



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

Modern Movement in Myanmar

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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.
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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



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



08 U Kyaw Min, Thakhin 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.

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