



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

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

BY PEN SEREYPAGNA

This essay will examine 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:

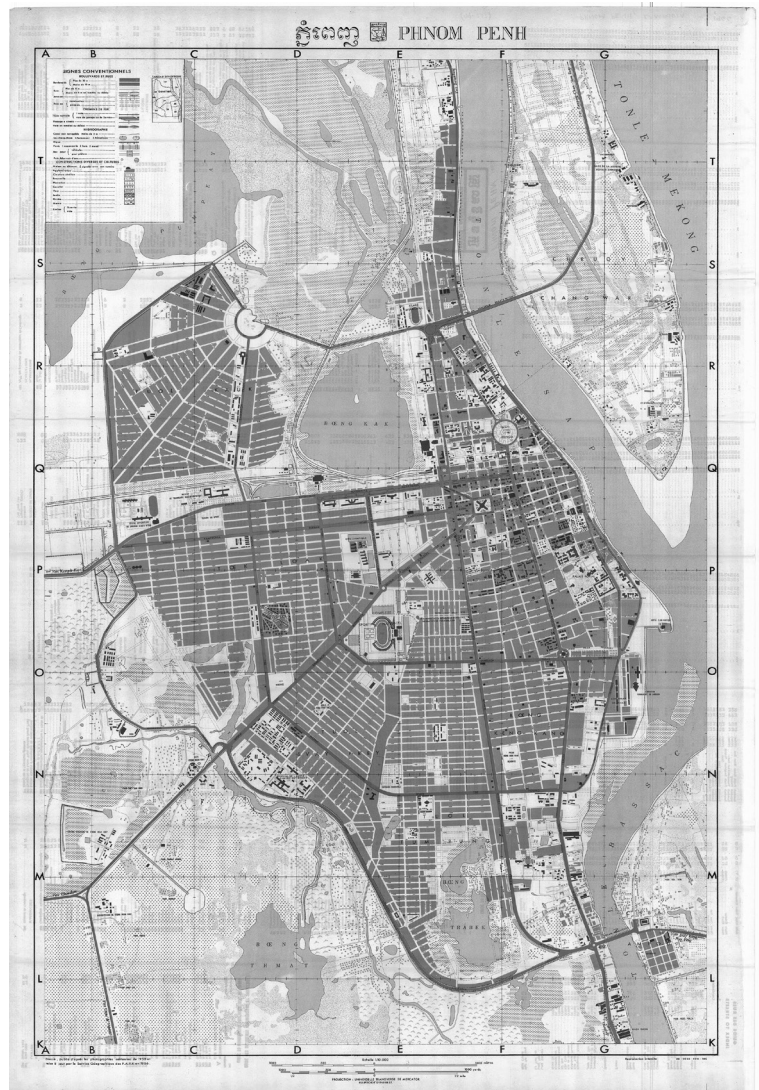
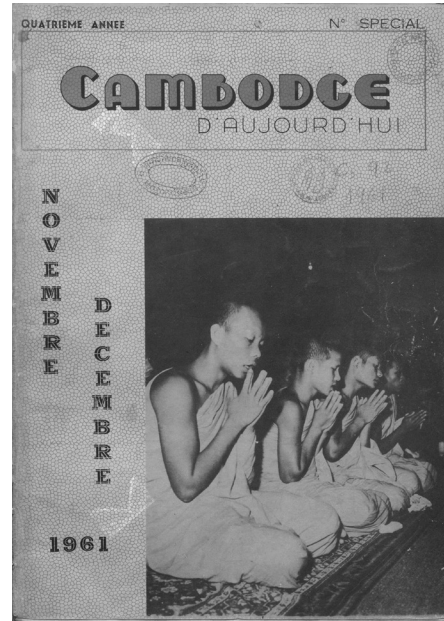
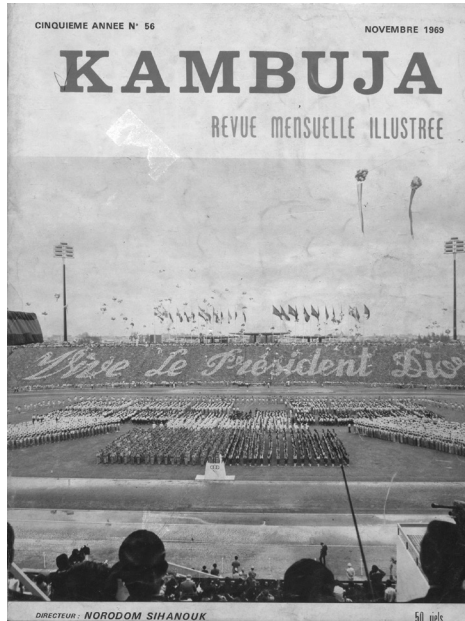
In the current redevelopment of Phnom Penh, many foreign developers, especially the Chinese and Koreans, are imposing their own urban forms and ways of life on the city. Unlike the current development, in the 1960s, while Phnom Penh urban planning followed traces left by the colonial regime, the architects 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.

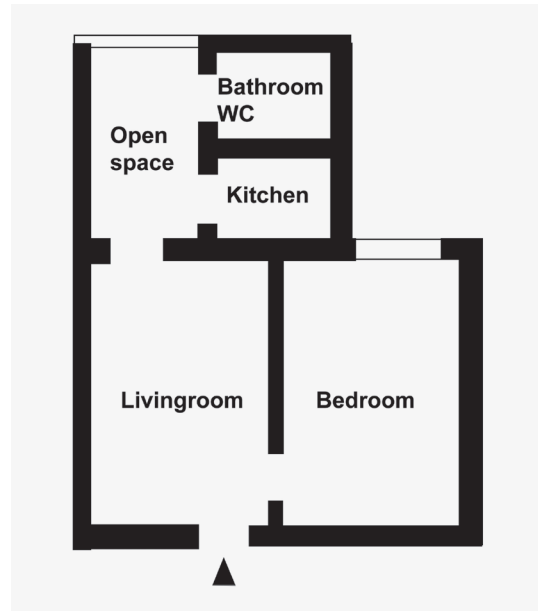
Referencing the traditional Khmer temples of the Angkorean period, the institute is composed of three buildings connected by a Naga walkway bridge: the main central building, the circular library building (which is in the position of a Khmer temple's library), and the teaching rooms building to the west.

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

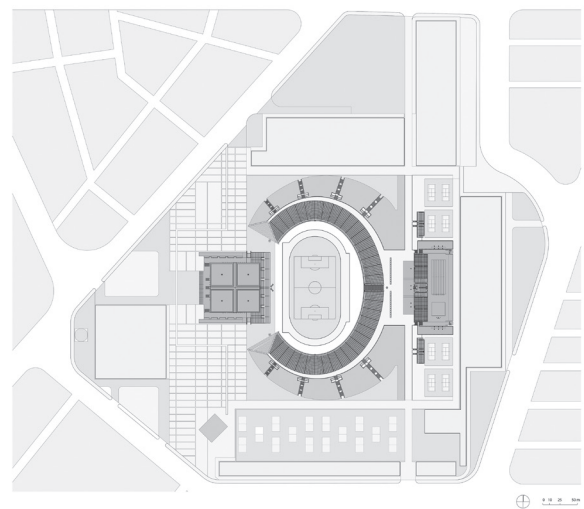
04 Lu Ban Hap, White Building, Phnom Penh, Cambodia, 1963. View from the garden in front of the building. © Vann Molyvann Private Collection.



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 Nijum* regime collapsed in 1970.

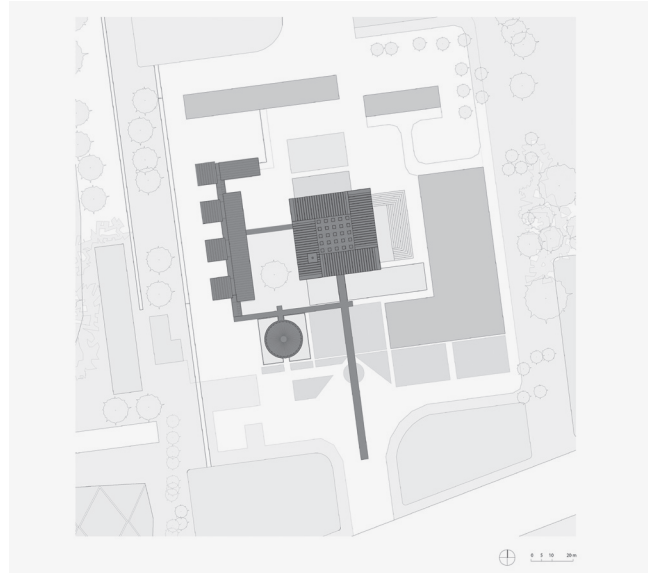
The Modern Movement in Cambodia in the 1960s is comparable to other movements in Southeast Asia which were learned from Western ideology, local lifestyle, and socio-political movements in the region. By studying some of the foregoing points, New Khmer Architecture is not only significant for its unique 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

Pen Sereypagna

(b. Phnom Penh, Cambodia, 1989). Freelance architect and urban researcher based in Phnom Penh City. He holds a bachelor degree in Architecture and Urbanism from the Royal University of Fine Arts (RUFA), Phnom Penh. He is currently the director of The Vann Molyvann Project.