicular to the street and is able to be seen from far down Pyay Road. There is a large rectangular window on the street façade which is the only aperture on the front of the tall building. The library is constructed as a multi-story building with precast concrete, “coffin-shaped” fenestration panels.

The main building's entrance area is covered with a double-folded concrete canopy and the high-rise portion of the building is distinguished by its transparency which is a hallmark of progressive international post-war modern architecture. The whole of this building's façade is clad with precast box shaped glazed and concrete panels. These panels were applied in the form of louvers that allowed the gentle ventilation of the building. The multi-colored glass gave the effect of flashing lights.

Inside of the building are wall paintings and reliefs. The rest of the complex is made up of smaller building blocks which accommodated more lecture theaters and classrooms. Myanmar artists were personally authorized by Squire to plan various murals and bas-reliefs in the courtyard. Myanmar artists illustrated the enjoyable and optimistic reveling of traditional life in an independent Myanmar.

Raglan Squire regarded this project as the high point of his career. After 60 years, the University of Medicine-1 is still arrestingly modern. It still shows the spirit of a newly independent nation that placed a heavy emphasis on the education of its young.

Technical High School

The Technical High School (1952–1956) is located on 123 Nat Mauk Road to the north of Kandawgyi Lake, Bo Cho Ward. Firstly, it provided for high school students vocational training center for the use of modern machines and equipment. Later the building was used as a branch of the Radiation Protection Department. Today the school has become the Singapore-Myanmar Vocational Technical Institute (SMVTI), Singapore Prime Minister Lee Hsien Loong officially launched the school in Yangon on 9 June 2016.

Technical High School is a large low-rise complex that informs the moment in time when the potential of Burma seemed so bright in spite of its post-independence problems. The past of the school is not widely known but it still retains extraordinary value with great elegance and grace. The school also maintains a high standard of design, materials, and workmanship, and has high emotional and associative value. The building and its components like stairways, corridors, doors and windows, floor surfaces, ceilings and



decorations, as well as roof elements, epitomize post-independence architecture.

The entire school complex is mostly built with reinforced concrete. The street façade of the main building is a playful appearance with the semi-circular roof elements and curved entrance canopy. The main assembly hall is designed for 600 people and its timber parquet floor is made from local teak which is the best-protected commercial species in the world. The windows for the main building are designed with louvers and other windows in the complex with metal mesh. The ceilings in classrooms and workshops are intentionally set up with acoustic plates in order to absorb noise. Most of the interior walls are painted with distemper, only a few with oil-based paints and some concrete walls are left uncovered.

Other completed buildings in the school also retain a fairly simple and sober form. The two wings which contain the classrooms are raised on stilts which provide car parks and a public area underneath the western wing. This is to avoid the strong heat and the heavy rainfalls during the monsoon. The last wing towards the north was for vocational workshops, of which traces remain. At the back of the north side, there are two tall interconnected 8-story tower blocks which look like accommodation for boarding students. They were remarkably high for Yangon's architecture in the 1950s.

Inside the main compound, there are several large admirable mosaic murals. The artists describe an idyllic setting and optimistic views of traditional life in an independent Myanmar. Although the Technical High School has been discontinued, the artworks stay behind in good shape. Some Myanmar artists, U Kyi Winn, U Khin Maung, U Nann Waii, U Bagyi Aung Soe and U Thein Han, who were involved in this program are among Myanmar's most celebrated artists of the 20th century. The Myanmar government funded the school at a cost of 2.5 million US dollars.

Buildings at the Kabaaye Religious Complex for the Sixth Buddhist Synod

U Nu, the prime minister of the democratic parliament, also supported the Buddhist celebration of the sixth synod

at Kaba Aye Maha Pasona Guho (Great Cave) located in Mayangone Township. In the complex of Kaba Aye Maha Pasona man-made cave, the Tripitaka Library, known as Pitaka Taik (1956-1961), was designed by the American architect, Benjamin Polk (1916-2001). He is well known for his work in India and Nepal and his design for Pitaka Taik was full of highly symbolic elements based on Buddhist cosmology, and this Western modern architect expressed Buddhism through his skillful works. In this building, reinforced concrete served the spirit of modern Myanmar and it became the heir to the architectural practices of ancient Bagan which were buildings with bold architectural design that conveyed the bygone optimism of a young Buddhist nation.

Pitaka is derived from the Pali Tripitaka, which means Three Baskets of Wisdom. The Tripitaka library was one of U Nu's important pet projects. Prime Minister U Nu sought out Polk in Nepal to design the library for the Sixth Buddhist Synod. The building was completed only in 1961 because U Nu lost the Prime Minister's position to U Ne Win (1911-2002) on 26, September, 1958. In 1960, U Nu once again regained the Prime Ministership.

The Pitaka Taik stands with the Kaba Aye Pagoda on hilly terrain north of Yangon's downtown area. North of the library is the pagoda and cave. West of the library is a walled garden. A man-made lake provides the landscaping in front of the building.

There are four sectors in the ground plan which represent the quintessence of the Buddha's teachings. The number of three stories is fundamental to the three principles of existence in Buddhism: impermanence, suffering and insubstantiality (figure 05). The building contains three wings and three stories. The building was constructed with reinforced concrete which is easily curved. It is surrounded by encircling walls. The expression within the main building looks like the form of the Lotus. The interior of the building is formed like "the stamen and pistil of a flower". The curved stair seems quite extraordinary in describing gracefulness. The three wings include a library for Buddhist monks and a sacred museum. The teaching of Gautama or Buddha is conserved and studied. There is also accommodation for meditation in the central building. This building expresses the religious soul of the Buddha. The radial design reflects the traditional stupa of Madhya Pradesh, India and the cultural arch designs are inspired by the arches in Bagan.

Public Recreation Spaces

Many public recreation spaces emerged in this period, including cinemas, which was because Yangon was a film-mad city. Shae Saung and Nay Pyi Taw were well known for façades with early styles of the late 1950s and early 1960s. In Thailand and Cambodia, such façades in cinemas were also found as contemporary at that time. Shae Saung's and Nay Pyi Taw's cinemas are different from neo-classical façades of the Waziya Cinema. The emergence of numerous modern cinemas represented the socio-economic conditions at that time.



Gift from the Soviet Union

In 1955, relations between Myanmar and the Soviet Union had warmed considerably. After Nikita Khrushchev (1894-1971), first secretary of the Communist party of the Soviet Union, had visited Myanmar, he presented the government of Burma with 3 gifts. Two of these gifts were the Inye Lake Hotel (1958-1962) and the Rangoon Institute of Technology.

In the Soviet Union, workers were allocated to state-run vacation centers which were usually located near the sea or large lakes. The architects Vicktor Andreyev (1905-1988) and Kaleriya Kislova conveyed this idea and architectural concept several kilometers east of Yangon. They proposed the Inya Lake Hotel to be a resort of international standard. This hotel was designed to suit the local climate, especially main entry which was created as a large rainproof area. The building's top imitates the form of steamship funnel, referencing a cruise ship. So, it makes a peculiar impression with a playful maritime association along the lake shore.

A Hospital for the Tropics

In 1970, U Tun Than (1934-), who was among the first batch of architectural students at Yangon University after the country's independence, designed the Children's Hospital (1970-1978). This case study has been chosen because of its economical and flexible design. The façade modeling was designed to create shade and provide cooling. The structural honesty and stylistic unity of this building make it an ex-

emplary public building of that period. Although originally planned as a much bigger structure, the hospital had to be scaled down because of scarce funds and rampant inflation.

The Yangon Children's Hospital is a major public hospital in Yangon, Myanmar. It was established in 1960 under the Yangon General Hospital with a capacity of 60 beds. In 1962-1963, the hospital moved to Myenigon with the capacity of 80 beds, and in 1963, it moved again to its current 8.73-acre (3.53 ha) compound. The current main building was built in 1970 with Canadian aid, and opened in September 1978. Since then, a new 3-story annex building with 550 beds has been added.

Yangon Children's Hospital is a part of Myanmar's heritage in terms of history, architecture, engineering and culture. The Canadian Government provided funds for the hospital to Burma at heavily discounted prices in the 1960s. The façade modeling of this hospital is designed to create shade and shadow. Its structural design and stylistic unity make this an exemplary public building of that period, adapted to local conditions and the limited of availability of building materials. The use of color for this building is simple but provides a visual cooling effect. The hospital's architect, U Tun Than, designed the portico of this building by making a cantilever to create shade and to balance the proportion of the building. Visually, the building appears out of proportion but, by employing a red square and rectangle, he provides a scale to this building so that it appears longer and



this device creates a balance of proportion. The use of color is unifying and repetitive. The beautiful flower patterns in the façade are to provide good ventilation and lighting, but without heat, to the dark side which are corridors.

This building highlights that Myanmar architecture should focus on the country's harsh climate conditions first and foremost: extreme heat and heavy rainfalls are a constant issue. However, a cursory look at Yangon's construction sites shows rampant use of glass cladding. New power plants will no doubt be needed just to keep the air conditioning units humming.

U Tun Than is now in his eighties and has retired long ago. He was among the first batch of architecture students of Yangon University after the country's independence, graduating from the institution in 1958. Upon graduation, he worked for a few months at U Tin's office and spent several years working on public housing projects, for example in Yankin Township. In 1965, he received a tropical architecture degree from Architectural Association School of Architecture, London, and then spent a year as an assistant architect at the British Ministry of Health. When he returned to Burma in the late 1960s, he focused on building hospitals, with the Children's Hospital being his first major assignment. U Tun Than continued working for the Public Works Department for more than 20 years. In the 1980s, he started working at the construction corporation as a project manager for the Primary School Development program of

UNICEF. In 1991-1997, he worked as a consultant architect for several projects such as Lashio Hospital, Hakha Hospital, West Yangon Hospital (1971-1972), Children's Hospital (1973), Mingalardon Military Hospital, and the Radiology Departments at Taunggyi and Mandalay Hospitals.

Mausoleums of Modern Architecture

Modern mausoleums still have relevance and appeal. Martyrs' Mausoleum has been rebuilt since 1983 after the former building had been exploded by a North Korean agent. The authoritarian socialist government that ruled the country restricted public access to the mausoleum for more than 20 years. Nine curved, elegantly-shaped reinforced concrete ribs curved upwards from a horizontal bed in a vertical cantilever that expressed resting-in-peace.

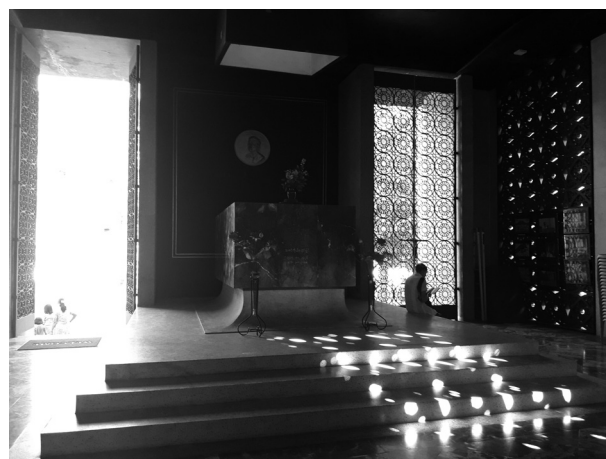
The Thakhin Kodaw Hmaing Mausoleum (1964-1966) built for Thakin Kodaw Hmaing (1876-1964), one of Myanmar's most famous poets during the pre-independence and post-independence periods, can also be seen as a modern building. Perforated traditional pattern walls are mainly used to allow light and air to enter. The tall doors and sky light are significant features of this building which still gives the interior a dim light.

The architect of the mausoleum is U Kyaw Min (1933-1999) and the artists are U Ohn Lwin and U Paw Oo Thett. Hmaing's mausoleum was built in 1966, two years after his death. The mausoleum is located in front of the

06 Viktor Andreyev and Kaleriya Kislova, Inye Lake Hotel, Yangon, Myanmar, 1955. © Su Su, 2017.



07 U Kyaw Min, Thakshin Kodaw Hmaing Mausoleum, Yangon, Myanmar, 1966. © Su Su, 2017.



08 U Kyaw Min, Thakshin Kodaw Hmaing Mausoleum, Yangon, Myanmar, 1966. © Su Su, 2017.

Shwe Dagon Pagoda. The tomb is a strikingly simple and square-shaped concrete building which was recently renovated. On its main façade are the four emblems associated with the life of Thakhin Kodaw Hmaing, the winner of “Stalin Peace Prize”. The four emblems are the hammer and sickle, a book, a peacock (Myanmar’s national symbol) and a peace dove.

U Kyaw Min studied at Yangon University’s Engineering College and was offered a scholarship to study in the US, at the Massachusetts Institute of Technology, where he was awarded his engineering degree in 1957. In the early 1960s, he taught students as a lecturer and built up his private practice in Myanmar. Because of his expertise and understated style, many business people engaged U Kyaw Min to build residential projects. His designs were able to add local cultural design elements in his modern architecture, as seen in the mausoleum’s subtle ornamentation. His mausoleum was adjacent to the mausoleum of Daw Khin Kyi (1912-1988), the honorable wife of late General Aung San (1915-1947).

The State of the Art on Documentation, Regulations and Institutions Embracing Modern Architecture in Myanmar

Only a very few modern architecture buildings (the ones which have gone through adaptive reuse or been recognized by Architecture Departments as being worthy of preparing measured drawings) have been documented.

Milestones of modern architecture are to be safeguarded through listings according to the definition of “heritage places and properties” in the *Historical Building Chapter of TWGII Architecture and Urban Design, Myanmar National Building Code*:

Any habitable building, site, place, location, district or collection of structures, and their associated sites, deemed of importance to the history, architecture or cultural landscape of an area either listed by an appropriate local, regional or union level jurisdiction or with cultural significance. This shall include habitable historical buildings or properties on, or determined by city or county historical buildings lists, inventories or surveys of historical or architecturally significant sites, places or landmarks, identified and determined by the relevant local authorities, communities and concerned organizations to be included.

However, the official listing of modern heritage (along with other heritage categories) in Yangon, Mandalay and other cities hasn’t been done to prevent them from demolition. Although, very significant modern public buildings are currently not in danger of being demolished, the future of some public buildings and those in private hands is still not certain.

The Green Building Committee (GBC) will also need to provide strategic advice and recommendations through shared services for Green buildings. Buildings of Modern Movement in cities of Myanmar are in this category as they are well-matched with the common objective of the Green Building Committee which is to promote the design of buildings in order to reduce the overall impact of the built environment on human health and the natural environment

by efficiently using energy, water, and other resources, protecting occupants’ health and improving employee productivity and reducing waste, pollution and environmental degradation, etc.

Conclusions

A clear reflection on the short period of Myanmar’s Modern Movement can be obtained by examining some architects’ works. However, it has yet to be investigated how these case studies influenced newer generations of architectural practices in Myanmar. Further research is required into how the general public perceived the meaning of these modern buildings, rather than just the bare historical facts. The buildings are the evidence of the past generation confronting post-independence challenges such as building the nation, memorializing heroes, popularizing culture, promoting modern medicine and the higher education system. These buildings still express the evolving questions of the country’s culture, identity and integrity of a fast-approaching future.

Notes

- 1 The Colombo Plan was established in 1950 and originally comprised seven Commonwealth nations: Australia, Britain, Canada, Ceylon (Sri Lanka), India, New Zealand and Pakistan.

References

Ben Bansal: <http://www.benbansal.me>
 The Telegraph: <http://www.telegraph.co.uk>
 Myanmar Engineer: <http://www.myanmarengineer.org>
 Yangon Architecture: <http://yangonarchitecture.tumblr.com>
 BANSAL, Ben, FOX, Elliott, OKA, Manuel, *Architectural Guide Yangon*, Berlin, DOM Publishers, 2015.

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Carlos Arguelles, Philam Life Building, Manila, Philippines, 1961.

Rising from of the Ashes: Post-war Philippines Architecture

BY GERARD LICO

The 1945 battle for liberation witnessed the massive decimation of Manila's urban built-heritage and the irreplaceable treasures of colonial architecture. Despite the seemingly impossible task to resuscitate war-ravaged Manila, it rose again. Out of the ashes, modernism provided the opportunity to craft a new architecture for a newly independent nation. Modernism emerged as the period's architectural symbol of survival and optimism. In a post-colonial cultural milieu, Filipino architects pursued the iconography of national mythology channeled through the pure surfaces and unadorned geometries of modern architecture. They found in modernism a convenient aesthetic modus to denounce the colonial vestiges embodied in the infrastructure of American neo-classicism in pre-war Manila and sought to create new-built environments that conveyed emancipation from the colonial past and celebrate the vernacular forms processed through modernist geometric simplification. Modernism, therefore, was a logical choice, for it provided a progressive image. The Philippines post-independence architecture endeavored to dispense an image that stimulated a national spirit, inspired patriotism, and invoked faith in the unknown future of the national imagination.

At the end of the Pacific War in 1945, Manila lay in ruin. The city's built-heritage and once grand edifices of Spanish and American colonial architecture were reduced to rubble by indiscriminate bombardment to liberate the city. American bombs turned Manila into the second most devastated Allied city in the world. Yet war-torn Manila rose again. Out of the ashes, Filipinos moved on to rebuild their lives and would be gripped by nostalgia for nation, a sense of mourning for the things lost during the war, but they found in modernism the foundation on which to erect a new nation.

The widespread dissemination of modernism in the Philippines happened after the Pacific War and coincided with post-war reconstruction and the birth of the Filipino nation. Despite the shaken state of the country in the aftermath of WWII, on July 4, 1946, the Philippine Islands became the independent Republic of the Philippines. Soon after, the new nation-state found in modern architecture and modernism a way to divorce itself from the vestiges of colonization and to create new-built environments that conveyed freedom from the colonial past. Modernism was found in audacious explorations of new architectural forms in the post-war creative imagination. Modernism possessed a symbolic allure of a new architecture for rebuilding a brave new world ravaged by war. Modern architecture, in the midst of post-war recuperation and the advent of national independence, provided the appropriate architectural image that represented growth, progress, advancement and decolonization.

Though modern architecture had a reputation of being arid, machine-like, and impersonal, it was considered by many as positive, rational and objective, and they championed its ability to express a new social order. The modern fervour fu-

elled the building of a new Capitol Complex. The adaptation of modern architecture as the official architectural style was not arbitrary but a strategic choice for it possessed a symbolic appeal of technological advancement, economic prosperity and cultural progress that an emerging nation would aspire to. Emblematically, modernism conferred materiality to the Filipino national imagination, circulating in the potent visual politics of nation building.

The US War Damage Rehabilitation Fund was also instrumental in resurrecting Manila's pre-war neoclassical splendor. The Manila City Hall (1941), Post Office building (1931), Agriculture and Finance buildings (1940), Legislative building (1926), and a group of buildings of the University of the Philippines (1920-30s) in Manila were rebuilt approximating their original plans.

As the war damage claims reached their respective beneficiaries, a construction boom followed suit. The architects, after a long inactive practice, dusted off their drawing boards and joined the reconstruction euphoria. As they built to address the widespread housing shortage and infrastructure deficit, they had to abandon the motifs and ornament of styles of the pre-war era to reduce the construction cost and efficiently complete the structure in the shortest possible time. Post-war austerity meant straightforward and no-nonsense architectural forms which modernism readily supplied. "Form follows function" was the new doctrine proclaimed by the "third generation" Filipino architects, namely, Jose Maria Zaragoza (1912-1994), Cesar Concio (1907-2003), Angel Nakpil (1914-1980), Alfredo Luz (1904-1980), Otillo Arellano (1916-1981), Felipe Mendoza (1917-2000), Gabriel Formoso (1915-1996) and Carlos Arguelles

01 Caesar Concio, University of the Philippines Liberal Arts Building, Quezon City, Philippines, 1950.



02 Federico Ilustre, Model of the proposed National Parliament, Quezon City, Philippines, 1957.



(1917-2008). For them, modernism was the most appropriate architecture for crafting an environment and recuperating lives after the devastation and trauma of war.

Modern architecture's simplified geometries were in accordance with demands for honesty expressed in materials, structure and form; maneuver in restraint rather than indulgence, valuing simplicity over complexity. To modern architects, buildings should be shaped purely by light, structure, and massing and not be disguised or concealed behind ornamentation. The utilization of reinforced concrete, steel, and glass, the predominance of cubic forms, geometric shapes, Cartesian grids, and most of all the absence of all forms of applied decoration were the essential features of modern architecture. The *brise-soleil* or sun shade, glass walls, pierced screen and thin concrete shells were staple architectural elements of the 1950s and 1960s.

The Philippine government's use of modernism to sustain its patrimony was pursued immediately after it declared its independence. The faith in modernism fuelled the building of a new and modern Capitol Complex. As early as 1947, the Philippine government constituted a group of architects and engineers on a mission to study the modern capitals of the United States and Latin America and on their return, they were to formulate the master plan for the modern capital city and the campus of the state university. The mission acquainted the Filipino delegation with South American modernism, particularly the works of Oscar Niemeyer (1907-2012). The impact of this exposure among the members of the mission was so immense that on their return they would design buildings that closely resembled the refereed modern structures from South America. For one, Cesar Concio, a member of the delegation who later worked as the university architect of the University of the Philippines, borrowed Oscar Niemeyer's massing and sun shades for his twin Liberal Arts Building (1950) (figure 01) and the Engineering Building and his saddle-shaped Church of the Risen Lord (1954) was imitative of Oscar Niemeyer's St. Francis Church (1943) in Pampulha, Brazil.

In fulfilment of Philippine Commonwealth President Manuel Quezon's (1878-1944) pre-war urban vision of establishing a new modern metropolis and national capitol

for the new commonwealth reminiscent of Washington DC in 1939, the government declared, in 1948, Quezon City as the Philippine capital and created the Capital City Planning Commission to prepare its master plan. In 1949, the commission, chaired by Juan Arellano (1888-1960), submitted the master plan which provided a detailed urban framework for the creation of the capital city. Using the urban scheme of Washington, the plan endorsed a government center situated on a high plateau, called Constitution Hill, composed of imposing edifices: the House of Congress composed of the Senate Wing and the House of Representative Wing linked by a central tower containing the Memorial and the Library of Congress; the Hall of Brotherhood, an assembly hall for important international meetings and conventions; and the Palace of the Chief Executive.

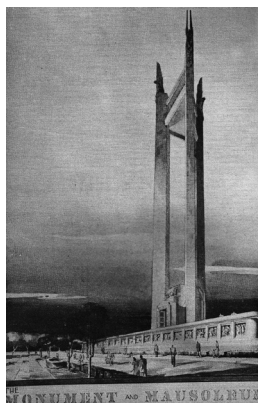
The ambitious capital remained on paper until 1955 when the government finalized its plan to relocate all its offices from Manila to Quezon City. In May 1956, the proposed design and scale model of the Capitol Complex on Constitution Hill were presented to the public. These were prepared by Federico S. Ilustre (1912-1989), the consulting architect of the Bureau of Public Works. Ilustre's Brasilia-inspired design stirred much controversy. Consciously propelled by concepts of national identity, his design combined unrelated shapes and flamboyant forms; used building height for excessive monumental effect; and toyed with Philippine stylistic motifs (figure 02). Despite the outrage and criticism, preliminary construction work commenced in 1958 but was later abandoned as the funds dwindled in 1960. What remained of the project was an 11-story structural steel frame, which was used for the structure of the *Batasang Pambansa* [National Parliament] decades later when President Ferdinand Marcos (1917-1989) revived the plans for the Parliamentary Complex.

This, however, did not stop government architects from dreaming; and moving on to design government edifices in the mold of some tropicalized South American modern architecture production. The Division of Architecture had produced these kinds of structures for the bureaucracy. These were not just modern buildings of efficient governance, but a medium to stimulate nationalistic spirit, inspire

03 Federico Ilustre, Government Service Insurance System (GSIS) Building, Pasay City, Philippines, 1957.



04 Federico Ilustre, Quezon Memorial Monument, Quezon City, Philippines, 1950-1978.



patriotism, and evoke technological progress as well. The pinnacle of this fixation with South American modern production was the unbuilt plan for the 1967 Department of Education Complex which featured elements resonating with Oscar Niemeyer's Brasilia – such as the rectangular block suspended by sculptural stilts, fenestrations of delicate vertical louvers, and the iconic domical thin-shell structure.

The need for new government building was greatly felt in the 1950s as old government edifices could no longer accommodate the state's burgeoning bureaucracy and expanded services. The building program of the new Republic grew beyond the capacity of the Division of Architecture of the Bureau of Public Works to handle, necessitating the revision of its policies in 1952 which allowed private practitioners to engage in government projects. The change in policy resulted in a diversity of architectural expressions and design ideologies to shape modern government edifices.

The Government Service Insurance System (GSIS) Building (figure 03) in Aroceros, Manila, by Federico Ilustre, completed in 1957, belonged to the first batch of the new government buildings programed for the New Republic. As a transitional style for government architecture, the building demonstrated the shift from classical to modern. It had an imposing façade with soaring pillars that were fluted but without bases or capitals that evoked classical proportions but its volumes were highly simplified in a modern manner. The Veterans Memorial Building, completed in the same year, was decidedly modern with its semi-circular convex façade flanked by two massive vertical walls. The curved façade was complemented by a dome structure over the circular vestibule supported by slender *pilotis*. Transparent plastic bubble skylights punctured the dome to provide natural daylight.

The old capitol site in Diliman, Quezon City, in the 1950s played host to several government agencies that boast of hard-edge modern architecture. These were the Motor Vehicles Office, People's Homesite and Housing Corporation, Department of Agriculture and Natural Resources, and the Agricultural Extension Buildings. The centerpiece of this elliptical core is the 66-meter high Art Deco Quezon Memorial Monument (1950-1978) (figure 04), by Federico

Ilustre, composed of 3 pylons topped by female winged figures representing 3 major islands of the Philippines – Luzon, Visayas, and Mindanao.

The National Library (1961), designed by a consortium of architects known as Hexagon Architects, was a plain rectangular prism, whose façade was almost wholly covered by grids of vertical slats except at the center where planes of curtain wall rendered transparency to the building. The planes of glass were further defined by towering and slender *pieds droits*, dividing it into 5 vertical sections.

Ruperto Gaité's Rizal Provincial Capitol (1962) was one of the important post-war capitol edifices that deviated from *Beaux Arts* formalism. The modern capitol was remarkable for the diamond-shaped concrete supports extracted from Oscar Niemeyer's Presidential Palace in Brasilia (1960). The Rizal Capitol was replete with wrap-around louvers and sun-baffles. The extensive use of concrete translated into a saw-tooth folded plate roof and abstracted and repetitive façade details. In the Quezon City Assembly Hall, Gaité created an illusion of weightlessness as a massive elongated octagonal structure appeared to be lifted by two tapering stilts.

Juan F. Nakpil (1899-1986) and Sons' Social Security System Building (1965) was formed by a low podium and a 60-meter slab tower clad in a curtain wall. The building could be accessed at the podium level through an open ramp protected by a folded plate canopy. The tall slab tower was serviced by an external spine housing the elevators. Continuous bands of aluminum louvers shielded the façade of the slab block while precast concrete diffusers, placed on East and West sides, were designed to give a strong pattern of light and shadow.

Mid-century modern aesthetics were also influenced by new materials and scientific events, particularly space exploration, which fuelled much faith in technology and the future. Logically, modern architectural design feverishly looked towards the infinity of the skies for inspiration. This so-called "space age" of the 1950s had since been translated into a visual language of long, lean horizontal lines suggesting airplane wings, soaring upright structures and parabolic arches that direct the eye to the sky, and sharply contrasted angles that express speed.



Innovations in building materials, including reinforced concrete, plastics, and steel, made it possible for architects to manipulate materials to the point where buildings became sculptures. Complex mathematical computations and advanced engineering techniques allowed new shapes and structural configurations to be performed in thin concrete shells, concrete folded plates and space frames structures. Soft modernism, as the name implied, experimented with the sculptural potential of concrete's plasticity to come up with soft and organic forms with the use of thin-shell technology. The typical geometrical forms generated by thin shell engineering were the hyperbolic paraboloid (Church of the Risen Lord) and spherical dome (Church of the Holy Sacrifice).

In the Philippines, the first venture into thin-shell experimentation yielded the Church of the Holy Sacrifice (1955) (figure 05).

This was a revolutionary structure heralded by national artist Leandro Locsin (1928-1994) and engineers Alfredo Junio and David Consunji. Amazingly, the structure was molded in its entirety using mere plywood forms and a continuous 18-hour process of concrete pouring. The main concrete shell was 3½ inches (30 mm) thick and was supported by a 4-inch (100 mm) thick ring beam that in turn was supported by 32 curved reinforced columns. The composition seemed to defy gravity with its visually buoyant spherical dome and imagery reminiscent of a flying saucer.

The facility of the Philippine Atomic Research Center (1963), designed by Cresenciano de Castro (1927-1992), comprised an arc-shaped nuclear laboratory building and an egg-shaped reactor building. The reactor building was an air-tight concrete shell structure. East of the reactor building and connected by entrance tunnel was a semi-circular administration and auxiliary laboratory roofed by a serrated folded plate structure.

The Araneta Coliseum (1957) by Dominador Lugtu (figure 06) reigned until 1963 as the world's largest domed coliseum. It was constructed of a reinforced concrete cylinder with an aluminum dome structure. The base of the coliseum and its tiers were cast concrete. The dome was made of steel with 48 main ribs meeting in a compres-

sion ring that floated high above the floor. The dome was suspended 10 stories above the arena floor, which itself was a half-acre (0.2 ha) in area.

Folded plate was a roof structure whose strength and stiffness was derived from a pleated or folded geometry. It was a special class of shell structure formed by joining flat, thin slabs along their edges so as to create a three-dimensional structure.

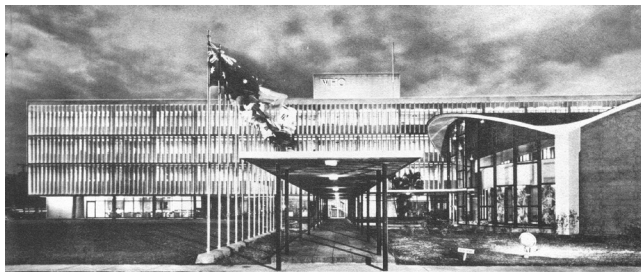
The University of the Philippines International Center (1968), designed by Victor Tiotuyco and Cesar Caliwara, was renowned for its lobby building, built with a large-span folded plate, which rests on four radiating beams rising at acute angle from a triangular ornamental pool.

National artist Juan Nakpil introduced the use of folded plate as a structural shell in the 1960s. The profusion of folded plate as a structural plate spurred the utilization of diamond shaped supports on the exterior. Examples of this new style were the now-demolished Rizal Theater (1960), Rufino Building (1965), and the Commercial Bank and Trust Building (1960). Rizal Theater, a building revived from his still-born National Theater project in Luneta, was distinguished by its slightly convex façade with 14 pilasters tapering downwards and a cantilevered canopy. The windows were deliberately made dark to give an illusion of lightness, making the façade seeming to be afloat.

Space age aesthetics also made their presence felt in Jose Maria Zaragoza's cantilevered circular folded plate roof that resembled an *anahaw* [*palma brava*] leaf for the Union Church; in Leandro Locsin's biomorphic billowing roofs for the Church of St. Andrews (1968); in Marcos de Guzman's saucer-shaped residence of Artemio Reyes (1959); and in the Mañosa Brothers' futurist residence of Ignacio Arroyo (1960s).

The use of crystalline surfaces for modern edifices was best captured in Angel Nakpil's National Press Club Building (1955), in which a cylindrical glass tower became the focus of this Bauhaus volumetric manipulation.

The modern places of worship explored new and dynamic forms mostly in concrete. The Aglipayan Cathedral of the Holy Child (1969) possessed a suspended block with sloping trapezoidal walls and textured with horizontal grooves



throughout. The sides of the suspended block sloped beyond the walls of the lower block to form wide overhangs.

The omnipresent *kapilyas* [chapels] of the *Iglesia ni Cristo* (INC) were mid-20th century interpretations of Gothic architecture, where pointed arches, the triangular arch, towers and spires, and wall tracery were rendered in austere concrete. The genesis of this *Iglesia ni Cristo* archetype could be traced to the congregation's first concrete neogothic chapel. Its architect, Rufino Antonio, created a castle-like building layered with precast tracery and rosette ornaments, lofty spires and lancet arched windows. Today's iconic *kapilyas* is based on the template crafted by Carlos-Santos Viola (1912-1994) in the 1950s. This template is characterized by a predominance of triangular or Tudor arches, flanked by tall and slender towers which taper and terminate to a sharp spire. Decorative motifs such as rosettes and interlocking trapezoids provide textural appeal to the smooth and crisp external planes.

The expansive use of glass for curtain walls posed a problem of heat build-up. Sun baffles and pierced screens were simple external devices employed to tropicalize and modulate the climate-insensitive glass volumes and rectilinear planes of the International Style.

The Engineering and Architecture Building of the University of Santo Tomas (1952), designed by Julio Victor Rocha, initiated the successful use of the *brise-soleil*. This launched a wave of imitation and a craze for the sun shade, which some architects use indiscriminately without knowledge of proper solar orientation, making the devise a useless and expensive fashion appliqué. But the more judicious application of these sun shading devices resulted in magnificent structures such as Alfredo Luz's World Health Organization Building (1958) (figure 07) and his *Ermita* Center (1967); Cesar Concio's Insular Life Building (1963) (figure 10); and Pablo Antonio's (1901-1975) May Building (1959).

The use of the sun shades remains unsurpassed in the 7-story *Philam* Life Building (essay cover), designed by Carlos Arguelles in 1961. Arguelles utilized wrap-around horizontal aluminum sun baffles supported by pipes and



mullions. This horizontal definition negates the bulk and height of the building, allowing it to blend with the surroundings.

Jose Maria Zaragoza's 14-storey *Meralco* Building (1968) (figure 08) was articulated by the series of tapering mullions. The vertical sun shade with a slight curvature was conceived not only for decorative purposes but also for the deflection of light and sound. The ends of the building were emphasized by two massive marble-surfaced walls splayed at an angle.

As a sort of improvement over the *brise-soleil*, the pierced screen was extensively adopted in Manila during the 1960s. The pierced screen functioned mainly as a diffuser of light and doubled as a decorative layer for the exterior. It is fabricated from perforated concrete or ceramic blocks, pre-cast concrete, or aluminum bars with various ornamental punctures. The US Embassy Building, designed by American architect Alfred L. Aydelott (1916-2008), was one of the most noteworthy applications of the pierced screen in Manila. A cubist carabao head motif was employed in the concrete pierced screen of the Department of Agriculture Building in support of nativist impulse.

Following the oil crisis of 1973, architects began to realize the failures of these modern buildings in the tropical climate. The International Style was typified by the cubic glass tower that relied heavily on the technology of artificial ventilation and air-conditioning to provide comfortable internal conditions. These sleek crystalline towers operated on high energy consumption. As such, Filipino architects were compelled to backtrack and re-evaluate vernacular building traditions as sources of energy efficient design, which in effect gave rise to a modernist strand known as tropical regionalism.

Exponents of tropical regionalist architecture advocated the philosophy of energy efficient buildings by pleading for designs that were responsive to both local climate and culture. The products of such undertakings were the Mañosa Brothers' San Miguel Corporation Headquarters Building (1982) (figure 09), Felipe Mendoza's Development Academy of the Philippines (1982), Leandro Locsin's Benguet Corpo-

09 Mañosa Brothers, San Miguel Corporation Headquarters Building, Pasig, Philippines, 1982.



10 Cesar Concio, Insular Life Building, Makati, Philippines, 1963.



ration Building (1983), and Antonio Sindiong's Ritz Towers (1995). The San Miguel Corporation Headquarters Building is a terraced prism that alludes to the verdant rice terraces. The deep and angled glass walls quote the vernacular passive cooling technology of *tukod* windows. Similarly, the Benguet Corporation Building evokes the rugged grandeur of stone-walled rice terraces of the Cordilleras. The design concepts for the GSIS Building, which aimed to reduce the energy consumption by half, called for scientific deductions for the spacing and angles of the *brise-soleil* components and terraced building envelope. The Asian Development Bank Building (1986) is an outstanding example of tropical architecture using built-in structural climatic control devices – such as aluminum grillage, louvers, perforated barriers, and deeply recessed windows.

In the 1950s the height of buildings was limited by law to 30 meters. With the amendment of Manila Ordinance no. 4131, a high-rise fever swept and redefined Manila's skyline. Angel Nakpil's *Picache* Building (1962), considered as the first skyscraper in the Philippines, reached 12-stories high. Cesar Concio's Insular Life Building (figure 10) was the first office building to surpass the old 30-meter height restriction, ushering the vertical trend in the city of Makati.

The marble-surfaced rectangular tower block of the Ramon Magsaysay Center (1967), designed by Alfredo Luz, was supported by 12 travertine-clad reinforced concrete columns like tree trunks flaring out. In reality, the main support was a cast-in-place concrete sheer wall core over deeply embedded concrete piles.

Cresenciano De Castro introduced the use of an exposed aggregate finish. This eliminated the need to paint the exteriors. An excellent example of this brutalist tendency was the Asian Development Bank Building in Roxas Boulevard. The same roughly textured finish was employed in the buildings within the bay front area like the Cultural Center of the Philippine Building (1969) and the Central Bank of the Philippines (1972) with an aggregate mixture of crushed shells derived directly from the site.

To address the widespread homelessness, subdivision development came into full-scale. These planned satellite

communities were patterned after American suburbia, which encouraged an automobile culture. New roads and a transportation system were created to efficiently link these suburban communities to the urban core.

Through the People's Homesite and Housing Corporation (1949) (present-day National Housing Authority), new suburban communities were developed in Quezon City. These projects offered three types of low-cost concrete bungalows: the 3-story row type dwelling, the single-detached type house, and the twin or duplex type. The bungalow thus became the convenient model for post-war housing.

For middle income households, residential units in Philamlife Homes (1955), one of the best-planned subdivisions at the time, were designed on a modular system with 24 schemes for a bungalow derived from a single typical floor plan designed by Argüelles.

In upscale subdivisions established by the real estate companies of Ayala and Ortigas, homes were designed, not by the company architect, but by an architect commissioned by the individual homeowner. This allowed a great variety of domestic architecture to develop – bungalow, split-level, and one-and-a-half story houses. The sprawling Californian bungalow with the lanai and a two-car garage became the 1950s symbol of domestic affluence. These houses incorporated the most up-to-date features such as a single pitch roof, split level roofs and floors, slabs, wall screens, pierced screens, wide overhangs and, most of all, the car porch to accommodate the machine for suburban mobility.

Tall and multi-storied apartments played a new role in providing Filipinos with modern housing. Monterrey Apartments (1957) and Carmen Apartments (1958) epitomized the modern high-rise apartments of the period. Carlos Argüelles' Carmen Apartments was unique for its curved plan which posed an elegant contrast to the surrounding structures in the vicinity. All the floors and units had wide cantilevered balconies. Steel railings and large windows combined with these floating slabs to endow the building with lightness and transparency counteracting the bulk of the reinforced concrete core. Leandro Locsin's Monterrey Apartments was a structure of extreme transparency. Strips

11 Imelda Marcos at the Cultural Center of the Philippines, Manila, Philippines, 1978.



12 Francisco Mañosa, Coconut Palace, Manila, Philippines, 1980.



of glazing were wrapped around the building while one wall of the central stairwell was encased wholly in glass. Front balconies were treated with aluminum louvered eaves while the rear balconies were provided with louvered railings. Continuous floor slabs or balconies appeared suspended in space.

The global proliferation of the International Style resulted in serial monotony of the nondescript modernist box, obliterating many traditional built environments. By the middle of the 1960s, young architects and designers began to reappraise the country's rich architectural and cultural heritage as a source of design inspiration. The need to express a local identity in built-forms suddenly became the preoccupation of many in the practice of architecture in the mid-1960s.

Local architects adapted Maranaw and Southern Philippine motifs, exploiting *vinta* colors and roof silhouettes resonating ambiguous Malayan figuration. These were transcribed in works like Mañosa Brothers' *Sulo* Hotel (1962) and Francisco Fajardo's Max's Restaurant (1960) and *Luau* Restaurant (1960) which exaggerated the vernacular sloping roofs. Mañosa Brothers' Esso Gas Stations (1962) transcribed the *naga* pattern in reinforced concrete. Felipe Mendoza's Holiday Hill's Golf Club House (1963) liberally applied the *naga*'s head in ornately carved beam ends. Otillo Arellano's FILOIL Service Stations employed the *Maranao Panolong* [ornate beam ends] as decorative accents.

Gabriel Formoso's Valley Golf Club (1960), when seen from a bird's eye view, assumed a floor plan suggesting the form of a golf ball resting on a tee. Although with such literal frankness, the structure at street level evoked the grace of the vernacular sloping roof.

This vernacular tendency extended beyond Philippine shores as manifested by a number of Philippine embassies designed by Federico Ilustre in the 1960s. These embassies were grafted with traditional rooflines such as those in India, Jeddah, and Brazil.

In a similar fashion, designs for Philippine pavilions for various international expositions appropriated exotic building motifs for the projection of a national image in

the international arena, which began when Manila hosted the Philippine International Fair in 1953. In the 1958 Brussels Universal Exposition, the country was represented through a pavilion no different to the *bahay kubo*, the Philippine vernacular house, except that its high-pitched roof was transparent plastic and its walls were simulated *sawali* [woven bamboo mats] sidings. For the 1962 Seattle World Exposition, the Philippine pavilion took on a less literal interpretation of vernacular architecture via the cuboidal pavilion designed by Luis Araneta (1916-1984). Yet the surface ornaments that lavished this simple cube were no doubt exotic.

The Philippine pavilion for the 1964 New York World's Fair designed by Otillo Arellano, demonstrated the interaction of native design and spatial age aesthetics. The roof assumed the form of a wide-brimmed *salakot* lifted above the ground by stilts which looked like a levitating space craft. In the 1970 World Exposition in Osaka, Japan, Leandro Locsin created a national pavilion with an exaggeratedly protruding form which could be variously interpreted as a bird in flight, a prow of a Muslim *vinta* [boat] or as a metaphor for the nation's progressive aspirations.

The dictatorship of Ferdinand Marcos held the promise of national rebirth and resurrection of old Filipino traditions. The cultural and architectural agenda of the regime, which spanned from 1965 to 1986, was placed under the auspices of the First Lady Imelda Marcos (1929-), who packaged herself as "The Patroness of the Arts" and tended the cultural renaissance of the nation. A singular "national architectural style" braced by the motto *Isang Bansa, Isang Diwa* [One Nation, One Soul] was invented using indigenous architectural icons as design trajectories. The regime's extravagant building program was legitimized by the search for national identity and nation-building. The colossal building projects of the Marcoses – cultural buildings, finance complexes, medical centers, mass housing, hotels, convention centers, sports complexes, airports, official residences, and a Filipino theme park – projected an image of a progressive and modern nation-state. Behind the façade of seemingly infallible modernity lurked the squalor of informal settlements and rampant poverty.

The infrastructure projects of the regime, unprecedented in Philippine history since the post-WWII reconstruction period, projected an image of a progressive and modern nation-state. Interestingly, it was in this repressive political climate that a golden age of Philippine architecture flourished, catalysed by the iconic works of the modernist mandarin Leandro Locsin, and neovernacular pioneer Francisco Mañosa (1931-). The regime's manipulation of space sought to prescribe a reincarnation [*palingenesis*] of vernacular civilization, crafted from a synthesis of indigenous and cosmopolitan aspirations of modernity: identity as a derivative of primeval ancestry, and identity as evidence of human progress, made possible through art. Thus, the modernizing impulses relied on some contradictory, anti-modern features such as the cult of the leader, the justification of force and violence, the invocation of the past, and the notion of *Bangong Lipunan* as the revived epitome of Malayan culture. The myth conveyed by the regime's architecture is a consolidation of a unitary image of the Filipino in architecture, circulated by the regime in order to illuminate the promise of "national architecture" or the architecture for the nation.

The regime promoted traditional culture and refashioned ethnic symbols in every imaginable form. These archaic symbols were co-opted to substantiate the nationalist fantasies of the Marcos regime, which was inclined to impose an invented Filipino identity. The essential characteristics of the *babay kubo* – its visual lightness, honesty and simplicity of materials, exterior-interior continuum, and non-compartmentalized arrangement of interior spaces which flow organically — are reinterpreted by means of crisp modernist vocabulary in the manipulation of primary Cartesian rectangular masses and spatial drama in the cantilever projections in Leandro Locsin's buildings at the Cultural Center of the Philippines Complex (1969-1981) (figure 13).

The CCP Main Theater, Folk Arts Theater, Philippine International Convention Center, and the Philippine Center for International Trade and Exhibitions demonstrate Leandro Locsin's application of abstract cubist principles to distil the essential and floating qualities of the *babay kubo* into sculptural edifices.

A more profound allusion to the *babay kubo* and a slight deviation from the modernist box is Leandro Locsin's design for the National Arts Center. Acquiring outright inspiration from early Philippine edifices, the building was dominated by a huge truncated pyramidal tiled roof supported at four corners by eight triangular buttresses. The pyramidal superstructure evoked the rooflines of Austronesian stilt dwellings. Such imagery was later rehashed for other state buildings like the Felipe Mendoza's *Batasang Pambansa* (1978) and *Baguio* Convention Center (1978).

The regime's mass housing program used the vernacular paradigm to develop its prototype houses like those found in *Bangong Lipunan* Infrastructure Sites and Services (BLISS) (1979) housing, Kapitbahayan (1976) and Maharlika Villages (1974). In 1981, Geronimo Manahan, collaborating with the Ministry of Energy, developed a prototype house known as the Passively Cooled Urban House through the marriage

of scientific methods and vernacular building technology in support of energy conservation.

Taking the same romantic nationalist strategy, Francisco Mañosa used an imitative and straightforward approach for his *Tabanang* Filipino or Coconut Palace (1980) (figure 12). This palatial residence showcased a double roof reminiscent of the native farmer's wide-brimmed hat [*salakot*] and a swing-out [*tukod*-style] window borrowed from the *babay kubo*. Every inch of the building harked back to an idealized past using primarily coconut and its by-product. Here, Francisco Mañosa's hexagonal design plans were taken from the hexagonal cross-sectional pattern of lumberyard-cut coconut trunk. Through this watershed building, Francisco Mañosa began to more firmly align his practice towards the advocacy of climate-responsive vernacular architecture – such as the Ateneo Professional Schools (1991), Ateneo Educational Building (1996), Pearl Farm Resort (1989), Lanao Provincial Capitol (1998), Mary Immaculate Parish Church (1988), Aquino Center (2001), Bamboo Mansion (1981) and his own residence (1983) – a body of work which made him the paternal figure of Filipino neovernacular.

Modernism in the Philippines was beginning to lose its ground by the 1980s and many came to denounce the austere modernist buildings as boring and lacking character. The canons of modern architecture were challenged by a movement which sought to rummage through historicist precedent to celebrate pluralistic architectures. Postmodern architecture altered the landscape with buildings proclaiming the resurgence of ornament as an antidote for modernism's renunciation of history and tradition. This was a reaction against a building style now found to be boring, indifferent to its surroundings, and devoid of historical and cultural associations. Moreover, the full-scale condemnation of modernism reached its peak after the EDSA revolution of 1986, when the modern and monumental architecture of the conjugal dictatorship of the Marcoses were perceived by Filipinos as symbols of excess, repression and authoritarian power – symptomatic of the regime's "edifice complex". In the liberal atmosphere of post-EDSA, postmodernism all-pervasive style would soon engulf the architectural landscape, serving as an antidote for modernism's renunciation of history and tradition and to regain freedom from the panoptic Marcosian modernity. This new period held a promise of liberation from the stern modernist paradigm and sanctioned an "anything-goes" exuberance to craft pluralistic architectural expressions.

The cult of postmodernism threatens the survival of the modernist building. In the last two decades, many of the modern landmarks have been subjected to the wrecking ball to make way for new developments in the central business districts of Makati and Manila. In the residential areas of Manila, Cebu and Quezon City, many sprawling mid-century residences succumbed to the pressures of real estate developments and have been turned into anonymous, high-density, and nondescript condominiums. In 2009, the rampant destruction and replacement of modern built heritage was brought to a halt with the promulgation of the Republic Act (RA) No. 10066, otherwise known as the



National Cultural Heritage Act of 2009, which has instituted protection for two types of built heritage, among the innumerable cultural properties in this country.

First, the said law accords absolute protection to built heritage that has been declared as nationally significant. As these properties are integral to the articulation of the national identity, the State has the constitutional duty to preserve and enrich, and the power to regulate their disposition. For this purpose, the Philippines Congress has assigned to the national cultural agencies (CA) the authority and ability to identify which built structures possess national significance and to categorize them under specific nomenclature. The National Museum (NM) categorizes National Cultural Treasures and Important Cultural Properties, whilst the National Historical Commission of the Philippines (NHCP) declares National Historical Landmarks, Shrines, and Monuments, as well as Historic Sites and Heritage Houses. The NM and NHCP are both required to search, research, maintain, and update substantial bodies of documentation on each cultural property prior to declaration, in order to clearly establish or support their statements of significance. As RA 10066 highlights the primordial importance of significance and its maintenance over time, the same law has empowered the CAs to administer these above-titled properties, monitor their states of conservation, approve methods and materials of conservation that are applicable to the same, and exercise powers to command the stoppage of works endangering the physical integrity of these structures and to compel their maintenance or repair. The same powers are also exercised by the National Commission for Culture and the Arts (NCCA) over the Philippine World Heritage Sites declared by UNESCO.

Second, the same law empowers the national cultural agencies to enrich the pool of national cultural properties. Contingent to this, the CAs continue to assess built heritage everywhere and have the power to protect structures of at least 50 years old from demolition or modification until the same have been deemed as either nationally or

locally significant. This function necessitates formidable documentation as decisions of the CAs pertain to their quasi-judicial authority, which are contestable only in the proper courts.

Since the passage of the implementing rules and regulations of RA 10066 in 2012, the NCCA, NM, and NHCP have been dealing with all sorts of heritage cases involving cultural properties of either national or local significance. This piece of legislation ensured the protection and perpetuation of modernist built legacy in the Philippines for generations to come.

References

- CABALFIN, Edson, "Modernizing the Native: the Vernacular and the Nation in Philippine Modern Architectures", *Docomomo Journal* n. 34 – France-Brazil Round Trip, Paris, Docomomo International, March 2006, 34-41.
- FRAMPTON, Kenneth, *Modern Architecture: A Critical History*, London, Thames and Hudson, 1992 [1985].
- KLASSEN, Winand, *Architecture in the Philippines: Filipino Building in a Cross-Cultural Context*, Cebu City, University of San Carlos Press, 1986.
- LICO, Gerard, *Arkitekturang Filipino: A History of Architecture and Urbanism in the Philippines*, Diliman, Quezon City, University of the Philippines Press, 2008.
- LICO, Gerard, *Edifice Complex: Power, Myth and Marcos State Architecture*, Quezon City, Ateneo de Manila University Press, 2003.
- MAHANAN, Geronimo, *Philippine Architecture in the 20th Century*, Manila, Kanlungan Foundation, 1994.
- PEREZ, Rodrigo, *Arkitektura: Essay on the American Colonial and Contemporary Traditions in Philippine Architecture*, Manila, Cultural Center of the Philippines, 1994.
- PINCHES, Michael, "Modernization and the Quest for Identity: Architectural Form, Squatter Settlements and the New Society in Manila" in LOGAN, William; ASKEW, Marc (ed.), *Cultural Identity and Urban Change in Southeast Asia: Interpretative Essays*, Victoria, Deakin University Press, 1994, 13-42.
- POLITES, Nicholas, *The Architecture of Leandro Locsin*, New York, Weatherhill Inc., 1977.
- VILLANUEVA, D., "Toward a Filipino Architecture", *Sunday Times Magazine*, April 6, 1958, 42-45.

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Public Works Department, Singapore Civil Aerodrome, Singapore, 1937. Photograph taken on 12 June 1937 during the Aerodrome's opening. © Edwin A. Brown Collection. All rights reserved, Celia Mary Ferguson and National Library Board, Singapore 2008.

Before and behind the Pioneers of Modern Architecture in Singapore

BY JIAT-HWEE CHANG

This article situates the emergence of pioneer modern architects and architecture of Singapore in the longer history of colonial and post-colonial modernities and modernization, and in relation to socio-economic forces of capitalism and socio-political influences of the modern state in both the colonial and post-colonial eras. Rather than understand modern architecture in terms of style, this article goes behind style to explore the social, economic, technological and political conditions of producing modern architecture.

In January 2017, the 3rd MASEANA International conference, *Pioneers of Modern Architecture*, was held in Hanoi to explore the history of pioneer architects in different Southeast Asian countries. Earlier, in 2015, when Singapore celebrated its 50th year of independence, organizations in the architectural and design fraternities gave out a number of awards to recognize the “pioneer architects” of the country. Despite these scholarly and professional recognitions given to pioneer architects in Southeast Asia, we do not really know what are the criteria that make one a pioneer architect. Surely it is not based on being on the national scene first during the early post-independence phase, otherwise many more architects would be recognised. If it is about architectural achievements, it remains rather unclear what the bases are for evaluating these achievements. In the case of *Pioneers of Modern Architecture*, these ideas and works should be related to modern architecture. But what is modern architecture in Southeast Asia in the absence of a definitive study? On what criteria should we select the appropriate figures to represent the pioneers?

As a way of answering these questions it might be useful to look at Nikolaus Pevsner's *Pioneers of Modern Design*, first published in 1936, to discern how the word pioneer was first deployed in the history of modern architecture and how it has informed historiography. For Pevsner, the pioneers of modern design were those who were the first to discern the *zeitgeist*, or the spirit of the age, of the modern era and accordingly produce the modern style. Understood as “an invisible, pervasive driving force behind art”, *zeitgeist* was an influential Hegelian idea that shaped the thinking of many 19th century and early-20th-century art historians who wrote in German, such as Wilhelm Pinder (1878-1947), Pevsner's teacher, and Alois Riegl (1858-1905).

According to art historian Alina Payne, style was just Pevsner's starting point. Pevsner also had a strong leftist social message to deliver. Payne argues that Pevsner saw the social and political content of Modernism as equally significant as the aesthetics. Therefore, Pevsner celebrated

Peter Behren (1868-1949) and the Werkbund, and Walter Gropius (1883-1969) and Bauhaus because these two figures and their respective movements promoted mass-oriented and socially-conscious modern design of everyday objects and environments¹.

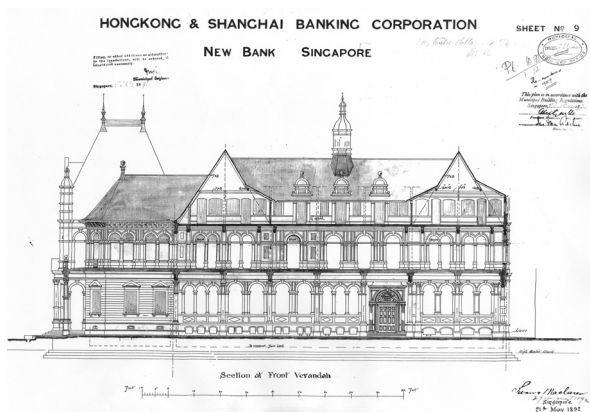
One of the most interesting arguments that can be drawn from Pevsner's *Pioneers of Modern Design* is that style and aesthetics are indissolubly linked to society and politics. Rather than be preoccupied solely with modern architecture and the pioneer architects, it is perhaps more productive to explore what lay behind them: the larger social and political conditions of modernity and modernization from which they emerged. When we explore these conditions in the case of Singapore, they are obviously also part of the national conditions. But these national conditions, especially in the early post-independence years, were inextricably linked to the colonial structure. Thus, in this paper, I would like to explore modernity and modernization in a longer time frame, situating the emergence of pioneer modern architects in Singapore in the longer history of modernity and modernization.

Colonial Modernity and Architecture in early 20th Century

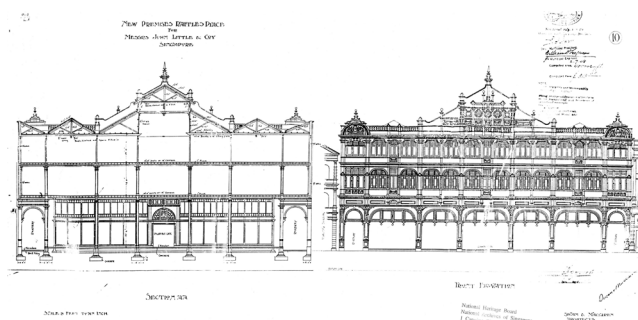
In early 20th century, when the pioneers of the Modern Movement in Europe and North America were designing and building the early path-breaking works that emphasize dynamic experience of light-infused space and volumetric expression of mass with unadorned surfaces, the type of works produced by Singapore's most progressive professional architectural practices were generally in the modes of eclectic classicism or Art Deco. Despite their purportedly non-modern appearance, these works were thoroughly modern in other ways, ways that were inextricably linked to colonial modernity.

First of all, these buildings were designed by the modern architectural profession that was only recently recognized by the colonial state through legislation. Despite what has

01 Swan and Maclaren, Hong Kong and Shanghai Banking Corporation building, Singapore, 1892. © National Archives of Singapore.



02 Swan and Maclaren, John Little Department Store, Singapore, 1907. © National Archives of Singapore.



been written about George D. Coleman (1795-1844) as the “first architect” of Singapore, Singapore did not have a professional architect until the arrival of Regent Alfred John Bidwell (1869-1918) in Singapore in 1895 to join the firm of Swan and Maclaren. Prior to Bidwell, all buildings in Singapore were “designed” – if the word in the modern sense could be used as such – by engineers-surveyors and what I have called “surrogate architects” elsewhere². Bidwell, who was a member of the Architectural Association in London and worked as an assistant architect in the London County Council, was the architect for numerous colonial landmarks. His firm Swan and Maclaren was regarded as the first professional architectural firm in Singapore and it was commissioned to design most of the prominent buildings in colonial Singapore from 1890s to the mid-20th-century, as we shall see³.

The only other firm that was to challenge the dominance Swan and Maclaren in the pre-war era, albeit only briefly, was Keys and Dowdeswell. It was founded by Major Percy Hubert Keys (1879-1954) and Harry Frederick Dowdeswell (?-1937), two British architects who came to Singapore in 1920 because they were commissioned by the colonial government to design The General Post Office Building (also known as the Fullerton Building). Soon after the arrival of Keys and Dowdeswell, we saw the passing of the Architects’ Ordinance in 1926 that strengthened the architectural profession by requiring all buildings to be designed by registered architects.

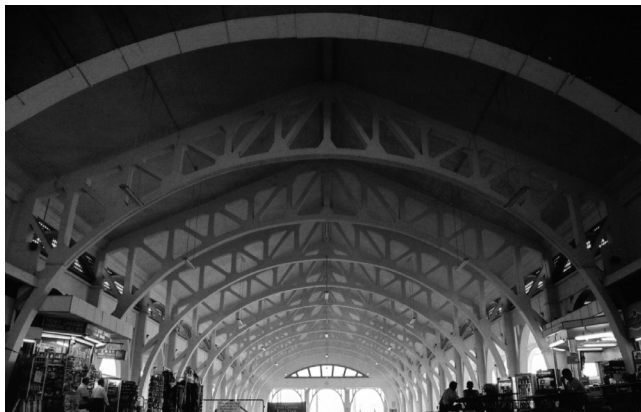
Monuments of the colonial economy, such the head-quarter buildings of the major banks, were almost entirely designed by these two firms. They included the Hong Kong and Shanghai Bank (1922) and the Chartered Bank of India, Australia and China (1915) by Swan and Maclaren; and the Mercantile Bank of India (1928) and the Overseas Chinese Banking Corporation (or the China Building) (1932) by Keys and Dowdeswell. The two bank buildings by Swan and Maclaren replaced smaller buildings that were also designed and erected by them for the same clients just a few decades ago. And the Overseas Chinese Banking Corporation was formed through the merger of three Chinese banks

established only in the 1910s – The Chinese Commercial Bank, Ho Hong Bank and Overseas Chinese Bank. The proliferation of such bank buildings was indicative of the rapid expansion of the colonial economy in the early 20th century, due primarily to the rubber and tin mining boom in Malaya at that time.

Other than bank buildings Swan and Maclaren and Keys and Dowdeswell also designed buildings for other entities central to the colonial economy, such as Boustead and Company, and Guthrie and Company. These were the British trading and agency houses that handled most of Malaya’s import and export and dominated as the main representatives of shipping and insurance companies from the 19th century onwards. Beginning in the 20th century, the management and control of rubber plantations and tin mines were also concentrated in the hands of these agency houses⁴.

As Anthony D. King has noted in his seminal works, the colonial city was a key node in the capitalist world-economy. It was a centre of political, economic, administrative and managerial control of the colonial society and economy, directing surplus capital to the metropole and assisting in incorporating the “periphery” into the metropolitan “core”⁵. Besides concentrating these key economic institutions (and political ones too, as we shall see below) in colonial cities, colonial capitalism also structured the natural and built environment in specific ways⁶. For instance, colonial capitalism brought about the specialisation and differentiation of production and consumption processes, and contributed to the spatial segregation between home, work and leisure. Architecturally, spatial specialisation and segregation also brought about important changes. Among them was the emergence of new buildings types, such as the modern clubhouse, hotel, department store and cinema. Many of these in colonial Singapore were also invariably designed by the aforementioned big two firms. Examples included Raffles Hotel (1899), the Teutonic Club (1900), Grand Hotel de l’Europe (1905) and John Little Department Store (1907) by Swan and Maclaren; and Capitol Cinema (1930) by Keys and Dowdeswell.

03 Public Works Department, Clifford Pier, Singapore, 1933. Interior view showing the reinforced concrete arched trusses. © Jonathon Lin, goo.gl/Zb2Pov, used under CC license.



Modern Colonial State, Infrastructure and Architecture

Besides modern capitalism, colonial architecture in Singapore was also shaped by the modern colonial state. Various scholars have traced the emergence of the modern state in Southeast Asia to the decades around the turn of the 20th century, when the various colonial powers ruling different parts of Southeast Asia embarked on the expansion, functionalization and rationalization of their presence and their institutions of governance⁷. The modern colonial state not only reformed and strengthened the old functions of the state but took on a new rationality of governance and engaged in new activities – such as education, public health and social welfare – to improve the biopolitical lives of the population. The creation of this new political order had a direct impact on the built environment, particularly on the planning and design of public works and public buildings⁸.

In Singapore, the modern colonial state embarked on various new initiatives, including infrastructure building and the provision of medical facilities. Among the major infrastructural projects undertaken in the early 20th century was the building of the Singapore Railway Terminus (later better known as Tanjong Pagar Railway Station) (1932). The Singapore Railway Terminus was the terminal station of the Federated Malay States Railway lines. Sited opposite Tanjong Pagar docks, the Art Deco station – designed by H. G. Atkin-Berry, Denis Santry (1879-1960) and D. S. Petrovitch of Swan and Maclaren – was seen by the Straits Governor Cecil Clementi as the key nodal point for “interchange between railway traffic and ocean shipping” and a part of the “immense system” of rail and shipping infrastructure connecting Asia and Europe⁹. These new transportation infrastructures and the new modes of transportation they served – trains and steamships – helped to compress time and space, which in turn increased the rate of capital accumulation and were thus central to colonial capitalism. Not only did the colonial state commission and fund these infrastructural projects, it was sometimes directly involved in planning and designing these projects through one of its agencies – the Public Works Department (PWD), as we shall see below¹⁰.

Two of what architectural historian Wong Yunn Chii described as the “crown jewels” that the architectural branch of PWD built in early-20th-century Singapore were also transportation infrastructural projects – Clifford Pier (1933) and Singapore Civil Aerodrome (1937). Clifford Pier was built to replace the old Johnston’s Pier as the main arrival and departure point for passengers travelling by sea. The main space of Clifford Pier was conceived as a large loggia covered with a roof supported by large-span reinforced concrete arched trusses. On the seaward side of the loggia was a “ceremonial landing place” that could be illuminated by arc lamps¹¹.

At a much larger scale and involving much more challenging engineering works than the Clifford Pier was the building of the Singapore Civil Aerodrome. Planned to cater to the rapidly growing commercial aviation traffic, the project started in 1931 with the extensive land reclamation and engineering works at Kallang Basin to turn the tidal swamp into an aerodrome with a landing area for airplanes, and a wharf and slipway for seaplanes and flying boats¹². The iconic building in the complex is the main terminal. Its streamlined exterior with horizontal lines, emphasized by large multi-tiered cantilevered decks and big continuous expanse of glass windows, makes it one of the most recognizably “modern”



04 Keys and Dowdeswell, China Building in 1964, Singapore, 1932. © From the Kouo Shang-Wei Collection 郭尚慰收集. All rights reserved, Family of Kouo Shang-Wei and National Library Board Singapore 2007.

in style among the pre-war buildings. Its interior spaces and decorative details, however, suggest much greater affinity with the Art Deco style. The interior spaces are arranged symmetrically and highly compartmentalized. In the centre of the terminal building is an inward-looking, double-volume main hall, where one is cut off from the dynamic spaces of the exterior. Instead of unadorned surfaces echoing the machine aesthetics of the Modern Movement, the interior featured surfaces decorated with all kinds of Art Deco geometries and motifs made with novel materials like chromium plated metal and rubber tiles.

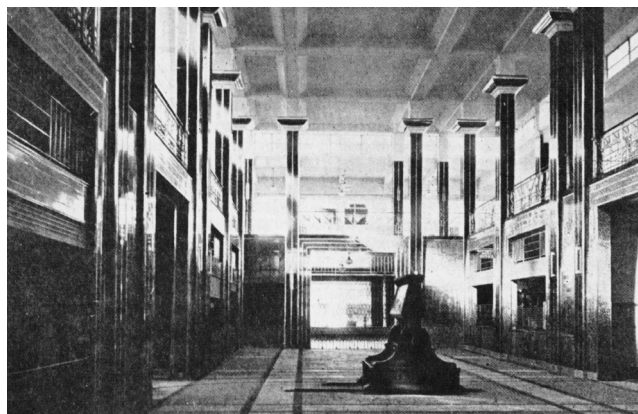
Despite the inconsistencies in style, these infrastructural projects made use of modern constructional technologies and engineering methods. Steel frame and reinforced concrete structures were deployed for Singapore Railway Terminus, Clifford Pier and the terminal building of Singapore Civil Aerodrome. The unique structural properties of these new materials are vividly demonstrated in these three buildings: the main interior spaces in the first two buildings – the main hall and the loggia respectively – appear bright and airy because of the light-weight large-span structures while the last building features large cantilevered decks that seem to float. Even in the case of the Supreme Court building (1939) and General Post Office (1928) – the two most explicitly classicist buildings commissioned by the colonial state – steel and reinforced concrete were used together with the latest mechanical ventilation technologies¹³. In fact, the General Post Office was only one of the two buildings in early 1920s Singapore that was designed in accordance with the latest London County Council specifications¹⁴.

These buildings were also modern in the sense that they were assemblies of globally-sourced materials, products, labour and expertise. For instance, the Supreme Court



05 Swan and Maclaren, Singapore Railway Terminus, Singapore, 1932. Main hall. © Jiat-Hwee Chang, 2015.

06 Public Works Department, Singapore Civil Aerodrome, Singapore, 1937. © *The Malayan Architect*, vol. IX, n. 6, June 1937.



building used local hardwood *chengai* and *kapoh* obtained through Malaya's Government Forest Department for most timber components, "Bombay Burmah first quality teak" for the doors to the main spaces, "snowcrete" white cement from a London cement company for exterior rendering, windows from Crittal Manufacturing in London, cast iron canopies from Walter Macfarlane & Co. of Glasgow, bronze caps from Bigazzi in Hong Kong, "centrifugal multivane blowers" manufactured by Ozonair Co. of London, etc. Only a modern resource infrastructure could ensure the provision of these different materials and products from far-flung localities. Furthermore, on top of relying on British architects, engineers and consultants, the Supreme Court also benefited from the craft of Italian sculptor Cavaliere Rudolfo Nolli (1888-1963), who was responsible for the sculptures on the pediments and the carvings on the capitals of the columns and other classicist ornaments. It also benefited from the "first class workmanship" of plasterers who were forced to leave Shanghai for Singapore due to the Sino-Japanese hostilities in the 1930s¹⁵.

Pre-war colonial architecture in Singapore should also be noted for its innovations in environmental planning, i.e. the ways it was designed to respond to hot and humid climate in the tropics. Hospital buildings, in particular, are one of the much-overlooked building types that contributed to these innovations. An excellent example in Singapore is the Tan Tock Seng Hospital (1909) by PWD. It was a pavilion plan hospital in which each individual ward was planned as a separate airy pavilion encircled by verandahs and porous walls to provide shade while optimizing cross ventilation. The different wards were arranged in parallel rows linked by a common corridor¹⁶.

The Emergence of Local Architects and Early Experiments in Modernism

During the late-19th and early-20th centuries when European professional architects began to dominate the architectural scene in colonial Singapore, there were a small number of local "amateur" architects, i.e. those who were trained as engineers and surveyors, primarily dealing with small buildings for local clients who might not be as preoccupied with style and symbolic contents as their European coun-

07 Public Works Department, Tan Tock Seng hospital, with the pavilion wards completed in 1909 in the foreground and the mid-20th century addition in the background, Singapore. © National Archives of Singapore.



08 Ho Kwong Yew, House for Aw Boon Par at Haw Par Villa, Singapore, 1938.



terparts¹⁷. These local “amateurs” were a multicultural group that included figures such as George d’Almeida, Wan Mohammad Kassim, A. F. Cornelius, George Anthony Fernandez, Chye Tian Fook, Wong Siew Yuen and Seah Eck Jim. Their lack of professional training is evident in the comparatively less professional drawings their firms produced.

Later, with the passing of the Architects’ Ordinance in 1926, other locals qualified as architects through examinations. As there was no formal architectural training in colonial Singapore until a Department of Architecture was established at the Singapore Polytechnic in 1958, these locals picked up the requisite knowledge through working as tracers and draughtsmen in architectural offices and learning on the job. By the 1920s, a few architectural offices established by local architects began to gain some level of professional prominence by having their works featured in local architectural journals.

One of the more prominent local architectural firms was Chung and Wong, established in 1920. It was formed by Wong Puck Sham (1896-?) and Chung Hong Woot (1895-1957), two architects who apprenticed at the government survey department and Singapore Harbour Board’s building section respectively¹⁸. Although “a large portion of their practice was building shophouses”, the firm also designed large houses in eclectic classicist style for social elites such as wealthy Chinese businessmen Lim Peng Siang and medical doctor S. Y. Yin, and large projects such as the Happy World Stadium¹⁹.

One of the most notable pre-war local architects was Ho Kwong Yew (1903-1942). Ho apprenticed at the PWD and gained experience as a draughtsman in the Municipal Architect’s Office. Later registered as both an architect and civil engineer, Ho was a partner of Chung and Wong between 1927 and 1933 before venturing out to set up his own firm²⁰. His in-depth knowledge of reinforced concrete construction and flair for design were evident in the houses he designed for two tycoons and their families – Chee Guan Chiang at Grange Road (1938) and Aw Boon Par at Haw Par Villa (completed in 1938 and destroyed in 1942). In both houses, he appropriated the streamlined aesthetic and ocean liner imagery of *Art Moderne* and translated them into idiosyncratic forms. In the former, the main house

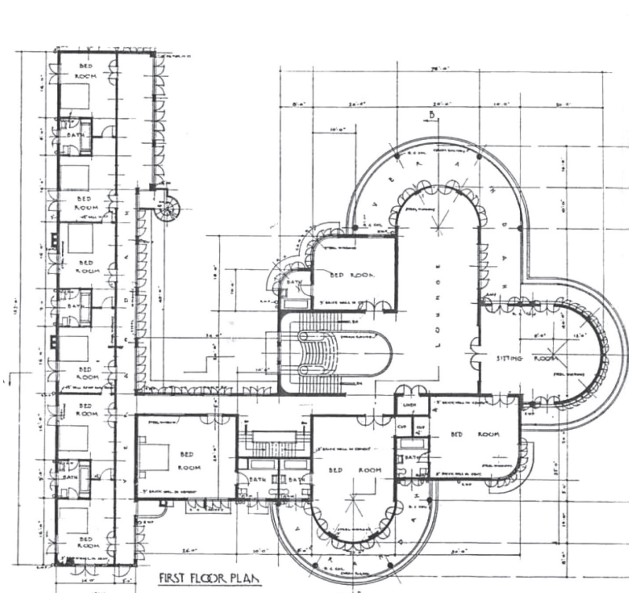
consists of three projecting double-storey semi-circular structures with verandahs and porches. These are asymmetrically arranged around more-enclosed and less-curvilinear volumes. In the latter, the single-storey building consisted of 6 circular rooms, each topped with a reinforced concrete dome, clustered together to form an unusual bulbous exterior²¹. Despite their dynamic external forms, the spatial configurations of these houses are quite conventional. They have centrally-positioned grand entrances and clearly compartmentalized spaces. There is little in the plans to suggest a dynamic conception of space that is comparable to Euro-American Modernism of the time. Nor does the planning imply that they were designed for a modern lifestyle that is different from that found in traditional Chinese households during the colonial era.

The late 1930s, just before WWII and the Japanese Occupation, also saw the return of the first three overseas-trained Singapore-born architects – Koh Cheng Yam, Robert F. N. Kan and Ng Keng Siang²². However, it was only Ng Keng Siang who made a discernible impact with his architectural output. His own firm became one of the most successful local practices in the 1950s and it was given prestigious commissions such as Asia Insurance Building (1954), the tallest building in Singapore at its completion, and Ngee Ann Building (completed in 1957, demolished in 1985), the first post-war luxury flat development²³. Although these projects were not exceptional aesthetically – either resembling *Art Moderne* architecture elsewhere or the type of middling mid-20th century Modernism typical of the region – Ng Keng Siang was a model professional. He showed younger local architects that local firms could be as successful as the European expatriate firms. He also became the founding president of the Society of Malayan Architects (later Singapore Institute of Architects), the professional body established as an alternative to the expatriate-dominated Institute of Architects of Malaya.

Modernism, Post-colonial Modernity and State

Modernism really flourished in Singapore in the 1950s and 1960s, after a younger group of overseas-trained architects came back to Singapore. Prominent among this group were Alfred Wong (1930-), Lim Chong Keat (1930-), William S.

09 Ho Kwong Yew, House for Chee Guan Chiang at Grange Road, Singapore, 1938. © *The Malayan Architect*, Vol. X, n. 2, 1938.



HO KWONG YEW,
ARCHITECT.

W. Lim (1932–) and Victor Chew (1928–). While these four architects are rightly celebrated and well-known today, with the exception of Alfred Wong, they all formed group practices informed by the ideal of equal partnership. Together with Chen Voon Fee (1931–2008), Lim Chong Keat and William Lim formed Malayan Architects Co-partnership (MAC) in 1960. When MAC was dissolved in 1967, Lim Chong Keat formed Architects Team 3 while William Lim formed Design Partnership with Tay Kheng Soon (1940–) – one of the first five graduates of the Diploma course at the Singapore Polytechnic in 1963 and an important architect in his own right subsequently – and Koh Seow Chuan²⁴. Victor Chew first established CAV Chew and Partners in 1957 but he changed it to Kumpulan Akitek in 1964 when he teamed up with Wee Chwee Heng – another one of the first graduates from the Singapore Polytechnic – and Chew Kum Chong²⁵.

From the late 1950s to the early 1970s, these architects produced a body of important works in Modernism: St. Bernadette Church (1958), St. Ignatius Church (1961), National Theatre (1963) and Hotel Malaysia (1968) by Alfred Wong; Singapore Conference Hall and Trade Union House (1965) by MCP; Malaysia-Singapore Airways Building (1969) and Jurong Town Hall (1973) by Architects Team 3²⁶; People's Park Complex (1973) and Woh Hup Complex (1973) by Design Partnership; Hilltops (1965), Malayan Bank Chambers (1965), Ming Court Hotel (1970) and Subordinate Law Courts Complex (1975) by Kumpulan Akitek²⁷. Much has been written about the architectural significance of these works and I will not repeat these arguments here²⁸. What I would like to show instead are the connections between architecture, economic structure and state.

Earlier in the paper, I have argued that what appeared to be Eclectic Classicist architecture of the colonial era

was inextricably linked to colonial modernity, particularly its modern capitalist economy, and the modern colonial state. These linkages continued in the post-colonial period except that the main actors and the socio-economic conditions have changed. Instead of expatriate architects, we have local architects as the main designers. Rather than depending on European capitalists and firms, these architects have Asian capitalists, who had gradually displaced the Europeans in the decolonizing and post-independence years, as their clients. For instance, one of the major clients of Kumpulan Akitek was Khoo Teck Puat, who was a major shareholder of Goodwood Group of Hotels and Maybank. Khoo commissioned the firm to design a number of hotels and bank buildings, including branches, connected to these two major companies. Likewise, the post-colonial state, its state agencies and state-linked companies either directly commissioned or indirectly facilitated a significant number of these projects. For example, Singapore Conference Hall and Trade Union House was commissioned by the state for hosting major conferences and housing the headquarters for the new trade union movement; Jurong Town Hall was seen by Jurong Town Corporation, the statutory board established by the state to lead Singapore's post-independence industrialization program, as a monument to Jurong Town; buildings like People's Park Complex and Woh Hup Complex were only possible because of the post-independence state's urban renewal and land sale programs.

Afterword: the Conservation of Modern Architecture in Singapore²⁹

The very conditions of rapid socio-economic development that had given rise to the above-mentioned exemplars of modern architecture in the past 70–80 years in Singapore are also the very conditions that had led to and continue to lead to the demise of many of these exemplars of modern architecture. Capitalist logic that expects the continual “upgrading” and renewal of commercial projects such as hotels, shopping malls, offices, mixed-used complexes so as to facilitate further capital accumulation meant that a number of the aforementioned buildings – such as Hotel Malaysia and Malaysia-Singapore Airways Buildings – have already been demolished and redeveloped. As their 99-year land tenure runs down and their real estate value diminishes accordingly, a number of key commercial buildings from the 1970s – such as the People's Park Complex, Golden Mile Complex and Pearl Bank Apartment – also face the possibility of imminent collective sale and en bloc redevelopment. Fortunately, state agencies such as the Urban Redevelopment Authority and Preservation of Sites and Monuments have, in recent years, gazetted a number of modernist buildings for conservation and even as national monuments. Notable examples include St. Bernadette Church, Jurong Town Hall and Singapore Conference Hall. Despite these laudable attempts at conserving modernist buildings, particularly state-owned modernist buildings, development pressure to optimize land utilization in order to house a projected population of 6.9 million means that many other state-owned modernist projects from the past that were

built at lower density – particularly Singapore Improvement Trust's housing at Dakota Crescent – are facing uncertain future. Besides state agencies, non-governmental grassroots organizations have also emerged in recent years and become active in engaging with both members of the public and the state agencies in their advocacy for the conservation of modernist built heritage. Hopefully, these organizations are able to effect change and help to bring about the conservation of more modernist buildings and their landscapes.

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Notes

- 1 Alina Payne, "Review of Pioneers of the Modern Design, by Nikolaus Pevsner", *Harvard Design Magazine*, n. 16, 2002.
- 2 Jiat-Hwee Chang, *A Genealogy of Tropical Architecture: Colonial Networks, Nature and Technoscience*, London, Routledge, 2016.
- 3 My account of the works of Swan and Maclaren draws primarily on Eu-jin Seow, *Architectural Development in Singapore*, Unpublished PhD thesis, University of Melbourne, 1973.
- 4 James J. Puthucherry, *Ownership and Control in the Malayan Economy*, Singapore, Eastern University Press, 1960.
- 5 Anthony D. King, *Urbanism, Colonialism, and the World-Economy: Cultural and Spatial Foundations of the World Urban System*, London, Routledge, 1990.
- 6 *Buildings and Society: Essays on the Social Development of the Built Environment*, London, Routledge & Kegan Paul, 1980.
- 7 See for example, Carl A. Trocki, "Political Structures in the Nineteenth and Early Twentieth Centuries", in Nicholas Tarling (ed.), *The Cambridge History of Southeast Asia Volume 2: The Nineteenth and Twentieth Centuries*, Cambridge, Cambridge University Press, 1993; Robert E. Elson, "International Commerce, the State and Society: Economic and Social Change," in Nicholas Tarling (ed.), *The Cambridge History of Southeast Asia*, vol. 3: *From C. 1800 to the 1930s*, Cambridge, Cambridge University Press, 1999.
- 8 Jiat-Hwee Chang and Imran bin Tajudeen (ed.), *Southeast Asia's Modern Architecture: Questions in Translation, Epistemology and Power*, Singapore, Singapore NUS Press, 2018.
- 9 "Opening of Singapore's New Station", *The Singapore Free Press and Mercantile Advertiser*, 3 May 1932.
- 10 The most thorough research done on the architectural works of the colonial PWD thus far is Yunn Chii Wong, *Public Works Department Singapore in the Inter-War Years (1919-1941): From Monumental to Instrumental Modernism*, Unpublished Research Report, National University of Singapore, 2003. I draw extensively on this work below.
- 11 "Modern Pier for Singapore," *The Straits Times*, 23 October 1929.
- 12 Reginald Lewis Nunn, "The Singapore Airport", *Journal of the Institute of Civil Engineers* 12, n. 8, 1939.
- 13 "Air Conditioning: The Plant at the G.P.O Singapore", *Journal of the Institute of Architects of Malaya* 2, n. 6, 1932.
- 14 The Colonial Engineer J. H. W. Park's assertion. The regulations of Singapore Municipality then was lagging quite a few years behind LCC's regulations. See *Proceedings of the Legislative Council of the Straits Settlements* 1922, B85.
- 15 *Ceremonial Opening of the New Supreme Court Building Singapore by His Excellency Sir Shenton Thomas*, Singapore, Government Printing Office, 1939.
- 16 Jiat-Hwee Chang, *op. cit.*, 94-128.
- 17 Many of them were recorded in Kip Lin Lee, *Emerald Hill: The Story of a Street in Words and Pictures*, Singapore, National Museum Singapore, 1984.
- 18 Seow, "Architectural Development in Singapore".
- 19 "Architect's Claim", *The Straits Times*, 9 February 1931; "House at Siglap for Mr. Lee Siong Kiat", *Journal of the Singapore Society of Architects Incorporated* 2, n. 1, 1929; "House for Dr. S. C. Yin at Gilstead Road", *Journal of the Singapore Society of Architects Incorporated* 1, n. 4, 1929.
- 20 Weng Hin Ho and Kar Lin Tan, "Ho Kwong Yew", in Leo Suryadina-

- ta (ed.), *Southeast Asian Personalities of Chinese Descent: A Biographical Dictionary*, Singapore, Institute of Southeast Asian Studies, 2012.
- 21 "New Residence Grange Road - Singapore - for Chee Guan Chiang", *The Malayan Architect* 10, n. 2, 1938; "Mansion on a Hill: Work Nearing Completion", *Morning Tribune*, 12 March 1936.
- 22 Seow, "Architectural Development in Singapore", 312-3.
- 23 Fong Leng Chow, "Ng Keng Siang (1909-1967) - Singapore's Pioneer Architect", Elective study, University of Singapore, 1979.
- 24 For Tay Kheng Soon's architectural career, see Jiat-Hwee Chang, "Deviating Discourse: Tay Kheng Soon and the Architecture of Postcolonial Development in Tropical Asia", *Journal of Architectural Education* 63, n. 3, 2010; Robert Powell and Kheng Soon Tay, *Line, Edge & Shade: The Search for a Design Language in Tropical Asia*, Singapore, Page One Pub., 1997.
- 25 Bee Lok Hoong, "Victor Chew: An Architect", BArch Elective Study, National University of Singapore, 1981.
- 26 "Singapore's Jurong Town Hall", *Asian Building and Construction* March, 1974.
- 27 "Victor Chew: An Architect".
- 28 See, for example, Alfred Hong Kwok Wong, *Recollections of Life in an Accidental Nation*, Singapore: Select Books, 2016; Jiat-Hwee Chang, "Race and Tropical Architecture: The Climate of Decolonization and Malayization" in Irene Cheng, Charles L. Davis and Mabel O. Wilson (ed.), *Race and Modern Architecture*, Pittsburgh, University of Pittsburgh Press, forthcoming; Eunice Seng, "Habitation and the Invention of a Nation, Singapore 1936-1979", Unpublished PhD Dissertation, New York, Columbia University, 2014.
- 29 Although I am a member of the advisory committee of the Preservation of Sites and Monuments, the views expressed in this essay is in my personal capacity as a researcher and scholar of modern architecture. They do not represent the views of the institutions that I am affiliated with.

References

- CHANG, Jiat-Hwee, *A Genealogy of Tropical Architecture: Colonial Networks, Nature and Technoscience*, London, Routledge, 2016.
- CHANG, Jiat-Hwee, "Race and Tropical Architecture: The Climate of Decolonization and Malayization", in CHENG, Irene; DAVIS, Charles L. and WILSON, Mabel O. (ed.), *Race and Modern Architecture*, Pittsburgh, University of Pittsburgh Press, 2018.
- CHANG, Jiat-Hwee; IMRAN, bin Tajudeen (ed.), *Southeast Asia's Modern Architecture: Questions in Translation, Epistemology and Power*, Singapore, Singapore NUS Press, 2018.
- HOONG, Bee Lok. "Victor Chew: An Architect", BArch Elective Study, National University of Singapore, 1981.
- KING, Anthony D. (ed.), *Buildings and Society: Essays on the Social Development of the Built Environment*, London, Routledge & Kegan Paul, 1980.
- KING, Anthony D. (ed.), *Urbanism, Colonialism, and the World-Economy: Cultural and Spatial Foundations of the World Urban System*, London, Routledge, 1990.
- LEE, Kip Lin, *Emerald Hill: The Story of a Street in Words and Pictures*, Singapore, National Museum Singapore, 1984.
- SEOW, Eu-jin, *Architectural Development in Singapore*, Unpublished PhD thesis, University of Melbourne, 1973.
- WONG, Alfred Hong Kwok, *Recollections of Life in an Accidental Nation*, Singapore, Select Books, 2016.
- WONG, Yunn Chii, "Public Works Department Singapore in the Inter-War Years (1919-1941): From Monumental to Instrumental Modernism", Unpublished Research Report, National University of Singapore, 2003.

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Chirag Silpakornok, Indro Hotel & Shopping Complex, Bangkok, Thailand, 1970. © Weerapon Singnoi, 2016.

Modern Architecture in Thailand

BY PONGKWAN LASSUS

The influence of modern architecture became more visible in Thailand after the country shifted from an absolute monarchy to a constitutional monarchy in 1932 and also as a result of economic circumstances and world trends. The first generation of Thai Modernist architects (or the pioneers of modern architecture in Thailand) had their education in Europe because of the necessity to modernize Thailand. The second generation were Thai architects who received their architectural education in Thailand as well as some continuing their studies in the USA. Their works reflect the International Style with a concern for a tropical architecture vocabulary and local material utilization based on economics. As the architectural profession was declared a protected profession in 1965 for Thai architects only, there was very little modern architecture in Thailand designed by foreign architects.

Introduction: the Pre-Modernism Western Architecture in Thailand (1851-1917)

Architecture in the Kingdom of Siam (former name of Thailand) gradually changed after the arrival of Western influences during the reign of King Mongkut (Rama IV, 1851-1868). All neighboring countries were colonized by either Great Britain or France. In 1955, King Mongkut (1804-1868) signed the so-called "Bowring Treaty" which abolished import duties and integrated Siam into the world economy.

King Mongkut's son, Chulalongkorn (Rama V, 1853-1910) ascended the throne in 1868. He was entirely Western educated and he tried to modernize the country in order to avoid being colonized by showing how Siam was as civilized as Western countries. He sent his children to study abroad. During his reign (1868-1910) there was reform in every field: education, the military, finance, justice, transportation and infrastructure. Bangkok, the water-based settlement capital, was transformed into a Western land-based city with more roads and railways. During his reign, architects from the West were commissioned to design many important buildings. The iconic architecture of this period was the *Chakkri Mahaprasat* Palace (1876), designed by John Clunis (?-1894, worked in Thailand since 1875). There were some Italian architect-engineers who worked in Siam during this period such as: Joachim or Giochino Grassi (1837-1904), Carlo Allegri (1862-1938), Mario Tamagno (1877-1941) and Annibale Rigotti (1870-1968), as well as another important German architect, Karl S. Dohring (1879-1941). The *Anantasamakom* Palace (1908), a very important building, was designed in the Italian Renaissance style by Carlo Allegri, Mario Tamagno and Annibale Rigotti. Another iconic work of architecture designed by German architect Karl S. Dohring in Art Nouveau is the *Baanpuen* Palace in Petchburi (1910). So many important ministerial buildings were built after governance reform and most of them were designed by Western architects and engineers. A variation of architectural styles was found in this period: Classicism, Italian Renaissance, Palladianism, Baroque, Neoclassicism and Art Nouveau.

During the reign of King Vajiravudh (Rama VI, 1880-1925; reign: 1910-1925), there was an economic recession in Siam. The first university in Siam was established in 1916. In 1917, Siam joined the Allies during WWI. Construction of luxury Western architecture in this period slowed down and changed from grand symmetric planning into a more asymmetric floor plan. Siam began to fabricate Portland cement for its own use in 1913. The most important building in this period is the Bangkok Railway Station at Hualamphong designed by Karl Dohring (1912-1915). This building utilised the new construction technology of 50-meter-long semi-circular steel arches, but the front façade was still be designed in a symmetrical Neoclassic style. Several palaces in this period were designed with asymmetrical floor plans and with free form gardens. We can find different styles of architecture such as Romanticism, Neo-gothic, Venetian Gothic, etc. There was a return to traditional Thai architecture reinforcing the idea of nationalism that can be seen in the Vajiravudh College, built in 1925, and the first building of Chulalongkorn University, built in the same year, designed by Edward Hilly. Many railway stations all over Thailand were built during this period. The Huahin Railway Hotel (1924) was the first resort hotel, built in Huahin (Rachuabkirkun province) and included the first golf course, designed by an Italian architect who worked for the railway department at that time.

Modern Thailand

During the reign of King Prachadhipok (Rama VII, 1893-1941; reign: 1925-1935), the group of Thais, which called themselves *Khana Ratsadon*, seized power from the absolute monarchy on June 24, 1932. They installed a constitutional monarchy with Prachadhipok as king. Later on, the many unsettled constitutional roles of the Crown and the dissatisfaction with *Khana Ratsadon*'s seizure of power culminated in 1933 in a counter-coup, which resulted in a small-scale civil war. King Prachadhipok abdicated and he was replaced by his 9-year-old nephew Prince Ananda Mahidol (Rama VIII, 1925-1946).

01 Mew (Chitrasaen) Aphaiwong, the Central Post Office, Bangrak, Bangkok, Thailand, 1937-1940. © Weerapon Singnoi, 2016.



In 1938, Plaek Pibulsonggram (1897-1964) became prime minister. He was an open supporter of Mussolini and Hitler and began to move the government towards the Right. In 1942, he issued a series of cultural decrees *Rattaniyom*, or Thai cultural mandates, which reflected the desire for social modernization and exaggerated nationalist spirit. He changed the country's name of Siam to Thailand, which was based on the idea of a "Thai race". This nationalist modernization obliged Thais to use Western clothing including hats for men and women, and gloves and high heels for women. The arts and architecture were also tools used to identify this nationalist modernization, the best example of which was the group of buildings along Rajadamnern Klang Avenue (1937-1940), the *Suphacalasai* Stadium (1938) and the Central Post Office (1940) designed by Mew Aphaiwong.

Modern Architecture in Thailand

During the King Rama VII era (1925-1934), Thailand was hard hit by the world economic recession resulting from WWI. The government had to cut back on most projects including building construction. About this time, after returning to Thailand, European-educated Thai architects began to play more important roles. As a result, the influence of modern architecture became more visible in Thailand after the country shifted from the absolute monarchy.

It can be said that modern architecture in Thailand resulted from economic necessity, from a transmission of European concepts and technology via European-educated Thai architects and from political change to a more democratic system.

Pioneers of Thai Modern Architecture: the First Generation of Thai Modernist Architects

Among Thai architects who graduated from the West during the Rama VII era and contributed to modern architecture in Thailand was M. C. Itthithesapwan Kridakorn (1889-1934). His designs included the Piamsook Royal Residence in Klaikangwol Palace (Huahin district, Prachuab Kirikhan Province, 1926), Sra Phatum Palace in Bangkok (1926). Another important figure was M. C. Samaichalerm

02 M.C. Samaichalerm Kridakorn, Chalerkrung Theatre, Bangkok, Thailand, 1940-1943. The first theater in Bangkok. © Weerapon Singnoi, 2014.



Kridakorn (1895-1967), a *Beaux-Arts* graduate who designed the headquarters office of the Bangkok Metropolitan Administration (1955) on Dinsor Road (some parts of his design, however, were omitted from the completed buildings). He also produced a sign for Thailand's National Theatre (1965), although the building that resulted was not based entirely on his design. He also designed many buildings for the Chiangmai University Campus. His masterpiece was a co-design of *Sala Chalerkrung* Royal Theatre (1931). The architecture and decoration of this building was an Art Deco or early modern design. Nart Bhotiprasart (1901-1954) was a co-designer and calculated the structure for this building. He graduated with the Gold Medal honors from Liverpool University (England) and worked at the Civil Engineering Department before assuming a teaching post at the Faculty of Architecture of the Chulalongkorn University. He wrote an important book on the history of Thai architecture, *Architecture in Thailand* (Bangkok, Chulalongkorn University, 1944). He was the most important person who founded architectural education in Thailand. Other works of Nart Bhotiprasart evinced the early modern style, including the Bangkok Metropolitan Police building, Royal Air Force headquarters, and the Central Hospital (1939). Another famous architect of this era was Mew (Jittasen) Aphaiwong (1905-?). His first famous project was the *Dome* building (the headquarters building of *Thammasart* University) (1934), the second university of Thailand specialising in political science. The style of this building was not easy to identify: "it can be referred to as the European Domestic Revival style". After the success of this building, the government commissioned him to design important buildings to demonstrate that Thailand was a modern country. These well-known buildings are the group of building on Rajadamnern Klang Avenue (1937-1940), the *Suphacalasai* Stadium (1938) and the Central Post Office (Bangrak, 1940). Jungsi-arak Somchat mentioned in his book that "all of these buildings were designed in the Art Deco style, mixed with 'Stripped Classicism', which was chosen to identify with the 'Modernity' of the 'Thai Democracy Period', the period of democracy by the military in the Thai context at that time"².

03 Saroj Sukhyanga, Rattanakosin Hotel, Rajdamnern Klang Avenue, Bangkok, Thailand, 1940. © Weerapon Singnoi, 2017.



Other important architects who worked for the Thai government were Saroj Sukhyanga or Phra Sarojratananimarn (1895-1950). Graduating from Liverpool University, he designed most of the important government buildings. His early design was a Neo-gothic style *Manusnakwitthayatar* building at *Bovornniwet* Temple (1923) and the Neo-thai style *Niphanopphadol* building at the *Thepsirin* Temple (1923-1924). In 1947, he was in charge of the construction of the Siamese pavilion at the *Exposition Internationale des Arts et Techniques dans la vie Modern*, in 1937 (Paris). This exhibition changed completely his vision of architectural design. In 1948, he went to New York with the same mission. From then on, his work changed completely: “He still used the symmetric classical plan but designed the massive facade which looks like the Art Deco Style or Stripped Classicism”³. His famous modernist works were the Ayutthaya Town Hall (1939-1941), the Ministry of Justice (1940), the Faculty of Pharmacy and Faculty of Chemistry at the Chulalongkorn University (1940), the Rattanakosin Hotel (1940), the Rasameevittaya building and the *Siriraj* Hospital (1939). A Cambridge graduate, M. C. Vodhayakorn Varavan (1900-1981) worked as the architect of the State Railways Department. His projects appeared after WWII. He designed the New Bangkok *Noi* Railway Station (1946-1950) and the *Siriraj* Hospital’s old O. P. D. Building (1953). “His design was a mix of modernist floor plan with the European Domestic Revival style which came from his education in England”⁴. The new Chiangmai Railway Station (1938) was influenced by the Northern Thai style in the same way as the *Siriraj* Hospital’s *Rajapaetayalai* Hall (1960) which reflects the central region’s traditional Thai style. He taught architecture in the Faculty of Architecture at the Chulalongkorn University for several years and he was the one who gave the basis of architectural construction in Thailand as using local materials, the “form follows function” theory and the architectural aesthetic based on economic criteria.

Postwar Situation/Americanization

After WWII, elections were held in January 1946. These were the first elections in which political parties were legal,

04 Saroj Sukhyanga, Ministry of Justice, Bangkok, Thailand, 1940. This important building was demolished in 2013. © Chatri Prakinnonhakarn, Seminar paper on Supreme Court demolition, Bangkok, Faculty of architecture Silpakorn University, 2013.



and Pridi’s People Party and its Allies won a majority. Pridi (1900-1983) became Thailand’s first democratically elected Prime Minister. In 1946, the young King Ananda Mahidol (Rama VIII) was found shot dead in his bed, under mysterious circumstances. He was succeeded by his younger brother, Bhumibol Adulyadej (Rama IX, 1927-2016) Pridi was forced to resign. After an interim Prime Minister Kuang Aphaiwong (1902-1968) led the government for a short time, in 1948, the army brought Pibulsonggram back to be Prime Minister. Although nominally a constitutional monarchy, Thailand was ruled by a series of military governments.

In 1955, Pibulsonggram was losing his leading position in the army to Field Marshal Sarit Thanarat (1908-1963) and general Thanom Kittikachorn (1911-2004). The regimes of Sarit and Thanom were strongly supported by the USA. Thailand had formally become a USA Ally in 1954. In the 1960s, the Vietnam War hastened the modernization and Westernization of Thai society. The American presence and the exposure to Western culture had an effect on almost every aspect of Thai life in every class of the Thai people. The traditional rural family unit was broken down as more and more rural Thais moved to live in the capital of Bangkok. The economic recession forced Field Marshal Sarit Thanarat’s government to reform its national economic plan in line with global market forces. The Bureau of National Economic and Social Affairs was established in 1961. Modern Thai architecture reflected the process demonstrated in a Bangkok increasingly driven by a capitalist consumer lifestyle. Besides developing a basic infrastructure of “running water, bright lights, good roads, ample jobs and hygiene”⁵, the nation moved quickly to open up to local and foreign investors. The rush to build up education and public utilities paralleled the emergence of a changing urban elite with new values and consumption patterns.

Second Generation of Modernist Architects in Thailand and their Works in the 60s and 70s

Thai architects were starting to be trained in Thailand around 1960. They had studied mainstream international designs, believing that those designs were the suitable

forms, including not only construction technology but also the popular forms themselves. All these had contributed to the bloom of modernism which, after the drafting of the National Socio-Economic Development Plan in 1961, combined well with the development of the Thai economy. This was because as private sector businesses became successful, companies began to build commercial buildings, such as hotels, shopping centers, banks and office buildings. Most Thai architects during the 1960s and 1970s adopted the International Style from the Western world, especially from the USA. They considered function as the key design principle. Not only did function depend on practical usage, but it also depended on geographic location and climate. The use of strip windows and walls made with ventilation cement blocks were designs that took the climate into consideration, which was always another principle of the International Style.

Thai architects in this period began their careers by working as architects in different government organizations such as: the Department of Civil Works, the State Railways, the Crown Property Bureau, the Police Department, the Department of Army, the Civil Affairs, or teaching in a university. After a while they established their own architectural firms when there was more demand from the private sector. Some of them had the experience to work with the foreign firms in Thailand. Chira Silpakarnok (1928-2013) used to work with a Japanese company in the project for the Thai Military headquarters. Trungjai Buranasomphop (1942-2016), a Thai female architect who worked for *Intaren Architects*, a French-Swiss architecture firm, mentioned that “this firm was very keen to design fins on the façade and was concerned about tropical architecture and its heat protection”⁶. Chatchawal Pringpuangkaew (1939-) was working for Louis Berger Group inc., a big American architectural firm, with John Rifenberg and Robert G. Boughey (1936-) as its chief architects. For him, “these two American architects have put the idea of local identity into Modern Architecture in Thailand”⁷.

There were five main groups of architects during this period who contributed to the Thailand modern built environment.

The first group was the group of Thai architects who graduated from Chulalongkorn University and mostly continued their studies in the USA in the late 1950s or early 1960s.

The most important figure who contributed to architectural change in Thailand was Dr. Wadhanyu Na Thalang (1925-2013), who graduated from Chulalongkorn University and received his master in architecture from Cornell University in USA. He dedicated himself to the decentralization of architectural education by teaching architecture and construction in the North-Eastern Institute of Technology in Nakhon Ratchasima (1957-1967). He became the Governor of the Housing Authority of Thailand in 1973, and was a very important figure in the preservation of architectural heritage in Thailand. Among the buildings designed by Dr. Wadhanyu are the Life Insurance building in Bangkok and a dormitory for Bangkok Technical College, with no record for year of construction. The dormitory was a fine exam-

ple of an architectural design having to comply with the height-limit regulations and functional requirements, with the distinctive feature of sunshade panels. Another masterful design by him was the Teacher Seminar building in the *Rajamangala Institute of Technology's* Nakhon Ratchasima Campus (1960), an exemplary instance of advancements in engineering technology combined with use of local materials. Another important figure was M.L. Santaya Issarasena (1925-1984). He also received his master in architecture from Cornell University. He designed the *Phuphan Palace* (1975) in Sakon Nakorn province and the *Thaksin Rajanivet Palace* in Narathiwat province (1976). His works also included the headquarters of Building Materials Company Limited on Phaholyothin Road (1969), a group of buildings for Siam Cement Group (Bang Sue district) and the Bank of Thailand Banknote Printing House in Bangkok (1968). Chira Silpakarnok received his master in architecture from the University of California (USA) in 1959. He began his career in the Ministry of Defense, and then established his own firm, Chira Silpakarnok & friends, in 1976. Most of his architectural works were for the bank. But the most well-known work was the *Indra Hotel & Shopping Complex* in Bangkok (1970). This project was Bangkok's first integrated commercial leisure center. To maximize its commercial potential, Chira Silpakarnok designed the layout of the shopping arcade, cinema, hotel rooms and facilities, allowing 24 hours a day access to the arcade. The stylish fin façade, inspired by traditional Thai motifs, gave the building a design edge over its competitors. This project offered shopping, eating, and the movies all under one roof; Western-inspired lifestyle options which were slightly out of the spending reach of most city inhabitants at the time. The 5-star hotel was a new choice for foreign investors and tourists, and a dining entertainment venue for local elites.

The first high rise office building appeared on Sukumvit Road in the east part of Bangkok in 1969. Although the building featured a glass curtain wall, Rangsan Torsuwan (1939-) designed the building grid to fulfill the demand of the tropical climate. To save energy, he limited glazing to



05 Rangsan Torsuwan, Chokchai International building, Bangkok, Thailand, 1969. The first high rise office building in Bangkok. © Weerapon Singnoi, 2016.

06 Vadhanyu Na Thaleng, Kurusamanakarn (teacher's seminar building) at the North Eastern Institute of Technology, Nakhon Ratchasima, Thailand, 1960. © Weerapon Singnoi, 2015.



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07 Amorn Srivong, Faculty of Science, Mahidol University, Bangkok, Thailand, 1970. © Weerapon Singnoi, 2016.

parts of the north and the south façade only. But, a few decades after, for aesthetics and design fashion, the building façade has been modified by installing glass on the concrete facades. Rangsan Torsuwan received his master's degree from MIT, in 1966, and created a unique style of modern architecture for over 100 Thai Farmers Bank branches all over Thailand. These iconic buildings were designed following the logo of the Thai Farmers's Bank representing rice.

Other Thai modernist architects in this group that could be mentioned were Duang Yossunthorn (1920-), Thaweesak Chantraviroj (1931-1977), Chaiya Poonsiriwong (1932-1990) of Duang-Thaweesak Chiya & associates, Jen Sakolthanarak (1926-1973), Yiam Wongvanich (1937-), Dan (Thanasit) Wongprasat (1939-), Chuchawal Pringpuangkaew (1939-) of Design 103, Mati Tungpanich (1941-) of Design Develop co.ltd, Nond Buranasomphop (1938) and Trungjai Buranasomphop (1942-2016) of Nond-Trungjai architects and planners.

The second group of modernist architects in Thailand were the Thai architects who received a Western architectural education.

Among those architects who graduated from abroad, Sumet Jumsai na Ayutthaya (1939-) is still the most famous Thai architect with an international reputation. He graduated from the University of Cambridge (UK), in 1961, received his master in architecture in 1965 and a PhD degree in 1969 from the same university. He began his career in the Department of Urban Planning and then established his own firm, Sumet Jumsai Architect, from 1975. He is the most well-known architect of Thailand, as he participated in several international architectural competitions and also taught in the Department of Architecture at the University of Cambridge, between 1989 and 1991. He was also involved in architectural conservation and was a founding member of ASA Architectural Heritage Committee established in 1968. He was selected by the Ministry of Culture to be the national Thai artist, in modern architecture design in 1998. His early projects are: the Crown Property Bureau in Sea Phantom Place (1969), the British Council in Bangkok (1970), the Siam Country Club in Pattaya (1972), the School for the Blind (1973), and the Science Museum in Bangkok (1976). For the Science Museum, he designed for children in fun and futuristic geometrical shapes, reflecting the city's growing interest in science and technology at the time. He kept the interlocking steel roof structure exposed, saving on construction materials, while opening up a large space for the display of oversized objects like spacecraft models. The museum marked the beginning of government interest in creating knowledge centers for the nation's youth.

Krisda Arunvongse Na Ayudhaya (1932-2010) graduated from the Massachusetts Institute of Technology in 1959. He began his career in the Department of Army Civil Affairs, then became an architecture teacher at the Chulalongkorn University, serving as Dean between 1974 and 1978. He was elected Mayor of Bangkok in 1992. He also had his own architectural firms Krisda Arunvong Architect and Casa. His famous projects are: the President Hotel (1966), the AUA. Library (1970), the Xevier Church (1970), the Bangkok Bank

headquarters (1974), and the Central Department Store, *Ploenchit* (1974). He also designed a very important building of this time, the New *Suan Amporn* Pavilion, in 1972. Economic growth and the rising population led to ever larger product fairs and festivals in the city, creating the need for a multi-purpose building suitable for a variety of civic events. He designed the huge 15 meters, column-free expanse, using the latest concrete engineering techniques and incorporated a folded plate roof which created a large space adaptable for various uses. The brief for the pavilion included serving as an occasional badminton court for the king, and as a reception hall for the queen's state visitors. Significantly, his new *Suan Amporn* Pavilion was built on royal grounds, but functioned as both a public use building and a royal venue. In stark contrast to the surrounding backdrop of *Amporn* Palace and *Ananda Samakom* Throne Halls, this modern structure was a symbol of the evolving relationship between the Monarchy and the people.

Other famous architects in this second group were: M. L. Tridhosyuth Devakul (1942-), graduating from the Harvard University and Ong-art Satrabhandhu (1942-), graduating from the Cornell and Yale Universities.

The 3rd group of modernist architects in Thailand was the group of Thai architects who received a Thai architectural education.

Among Thai architects in this group, Pongpun Pisalsarakit (1933-2003) was the most famous. He used to work with Jen Sakolthanarak (1933-2003) and he established the architecture studio 110 architect co., ltd. which gained experience in designing hospitals and office buildings. Pajit Pongpunrug (1938-) began his career by working with Jen Sakolthanarak as well. His famous architectural designs were *Masjit Nurul Islam* (1973) on Pattanakan Road and the Islamic Center Foundation (1983) on Ramkamhaeng Road (Bangkok).

The 4th group of modernist architects in Thailand was the unique case of Amorn Sriwong (1928-2013), who was self-educated by working in a construction firm. Without attaching to a style or teacher's vision, he designed more creative architectural works with a structural beauty. His well-known buildings were constructed all over Thailand, in Bangkok: the university campus in Hadyai and Chiangmai. Those buildings are the *Satang Mongkolsuk* building at the Faculty of Engineering, Songklanakarin University, Hadyai (1966), the *Suanmali* branch of Thai *Pattana* Bank (1970), the Faculty of Science building, Mahidol University (1970).

The 5th group of modernist architects in Thailand were the foreign architects who worked in foreign companies at the time when there were foreign investors investing in Thailand. They hired foreign architectural firms such as Louis Burger (an American firm), Gerson & Son, and *Intaren* Architects (a French-Swiss firm). Robert G. Boughey, Rifenburg, OICC to design their office buildings. We don't have much information about those architects but one American architect who still continues to practice architecture in Thailand, and has his own firm, is Robert G. Boughey (1936-). He is the only foreign architect who obtained a Thai architect license after the Thai architectural professional practice law was enforced in 1965.



Since 1965, the architectural profession in Thailand has been declared a protected profession that could be practiced only by Thai architects, with the exception of some special projects, commissioned by the government, which permitted some foreign architecture firms. Because of this, there is not much modern architecture designed by foreigners or world master architects. Some modern architecture designed by Japanese architects appeared in governmental educational co-operation projects, such as some buildings for the *Ladkrabang* Institute of Technology in Bangkok, Hadyai and Chiangmai Institute of Technology. Some exceptions which appear are the luxurious hotel projects, such as the Siam Intercontinental hotel (1966), designed by Joseph P. Salerno (1915-1981), and the *Dust Thani* Hotel (1971), the tallest hotel (22 stories high) and a new Bangkok landmark, designed by the Japanese architect, Yozo Shibata (1927-2003).

Modern Thai Architecture in the 80s and 90s

An economic boom resounded through Thailand during the 80s and 90s. Large financial institutions built huge structures. When the president of the Thai Farmer's Bank returned from his business trip in the USA he had an idea to build a glass covered building, which was a very popular style in the USA. Rangan Torsuwan (1939-) designed a modern steel and glass skyscraper with an open plaza fronted by a piece of contemporary sculpture. The architectural formula signified the bank's progressive vision and innova-

tive management. The architect was criticized for designing a building which reflected light and heat upon its neighbors. At that time, the technology was insufficient regarding heat reduction and energy conservation for glass and related elements. But glass is beautiful, and it was increasingly popular both in the West and in Asian countries.

The Bangkok Bank on its 33rd anniversary, in 1982, commissioned a new 33-story head office on Silom Road, in the heart of the city's financial district. The Head Office of the Bangkok Bank was finished in 1984 and was the tallest building in Bangkok at that time. Architect Krisda Arunvongse Na Ayutthaya (1932-2010) had a far-sighted design including higher-than-usual ceilings in the car park, so that the space could be transformed into additional offices in the future when good public transport would reduce the need for private cars. He designed an International Style modern building with tropical features such as horizontal fins to filter heat.

In this period of economic boom, there were all kinds of modern International Style commercial buildings such as office buildings, banks, commercial centers, spread all over Bangkok. In the late 1980s, the post-modern movement began to appear in the Thai urban landscape. Some Thai architects who used to design modern architecture were commissioned by clients to design in the post-modern style. We cannot tell that this was the end of the Modern Movement in Thailand but there have been many changes in the way architectural forms are perceived. In the past,

modernism encompassed mainstream architecture, society and other fields of professions. But new architecture has changed. In general, society embraces a diversity of forms and does not hold to one structure for long. In the past, technology was limited so everything was straightforward, based on reason, hence the reliance on simplicity as an ideal. Such a concept was appropriate for the social and economic milieu of the time.

In 1997, Asia faced the huge economic crisis which started in Thailand and was called the *Tom Yum Koong* Crisis, with the financial collapse of the Thai baht after the Thai government was forced to float the baht due to a lack of currency to support its currency pegged to the USA dollar. This marked the end of the Thai economic boom and architectural bloom.

Nowadays, it is a sad fact that many examples of modern Thai architecture have already been lost as very few of them were registered as historical monuments. The Ministry of Justice building was demolished in 2013 and there are many more to come. The *Dusit Thani*, the first Thai luxury hotel in Bangkok, is set to be demolished next year to give way to a huge shopping complex in the center of Bangkok. The Embassy of Australia has just moved to a new location as the previous. Modernist building by the Australian architects, Ancher, Mortlock & Woolley, will be demolished soon and also be replaced by a new commercial development project. Many more examples of modern architecture in Thailand are under threat and some are transformed into other architectural styles due to the lack of knowledge about their value as urban heritage.

Architectural Conservation and Documentation in Thailand

In Thailand, we have had registered historical monuments selected by The Fine Arts Department since the founding of the department in 1911. Those buildings were thus protected by law. But very few examples of modern architecture were registered and are still in danger of being demolished, and are still being replaced by new buildings. In 1968, architects, scholars and people concerned about architectural conservation gathered together, under the Association of Siamese Architects under Royal Patronage (ASA), to create the Fine Arts Commission under the Scientific committee of ASA which later became the Architectural Conservation Committee with the following objectives:

- To find ways and means to conserve wholesome urban and rural features such as public open spaces and buildings that contain architectural or historical value.
- To consider and give advice on sustainability of locations and architectural standards for major buildings in important areas which, if built, would affect the environment.
- To work in an advisory capacity with the government and private bodies on schemes concerning or affecting the public environment as set out above.
- To propagate to the general public the importance of preservation.
- To make an inventory of places of significance or beauty, man-made or natural well as buildings or structures of

09 Krisda Arunvongse Na Ayudhaya, Bangkok Bank headquarters, Bangkok, Thailand, 1974. © Weerapon Singnoi, 2017.



architectural or historical interest. Such an inventory was to serve as a basis for preservation and restoration.

In 1971, this group of people decided to establish a new body to work in parallel concerning protection of the environment in general, called The Society for the Conservation of Natural Treasure and Environment (SCONTE). At the same time, the working group under ASA became the ASA Architectural Conservation Committee, their work focusing on the protection of architectural heritage.

In 1982, ASA initiated the ASA Architectural Conservation award to nominate conservation projects and people or organizations involved in conservation. The award sought to promote these projects so that they would gain more support and a higher profile in the public eye. The award was given in person by H. R. H Princess Mahachakkri Sirindhorn, so the owner would be inspired to continue with the conservation effort.

Concerning the art of documentation, ASA published bilingual books such as: *Six Hundred Years of Work by Thai Artists and Architects* by Joti Kalayanamitra (1976) and *Northern Thai Domestic Architecture and Rituals in House-Building* by Anuvit Charernsupakul and Vivat Temiyabhandha (1976). In 1996, ASA published 9 more books about architecture in the Thai language, 32 of them were *Siamese Architects (principles, role, works and concept of Siamese Architects from 1932-1994)*, vol. 1 and 2 written by Phussadee Thippatas. In 2004, to commemorate 20 years of the ASA Architectural Conservation Award, the 1st volume of *Architectural Heritage in Thailand* was published (in Thai and English) by ASA and then the second volume in 2013. In 2017, ASA plans to publish the 3rd volume which contains awarded buildings

from 2013-2017. In these 3 volumes, more than 400 awarded buildings are documented, and the document can be found online. In 2010, ASA and the Faculty of Architecture, Silpakorn University, published *Western Architecture in Siam from the reign of Rama IV to 1937* written by Somchat Jungsiri-arak, and in 2014, a research work was published by a group of teachers in the Faculty of Chulalongkorn University, led by Chaiboon Sirithanawatana: *Siamese Architects Route*, a biography of 75 Thai architects who were born between 1887 and 1947.

Another activity of architectural heritage documentation is VERNADOC. The word VERNADOC stands for Vernacular Documentation, a term coined by Finn architect, Mark Mattila, to specify a means of vernacular architectural study which emphasizes collection of data in situ by basic techniques to produce high quality works. It is expected that the results of measured drawings would inspire building owners, or people in the community, to perceive the heritage value of works by outsiders, thus collaborating to conserve those buildings. Markku Matilla started the first international VERNADOC camp in 2005, then Thai architect Sudjit Sananwai has spread this idea and techniques all over Thailand since 2007 under the ASA Architectural Conservation Committee. In 2013, the book VERNADOC vol. 1: *Thailand*, by Sudjit Sananwai and published by ASA, collected drawings and articles from VERNADOC camps held in Thailand during the 5 years from 2007 to 2012.

In 2014, Thailand became a new chapter of **docomomo** through the efforts of the ASA Architectural Conservation Committee and the **docomomo** Thailand working group. We presented *Modern Architecture Conservation in Thailand* at the 13th **docomomo** Council meeting, in Seoul, 2014, and joined the 14th **docomomo** Council meeting, in Lisbon, 2016, as a new working party. Around 25 works of modern Thai architecture were documented under **docomomo** Thailand and which were mainly drawn from ASA Architectural Conservation awarded buildings.

In 2017, the Department of Public Treasury, Ministry of Finance started to make a list of buildings with architectural and historical value and to first take into consideration the list of ASA Architectural Conservation awarded buildings.

Recently, the Urban Heritage Center was established under ASA in April 2017 with the main objective to manage the architectural archives and documentation and give academic and scientific support and advice to the ASA Conservation Committee and Conservation Network in Thailand.

The pioneers of modern architecture in Thailand were the elites in Thai society. Members of the Royal family were sent to Europe for their architectural education and, as they were trained in architectural schools that taught classical architecture, they came back with the skill of classicism's symmetrical plan design. But as the world trend of architecture changed into the Modern Movement together with the Great Depression, they were required to reduce all façade details of their architecture. The architectural forms of Art Deco and stripped classicism were the results. The simplified domestic revival style and traditional Thai simplified style also appeared in this period from 1926 to 1946.

In the late 1950s, the second generation of modernist architects, who were mostly educated in Thailand, and from abroad, began to play an important role in contributing to the Thai modern built environment. We can find International Style architecture similar to overseas which follows the principle of "form follows function" and "less is more", based upon new technologies of construction at that time, particularly the use of glass, steel and reinforced concrete.

Notes

- 1 Somchart Jungsiri-Arak, *Western Architecture in Siam from the reign of Rama IV-1937*, Bangkok, Association of Siamese Architects under Royal Patronage (ASA) and the Faculty of Architecture Silpakorn University, 2000.
- 2 *Id.*
- 3 *Ibid.*
- 4 *Ibid.*
- 5 Chaiboon Sirithanawatana, "When Thailand turned towards Modern Architecture", in *Keeping up-Modern Thai Architecture*, Bangkok, Thailand Creative & Design Center (TCDC), 2008.
- 6 Phussadee Thippatas, *Siamese Architects 2: Principle, roles, works and concept (1932-1994)*, Bangkok, Association of Siamese Architects under Royal Patronage (ASA) Bangkok, 1996.
- 7 *Id.*

References

- HORYINGSAWAD, Wichit, "The magnificent Dust Thani", *ART4D Magazine online*, Bangkok, 2017.
- JUNGSIRI-ARAK, Somchart, *Western Architecture in Siam from the reign of Rama IV-1937*, Bangkok, Association of Siamese Architects under Royal Patronage (ASA) and the Faculty of Architecture Silpakorn University, 2000.
- LASSUS, Pongkwan, *Architectural Heritage in Thailand 1*, Bangkok, Association of Siamese Architects under Royal Patronage (ASA), Bangkok, 2004.
- LASSUS, Pongkwan, *Architectural Heritage in Thailand 2*, Bangkok, Association of Siamese Architects under Royal Patronage (ASA), 2013.
- PIMONSATHEAN, Yongtanit, "Preservation of Modern Architecture: The neglected heritage of modern architecture and why it needs to be preserved", in *Keeping up-Modern Thai Architecture*, Bangkok, Thailand Creative & Design Center (TCDC), 2008, 80-85.
- SANANWAI, Sudjit, *Vernadoc Vol.1 Thailand*, Bangkok, Association of Siamese Architects under Royal Patronage (ASA), 2013.
- SIRITHANAWATANA, Chaiboon, "Tropical High-Rise Debates", in *Keeping up-Modern Thai Architecture*, Bangkok, Thailand Creative & Design Center (TCDC), 2008.
- SIRITHANAWATANA, Chaiboon, "When Thailand turned towards Modern Architecture", in *Keeping up-Modern Thai Architecture*, Bangkok, Thailand Creative & Design Center (TCDC), 2008.
- SIRITHANAWATANA, Chaiboon, *Siam Architects Route: 75 Thai architects (1932-1992)*, Bangkok, Association of Siamese Architects under Royal Patronage (ASA), 2004.
- THIPPATAS, Phussadee, *Siamese Architects 1: Principle, roles, works and concept (1932-1994)*, Bangkok, Association of Siamese Architects under Royal Patronage (ASA), 1996.
- THIPPATAS, Phussadee, *Siamese Architects 2: Principle, roles, works and concept (1932-1994)*, Bangkok, Association of Siamese Architects under Royal Patronage (ASA), 1996.

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Trần Đình Quyên, Vĩ Đan [For the People Hospital (former name: Thong Nhat Hospital), Ho Chi Minh, Vietnam, 1972. © Phạm Thủy Loan, 2016.]

Modern Architecture in Vietnam or Vietnamese Modern Architecture?

BY PHAM THUY LOAN AND TRUONG NGOC LAN

Architecture is one of the keys to the values of a society, a reflection of a people's aspiration, and a society's ideas and technological experiments over periods in its history. This paper will address "modern architecture in Vietnam" focusing on the general course of its development: its practice, discourse and the built environment throughout history. The guiding questions for the main content of this paper are very fundamental:

How can we define modern architecture in Vietnam?

How was it formed and developed through the modern history of the country?

Can we call modern architecture in Vietnam "Vietnamese modern architecture"?

The Analytical Framework

The MASEANA project offers a definite approach to the issue when it states that "the history of modern architecture in Asia is the history of how Asians have become modern; and has evolved through sustained interactions with the West". In other words, modern architecture accompanies modernity, or modernism, having undergone numerous upheavals in history, from colonization, decolonization, westernization, through industrialization, and urbanization, to nation-building and globalization. These are various phenomena that help define and shape Asian modernism today.

In this regard, we would like to go back to the beginning of Vietnam's modern history with milestones, emphasizing external influences and seeing how these encounters of modern thoughts shaped our modern architecture and generations of Vietnamese architects.

French Colonization (1858–1954): Strong Encounter with the West

The French colonization period lasted almost a century in Vietnam and Indochina. The quasi-feudal/colonial regime left a remarkable legacy in Vietnam; architectural heritage is nowadays one among many other assets.

Before 1920

When the French conducted their first colonization program, they undertook major construction works in the larger cities in Vietnam: public buildings, housing projects, infrastructure systems, ports, railway stations and factories. That was a significant period when comprehensive modernity was brought into Vietnam for the first time by the French.

The first aspect of modernity was reflected in urban planning. The French conducted a number of master plans for Hanoi, Saigon, Haiphong, Dalat city, etc. Western town planning principles of the grid, axes, boulevards, parks and

public gardens, and grand facilities such as theaters, schools, libraries and hospitals were put into use. The fundamental base for modernity to take shape was urban infrastructure, which had not existed in Vietnam before. Grand road networks with sidewalks for pedestrians separated from automobile flows, networks of water supply, sanitation, electricity, communication as well as greenery, were implemented. One of the most remarkable modern works of that time was the Paul Doumer Bridge (1898-1902). It was a beautiful iron bridge that consumed 30,000 m³ of stone, 5,600 tons of laminated steel, 137 tons of cast iron, 165 tons of iron and 7 tons of lead for the construction.

The second aspect of modernity could be found in buildings and architecture. Buildings of various Western styles were constructed in many cities. In the early colonial period, French architecture was directly imported to Hanoi: classical style, French regional styles, neoclassic or Art Nouveau. The most typical and outstanding examples of these types were the Hanoi Opera House (1901-1911), and the Residence Superior of Tonkin (started 1917) illustrating traces of modern architecture as seen on Art Nouveau entrance canopies. Until 1920, almost all the significant buildings in Hanoi were built by French architects. Together with these very exotic styles, they brought into Vietnam new construction technology and materials, such as reinforced concrete, steel, glass, cement, etc.

The third aspect of modernity was demonstrated in the social transformation of Vietnam. Local intellectuals began absorbing new ideas from abroad, thus gradually deviating from Confucian thoughts. Movements and organizations for cultural and educational innovation like "Duy Tan", "Dong Kinh Nghia Thuc"², "Khai Tri Tien Duc" (AFIMA)³ accelerated the change in the local people's awareness and lifestyles. With the perspective of learning Western civilization while preserving and developing traditional cultural identity, these movements and organizations exercised their



influences on the first Vietnamese modern buildings. An exemplar building of this kind was the AFIMA Head Office in Hanoi, which was designed in 1920 and completed in 1922. This building combined Western spatial organization and construction technologies with Vietnamese traditional form and ornaments. Unlike the old Confucius rectangular layout, its sector-shaped floor plan contains new functions like a billiards room, an auditorium and a dancing hall.

From 1920 to 1945

After WWI, the French implemented their second colonization program for economic recovery in Vietnam. Construction activities and urban expansion were carried out. Ernest Hébrard (1875-1933) – a famous French architect – came to Vietnam and made a great impact on Vietnamese architecture. With his sophistication and talent, he created a mixture of Western technology and adaptation to local climate and culture. Remarkable buildings by him were the Department of Finance (1924-1928, present-day Ministry of Foreign Affairs), Louis Finot Museum (1925-1931, present-day National Museum of History) in Hanoi; and Pétrus Ky high-school (1927, present-day Le Hong Phong high-school), in Saigon. Art Deco also came to Hanoi in this period. Many Art Deco buildings became important landmarks in the city such as IDEO Print Factory (*Imprimerie d'Extrême-Orient*, 1929), Bank of Indochina (1931), Shell oil company headquarters (1938).

With Ernest Hébrard's role as a pioneer of the so-called Indochina style, buildings in this period shared a common expression of eclecticism of foreign styles and vernacular details from Vietnam, China, Khmer and Champa. Luckily, many of these buildings still remain today as part of our architectural heritage.

The First Generation of Architects:

The Indochina College of Fine Arts (1925)

Modernism was intensively developed when the French started training local intellectuals and technicians to

serve their colonial administrative systems. The Indochina College of Fine Arts was founded in 1925. The Faculty of Architecture, established one year later, educated the first generation of Vietnamese architects. Earlier, construction in Vietnam had been carried out by carpenters and builders based on indigenous knowledge and experience. This historical benchmark laid an important foundation for the formation of the architect as a privileged profession in Vietnam until today.

Before 1945, most of the Vietnamese architects played a minor role in the French design offices as assistants only. Some of them opened their own design offices, but their practice was limited to small-scale private villas and houses. Those first architects were greatly influenced by Western thinking and they quickly absorbed new knowledge, skills and building techniques which they applied to their practice with great passion. However, in this context of being influenced by the West, they developed a kind of resistant thinking when they wanted to confirm their characteristics and national identity as well as vernacular architecture in their designs. They disregarded the discrimination of the French and expressed their patriotism, national pride and the desire to create projects that would match the local characteristics and conditions, promoted the utilization of Vietnamese traditional elements in architecture.

One of the best-known names of the time was architect Huynh Tan Phat (1913-1989), who graduated as an architect from the Indochina College of Fine Arts in Hanoi in 1938. In 1941, he opened the first private Vietnamese architecture firm ever in Saigon. He was among the first of the Vietnamese modern architects to design several beautiful modernist villas in Saigon and Dalat. Huynh Tan Phat joined the Communist Party later that same year as a full member and became Ho Chi Minh's (1890-1969) trusted comrade from the south. He was a modern architect who paved the way for a modernist revolution in architecture of the country.

02 Un-specified architect, AFIMA head office, Hanoi, Vietnam, 1920-1922.
© Truong Ngoc Lan, 2016.



03 Ernest Hébrard, The National Museum of History (former name: Louis Finot Museum), Hanoi, Vietnam, 1925-1931). © Nguyen Phu Duc, 2015.



From 1945–1954: Indochina War

The period 1945–1954 was full of upheavals in the world's history as well as in Vietnam's history. On March 11st 1945, the Japanese army overthrew the French protectorate government in Vietnam and took control of the whole country. But only a few months later, WWII ended. On August 14th 1945, the Japanese army surrendered to the Allied Army. Vietnam fell into a chaotic situation. Seizing the opportunity, the Viet Minh (Alliance of Vietnamese Patriots) led by Ho Chi Minh came to power with a revolution in August that same year and declared independence by establishing the Democratic Republic of Vietnam on September 2nd in Hanoi.

However, subsequently, Vietnam commenced a war of resistance lasting almost 10 years against the return of the French troops to Vietnam. In 1954, as the Geneva conference was signed among the parties involved in the first Indochina war, the conflict finally ended. Vietnam was temporarily divided into two regions: North Vietnam and South Vietnam, which went different ways in terms of politics and economy.

During this period, almost no major buildings were constructed in both regions: South Vietnam and North Vietnam.

Country: Division or the Vietnam War (1954–1975)

Within two decades (1954–1975), Vietnam was divided into two states following two absolutely different socio-political models: North Vietnam – or Democratic Republic of Vietnam – was led by President Ho Chi Minh and supported by the Socialist Bloc, most notably by the former Soviet Union and China, while South Vietnam – known as Republic of South Vietnam – was led by President Ngo Dinh Diem (1901–1963) and backed by the United States of America. Nevertheless, that period was considered the golden years for modern architecture to flourish in both regions with a large number of large-scale and important buildings. There were three favorable conditions for such a vigorous

development of modern architecture in this period: firstly, both governments made great efforts to build infrastructure systems and urban facilities with different sources of investment: both domestic mobilization and overseas financial aid programs. Secondly, new development trends in thinking, style, technique, etc., from allied countries of both sides penetrated into North Vietnam and South Vietnam. Thirdly, Vietnamese architects played a leading role in Vietnamese architecture, no matter which political system it belonged to. They wished to confirm their national identity in architecture.

Notwithstanding, the panorama of architecture in each part of the divided country had its own interesting features.

North Vietnam

In North Vietnam, the government led by President Ho Chi Minh spent most of its resources on the liberation of South Vietnam from the USA's domination; thus, investment in construction was minimized. Most of the important buildings in North Vietnam were constructed with financial and technical support from the Eastern Bloc, such as the former Soviet Union, the Democratic Republic of Germany, and from Poland and China as well. Since 1964, due to the threat of the USA Air Force's air raids, construction in the North was halted for several years. On the other hand, in the centralized economy of the North, the construction market did not exist and the State was the only "investor" which seriously limited the diversity in architectural development.

In this period, architects who had previously graduated from the Indochina College of Fine Arts continued to play a major role. However, their creativeness and personality were limited due to a number of constraints: the shortage of investment, building materials and common design guidelines applied to all public-invested projects. Some notable works of this time could be named: the Auditorium of Ho Chi Minh in the National Academy of Politics (1958) by architect Nguyen Ngoc Chan (1911–1990), President Ho Chi Minh's Residence (1958) by architect Nguyen Van

Ninh (1908-1975), the office of Ministry of Planning and Investment (1960) by architect Doan Van Minh (1908-1973). They were mostly masonry buildings with small windows, simple stucco decorations and ventilation bricks. Popular vernacular architectural features were symmetrical layouts, three-arched entrance gates and traditional verandas. The only work that showed a difference was the Polytechnic University of Hanoi (1961-1965) by Russian architects E. S. Budnik and S. T. Airapetov.

Southern Vietnam

Modern architecture in South Vietnam enjoyed more favorable conditions. Vigorous urbanization sponsored by the USA offered plenty of opportunities for the architectural profession without war disturbance or interruption. Secondly, architects in the South could enjoy much more freedom to design without political guidance of their thoughts. Thirdly, the South with a capitalist economy offered plentiful design orders, clients, materials and technologies. Therefore, modern architecture in the South was more abundant and diverse in styles and expressions.

The first-generation architects from *École Supérieure des Beaux Arts de l'Indochine* or *Écoles des Beaux-Arts* played a significant role in contextualizing modern movements of architecture in Saigon. Some of their outstanding works such as the General Science Library (late 1960s-1972) by architect Nguyen Huu Thien (1914-1981) and Bui Quang Hanh (?-1992), Thong Nhat hospital (completed in 1972, present-day Vi Dan hospital) by architect Tran Dinh Quyen (1932-), Caravelle Hotel (1959) by architect Nguyen Van Hoa (1916-2005) were nationally recognized. They were successful in contextualizing Western modern architecture to Saigon's tropical climate and responded to national traditional aesthetic perceptions. As a result, their buildings clearly demonstrated local identity, yet still looked internationally modern. Common features of modern architecture in Saigon could be described as: form follows function, asymmetrical compositions, use of general cubic or cylindrical shapes, use of flat roofs, reinforced concrete, metal and glass frameworks often resulting in large windows in horizontal bands, absence of ornament or moldings. At the same time, their works combined tropical climate adaptive solutions, especially the use of claustra and other traditional expressions and added details.

One of the most outstanding works in the South was the Independence Palace, designed by architect Ngo Viet Thu (1926-2000) in 1962 as a result of a design competition to replace the damaged Norodom Palace (French Governor's Palace) that had been bombed. While several neoclassical schemes were submitted, the commission for the Independence Palace was the modernist masterpiece by Ngo Viet Thu. He was one of Vietnam's most accomplished and prolific modern architects, had been educated in Paris at the *École des Beaux-Arts*, and was the only Asian architect to be awarded the Grand Prix de Rome in 1955. This confirmed the government's and public's acceptance of modernism over neoclassicism at that time.

Country Reunification (1975-1986)

On April 30th 1975, the People's Army of North Vietnam took over Saigon and reunified the two regions into one united country, officially named the Socialist Republic of Vietnam. Pursuing socialism, the whole country embarked on a period of enthusiastic reconstruction, guided by the doctrine of centralized direction and management. The base of the socialist economy was the public and the collective sectors without any "room" for the private sector or market forces. That was also a period of economic hardship as a consequence of post-war exhaustion of economic resources, the embargo and sanctions by the USA and the ineffective centralized economy hindered by bureaucracy.

In respect of modern architecture, there were two remarkable phenomena in that period: the appearance of socialist collective housing projects (called KTT in Vietnamese) and the birth of the second generation of Vietnamese architects.

The KTTs

A KTT means a public housing estate, designed in the "micro rayon" concept imported from Eastern European Bloc, a "modified" version of the "neighborhood unit" concept of Clarence Perry (1872-1944) in 1923. In this period, housing was considered as a social service (similar to healthcare and education) and in-kind payment for low-paid civil servants that should be provided by the State. With financial and technical support from other socialist countries, many public housing neighborhoods were constructed in Hanoi, Vinh, Danang and elsewhere to accommodate the demand of the huge number of State employees and members of the armed forces.

These KTTs, a monotonous style of 4 to 5-story walk-up condominiums with identical, modest apartments, were built using various methods: from manual construction to the assembly of small components or large panels. This housing type quickly created a massive number of homes to meet the demand and, at the same time, followed egalitarianism perfectly as a familiar slogan during the period of Orthodox Socialism.

One good example of KTT was the Trung Tu project (1973-1980), which comprised 29 condominiums with a similar design: a 5-story walk-up, prefabricated structure, simple layout and details. Elementary and secondary schools were put in the middle of the neighborhood and kindergartens were located in the middle of 4 groups with 6 to 8 condominiums. No commercial facilities were planned and set-up as all food and necessities were completely provided by the State.

The Second Generation of Vietnamese Architects

In 1956, the Polytechnic University of Hanoi was founded as the first university of technology in Vietnam, with its first and foremost mission to train Vietnamese industrial engineers, including civil engineers and architects. Some of the first graduates in civil engineering from this university and some who were sent to study in Eastern Europe, Cuba and China in the 1970s and the 1980s became the second golden generation of Vietnamese architects.

- 04** E.S Budnik and S.T Airapeto, Polytechnic University of Hanoi, Vietnam, 1961-1965 © Trung Ngoc Lan, 2016.0s.



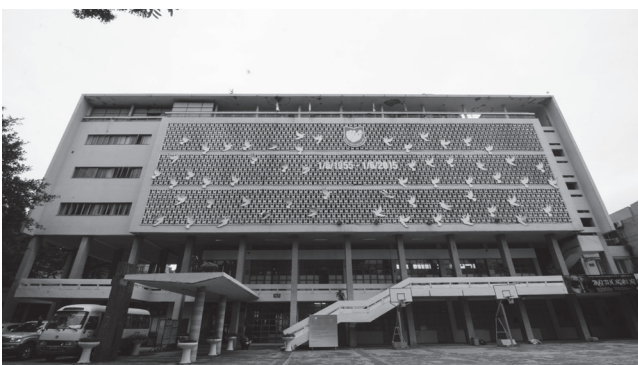
- 05** Doan Van Minh, Office of Ministry of Planning and Investment, Hanoi, Vietnam, 1960. © Nguyen Manh Tri, 2016.



- 06** Nguyen Van Hoa, modern housing, Ho Chi Minh, Vietnam, 1970s. © Trung Ngoc Lan, 2017.



- 07** Trung tu KTT, Hanoi, Vietnam, 1973-1980. © Redrawn from original map by Pham Thuy Loan, 2016.



- 08** Le Van Lan, The Children Palace, Hanoi, Vietnam, 1974-1977. © Pham Thuy Loan, 2016.



- 09** Ngo Viet Thu, The Independence Palace, Ho Chi Minh, Vietnam, 1962-1966. © Pham Thuy Loan, 2016.

Their designs were influenced so much by the Soviet style of modernism. Common features included architecture as a sculpture, functionalism, and socialist expressionism. Again, architects attempted to add local flavor to their works by adding local elements of expression like wooden-frame-like concrete structures, sloped roofs, verandas, and other details.

Remarkable buildings of this period included the International Department of Bach Mai Hospital (1986, present-day the Hanoi France Hospital) in Hanoi by architect Nguyen Vu Hung, Hoa Binh Theater (1985) by architect Huynh Tan Phat and An Dong market (1980s) by architect Le Van Rot (1942-) in Ho Chi Minh city, to name a few.

One of the most valuable buildings in those years was the Children's Palace (1974-1977) in Hanoi designed by architect Le Van Lan (born in 1938). The work was highly appreciated thanks to its modern, simple, asymmetrical form, smart East – West building layout and the use of claustra that proved to be very appropriate to the local climate; the conscious combination of spatial openness and enclosure, between architecture and artistic motifs (mosaic on columns, murals, paintings on glass); the utilization of existing trees on site and the creation of a roof-top garden for the first time in Vietnam; the use of reinforced concrete and recycled materials locally available, including war-torn buildings or left-overs from other buildings. Le Van Lan is also a well-known name among the second generation of local architects. Having graduated from Hanoi University of Polytechnics in Vietnam in 1959, he attended an internship in Russia in 1961, and practiced as assistant architect in the office of architect Nguyen Ngoc Ngoan (1912-1990) – a desperate admirer of Le Corbusier. He did his 3-year internship in civil building design in the Democratic Republic of Germany (East Germany), and developed a strong passion for modernism applying its principles in his works with his own creativeness and sensitivity. Other than the Children's Palace, architect Le Van Lan designed Thong Nhat Park Southern Gate and Video Game House, Hanoi Hotel – the first high-rise building and redevelopment of Dong Xuan historical market in Hanoi. All of them are important examples of architecture in Hanoi today.

The Post Reform and "Open" period (1990s onward)

In order to tackle the severe post-war economic stagnation, the Vietnamese government adopted integrated and consistent reform across many aspects of the economy and society. The adoption of the Doi Moi policy (meaning "renovation" or "reform") in 1986 triggered a profound economic change: the introduction of market mechanisms into the hitherto orthodox socialism of Vietnam. In line with the structural shift in the economy, there were many efforts to reform the construction sector, but not until 1990 did construction and architecture witness real major changes. As of 1990, the private sector emerged strongly enough; external resources began to pour into the country after the withdrawal of the long-standing economic embargo by the USA. With an initial success in the efforts to improve diplomatic relations, Vietnam marked its integration into the world through a series of important events: joining the Association of Southeast Asian Nations

(ASEAN) in 1995, the ASEAN Free Trade Area (AFTA) in 1996, the Asia-Europe Meeting (ASEM) in 1996, the Asia-Pacific Economic Cooperation (APEC) in 1998 and, most notably, becoming the 150th official member of the WTO in 2007. By this process, Vietnam transformed from a centralized socialist economy to an open market economy, and eventually to the international market economy it is today. Though they are not yet ranked among the world's major cities, Hanoi and Ho Chi Minh City (formerly Saigon) continue to be two powerhouses in terms of international capital exchange, education and training, business and commerce.

Diversity and Competitiveness

In the subsequent two decades, steady economic growth, rapid urbanization and global integration have opened up huge opportunities for new construction and architectural diversity. Vietnam welcomed an outbreak of various design styles ranging from classical colonial style, European classical style, through modernism, Soviet style and Expressionism, to postmodernism and Neo-modernism. Two centuries of the world's architectural history seemed to be recreated in Hanoi within just two decades.

Notable modernist buildings in these years were the Hamatco Headquarters (1990) by architect Vu Hoang Hac, the United Nations Development Programme Apartment Building (1994) by architect Nguyen Khoi Nguyen (1936-), the Hanoi International Convention Center (1997) by architect Nguyen Thuc Hoang (1940-) and architect Dang Kim Khoi (1958-), Noi Bai International Airport Terminal 1 (2000) by architects Luong Anh Dung (1942-) and Than Hong Linh (1965-) and their team in the Vietnam National Consultant Corporation (VNCC). In this new context, as Vietnam has become a vital hub for construction, it has attracted a wave of foreign architects. This is the third wave of influences from the outside world, not only from the West but also from countries in the region such as Japan, South Korea, Singapore and others.

Since 2000, iconic buildings such as the National Convention Center (2004-2006), the Hanoi Museum (2007-2010) and the National Assembly House (2009-2014) have all been designed by German architect Meinhard von Gerkan (1935-) and his partners in GMP. Architekten von Gerkan, Marg und Partner. The position of Vietnamese architects has been dramatically challenged as they face global competitiveness within their home country. Such a circumstance, at the same time, pulls them back to the quest for cultural values and the identity of the nation. The fight is not against the colonists but the danger of being a non-entity or having no identity in the era of globalization.

Vernacular Modernism

Failing to compete for big projects, Vietnamese architects have a great opportunity and favorable conditions to design private houses. Since the end of the 1990s, there has been a construction boom in private housing construction across Vietnam, accounting for as much as 70-80% of the total new housing output every year. Design of private houses in Vietnam is an interesting arena, because it is

possible to see how modernism is continuously absorbed and disseminated by the Vietnamese architects and people. Beyond boxy modernist forms, light and slender sunshades and screens were added that represent a flavor of modernism which may not be seen anywhere else in the world. Vietnamese modernism became a distinctive Vietnamese style, a kind of vernacular architecture through the experimentation as showcased in these houses. Nowadays, contemporary Vietnamese architects have continued this intellectual experimentation in composition, and contemporary Vietnamese modernism is therefore richer than the Western mainstream in its use of lines, planes, volumes, voids, materials, patterns, textures, and colors. In response to global issues of environmental degradation and climate change, local architects are paying more attention to energy efficiency and harmony with nature in their designs. They are also busting open the townhouses by introducing open stories or atria within the houses, using double building envelopes by means of stacking green walls and roofs, thereby turning the townhouses from a tube-like cave into truly tropical houses that allow more indoor/outdoor experiences.

Concluding Remark

Influenced by various overseas schools of thought and styles throughout different periods of history, modern architecture in Vietnam was formed and has developed vigorously. It is not a kind of modernist doctrine but a rich and diverse mixture in which modern and vernacular elements have been blended in order to adapt to natural conditions and local cultural, political as well as economic contexts. As a result, an eclectic and vernacular modernism has been shaped. We can call it Vietnamese modern architecture. Generations of Vietnamese architects, apart from absorbing international new ways of thinking, still continue to seek, experiment and confirm national identity in architecture as well as professionalism in their designs.

In Vietnam, the work on architectural history was begun in the late 1980s, initially focusing on monuments or religious buildings, and later on colonial architectural works. Postcolonial architecture (after the 1950s) received little research attention for a number of reasons: most of these works are not considered "legacy" in general terms because they are less than 100 years old, and with their simplicity of form and decoration, their value is not fully appreciated. The state of the art of documentation of modern architecture in Vietnam is still primitive at the level of preliminary, unsystematic and non-comprehensive inventories consisting of names of buildings without detailed documentation, information and records on buildings and their architects. In the context of fast economic development and urbanization in Vietnam today, modern works in Vietnam are at risk of being torn down to make space for new projects. This fact arises from the general unawareness of the meaning and value of modern architecture and the lack of documentation and records of these works of architecture as the basis from which to argue their significance in order to protect them from the risk of destruction.

Vietnamese architects are now promoting the establishment of **docomomo** Vietnam, joining with **docomomo** International and **docomomo** in other countries to share and to learn information, knowledge, experiences in research, conservation, adaptation, utilization of Modern Movement buildings and neighborhoods, and to promote its essence and spirit in our time.

Notes

- 1 "Duy Tân" literally means "new thought", or reform, renew in thinking and action. It is a name of a social reform movement, initiated (in 1906) by a wellknown Vietnamese intellectual name Phan Boi Chau (1872-1926) in the central Vietnam then suppressed by the French colonization government (in 1908). The movement advocates nonviolence, restoring the country by enhancing its intellectual level, reforming society in all aspects, including economic, educational and cultural, with practical activities such as open up the economy, set up big traders, open modern teaching schools: teach the national language, sciences and foreign languages as well as towards democratic politics.
- 2 "Đông Kinh Nghĩa Thục" (Chinese: 東京義塾) literally means Tonkin public free school. It was a movement established in Hanoi by the intellectual Phan Boi Chau (1872-1926) and other intellectuals in March 1907 and ended in November 1907, to carry out social reforms in Vietnam. The purpose of the movement was to educate the people by opening free teaching classes (to be called literate) and to hold lectures to exchange ideas movement among the population.
- 3 Khai Tri Tien Duc (in French is l'Association pour la Formation Intellectuelle et Morale des Annamites - AFIMA) is a private association with a policy of cultural exchanges between Western and Vietnamese scholars in the early 20th century (1919-1945).

References

- BAO, Tran QUOC; DINH, Nguyen Van, *Hanoi's Architecture in French Colonization*, Hanoi, Construction Publishing House, 2012.
- CHI, Tran Trong, LUAN, Nguyen, LUYEN, Nguyen Truc, THAI, Nguyen Huu, THONG, Nguyen Quoc, *Half Century Vietnam Architecture*, Hanoi, Time publishing house, 2010.
- Vietnam Association of Architects, *The First Generation of Vietnamese Architects*, Hanoi, Culture and Information Publishing House, 2008.
- HOANG, Dang Thai, *Hanoi Architecture in the 19th - 20th Century*, Hanoi, Hanoi Publishing House, 1999.
- QUYNH, Ngo Huy, *Research on Vietnam Architecture History*, Hanoi, Construction Publishing House, 2013.
- Vietnam Association of Architects, *Journal of Architecture*, vol. 2, 1986.
- LAN, Le Van; HOANG, Dang Thai, *Tran Hung 55 Years of Hanoi's Architecture*, Hanoi, The Time Publishing House, 2010.
- HUONG, Vu Minh; BOLOT, S.E.M. Herve; HUE, Ha Van; OLIE, Hubert; BINH, Nguyen Thi Thuy; Andrew HARDY, *Architecture in Hanoi (1875-1945)*, Hanoi, The World Publishing House, 2014.
- MASEANA Project (ed.), *The Report of MASEANA project 2016: 2nd & 3rd International Conference "Pioneers of modern architecture"*, Tokyo, **docomomo** Japan, 2017.
- SCHENCK, Mel, "How Vietnam Created Its Own Brand of Modernist Architecture", internet publication Saigoneer [<https://saigoneer.com/saigon-development/8939-how-vietnam-created-its-own-brand-of-modernist-architecture>], 2016.

Pham Thuy Loan

(b. 1974, Vietnam). Associate Professor, PhD, architect, Deputy Director of the Vietnam National Institute of Architecture (VIAR), in charge of research, training and international collaboration. Master and PhD studies in Urban Design (The University of Tokyo, Japan, 1997-2002). Senior Lecturer at Faculty of Architecture and Planning, National University of Civil Engineering (NUCE) (2004-2014).

Truong Ngoc Lan

(b. 1974, Vietnam). Architect, lecturer and researcher, Master of Architecture (National University of Civil Engineering (NUCE), Vietnam). Senior researcher at Vietnam Institute of Architecture (VIAR) (1997-2006). Lecturer of Architectural History and Theory at the NUCE (since 2006). Co-founder and architect of International Architecture JSC (known as 1+1+2 firm) with Hoang Thuc Hao.

Fumihiko Maki

Contributing to the debate on the development of modern architecture in the Asian countries, in March 2017, Ana Tostões interviewed Fumihiko Maki, one of the greatest Asian architects engaged with the modern project, and member of the Metabolism group. Maki is currently developing a number of projects in Asia, including the Taipei Main Station Redevelopment in Taiwan, Shenzhen Sea World Culture and Arts Center in China, and the New City Hall of Yokohama, Japan.

AT: Being modern is a way to answer to society and society is in constant transformation, so the modern project is a work in progress. I believe you are perhaps one of the most unique architects in this respect since the very beginning of your career in the 1950s, until today, with constant improvement.

FM: Paradoxically, architects always work with expected processes: an expected layout and an expected program, but I see your point. Maintaining quality is very important for me. I often compare buildings with human beings. Both are born and survive to a certain old age, let's say, 80 or 90 years old, but are always hoping to maintain good health. Buildings must also be healthy, so I too praise construction details. But it is also about life; buildings must be appreciated by people who use them and have society's agreement on their life. Vitruvius defined the virtues of architecture as *utilitas*, *firmitas* and *venustas*. *Venustas* has been defined as beauty but some scholars in Europe recently argued that Vitruvius meant being in a state of delight. Overall, these values are necessary for keeping a building alive and that is what we try to do; those values are important in keeping a building healthy.

So, architecture is really like a human being. We have to make the building good to live in, so it is loved and – at the same time, to express something for society. I have been working under this philosophy for almost 60 years and I haven't changed it, but I don't stick to one style, or partic-

ular materials. Mies, for instance, was the kind of architect who tried to limit his expression, his use of materials, and make it deeper throughout his life. I like to vary depending on the project and the resources: when I did 4 World Trade Center Tower, glass was the basic material while, on the Aga Khan Museum, we wanted to reflect light in a stone facade and used a Brazilian stone that suited this intention. For the MediaCorp building in Singapore, just completed this year, we had a budget that allowed us to use stainless steel panels instead of aluminium. Currently we are finishing the Bihar Museum, in Patna, India. We have learnt from the experience of Corbusier in India that exposed concrete isn't the best option, so instead we used Corten steel and stone to protect the building surface, so the building can have a long life, even if not properly maintained.

We have to be careful with projects in India, especially in the choice of materials, because maintenance is not so good. In Switzerland, in my experience with Novartis Campus in Basel, we didn't have to worry about maintenance. Each country has a different attitude towards architecture, towards the life of architecture. We always learn from what we have done and try to do something better next time.

AT: Indeed, you have extensive work around the world. You have already been faced with many different cultures, nations, continents...



01 Tokyo, Japan. © Ana Tostões, 2017.

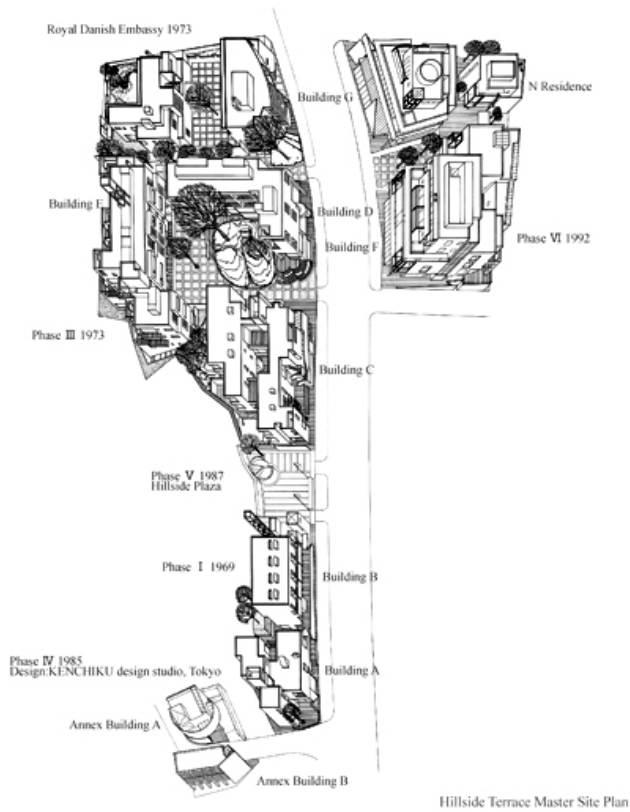


02 Osaka, Japan. © Ana Tostões, 2017.

03 Fumihiko Maki, Hillside Terrace, Shibuya, Tokyo, Japan, 1968. © Kaneaki Monma.



04 Maki and Associates, Square 3, Novartis headquarters, Basel, Switzerland, 2009. © Maki and Associates.



05 Fumihiko Maki, Hillside Terrace, Shibuya, Tokyo, Japan, 1968. © Maki and Associates.



06 Fumihiko Maki, Hillside Terrace, Shibuya, Tokyo, Japan, 1968. © Toshiharu Kitajima.

FM: ...and different clients, that's very important in architecture too!

AT: I believe the Hillside Terrace project reflects a good relationship with the client.

FM: True. In the case of Hillside Terrace – it will be the 50th anniversary of the building in two years – it was a lucky case. I was around 40 years old when I met the client Mr. Asakura and he was about the same age. We became good friends because we were able to share in the spirit of the time; of course, I don't know if his son or grandson will have the same attitude. Mr. Asakura and I keep discussing this issue of longevity. Looking back, nomadic people were not so concerned with material longevity: they constantly moved around and found shelter in certain places. But then, people began to settle and started agriculture, and certain community attitudes developed with it, as well as the concern for the longevity of shelters.

This reflects our lives in cities. In Tokyo people come in from different areas, and they start to establish relationships with new groups of people, but some are not so open. We are often criticized for not opening ourselves enough much to outsiders. When compared with Europeans, we are known for being too confined by ourselves, and this can be a problem. As an architect, I have chances to observe these things. I don't consider myself an anthropologist, but I'm interested in people.

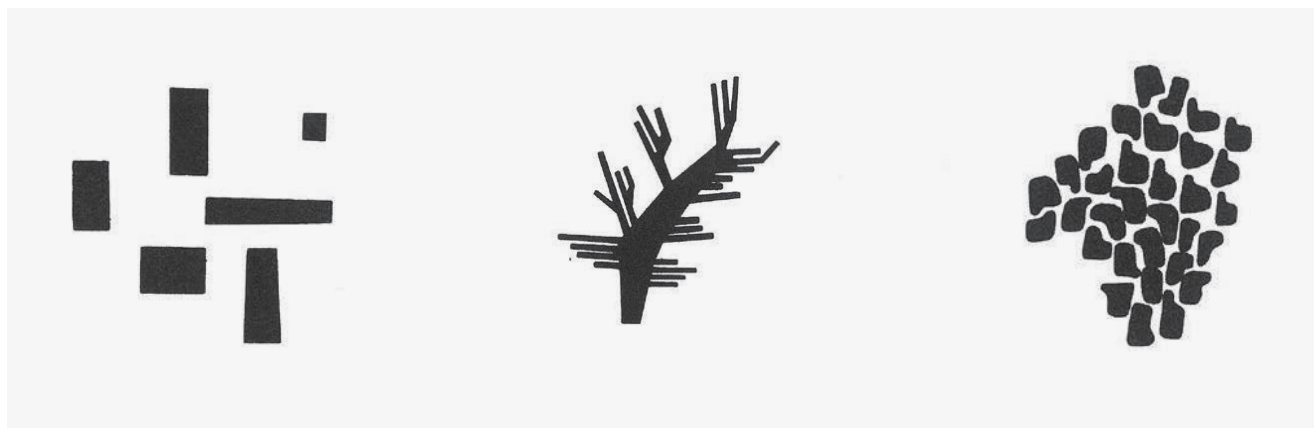
AT: You were able to address real urban questions – not only the objects of architecture, but how to connect and simplify the lives of people in cities. It is amazing to realize how, today in 2017, these cities with millions of inhabitants work well and move so fluidly.

FM: I think one of the characteristics of Japanese is gentleness – even when we are in a very crowded place, we try not to touch too much. I have written a short article on Japanese gentleness. I also have an article that relates this gentleness with the city – it is called “The DNA of the City”. It was published as an article in one of my latest books on modernism¹.

Regarding public transportation, the Japanese can be proud of their punctual systems. People are seldom late for their appointments. It is reliable; taking a car, you can easily be 20 or 30 minutes late due to traffic jams.

AT: Traffic jams are a problem all around the world. For instance, take Brasília – such a good project with good neighborhood unity, but the public transportation system is missing. Metabolism was really important and only now we are seeing the results, almost 60 years later; it was not only an architectural movement, but a kind of utopia that became real. Having lived to see these results, what is your vision of Asia nowadays – I mean, the relation between Japan and other Asian countries in terms of architecture?

FM: I have only done buildings in China, Singapore and India, so I can't have a comprehensive opinion on Asia. A vision for Asia is, however, of enormous importance for us. Many Asian countries were once colonized by Europeans. Japan was not colonized. The development of Japanese modernism was always steady and self-disciplined. In China, architects in my generation were hurt by the Great Cultural Revolution. But I believe that a younger generation of architects are coming up in China, Korea and other Asian countries, and I have big expectations for those younger generations. In the meantime, architects from Japan and Europe are doing many important projects in Asia, but this



07 Approaches to collective form: “compositional form”, “megaform”, “group form”, respectively. © Fumihiko Maki, Buildings and Projects, New York, Princeton Architectural Press, 1997, p. 209.

08-09 Maki and Associates, Aga Khan Museum, Toronto, Canada, 2014.
© Shinkenchiku-sha.



10 Maki and Associates, Bihar Museum, Patna, India, 2015.
© Maki and Associates.



may not be permanent. I am sure the younger generations in Asia will make good buildings by themselves soon.

AT: I agree with you, let's hope the new generation can take over Asia, not only just Japan. After the war, Japan had to pull itself together, and the post-war was very positive. Architecture's answers to the problems of reconstruction were impressive — if we see the work of Kenzo Tange, Maekawa, and Junzo Sakakura we can confirm that. Japan is a paradise for architecture. You were in Harvard and in the States working with Josep Lluís Sert. You had time for teaching, for studying, and you were preparing yourself to be one [and the second] of the five Japanese Pritzker Prize winners. Do you think your engagement in all these activities helped you to become a better man and architect?

FM: I believe these things I have mentioned are all related to each other. I haven't stopped looking back at all my past as a way to be better for the future. Architecture gives you a tremendous opportunity to think about human beings, cultures and technology, and I have never stopped thinking about them. I enjoy doing so.

Notes

- 1 Fumihiko Maki, "Zanzo no Modernism", Iwanami publisher. September 2017.

Fumihiko Maki

(b. 1928, Tokyo). He studied architecture at the University of Tokyo (BSc, 1952) and then attended the Cranbrook Academy of Art (MSc, 1953) and the Harvard University Graduate School of Design (MSc, 1954). After his graduation, Maki remained in the United States and worked in the office of SOM (Skidmore, Owings and Merrill), in New York, in the office of Sert, Jackson and Associates, in Cambridge, and in the campus planning office of Washington University, in St. Louis. He also taught architecture and urban design at Harvard and Washington University. When he returned to Japan in 1965, he established his own architectural firm, Maki & Associates, in Tokyo, where he also became a professor at Tokyo University, until 1987. As one of the most prominent architects in Japan, Maki has been internationally highly honoured by many awards, including the Japan Institute of Architects' Award (1985), the American Institute of Architects' Reynolds Award (1987), the Wolf Prize, from Israel (1988), the Pritzker Architecture Prize (1993), the UIA Gold Medal Prize (1993), the Prince of Wales Prize in Urban Design, by the Harvard University (1993), the Praemium Imperiale from the Japan Arts Association (1999) and the Arnold Brunner Prize from the American Academy of Arts and Letters (1999). Maki's publications include *Metabolism 1960* (Bijutsu Shuppan-sha, 1960), "Investigations in Collective Form" (The School of Architecture, St. Louis, Washington University, 1964), *Kioku no Keisho* (Chikuma Publishing Company, 1992), *Nurturing Dreams: Collected Essays on Architecture and the City* (MIT Press, 2008) and *Fumihiko Maki: Selected Buildings and Projects 1960-2012* (Phaidon Press, 2009)..



Ruy Jervis d'Athouguia, Teixeira de Pascoas School, Lisbon, Portugal, 1956-1961. © Ruy Jervis d'Athouguia archive.



Ruy Jervis d'Athouguia, Sande e Castro House, Guincho, Cascais, Portugal, 1956. © Ruy Jervis d'Athouguia archive.



Ruy Jervis d'Athouguia, Teixeira de Pascoas School, Lisbon, Portugal, 1956-1961. © Ruy Jervis d'Athouguia archive.

Ruy Jervis d'Athouguia (1919-2006) In memoriam

To pay tribute to Ruy Jervis d'Athouguia, the modern innovative architect born in Macau 100 years ago, the researchers and professionals engaged with his work were called upon to write about the importance of his legacy on the contemporary theory and practice.

Born in Macao, Ruy Jervis d'Athouguia (1919-2006) was a great and talented architect, whose name is irrevocably associated with modernity. He was an architect of the world, who put Portuguese architecture onto a contemporary footing. A designer of great versatility, he knew how to combine a powerful energy with an inventive creative genius. He left us an expressive legacy of constructed works.

He studied at EBAL (Beaux Arts School of Lisbon) but it was at EBAP (Beaux Arts School of Porto) under the master Carlos Ramos, where he graduated in 1948 with a grade of 18/20. From those student days, he often remembered his friend João Andresen, "Jóni", as he was called, who died so young. This capacity for relationships and collaboration was revealed throughout his lifetime in the various partnerships that he entered into (with F. Sanchez, F. Silva, A. J. Pessoa or P. Cid) without once losing the unmistakable line of his work. He belonged to the brand-new generation of the 1948 CIAM, the generation of "Verdes Anos" [Green Years], which established modern architecture in Portugal, drawing on the modern architecture of Latin-America, but also on the structural and classical minimalist silence of Mies van der Rohe, the powerful formalism of Le Corbusier, and the fluid space of Frank Lloyd Wright.

A born creator, his capacity for inventiveness was revealed, firstly in the Estacas Housing Development (with F. Sanchez), the first urban complex in Lisbon to apply the principles of the Athens Charter. Instead of traditional blocks, it was composed of a series of blocks perpendicular to the circulation axis, creating an extensive garden platform extending unobstructed under the buildings. Internationally publicised through the French magazine *Architecture d'aujourd'hui* and the Swiss *Bauen und Wohnen*, this work was awarded a prize in the 1954 São Paulo Biennale by a jury composed of Le Corbusier, Alvar Aalto, Sert, and Rogers. At that time, the *Diário de Lisboa* declared that the "moment has been reached in which the modern architecture of our country is in the process of bringing us a radical and healthy transformation", and for this reason this award was "a triumph". Athouguia considered that "the architectonic aspect is the result of the simplicity of the plastic processes used. Playing only with the constructive elements and with the contrast between solid and void, contrasting planes of light and shade, and with different colours and materials, we created an ensemble following the pure principles of contemporary architecture".

His contribution to the renewal of school architecture is also outstanding: in its search for clarity and rigour in the study of the classrooms, from the details of the furniture to solar incidence, for which a system of pivoting fins was designed to ensure comfortable lighting [S. Miguel Neighbourhood School (1949-1955)]; in the interior-exterior relationship explored in the pavilion system [Teixeira de Pascoas School]; and in the organisation of the volumes with solids and voids (Padre António Vieira High School).

But, it is above all the Headquarters and Museum of the Calouste Gulbenkian Foundation (1959-1969; with P. Cid and A. J. Pessoa) that represents the accomplished climax of a modern discourse revealed in the rationalist principles of its organisation of abstract and dry volumes employed in pursuit of an organic continuity and therefore subtly adhering to the land with a thoughtful site plan, following a philosophy of restraint manifest-

ed in the careful integration of the built mass into the surrounding park.

Ruy de Sequeira Manso Gomes Palma Jervis d'Athouguia Ferreira Pinto Basto, to give him his full name, or *Xai*, as his close friends affectionately called him, was an elegant aristocrat. His studio, on the S. Pedro de Alcântara Street, accurately reflected both his character and the simultaneously exquisite and radical taste of the architect. The baroque atmosphere of the Andrade Lumiares Palace, in which it was housed, was transcended on passing through the studio door towards the magnificent entry hall with a curved wall at the back. The furniture, framed accordingly, emphasised the markedly horizontal, modern scale, which was completed by paintings by Menez, and by himself and his friends. His archive, rigorously and meticulously systematized, reflected the great care that he put into the organisational process. This fabulous legacy was transferred at the beginning of 2001, due to the collapse of the Palace, to the Historical Archive of Lisbon Municipality, where it remains stored.

His work has become increasingly admired by the younger generations of architects who have undertaken studies, theses, and exhibitions. In 2005 the attribution of the AICA Award brought recognition to this unique career. Gifted with an unerring pictorial genius, as revealed in his drawings, Ruy Jervis d'Athouguia was an extraordinary and inventive modern architect who knew how to work with total inventive freedom, without ever losing the rigour, clarity or objectivity that always characterize great architectural work. – AT

To Write a Testimony about Ruy Athouguia.

I believe I wrote more about him than anyone else so far, but will that be my testimony? About testimony, the Priberam dictionary says: "witness testimony in court". By coincidence, in the same week this request arises, one could read "Escrito na Pedra" [Written in Stone], in *Público* newspaper, the words of António Lobo Antunes: "When we criticize, we are judging. If we judge, we don't understand anymore, because judging implies condemning or absolving". It became clear to me that I wanted to testify (what Priberam says to be), "to manifest" or "to reveal" why I wrote so much about this architect and, even more, about the importance of doing so not to "criticize", but to "learn and produce knowledge" in architecture.

I was interested in architecture produced in Portugal during the 50s – before Fernando Távora (1923-2005) and Siza Vieira (1933-) – and realized that there was a project published in the French magazine *L'Architecture d'Aujourd'hui*, internationally awarded by a jury constituted by the II Architecture Biennale in São Paulo, which included, none other than architects such as Le Corbusier, Alvar Aalto, José Luís Sert and Richard Rogers. It was the project we all know as *Bairro das Estacas*. I immediately called the architect whose name I knew better, Formosinho Sanchez (1922-2004), explaining my interest to "explore project by project the path of an architect and learn...". Right there over the phone, Formosinho without hesitation says: "If it's not about me that you have to research, it's about Ruy Athouguia. He was the greatest architect of those years, with his projects, his work, his resilience, and he was the only one who knew 'how to assemble and keep an office until the end', I don't know if you know what that is?". Yes, in 1997, I had already left Eduardo Souto Moura's office in the urgency of opening my own and I already knew how hard it was. "I" – he continued – "was an itinerant, worked in many places, sometimes at home, but when I was in greatest need, he was the one who gave me work...".

This was true. Later on, I could testify such a fact by the innumerable work hour sheets over many years that Formosinho had signed and that I found in different architecture processes in Ruy Athouguia's office.

The shyness, disbelief and courtesy with which Ruy Athouguia received me and gave me his office keys would almost justify why the most distracted didn't realize the force of his character and, for that, by judging without understanding, in the urgency of "condemning or absolving", have forgotten for more than three decades one of the most significant architectural productions in Portugal. In such way that every Monday and Thursday, when Ruy Athouguia arrived at his office and we went to lunch to *Bota Alta* restaurant, in Bairro Alto, he insisted: "Miss, you are wasting your time... no one is interested in these projects, listen to what I say!".

It was not true, I insisted, and I learned. Very much, consolidating my architecture, completing my knowledge from FAUP or, in collaboration with Eduardo Souto Moura, finding my own path.

It was a fact that the critics tried to condemn – maybe not explicitly, with a disturbing selective forgetfulness – but the eyes of those who really need to learn to produce and teach architecture couldn't stay indifferent to the relations that Ruy Athouguia managed to establish in the innumerable places that he characterized in Lisbon or Cascais. They relied on the correctness of his proportions, on the precision of the scale he has so well given to them, or on the coherence of his construction systems and attention to details that ensured the continuity of a significant set of works that, even when forgotten and abandoned, could withstand the test of time.

It will be by the materialized testimonial in the works of an already internationally recognized generation of architects – Gonçalo Byrne, Carrilho da Graça, Manuel Mateus, João Pedro Falcão de Campos, Inês Lobo, Ricardo Back Gordon and José Adriaão – whose eyes could not remain indifferent to these works which they come across every day, that the heritage of Ruy Athouguia will be identified, setting up a historical picture that Ana Tostões re-writes every day. – GC

Resources for a New Visuality

As a design studio teacher, in my PhD thesis I was mainly interested in understanding the "genealogy of aesthetic principles and the ways in which the design of objects is supported". Once my design studio was focused on housing, inevitably I discovered the buildings of Ruy Athouguia, exemplary in the rigor of drawing, in the forms of modern dwelling and in the sense of construction.

Ruy Athouguia began his career after the First National Congress of Architects (1948), becoming one of the silent, but not minor, protagonists of the sedimentation of design methodologies centered on modern drawing.

He contributed, discreetly but determinedly, to the "re-foundation" of a modern identity based on the visual control of architectural forms – the physical properties of architecture – and established with it, and through it, systems of compatibility between the different scales of the city.

One of his first experimental laboratories, together with Formosinho Sanchez, will be the "Estacas" quarter (1949/55) inserted in the *Alvalade* Plan of Faria da Costa (1946). Even with the limitation of the four floors laid down in the plan, the simple decision of opening the tops of the buildings and suspending the volumes on "pilots" [*estacas*] transforms the internal space of two common aggregate blocks, in an intercommunicating public space over a garden, following the Athens Charter principles. Thus, the radical idea of the passage "*de l'îlot à la barre*" is materialized in a very "logical" but sensitive way, and will open the door to all other modern operations in this neighborhood. In them we will find again collective housing buildings designed by Ruy Athouguia with Fernando Silva.

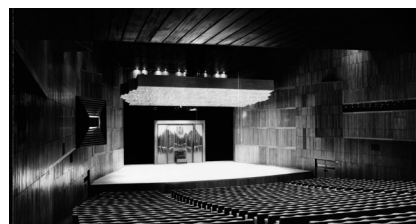
In all his buildings he conceived the form and organized the space based on a geometry that not only regulated the construction but, above all, supported a



Ruy Jervis d'Athouguia, Moisés Eugénio de Almeida House, Cascais, Portugal. © Ruy Jervis d'Athouguia archive.



Ruy Jervis d'Athouguia, Padre António Vieira high school, Lisbon, Portugal, 1959-1964. © Ana Tostões archive.



Alberto Pessoa, Pedro Cid, Ruy Jervis d'Athouguia, Calouste Gulbenkian Foundation, Lisbon, Portugal, 1959-1969. © Gulbenkian Archives, PT FCG FCG:SP0-S001-P0016/09-FOTO00590.

visual aesthetic principle of unequivocal authorship. Perception of spaces and their hierarchies from the exterior, succession and intercommunication of the spaces in the interior, and investment on few, but expressive finishing materials, give the buildings a paradoxical characteristic of identity and anonymity.

The efficacy of (his) modern construction manifesto will lead some critics to the "artistic" fear of the aesthetic banalization associated with the standard. Unlike the Brazilian experience, criticism of modern architecture would leave no room among us for specific disciplinary issues, centered on design and composition. Consequently, the formal qualities of architecture were identified with a certain "bourgeois" position, mistakenly inferring that the smaller the aesthetic concern, the greater the social skills. Designing the city became a "sin" that cost its inhabitants an unstructured architectural and urban model.

50 years after its construction, in commemoration of its birth centenary, his architectural and urban patrimony arises with the strong architectural relevance it has always had and, through the critical comparison of the disaster that has succeeded it, recalls Habermas's question about the principles and foundations of modernity that have not yet been fulfilled (Habermas 1980: 1006,1007). – JFG

At the start of the 1990s, to walk through the *Alvalade* district of Lisbon meant to have the largest and deepest meeting with the modern city. This is the place where the Garden-City model had found experiences derived from the Modern Movement. In a heterogeneity of buildings and architects, of positions and ways of making, a housing complex and three schools stood out for their design and capacity to contain life. Later I realized that an architect was behind these buildings, which had caused me to stop by and look again. His name was Ruy Jervis Athouguia.

His work had been absent from academic debate and his name was rarely mentioned in architecture schools. On the occasions where it appeared, it was associated to the Calouste Gulbenkian Foundation project, which he co-authored. The book *Verdes Anos* of Ana Tostões opened the work of Ruy Jervis Athouguia to debate and, for the majority of people this book revealed an extraordinary architect. Later, the interest manifested by Eduardo Souto de Moura in this architect, and the academic investigation of Graça Correia, continued a process of divulgation between architects. In 2003, I curated (with Joana Vilhena) the first exhibition that was dedicated to his work: *Architects of the Modern Generation: Ruy Jervis Athouguia*.

During the preparation of the exhibition, I visited the architect in his Cascais house, where we talked about the city and the architecture with which we identify, and also about the city and architecture with which we do not. I found him to be an understated, yet assured architect. He was not accustomed to the idea of his work captivating several generations. We jointly decided to exhibit his architecture using video, with the intention of showing the spatial experience in the city – in its greatest richness when laconically living day to day life. Even these days, when I think of schools, I think of the *Bairro de S. Miguel* School (1949), the *Teixeira de Pascoaes* School (1956), and the *Padre António Vieira* Secondary School (1959). When I think of where I would like to live in the modern part of the city, I think of the *Estacas* Neighborhood (1949) or the *Roma Building* (1959). I also think of what Ruy Jervis Athouguia told me: "we should always talk about what makes us happy". His work stands to prove this. –RC

The Conservation Project at EPFL, by the Falcão de Campos Architectural Studio

We wish to pay tribute to the work of Ruy Athouguia, by reporting on a gratifying academic experience conducted in the *École Polytechnique Fédérale de Lausanne* (EPFL), together with Thierry Manasseh, assistant architect from

EPFL, in the 2016 autumn term. In this workshop, part of the "Théorie et Critique du Projet – Orientation Sauvegarde" module of the MA in Architecture, we challenged the students to design a Conservation Project for the *Teixeira de Pascoaes* school (1952-1956).

The idea for this project came from Wilfred Wang's statement "before you contribute, construct your culture", in line with the spirit of the "projet de sauvegarde du patrimoine moderne", which has been developed since 2005, by the *Laboratoire des Techniques et de la Sauvegarde de l'Architecture Moderne* (TSAM) of EPFL, under the guidance of Professor Architect Franz Graf.

Detailed analysis of the work produced by the workshop substantiated our views on Athouguia's work, namely on his being one of the greatest architects of his generation. An "absolutely modern" architect, according to Eduardo Souto de Moura⁵, whose polished, refined and elegant design is remarkable. He possessed a wide ranging architectural culture, in tune with the best architecture produced in the mid-20th century. Ruy Athouguia's school projects were unique in their creation of humanized spaces that sought to bring living spaces into a continuum with the outside world.

The functional organization of the *Teixeira de Pascoaes* School reflects the "open air school" model where classrooms open on to private patios. In the scope of modern school projects, the *Teixeira de Pascoaes* school's project fully incorporates the best practices set out in the book by Alfred Roth (1903-1998)⁶, which disseminated the new pedagogical practices in which the child's needs for affection and comfort were placed at the core of the school project⁷. – JPF C, JSR

Notes

- 1 Helio Piñon, *El Sentido de la Arquitectura Moderna*, Catalunya, UPC Ediciones, 1997.
- 2 Philippe R. Panerai, Jean Castex, Jean-Charles Depaule, *Formes Urbaines: de l'ilot à la Barre*, Marseille, Editions Parenthèses, 1997; Philippe R. Panerai, Jean Castex, Jean-Charles Depaule, *Formas Urbanas: de la Manzana al Bloque*, Barcelona, Gustavo Gili, 1986.
- 3 About the Happiness of Daily Life
- 4 Conference delivered in the Ultzama Campus 2015.
- 5 Franz Graf, Christian Bischoff, Giulia Marino, *Un chef-d'oeuvre de l'architecture des années 1950 à Genève: les Salles de Sport de la Rue du Stand: Paul Waltenspihl, architecte, 1951-1953*, Lausanne, EPFL, 2008.
- 6 Eduardo Souto de Moura, "Athouguia e o 'Mapa'", in Graça Correia, Ruy d'Athouguia, *a Modernidade em Aberto*, Casal de Cambra, Caleidoscópio, 2006.
- 7 Alfred Roth, *The New School/Das Neue Schulhaus/La nouvelle école*, Zurich, Girsberger, 1950.
- 8 According to João Paulo Martins, in 1957, Roth came to Oporto to Carlos Ramos' invitation to attend the First Summer Course of the UIA dedicated to the subject of "school buildings", in João Paulo Martins, "Arquitetura Moderna em Portugal: Dificil Internacionalização. Cronologia", in Ana Tostões (ed.), *Arquitetura Moderna Portuguesa, 1920-1970*, Lisboa, IPPAR, 2003.

Ana Tostões

(b. Portugal, 1959). PhD, architect, architecture critic and historian, chair of *docomomo* International and editor of *docomomo Journal*. Full Professor at Técnico, University of Lisbon, where she is in charge of the Architectural PhD programme. Her research field is the theory and history of architecture and construction of the 20th century. Ana Tostões' groundbreaking research on Athouguia, published in *Os Verdes Anos na Arquitectura Portuguesa dos Anos 50* (1997 [1994]), was responsible for bringing his work to public attention. She was awarded the title of Commander of the Order of Infante Dom Henrique (2006), the APH Gulbenki-

an Prize for History (2014) and the BIAU Prize (2016). She is honorary member of the Portuguese Chamber of Architects.

Graça Correia

(b. 1965, Portugal). Architect (FAUP, 1989) and PhD in architecture (UPC, 2006). She has collaborated with Eduardo Souto de Moura (1989-1995). She is professor at FAUP and Lusófona School of Architecture where she is director of the PhD course. In 2005, she founded the architecture studio Correia/Ragazzi Arquitectos, together with Roberto Ragazzi. Her work has been awarded: Europe 40 Under 40 (2008), III Prémio ENOR Portugal (2007), Golden Medal of the Bienal Miami+Beach (2007), 16 Best Architects Awards (2016), Prémio Nacional de Reabilitação Urbana (2017). She published the book *Ruy Athouguia: A Modernidade em Aberto* (Casal de Cambra, Caleidoscópio, 2008).

José Fernando Gonçalves

(b. 1963, Portugal). Architect (FAUP, 1988) and PhD in architecture (UPC, 2007). Since 2007, he has been assistant professor at the Faculty of Sciences and Technology of the University of Coimbra (DARQ-FCUC). He was visiting professor at the *Facoltà di Architettura Aldo Rossi* (Università Alma Mater Studiorum, Bologna, 2011-2012) and at the *École Spéciale d'Architecture* (Paris, 2015-2016). He was president of the Northern Chapter of the Portuguese Order of Architects (2010-2013), he is founding member of AEAULP (Academia de Escolas de Arquitectura de Língua Portuguesa, Brazil, 2009).

Ricardo Carvalho

(b. 1971, Portugal). PhD in architecture (IST-UTL, 2012). He is an architect, professor and curator. In 1999, he founded the architecture office Ricardo Carvalho + Joana Vilhena Arquitectos. His office has been responsible for public and private work and has been shown in international exhibitions, having been nominated for the Mies van der Rohe 2015 Award. He is the head of the architecture department at Autónoma University of Lisbon. He taught at the international master program *Architektur Studium Generale* at Brandenburg University BTU Cottbus (Germany, 2009-2013). He was visiting professor at the Navarra University (Spain, 2013) and at the Carleton University (Canada, 2016-2017). Together with Joana Vilhena, he curated the exhibition *Arquitectos da Geração Moderna: Ruy Jervis Athouguia Arquitecto* (2004).

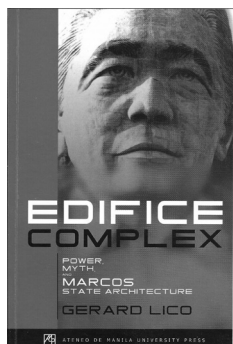
João Pedro Falcão de Campos

(b. 1961, Portugal). Architect (FA-UTL, 1984) practicing in his own office since 1987. He has collaborated with Álvaro Siza and Gonçalo Byrne. He is visiting Professor at Técnico – University of Lisbon and Navarra University. In 2015-2016, he was visiting Professor at the *École Polytechnique Fédérale de Lausanne*, where undertook the safeguard project of *Teixeira de Pascoaes* School (Ruy Athouguia, Lisbon, Portugal, 1952-1956) as one of the course exercises. His work has been awarded with several prizes: the BS1 Swiss Architectural Award (2010), the FAD Award (2014) and the AICA Award (2013).

João Santa Rita

(b. 1965, Portugal). Architect (EBAL, 1989), Master in Construction (IST-UTL, 1999), PhD candidate (IST-UTL). Since 1989, he has been active as an architect. He has been invited professor at Autónoma University of Lisbon (2007-2010), School of Arts of the University of Évora (2015, 2017) and *École Polytechnique Fédérale de Lausanne* (2015-2016).

BOOK REVIEWS



Edifice Complex: Power, Myth and Marcos State Architecture

Author: Gerard Lico
 Publisher: Ateneo de Manila University Press
 ISBN: 971-550-435-3
 Language: English
 Year: 2003

Gerard Lico's contribution to Philippine architectural history and criticism covers the late 20th-century phenomenon of a distinctive, but slightly demented, architectural aesthetic wielded by a "conjugal dictatorship" to legitimize its regime and perpetuate its power. It is this relationship between power and architecture that provides the framework and context for this book.

Lico provides straightforward historical narrative and architectural criticism of the buildings within the prime site of Marcosian architecture that is the CCP Complex, but he situates these within the terrain of tyranny that rerouted foreign aid funds and co-opted the architectural flair of the likes of Locsin, Mañosa, and Hong.

The CCP Complex, Lico states, was architecture as propaganda, a "noncoercive mode of power imposition in stone, concrete, and glass". Lico points out that the modernist, almost inhuman geometries and scale of the complex had a human and social cost. It was a price those in power then were willing to pay.

Lico's is a departure from traditional forms of architectural inquiry. Most previous works have been limited to stylistic influences or confined to Spanish era architecture. Few writers have looked at the larger political and theoretical context of buildings. For those still accustomed to pre-postmodern modes of architectural thought, the theoretical underpinnings may be a tad difficult. The effort, though, is necessary to reframe our understanding of the process and product of the architecture of that phase of our history.

Paulo G. Aleazaren



Building Cambodia: 'New Khmer Architecture' 1953-1970

Authors: Helen Grant Ross
 and Darryl Leon Collins
 Publisher: The Key Publisher
 Company Limited
 ISBN: 978-9749341216
 Language: English
 Year: 2006

After 6 years of research in Cambodia, France and Australia, Helen Grant Ross and Darryl Leon presented, in 2006, the "New Khmer Architecture" as an architectural movement that took place in Cambodia during the 1950s and 1960s, as the combination of Western modernism with traditional Cambodian architecture built in harmony with the tropical climate.

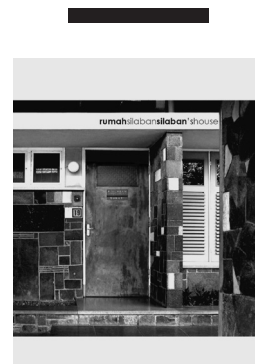
Between 1953 and 1970 Cambodia enjoyed an unprecedented era of economic and social development, associated with a renaissance of the arts and architecture where the national identity was taken into account regarding how to re-imagine new forms of culture in the framework of local traditions. In this publication, the authors explain how the "New Khmer Architecture" engaged diverse international architects, urbanists, and engineers from Japan, Europe, the former Soviet Union and the United States led by the Cambodian architect Vann Molyvann (1926-) who enthusiastically combined Western modern forms, materials and functions with traditional Cambodian designs, practices and local materials.

By analyzing public and private buildings through different perspectives – archives, photography, drawings –, Helen Grant Ross and Darryl Leon present a genealogy of this architectural production, with notes on its current state, crossing different themes: "nation in the making", "the artist and patron", "the builders", "modern traditional", "new khmer", "public investment", "the architect" and "innovative modern".

Through the narration of the country's history through architecture, exemplified with buildings, construction details and information on its architects, engineers and town planners, this publication is the most comprehensive record of Cambodian architecture from the 1950s to the early 1970s, revealing a Golden Age of optimism and experimentation – which is only recently being recognized –, before being led to almost 3 decades of military dictatorship, genocide and civil war.

This book was awarded as one of the top-10 "Best Asian Books 2006" from Time Magazine, immediately in the year of its launching.

Catarina Andrade



Rumah Silaban: Silaban's House

Edited by MAAN Indonesia and the School of Architecture, Tarumanagara University
 Publisher: MAAN Indonesia Publishing
 ISBN: 978-979-17381-0-1
 Language: Indonesian and English
 Year: 2008

This book was created as a record of the workshop held to document the works of Friedrich Silaban (1912-1984). Hosted by modern Asian Architecture Network (MAAN) Indonesia and co-hosted by Tarumanagara University, the Center for Sustainable Urban Regeneration (CSUR) at the University of Tokyo, and MAAN at the site of the architect's home from July 12th to 25th, 2007. This international workshop was a significant opportunity for us not only to record the past but also to sustain and regenerate cities in which we live.

Silaban, who was the focus of the workshop, worked as an apprentice in a Dutch architect's office and learned architectural designs during the colonial period. After Indonesia achieved independence, he designed

many monumental buildings as requested by Sukarno, the nation's first president. Among them are the National Mosque, Gedung Pola, and the Bank of Indonesia Headquarter. However, as time goes by, both Sukarno and Silaban have passed into oblivion. It is unfortunate that the current generation of Indonesian architects is no longer aware the knowledge concerning Sukarno's intentions and Silaban's design talents, so most of them are no longer able to appreciate the modernist legacy of Indonesia's early independence period.

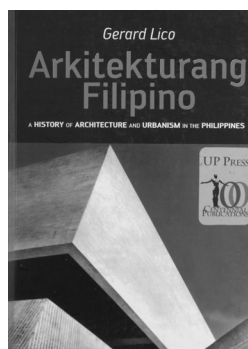
There are various ways to allow cities to sustain their development: reducing emissions of carbon dioxide, controlling unruly urban expansion, and restraining the amount of resource consumption, for example. I myself, would like to contribute to our common goal of urban sustenance and regeneration by taking advantage of my fields of specialty in urban history and architectural history. I believe that to cherish and keep using old buildings from the past could lead to saving of our resources and significantly reducing carbon dioxide emissions. It also allows us to inherit our predecessors' memories.

It is also true, however, that keeping all the buildings built in the past prevents us from building new ones that can constitute a better future environment. Thus, it is important to create standards, based on each society's value system, with which to decide whether a certain building should be preserved or demolished. Given this understanding, CSUR at the University of Tokyo has produced Jakarta Heritage Map in collaboration with MAAN Indonesia, Tarumanagara University and MAAN International, and now we are working to clarify the achievement of Silaban as an Indonesian architect.

Our project, which can be called the "F. Silaban Inventory Research Project", is now proceeding beyond just documenting history. In the near future, we are planning to build a database of Silaban's complete works as well as publishing his memoir and autobiography. To know what Silaban, one of Indonesia's most influential architects, thought and designed should allow the Indonesian people to acquire their own viewpoints for evaluating architecture in general. And, as I expect with strong hope, this will encourage the establishment of the study of sustainable urban regeneration in Jakarta and other parts of Indonesia.

I wish this pioneering book will be widely read and inspired many people, not only in Indonesia but also across Asia and the rest of the world, to think about the significance of documenting works of one's own nation's architects.

Shin Muramatsu



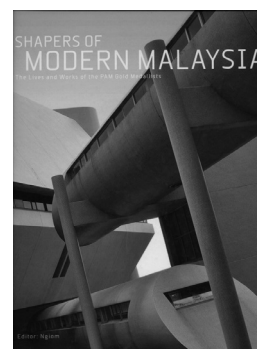
Arkitekturang Filipino: A History of Architecture and Urbanism in the Philippines

Author: Gerard Lico
Publisher: The University of the Philippines Press
ISBN: 978-9715425797
Language: English
Year: 2010

There is at the outset an unease caused by the title. The main phrase speaks of "Arkitekturang Filipino" an expansive territory that is rescaled as "Architecture and Urbanism in the Philippines". First, the scene of the vernacular, an instance of an irreducible particular; then, the translation into English, an attempt to reckon architecture cross-culturally. A tension stirs between an identity of architecture that is named Filipino and the focus of practice that is the Philippines, wavering between gestures of nomination and emplacement. It is a strain that is productive, and in fact may shape the very travail of writing about art and its locale, its universe.

This is intended to be a textbook for students of architecture who must learn to appreciate the lineage of their vocation. But it is more than just a catalogue of facts and figures; it is a compelling scheme that charts the direction of the study of architecture in the Philippines. With copious photographs and archival materials sorted out and analyzed in relation to ideas and propositions, this book turns out to be a vital contribution to our understanding of the abode of a most inhabited art. Indeed, with a sense of breadth and attention to the details of terrain, a horizon has been decidedly set.

Patrick D. Flores



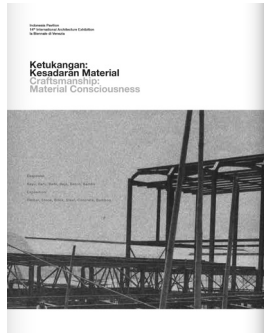
Shapers of Modern Malaysia: The Lives and Works of the PAM Gold Medallists

Editor: Lim Teng Ngiam
Publisher: Pertubuhan Akitek Malaysia (Malaysian Institute of Architects)
ISBN: 978-967-5264-03-0
Language: English
Year: 2010

The PAM Gold Medal is the highest award that can be given to a Malaysian architect by their peers. In the period 1988-2009 only five such awards were made: to Dato' Kington Loo (1988), Dato' Hisham Albakri (1992), Datuk Seri Lim Chong Keat (1997), Hijjas Kasturi (2001), and Dato' Baharuddin Abu Kassim (2009). This book provides an overview of their work.

The PAM Gold Medalists are considered the most important pioneers of Malaysian architecture in the post-independence years. They are collectively responsible for such icons as the now-demolished Subang International Airport, the National Library, National Mosque, Shah Alah Stadium and Selangor State Secretariat, as well as private residences and commercial towers such as KOMTAR and the Dayabumi building. *Shapers of Modern Malaysia* offers a full-color tour through their work, as well as an insight into the Malaysian struggle for national identity since 1957.

Laura Phelps



**Ketukangan: Kesadaran Material/
Craftsmanship:
Material Consciousness**

Editors: Avianti Armand, Setiadi Sopandi,
David Hutama, Robin Hartanto,
Achmad D. Tardiyana.
Publisher: Ikatan Arsitek Indonesia
ISBN: 978-602-12410-2-4
Languages: Indonesian; English
Year: 2014

June 2014, Venice. The 14th *International Architecture Exhibition of the Venice Biennale 2014* was launched by Rem Koolhaas with the statement “Architecture, not architects”. After years of biennales dedicated to the celebration of the most acclaimed contemporary architectural practices, this time the president of the *Venice Biennale*, Paolo Baratta, envisaged a research-centered architectural exhibition. Consisting of three exhibitions – *Elements of Architecture*, *Monditalia* and *Absorbing Modernity: 1914–2014* –, the main theme of the exhibition was *Fundamentals*, as a call for going back to basics and centering the attention of the participants on the past and present of the architectural discipline, as a ground for speculating on its future.

In the national pavilion representations, the participating countries were asked to address the single subject of *Absorbing Modernity: 1914–2014*, as an invitation to reflect and develop territorial narratives on the way that the local and the global, the national and the “universal”, have met in architecture’s evolution of the last 100 years. Rem Koolhaas went further, provocatively asking each country “to show, each in their own way, the process of the erasure of national characteristics in architecture in favor of the almost universal adoption of a single modern language and a single repertoire of typologies – a more complex process than we typically recognize, involving significant encounters between cultures, technical inventions, and hidden ways of remaining ‘national.’” There were 66 national contributions. Indonesia participated for the first time, under the theme “Craftsmanship: Material Consciousness”.

Entering the Indonesian pavilion, one was gradually transported to somewhere else far from the space before us, from Venice, from Europe. The eyes being slowly prepared to the clarity of the image in the dark and the ears to the precision of different layers of crystalline sound, allowing a sensorial travel into what I guessed, back then, to be the Indonesian materiality or its art of building. In the space, moving images projected into 7 floating glass screens were revealing 100 years of architecture in Indonesia, within the journey of 6 materials: timber [*kayu*], stone [*batu*], brick [*bata*], steel [*baja*], concrete [*beton*] and bamboo [*bambu*]. Glass, intentionally excluded from the story for not being a suitable material for the tropical climate, was paradoxically present as the perfect technology to project the story in Venice. The 7th screen was dedicated to the concept that entitled the exhibition: “Craftsmanship: Material Consciousness” [*Ketukangan: Kesadaran Material*].

Going deep into the meaning of this title, one can confirm the very clear message of the exhibition, effectively transmitted by only 3 elements: outspoken images, outright sounds and essential text. Craftsmanship [*ˈkraːft(s)mənʃɪp*], noun, in the Oxford Dictionary is explained as 1) skill in a particular craft, 2) the quality of design and work shown in something made by hand; artistry. Richard Sennett defined it, in *The Craftsman*, as “the basic human impulse to do a job well for its own sake” and that “good craftsmanship involves developing skills and focusing on the work rather than ourselves”, through the development of connections between material consciousness and ethical values. This consideration approaches us to the Indonesian meaning of *Tukang* [craftsman]: “anyone who has ability for manual labor”, “people whose job is to do something naturally” or “regularly”, “anyone who is involved in the act of building”, “somebody who is committed to their work”. In a country composed by more than 17,000 islands and with a surprising abundance of natural resources and cultural diversity, one can easily understand how craftsmanship, and its attached “material consciousness”, “is not merely a matter of practicality and technicality; it is also a value, an ethos, and a commitment, (...) practiced and internalized (...) diverse traditions as a driving factor to achieve excellence”.

The catalog of the exhibition, maintaining the same structure as the exhibition (with a chapter on each material, complementary texts and an epilog on the history of architecture in Indonesia between 1914 and 2014), reveals how craftsmanship, through the conscious labor of each material, is the identifying backbone of architecture in

Indonesia. Envisaged as an ethical answer to materiality, craftsmanship is exposed as the conscious way to work with the available tools, including human resources, materials – which also implies how to cultivate them, to know how to select and work with them –, the natural environment and every other changing element involved in the process. It is precisely in this knowledge of how to deal with change that the “absorption” of modernity is encountered: “Within the span of a hundred years, attitudes, values, and viewpoints on craftsmanship have developed and responded to change. Modernity arrived to introduce new building technologies and new building materials. However, the wave of modernity did not diminish or extinguish craftsmanship values. Instead, it has fostered a dialog that continues to open new opportunities in architecture”. Reading this publication, or watching the exhibition videos, one can recognize, in several architectural works, modernization, as defined by Johannes Widodo, as “a socio-cultural process that happens continuously in forms of transplantation, adjustment, adaptation, accommodation, assimilation, hybridization and materialization”.

In face of the challenges encountered by the curators – lack of archives and consistent discourses on Indonesian architectural history, slowly emerging from small groups of researchers; the common way to look at history as a frozen entity only reflected in retained objects that are emulated as proof of a glorious past, together with some difficulty in looking beyond the repression of the New Order regime (1966–1998), not allowing integrated interpretations on social, economic and cultural exchanges; the fact of modern architecture being often seen as a “foreign and dangerous idea”, as “an agent of infinite standardization, destroyer of anything local and particular”; and of course the vastness of the Indonesian territory and cultural diversity – *Craftsmanship: Material Consciousness* is extraordinarily notable in providing such a consistent (what they call) “glimpse” of a one-century dynamic of architecture in Indonesia.

Not having the presumption of yet have the possibility to give precise answers to some intrinsic questions of the Koolhaas challenge – “who are ‘we’ in the history (of architecture)? How did the ‘encounter’ with modernity happen? If modernity did erode our ‘national (architectural characteristics)’, is it true that ‘we’ have ‘national (architectural characteristics)’?” – the team of curators opted to try to answer the main question: “what is considered fundamental in the 100-year journey of architecture in Indonesia which related to modernity”.

The publication neither follows the common discourses looking at history as a battle between the East and the West, or between different times, nor reveals the need for pursuing nationalist dissertations, but precisely the opposite – architecture is perceived as a common language of Indonesian society, through a continuous movement over time, neither being excluded from interactions with the outside nor neglecting its local features. Architecture is exposed, in a very unprejudiced way, as a common ground for exchanges cutting across social, economic and cultural boundaries by being faithful to means and modus operandi as the essence uniting times.

At the same time, the choice of craftsmanship as the theme of the exhibition is a smart call for “design” and “construction” not to be separated from one another, in these capitalist and technological times, leading to the death of local consciousness in favor of the mere fulfilment of production lines. It reveals how craftsmanship, throughout the past and, hopefully, into the future was, and is, able to establish relationships between people and matter in the process of construction; promoting interdisciplinary teamwork and awareness of all the work processes; endorsing humanized work leading to local appreciation, recognition and people’s understanding of the role of architecture; potentially contributing to avoiding natural disasters such as deforestation, global warming, floods; finally, how it can be a sustainable answer, in social, economic and environmental terms. “Craftsmanship is a conscious decision that enjoys a close relationship with the quality of life in Indonesia”. And so it was the Indonesian curatorial decision to choose “Craftsmanship: Material Consciousness” as the reality to represent its country in the 14th International Architecture Exhibition.

The videos projected at the Indonesia exhibition are available at the YouTube Channel of *arsitektur indonesia*, the first ever (online) repository dedicated to architecture in Indonesia, funded by Avianti Armand and Setiadi Sopandi, curators of the Indonesia exhibition, together with Nadia Purwestri and Febriyanti Suryaningsih: <https://www.youtube.com/channel/UCfpXbsxsAJMTYJUeEZwH0IQ>.

Zara Ferreira



Our Modern Past: A Visual Survey of Singapore Architecture 1920s-1970s

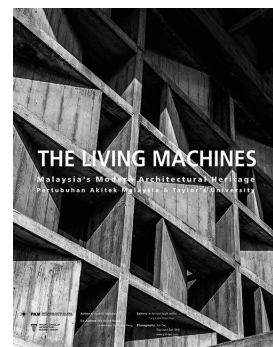
Authors: Ho Weng Hin, Dinesh Naidu and Tan Kar Lin
 Publisher: Singapore Heritage Society and SIA Press Pte Ltd
 ISBN: 978-981-09-2495-9
 Language: English
 Year: 2015

It is not obvious to many that Singapore boasts an exemplary modernist architectural legacy. Built during the mid-20th century, these structures were the result of progressive, even utopian, impulses to shape a new society – a vision of the future, built to last. But that future turned out to be startlingly short-lived. Relentless development is rapidly depleting the built heritage of the nation-building period in particular, which is relatively less well studied or protected.

The Singapore Heritage Society’s decade-long project, *Our Modern Past*, constitutes a sustained effort to document the city-state’s modern heritage, promote appreciation of this architecture, and present a case for its selective conservation. The first of two volumes, *Our Modern Past: A Visual Survey of Singapore Architecture 1920s-1970s* provides a photographic guide organized into three parts: “Interwar Period (1919-1942)”, “Post-War Years (1945-1965)”, and “Post-Independence (1966-1980)”. Each part begins with a survey of that period’s architectural elements, illustrating how locally typical modern expressions of form, type, materiality, and detail have been shaped by their contexts. “Feature buildings” then complete each part, providing a closer look at definitive works that capture the times. The book contains a total of 649 photographs, 34 elements, and 44 feature buildings, including several that have since been demolished.



From the Publisher.



The Living Machines: Malaysia’s Modern Architectural Heritage

Edited by Ar Azaiddi Abdullah;
 Tony Liew Voon Fun
 Publisher: Pertubuhan Akitek Malaysia;
 Taylor’s University
 ISBN: 9789675264122
 Language: English
 Year: 2015

The Living Machines: Malaysia’s Modern Architectural Heritage is a documentation effort to perpetuate the legacy of modern architecture designed and constructed in Malaysia, from the 1940s to the 1980s.

The publication reveals a collection of 30 Malaysian modern buildings that Pertubuhan Akitek Malaysia (PAM) Heritage and Conservation Committee believes should be classified as national heritage.

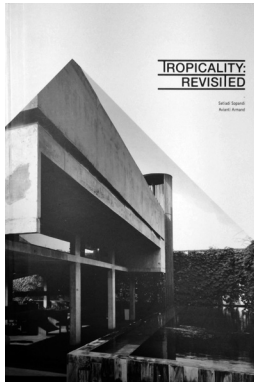
The information on the buildings is organized in 4 chapters, corresponding to the 4 stages that the author considers defines the history of Malaysian modern architectural heritage, classified as: a) Early Modern or “International Style”, b) Regional Modern, c) Brutalist Modern and d) Mid-century Modern.

“We now wish that this book had been published earlier to create an awareness of the value and significance of those buildings. Sadly, some of these buildings have been destroyed or had major renovations that have changed their character”.

The publication is written to the general public and profusely illustrated with photographs of different architectural elements, being hopefully able to interest different stakeholders in the public and private sectors towards the acknowledgment of the merit and historical significance of the expressive modern built landscape of Malaysia.

¹ Ar Steven Thang Boon Ann (Chairman of the Heritage and Conservation Committee, Pertubuhan Akitek Malaysia).

Zara Ferreira



Tropicality: Revisited

Authors: Setiadi Sopandi and Avianti Armand
 Publisher: IMAJI Publishing
 ISBN: 978-602-9260-27-4
 Language: English
 Year: 2015

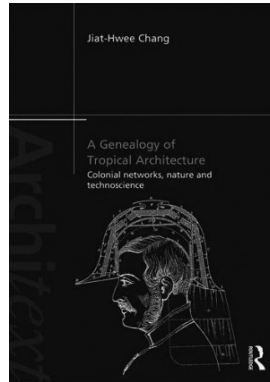
The publication *Tropicality: Revisited* documents the exhibition under the same name that took place at Deutsches Architekturmuseum, Frankfurt, within the framework of the *Frankfurt Book Fair 2015*, with the curatorship of Avianti Armand, Setiadi Sopandi and Peter Cachola Schmal.

The catalog explores modern Indonesian architecture as being a great contribution to the architectural discourse in Indonesia itself and its dissemination in Europe.

The research starting point is based in the explanation of the current understanding of “tropicality” analyzing the following topics: “the tropics”; “climate, hygiene and building”; “climatology”; “Dutch East Indies architectural discourse”; “the history of tropical architecture”; “towards an Indonesian architecture” and “the reinvention of tropical discourse”. These subjects are exemplified with 12 case studies — both private and public — responding to these issues through imaginative approaches to tropical architecture and the changing human ecology.

It is complemented with an extended 20th century timeline revealing the tropical studies and technological devices developed through time.

Catarina Andrade



A Genealogy of Tropical Architecture: Colonial Networks, Nature and Technoscience

Author: Jiat-Hwee Chang
 Publisher: Routledge
 ISBN: 978-0-415-84078-1
 Language: English
 Year: 2016

Fish don't know they're in water, says David Foster Wallace. But fish surely know best about breathing using gills. I find the parable comfortably fitting to a theme on so-called “tropical living” and its derivative “tropical architecture”. Too often we come across the two-word phrases — separately or together — to make up preconceived ideas illustrating a building or a complex of buildings dominated by the presence of the roof, frequently lacking walls, and surrounded by lush tropical gardens and water bodies. Images from resorts in Bali or Phuket proliferate in countless coffee table books, design monographs, and travel magazines.

For the ones living along the equatorial belt, the tropical climate seems to be naturally taken for granted. Despite there being problems, its heat and torrential rain seem to be part of casual daily life. Cultures learn to live surrounded by foliage and creatures. Throughout the year, the pattern monotonously provides the tropical living organism a safe haven of abundance far from extremes. In most cases, apart from steamy afternoons, human settlements are rarely prepared for cold winds and excessive heat waves. Shade, provided by the lush greenery, was one of the essential features of living the tropical life. All of those conditions make the tropics hospitable to survival. Vernacular houses of the tropics are commonly dominated by extensive roofs made out of organic materials. Apart from their function to symbolize certain social and spiritual values, house forms often reflect immediate practical purposes to effortlessly adapt to the rain and the sun. However, we are now living in a world that has become so different from our ancestors’.

What we are facing now are crowded tropical cities with tarmac streets and air-conditioned shopping malls. We are distanced from the natural world as our cities and architecture are becoming more and more dependent on mechanical apparatuses that enables us to build everywhere on earth in whatever styles we want. This is how the tropical resorts slip into our mind when we plan our holidays.

But it was not the case with the European settlers when they first built colonial outposts. The tropics were depicted as a place filled with miasma, which brought illness and death among the whites. When it was not lethal, the unpleasant heat caused by the sun and the humidity was believed to be conducive to idleness and to be capable of dispiriting the white man. As military and industrial activities began to increase in the tropical colonies along with the growing population, climate was becoming an important subject in developing cities, settlements, and other infrastructure. Densely occupied cantonments and city centers in the second half of the 20th century were alarmingly hazardous to public health and were considered as unfavorable.

This story begins the newly-published monograph by Chang Jiat-Hwee, *A Genealogy of Tropical Architecture*. The book tells us about an unusually ordinary story of so-called tropical architecture. It is “unusual” because it is a rarity to be able to tell an interesting story for something as mundane as tropical buildings. When I first heard his idea to research “the tropics” in the Department of Architecture at National University of Singapore (NUS), I immediately felt that it would only lead to yet more technical learning, such as how to handle excessive sun light, how to invite breezes into interior spaces, or how to handle downpours, as it always was. Apparently, it did not. In fact, if we are meticulous and determined enough to trace back far and wide, we can find how the term “tropical” could expose us to cultural, social, political, and — of course — technical realms. In that sense, our image-laden understanding of tropical architecture would no longer be simple and limited. The idea stems from a trail of research in the Department of Architecture at NUS, while this particular topic had been developed by Chang since as early as 2002 and would eventually become his doctoral thesis at the University of California, Berkeley. The breadth and depth of the long-nurtured knowledge is exactly what the book provides us.

The narrative of the book offers lengthy and meticulously arranged stories — classified under several general themes — passing through almost 200 years from the genesis and the development of this loosely-defined breed of architecture. The thesis is centered

on how the idea of “tropical architecture” was generated initially as part of the colonial solution – in this book, the British Empire – for health and survival reasons particularly during the second half of the 19th century. Interestingly, as history progressed, the idea of tropical architecture grew into a norm as practices were standardized and spread out around the colonies. The stories that Chang includes – well researched and backed up by impressive records – are mainly centered on events in Singapore: from the establishment of the military barracks, the building of Singapore General Hospital, the development of swampy areas, and the urban improvement attempts by the colonial government. But the stories progress far and wide from technical feats into interesting encounters with sanitation issues as well as urban political conflicts imbued with racial tensions.

This is not all. Chang reveals an interesting escalation in the way climatology progressed in the 20th century and influenced the way the British colonial government deployed weather stations and established numerous “Building Research Stations” to conduct research into building performance in given climatic and local conditions. This activity was also simultaneously followed by developments conducted by scientists and engineers in other countries – such as the United States and Germany – establishing a global network of science and technology.

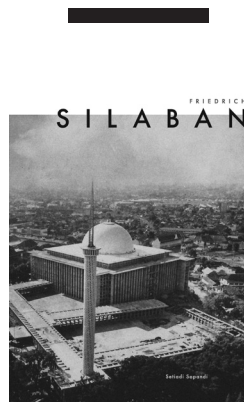
The second part of the book tells how the development of modern (international) architecture coincided with the new world order. After WWII, postcolonial countries – many are coincidentally located along the tropical belt – were trying to catch up with their former metropolises by building modern infrastructure and facilities. Assisted by the expertise and newly developed sciences and technologies, professionals from tropical countries learned the know-how and the climatic nature of their countries from a new point of view. The technoscience learned in research powerhouses like the University College in London and the Architectural Association in London enabled young engineers and architects to approach architectural design more as a rational and scientific pursuit rather than as an aesthetic and cultural treat. The spread of the “architectural sciences” was also helped by the United Nations’ development program in the 1960s, which was aimed at helping new developing countries to provide low-cost housing programs.

The stories raised and framed by Chang help us to understand how the development of science and technology during the mid-20th century shaped many technical aspects of our education and professional conduct nowadays. Design principles and procedures had been built around scientific development

and taught in technical schools around the world, planting seeds of knowledge which became common to us. The book also helps us realize how much of that knowledge had been forgotten, rendered as irrelevant and unimportant. Accordingly, our idea of tropical architecture has been changing over several decades. To some architects in Southeast Asian countries, the idea of tropical architecture had been associated not only with the climate-control performance of buildings but also with national architectural identity. It also suited the growing tourism industry and real-estate booms in countries like Indonesia, especially during the 1980s. We grew accustomed to the stylistic consequences of the tropics and we may be no longer be developing awareness of what “tropical” or “climatic” might have entailed.

Nowadays, with the alarming global environmental crisis, architects all over the world have been grappling with old ideas and inspirations in order to minimize energy consumption and to come to better terms with nature. From the dusty old archives and not-so-distant past, the mid-century architectural scientific novelty seems to linger and promise us a way forward we have forgotten. By the end of the trail, the book subtly exposes us to a question about how far we have gone and how we can possibly provide a better responsible architecture. Being a fish who knows well about water is maybe a good idea after all.

Setiadi Sopandi



Friedrich Silaban

Authors: Setiadi Sopandi
 Publisher: PT Gramedia Pustaka Utama
 ISBN: 9786020339597
 Language: Indonesian
 Year: 2017

“I am an architect, but not an ordinary one” is what Frederick Silaban (1912-1984) wrote in his letter to a job application letter for the United Nations in New York in the mid-

1960s. This extraordinary self-confidence came from an autodidact Indonesian architect, coming from a newly born nation that had just freed itself from Dutch colonialism and Japanese occupation just a few years before. Silaban is the best representation of the new soul of modernity in Indonesia, in line with the raging spirit of nationalism and self-esteem among newly independent countries in post-WWII Asia. His architecture faithfully responds to the tropical climate, is economically efficient, elegantly functional, and rationally embraces cultural traditions”. JW

“While his contribution to the Indonesian capital is significant, little is known about the architect, his architecture and his time. Setiadi Sopandi’s study is by far the most comprehensive account of Silaban’s works. It situates the architect in the context of Indonesian nation-building and the geo-cultural formation of postcolonial internationalism. A grand guided tour of a crucial period in the history of Indonesian architecture, revealing the innards of the political-artistic life of a nation and providing a rare glimpse into the work of a unique character of a most important Indonesian architect”. AK

“Silaban was aware of his own history but clearly projected the future as well. A future that represented an idea of Indonesian architecture within an international context. It is fantastic to see the works of Silaban concentrated together in this publication in a way you would never be able to see in reality. The publication not only provides an insight into the work of Silaban and the era he worked in, but allows readers to look forward and to enables us to contextualize our present time”. MV

“This book is a result of a long journey of self-discovery through the discourse of modern Asian architecture that began with the formation of MAAN (modern Asian Architecture Network) in 2001 with specific aims to push the critical discourse and theorization from Asian perspectives based on the comprehensive inventory and study of the pioneers of Asian architects. After more than a decade, the movement has produced a new generation of young architects, academics, and writers, who have been actively pursuing this objective.

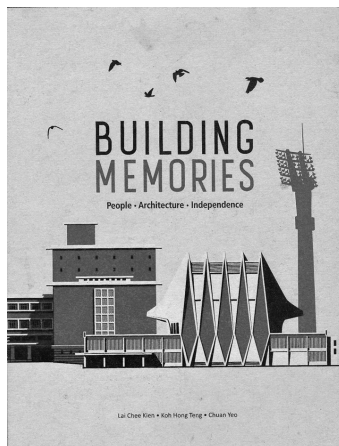
The writer is one of the most prolific young Indonesian scholars and a key member of MAAN who has been working with the original Silaban archives, under special arrangement given by Silaban’s family to MAAN. This is one of the first fruits of the long pursuit of knowledge of Indonesian architectural modernism based on local first-hand sources. Hopefully this excellent seminal work will trigger snowballing effects on the sustained studies, debates, and publications on the

works of other pioneers of Indonesian and Asian architecture and modernism". JW

"This publication is one of the top documentation and research efforts by Setiadi Sopandi to perpetuate the legacy of the journey of architects and architecture in Indonesia. This achievement is not only a valuable vehicle documenting contemporary heritage, allowing it to be known, understood, appreciated and remembered, but also a call for the need for its respectful preservation". AT

The English version of this publication will be available soon.

Publication endorsements by
JW-Johannes Widodo (National University of Singapore, MAAN)
AK-Abidin Kusno (York University)
MV-Martien de Vletter (Canadian Centre for Architecture)
AT-Ana Tostões (Chair of **docomomo** International; Técnico - University of Lisbon)



Building Memories: People, Architecture, Independence

Authors: Lai Chee Kien, Koh Hong Teng, Chuan Yeo
Publisher: Achates 360
ISBN: 978-981-09-8935-4
Language: English
Year: 2017

Having won no less than 10 book and design awards, *Building Memories* is a fine blend of many features. It is a serious and meticulously-prepared monograph on Singapore's national architectural heritage as well as an informative popular pictorial book. It is also, partly, a graphic novel and a heartwarming collective account on the history of a thriving nation.

Nice old photos or personal documents set within thorough historical narratives are usually doing more than enough for most readers, but here, the collaboration between

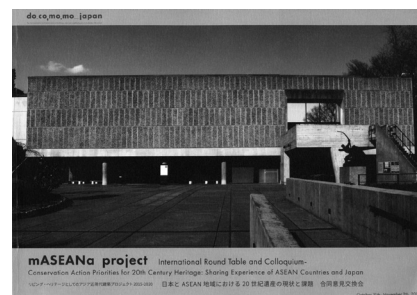
the author with the illustrator, and the graphic designer goes far to deliver intended messages for readers. The lavish design features are far from gimmicky and does not suggest the book as overtly celebrative and luxurious. Instead, the features help taking us beyond what can be explained by the architecture of the building.

Above all, this book is a reminiscence, dedicated to the loving memory of four seminal buildings built between 1960 and 1970: the National Library, the National Theatre, Singapore Conference Hall and Trade Union House, and the National Stadium. These buildings are depicted as the icons of the two decades from 1955 to the mid-1970s which is an important phase for Singapore as an independent nation. The era marked a piece of history of the nation when Singapore – despite being a small island-nation – started becoming a major economic powerhouse in the world. For Singaporeans, the era marked the advancement of the society moving beyond just bread and butter, embracing modern lifestyles. The selection of the four buildings is not only because their architectural merits but moreover about their roles in the society – in bringing Singaporeans knowledge, cultures, a sense of nationalism, entertainment, and a place among the emerging Southeast Asian nations.

As Singapore incessantly develops her urban infrastructures, these monuments were facing their obsolesce. The collection of the National Library had multiplied. Tunnels were built underneath the National Theatre to cope with growing traffic. The National Trade Union Congress grew much larger and demanded new premises, as Singapore needs more conference halls. The National Stadium needs to host more spectators and state-of-the-art sporting facilities. The old National Library was eventually demolished in 2004, while the National Theatre was gone even much earlier in 1986. The National Stadium was finally torn down in 2010 to give way for a new bigger stadium. The Singapore Conference Hall and Trade Union House has a better fate being refurbished as the home for Singapore Symphony Orchestra in 2001.

The author and editor Lai Chee Kien meticulously provides detail accounts on what happened before, during, and after the buildings were built. Using his own collection of mementos – and also relics from the National Archive of Singapore – along with personal accounts from seminal individuals, he brings us to details that matter to us and moreover to Singaporeans. *Building Memories* remembers the buildings like older family members that went before us, that left us beautiful memories and warm fuzzy feeling long after they were gone.

Setiadi Sopandi

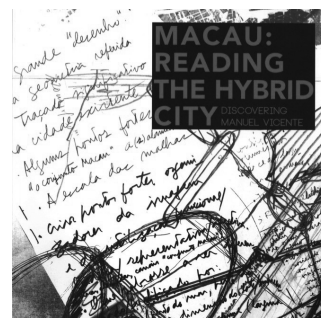


MASEANA Project International Round Table and Colloquium - Conservation Action Priorities for 20th Century Heritage: Sharing Experience of ASEAN Countries and Japan

Editors: MASEANA Project
Publisher: **docomomo** Japan
Language: English, Japanese
Year: 2015

This report summarizes the *MASEANA Project International Round Table and Colloquium* that took place in Tokyo between 31 October and 2 November 2015. Delegations from Japan and every ASEAN member country (except Brunei) attended the event, whose sessions included an introduction to organizational objectives, opportunities and actions in ASEAN, and an overview of current issues in modern architectural preservation within the region.

Laura Phelps



Macau: Reading the Hybrid City. Discovering Manuel Vicente

Edited by Rui Leão
Publisher: **docomomo** Macau
ISBN: 978-99965-672-0-9
Language: English
Year: 2016

Discovering Manuel Vicente is a result of three international conferences held in 2014 and the homonymous exhibition, in 2015, organised by **docomomo** Macau. It is a dense catalogue presenting a broad collection of diverse and divergent points of views from

the man, the thinker, and the architect Manuel Vicente was, as a basis for understanding his complexity.

By revealing Manuel Vicente through the lens of those who crossed his path and debated with him the marvellous experience of architecture; by working, learning or exchanging ideas and, more than presenting his built legacy, the importance of this book lies in the revelation of the legacy that Manuel Vicente has left as a way of thinking on architecture and the city. The reflection about its repercussion in the built production of Macau until the present day remind us of his intense and unique role in the creation of a Macau school. Following some arguments carried by Pedro Vieira de Almeida (“Uma História do Futuro”, *Colóquio Artes*, nº 89, 1991), exposing the idea already identified among some of us of a *Macau school* based on the intense action of Manuel Vicente operated in the space of Macau since the 60’s.

As a meeting point between East and West, Manuel Vicente found in Macau an available territory for the exploration of crossed influences between Europe and Asia, bringing together the American culture – pop, critical, cinematic – which he realises quite well due to his studies at the University of Pennsylvania following his master Louis Kahn, and Macau’s local culture – dense, informal, somehow secret which he codifies through the richness of the Asian world, sophistication and fantasy. Macau enabled his migration of ideas and allowed it to be contaminated by the development of a school of thought based on his method of approaching the city and architectural practice.

Believing that the chaos was an order yet to be understood, for Manuel Vicente architecture had to be magnificent to everyone, at every scale, on every place. With a sense of intense magic and happy grandiosity he created the spaces where people could live with glory!

Serving the city and its people, transcending the banality of the real, Manuel Vicente became the actor of the whole script, always finding the time, the place or the argument to tell new stories as the result of looking for new meanings and paths, of exploring the imagination and the memory.

The legacy of Manuel Vicente is above all the remarkable body of knowledge he built through his teachings and professional debate based on confrontation, posing wide open questions instead of giving answers. Through revealing the value of interrogation, Manuel Vicente built in people around him the capacity of critical thinking.

That’s why this book is so important, because it reveals how the work of Manuel Vicente, always controversial and even sometimes unloved, has been, in the end,

a critical reflection of Macau in physical and cultural terms, that has left decisive questions to continue to be explored.

Ana Tostões



Sanriku Tsunami and the Reorganization of Villages Beyond Modern Disaster Reconstruction

Author: Kentaro Okamura
Publisher: Kajima Publishing
ISBN: 978-4-306-04647-4
Languages: Japanese
Year: 2017

The Sanriku area, located in the northeastern part of Japan, was hit by four tsunami disasters including the East Japan great earthquake (2011) since the Meiji Restoration (1867). However, the area has undergone a miraculous reconstruction every time. Among them, the reconstruction method of Kirikiri Village as “the ideal village” after the Showa Sanriku Tsunami (1933) is still worthy of reference as the “Merckumar of Modern Disaster Reconstruction”. This book clarifies the process of the reconstruction of villages, from the change of the governance mechanism, the transition of institutions and operations, and the dynamics of the people. A contemporary reconstruction model is also discussed. This book contains many pictures of disaster areas photographed after the Great East Japan Earthquake.

Kentaro Okamura



mASEANa Project 2016: Pioneers of Modern Architecture — The Report of mASEANa Project 2016 2nd and 3rd International Conference

Editors: mASEANa Project
Publisher: **docomomo** Japan
Language: English
Year: 2017

This report summarizes the second and third international conferences of the mASEANa Project which were held in 2017 in Hanoi and Tokyo respectively.

The Hanoi conference, *Pioneers of Modern Architecture*, took place between 12 and 14 January with contributions from Vietnam, Indonesia, Cambodia, Thailand, Myanmar, Singapore, Philippines and Malaysia. The report includes inventories of modern buildings in the cities of Hanoi and Ho Chi Minh City, complemented with texts on the history of its modern architecture, as on policies and strategies of building conservation and reuse.

The Toyko conference, *Modern Architectural Heritage in ASEAN and Japan*, took place on 12 and 13 March. The first day was dedicated to sessions on the pioneers of modern architecture in ASEAN and Japan and to the value and possibility of its modern architectural heritage. The second day worked as a workshop with the goal of overcoming issues in conservation of modern heritage in ASEAN and Japan, organized around 3 main sessions dedicated to philosophy, method and documentation.

Laura Phelps