PART V

RACE AND COLONIALISM

13

Race and Tropical Architecture

The Climate of Decolonization and "Malayanization"

Jiat-Hwee Chang

In the 1980s Singapore and Malaysia saw a renewed interest in tropical architecture after almost two decades of neglect and disregard for it. One of the key protagonists behind the resurgence was the Singapore architect Tay Kheng Soon. Tay's advocacy of tropical architecture was partly a response to the ethnocentric "visible politics" that the Malaysian government was promoting at the time.[1] This brand of politics was exemplified in the policies of Mahathir Mohamad, then prime minister of Malaysia, who encouraged the use of Malay symbols in architecture to enunciate national pride and identity. He was, for example, quoted as saying, "There should be no reason why a skyscraper should not have a [Malay] roof which reflects our national identity."[2]

Tay, in contrast, felt that the explicit use of symbols clearly associated with a particular ethnic group in multiethnic societies like Malaysia and Singapore was both "historically absurd" and "dangerous" as it implied "ethnic sectarianism" and "inadvertently exacerbated ethnic cleavages that lay just below the surface of new-state cultures."[3] Instead of referencing ethnic symbols in the built environment to evoke national identity, Tay believed the region's architectural identity could respond to a "more intrinsic design agenda . . . the *environment* itself," specifically

the hot and humid climate of the Asian tropical countries.[4] By employing new technologies, Tay believed architects could draw on the environment to generate form and aesthetic expression that could communicate a kind of identity that transcended ethnicity and culture.

Urban historian and theorist Abidin Kusno was critical of Tay's construction of tropicality as a cultural identity discourse, which he interpreted as an abstraction of categories like "Asian," "people," and "independent identity" that invoked a trans-local pan-Asian environment absent the particularities of localized culture.[5] In this chapter, I argue otherwise by historicizing and tracing Tay's discourse to the decolonizing moment of the 1950s and 1960s. I show that instead of being based on an abstraction, Tay's tropical imagining was born out of the sociopolitical and racial tensions of decolonization in Singapore and Malaysia during the transition from colonial "plural societies" to postcolonial multiethnic societies. Tay's tropical imagining was an integral part of a modern and cosmopolitan Malayan architecture that he and his local colleagues conceived in their quest for an emancipatory architectural aesthetics capable of redressing some of the problems of colonial racialization.

Malayan Architecture as Tropical Architecture

Tay was among a pioneering group of five architecture students who graduated in 1963 from the Department of Architecture at Singapore Polytechnic (SP).[6] These students, who were the first generation of locally trained architects, were educated during the socially and politically turbulent period of the 1950s and '60s, in which cultural belongings and political allegiances were both varied and changing amid decolonization and the various competing constructions of new postcolonial nations. Influenced by the nationalist fervor of the milieu, Tay and his classmates sought to design a Malayan architecture that would contribute to the Malayan identity of the emerging nation.

At Singapore Polytechnic, Tay and his classmates were taught to design in the language of tropical modernism, deploying an approach that sought to understand and address the social, cultural, and technical problems of living in a tropical climate. For Kee Yeap, the department's first local head, the emphasis on tropical architecture meant a change of sociocultural reference, away from European colonial forms toward a pantropical orientation.[7] The sense that tropical architecture represented cultural reorientation away from colonial metropolitan references was reiterated in Tay's recollection many decades later. He argued that tropical architecture was a "quest" for an "architectural aesthetic . . . in our terms and none other" and it was "part of the context freeing oneself from the political and taste-dictates of our masters."[8]

However, if we examine Tay and Yeap's positions in relation to the larger his-

torical context of tropical architecture in the mid-twentieth century, their belief that tropical architecture represented a reorientation of cultural reference away from the metropole appears, at first sight, to be rather perplexing if not untenable. Modern tropical architecture was, after all, invented in the metropole at around the same time. One of the key conferences on tropical architecture was held at University College London in 1953 and one of the main institutions involved in the pedagogy of tropical architecture was the Department of Tropical Architecture at the Architectural Association, London, established one year after the conference.[9] Furthermore, some of the best-known practitioners of tropical architecture in Africa and Asia were British expatriate architects like Maxwell Fry, Jane Drew, and James Cubitt and firms such as the Architects Co-Partnership.[10] Furthermore, tropical architecture has its origin as a nineteenth-century colonial discourse to help Europeans cope with the tropics, which was previously constructed as the unhealthy, uncomfortable, and backward other to the European temperate zone.[11] Although rearticulated in different forms, many of these colonial ideas and their underlying assumptions continued to shape the mid-twentieth century discourse on tropical architecture. Given this pervasive undertone, how could tropical architecture be seen as constituting a reorientation—let alone an emancipation—from European/colonial references? Rather than dismissing as misguided Tay and company's positioning of tropical architecture as Malayan architecture, we need to probe deeper and understand it in relation to the mid-twentieth century architectural debates surrounding Malayan architecture and the underlying racial tensions behind the contested constructions of Malayan identity in architecture.

Malayan Identity Formation

Between 1945 and 1963, the word "Malaya" evoked in many of its inhabitants sentiments and visions for an independent, multiracial, postcolonial nation, just when it was being reconfigured geopolitically. From the nineteenth century to World War II, Malaya referred to the three British colonies in the Malay Peninsula: the Straits Settlements, Federated Malay States, and Unfederated Malay States. After World War II, the British split Singapore from Malaya to form a separate Crown colony while the rest of Malaya became first the Malayan Union in 1945 and then the Federation of Malaya in 1948. Malaya as a formal political entity, however, ended in 1963 when the Federation of Malaya merged with Singapore, Sarawak, and North Borneo to form Malaysia. Singapore was subsequently separated from Malaysia in 1965 and attained independence involuntarily. While Singapore was also governed as a separate political entity in the 1940s and 1950s, its long historical ties with the rest of Malaya meant that it was frequently imagined by people in both Singapore and Malaya as an integral part of Malaya.

The formation of the Federation of Malaya in 1948 also marked the beginning

of a twelve-year period of "emergency," or the war against communist guerrillas in Malaya. The emergency was the British colonial state's response to one of the major challenges to its power and legitimacy. These challenges arose following Britain's profound loss of prestige and legitimacy as rulers due to their inability to defend Malaya from the Japanese invasion in the early 1940s. When the British returned after the end of the Japanese occupation in 1945, Malayan independence was an inevitability. In response, the British sought to control the nature and pace of political development in Malaya. They also went about molding a Malayan citizenry that would be friendly to British interests in the region after the end of British colonial rule. It was in this context, as the British government sought to win the "hearts and minds" of the Malayans during the period of emergency, that Sir Gerald Templer, the British high commissioner in Malaya between 1952 and 1954, called for architects to design a "Malayan architecture."[12]

Any discussion of the construction of a Malayan identity in the postwar period must grapple with the legacies of colonial racialization and what British sociologist J. S. Furnivall has described as the colonial "plural society." In his study of colonial Burma and the Dutch East Indies, Furnivall argued that colonial policies had produced a society characterized by both hierarchical economic specialization and social segregation along racial and ethnic lines. It was a society in which different ethnic groups mixed but did not combine, "living side by side, but separately, within the same political unit."[13] In such societies, economic forces tended to create social tensions between competing groups and their interests, further accentuating cleavages along ethnic lines.[14] The concept of plural society is also applicable to many colonial societies beyond Burma and the Dutch East Indies, and numerous scholars have employed it to understand the socioeconomic order in colonial Malaya. In the case of Malaya, the socioeconomic segregation of the different ethnic groups was overlaid and reinforced with colonial cultural constructions and racial stereotypes.

As with some other parts of the British Empire, the British rule in Federated and Unfederated Malay States was based on trusteeship or indirect rule. In the words of historian Anthony Stockwell, the imperial rhetoric was that Malaya "was not a white man's country; it was *tanah Melayu* (Malay land) and the British had a duty to keep it so."[15] Formulated and deployed in Malaya in the late-nineteenth century to legitimize British colonial rule, this rhetoric and its underlying political ideology also meant that colonial officers in Malaya needed to study and know the "character" and way of life of the Malays in order to protect them. By the end of the nineteenth century, prominent colonial officers had already established influential portrayals of the Malays in books such as Frank Swettenham's *The Real Malay* (1900) and Hugh Clifford's *In Court and Kampong* (1897). These accounts included sweeping generalizations about the Malays that drew upon environmen-

tal and genetic explanations. They were affectionately stereotyped as easygoing but lazy, which precluded them from participating in the colonial economy. In contrast, the Chinese were considered hardworking and enterprising but untrustworthy, and the Indians were regarded as docile. Although both of the latter groups were deemed as vital to their colonial economies, they were seen as transients by the colonial state, and, unlike the Malays, the colonial administrators did not feel obliged to protect their culture and welfare. It is clear that these generalizations and racial stereotypes provided the underlying rationales and served as the justifications of the socioeconomic segregation in plural societies. Moreover, these stereotypes also informed and were further entrenched by colonial policies and administrative practices in census-taking, landownership, regulation of labor, education policy, and political representation.[16] On the whole, the colonial state demonstrated a pro-Malay bias in its policies and practices because "the 'protection' of Malays [in the rapidly transforming Malaya] was the justification of the British presence while the preservation of Malay society was the guarantee of indefinite British control."[17]

The socioeconomic segregation and racial stereotyping of the ethnic groups were obviously not conducive for the emergence of a unified national consciousness required for the formation of a postcolonial nation. If anything, communalism and ethnocentrism on the one hand, and interracial tensions and conflicts on the other, were the likely outcomes. Indeed, the 1950s and 1960s in Malaya were marked by three major racial riots: the 1950 Maria Hertogh riots, and the 1964 and 1969 racial riots.[18] At the heart of the construction of a Malayan identity was therefore the challenge of addressing a colonial plural society fraught with racial tensions and conflicts. Politically, the initial response of the British was to form the Malayan Union in 1945, which gave equal rights to all ethnic groups. The Malayan Union plan provoked two main forms of opposition. The first came from Malay traditionalists led by the United Malays National Organisation (UMNO) and the local aristocracy. This group opposed the loss of the sovereign rights of the Malay sultans and the absence of special rights granted to the Malays as the original inhabitants of Malaya. The second form of opposition was a broad-based, multiethnic and secular alliance known as the All-Malaya Council of Joint Action-PUTERA (AMCJA-PUTERA). Led by the Malayan Democratic Union and Malay Nationalist Party, AMCJA-PUTERA opposed the Malayan Union proposal because it meant continued British rule and the separation of Singapore from the rest of Malaya.[19] The British proved more responsive to the former opposition. They came up with the Federation of Malaya agreement that restored the sovereign rights of the Malay sultans and guaranteed the special position of the Malays, abandoning the idea of equal rights for all citizens, regardless of ethnicity and religion.

Although AMCJA-PUTERA failed to influence the British decision, its vision of a multiethnic and multicultural Malaya that included Singapore endured in other ways, especially in the cultural realm. In the 1950s and 1960s, during a period of what Mark Ravinder Frost and Yu-Mei Balasingamchow called "creative *Merdeka*" (creative independence), writers, artists, and intellectuals of different socioethnic groups within Malaya attempted to cross racial boundaries and articulate their visions of a multiethnic cosmopolitan Malayan culture through their arts.[20] The cultural outpouring encompassed various art forms—especially the literary and visual arts—produced by different socioeconomic and ethnic groups. For example, undergraduates of different ethnicities at the University of Malaya attempted to capture the hybrid culture in their English writings by incorporating Malay and Chinese cultural and linguistic elements. Besides the multiethnic representatives of the English-educated social elite, the comparatively marginalized Chinese-educated writers, artists, and intellectuals—including the Nanyang style painter and educator Chen Chong Swee—also put forward their own visions of Malayan literature, art, and culture. Shifting away from their previous cultural orientations toward China and Chinese culture, these writers, artists, and intellectuals began to identify with Malaya as their adopted homeland and sought to further root themselves in Malaya by learning and embracing indigenous Malay language and cultural forms.[21] Often also drawing on Malayan landscape and subjects, they sought to represent and create a "creolized" culture through the arts.[22]

The cultural outpouring of the creative merdeka also spread to architecture. Before discussing a design strategy deployed in an attempt to create a multiethnic architectural culture, I want to turn to two different ethnocentric approaches to architectural representations of Malayan identity in the mid-twentieth century. In analyzing and comparing these two approaches, it is perhaps useful to return to the pro-Malay bias of the colonial state discussed earlier. In its attempt to preserve the Malay society, Stockwell argued that the British colonial state instead created "a doctored version of traditional Malay society—one in which a careful delineation of genealogy, Western concepts of justice and humanitarianism, and European models of kingship, feudalism, clan organization and land-ownership intermingled with Malay *adat* (custom), Islam and the Hindu remnants of pre-Islamic days."[23] A key component of this "doctored version" of Malay society was the British colonial state's "invention" of Malay traditions and crafts. One of the most influential British colonial administrator-scholars involved was Mubin Sheppard (born Mervyn Cecil Sheppard, 1905–1994). Assigned as one of the four British advisors to work closely with Gerald Templer to formulate cultural policies, Sheppard helped to stage cultural shows and establish institutions that promoted Malayan arts and history during the emergency. A renowned scholar in Malay

culture who has written extensively on Malay history, arts, crafts, and architecture, Sheppard was one of the few British civil servants who stayed behind to work for the postindependence Malayan government after the formal end of British colonial rule. He was tasked to help to establish Muzium Negara (the National Museum)—which exemplifies the first ethnocentric approach to architectural representation—and to take charge of other cultural affairs.[24]

As the first director-general of Muzium Negara, Sheppard was the central figure behind not only the contents and curatorial direction of the museum but also its architecture, so much so that some claimed he was the "real designer" behind the building.[25] This is evident in how Sheppard went to great lengths to create a museum in what Mark Crinson has described as "Malay-house-style," a form of colonial regionalism in which highly recognizable elements and motifs of Malay vernacular architecture were exaggerated, often with minimal abstraction, and directly applied to a modern structure.[26] Sheppard's predilection for "Malay-house-style" should not be surprising. During the 1950s, when the traditional timber house was generally viewed as backward, uncomfortable, and thus undesirable, Sheppard was the first to see its potential and converted an old Malay *istana* (palace)—essentially a grander and more elaborate timber house—into a museum in the early 1950s.[27] He also specially commissioned a timber house built by traditional craftsmen for himself at Petaling Jaya in the late 1950s. Sheppard wanted the national museum to be based on the design of a traditional Malay istana—specifically the legendary Sultan Mansur Shah's istana that was built during the peak of the Malacca sultanate's power—and did a sketch to that effect. He rejected a modernist design for the museum by Ivor Shipley, an architect with the Public Works Department, and instead appointed Ho Kok Hoe, a Singapore-based Chinese architect, as the official architect.[28] With Sheppard, Ho toured different parts of the Malay heartland and they finally decided to incorporate a few architectural features from Balai Besar (literally, big hall) in Kedah in their design of the museum. Sheppard also assembled a team of Malay artisans from different parts of Malaya to incorporate "local" elements into the museum's design, such as screens with floral patterns, carved timber panels, and ornaments.[29]

Sheppard's preference for the "Malay-house-style" should also be understood in relation to the "romantic tradition in imperialism."[30] Hugh Clifford (1866–1941), the administrator-scholar who exemplified that tradition in Malaya, was Sheppard's role model.[31] Clifford saw the Malays as having "a Rousseauesque innocence, a virtue and nobility, expressed in their sensitivity and perfect manners, which was endangered by the spread of Western civilization" and Malaya as possessing the "makings of a very Garden of Eden" had outsiders been excluded.[32] Clifford felt that British administrators should encourage the Malays to preserve their traditions. During the colonial era, such a romanticization of the Malay

character and the fossilization of their culture served to legitimize the British indirect rule in Malaya. When a similar attitude was adopted in postindependence Malaya by the state—particularly in the ethnocentric manner it was manifested in an important national institution like Muzium Negara—it could be read as an attempt to justify the political primacy of the Malays in the Federation of Malaya.

The second approach is often referred to as Chinese traditional revival architecture (*huazu chuantong fuxingshi jianzhu* or 华族传统复兴式建筑) and is exemplified in a number of 1950s and 1960s buildings associated with the Chinese community.[33] Chinese traditional revival architecture has its origins in the quest of early twentieth-century Chinese architects to define a monumental architectural form appropriate to China as the modern nation.[34] The Chinese traditional revival architecture was intended to be a modern Chinese style that, according to Delin Lai, "embodied the Chinese nationalist elite's expectations of a 'renaissance' of Chinese culture that would originate in a vigorous Chinese tradition but be modified according to Western classical and modern standards."[35] An architectural style conceived to reinvigorate a fallen nation in the early twentieth century took on different significance in the context of ethnic politics in colonial and postcolonial Malaya in the mid-twentieth century.

Looking at three built examples of Chinese traditional revival architecture—the Nanyang University Library and Administration Building (1954) designed by Ng Keng Siang, the Singapore Chinese Chamber of Commerce Building (1964) designed by Ho Beng Hong, and the Chung Cheng High School Administration Building (1968) also designed by Ho Beng Hong—they appear, at first glance, somewhat similar to the aforementioned example of "Malay-house-style" colonial regionalism (figure 13.1).[36] Instead of a Malay roof atop a reinforced concrete structure with motifs of Malay vernacular architecture applied to surfaces of the structure, we have a Chinese roof and Chinese motifs. Yet there is a critical difference: the Chinese traditional revival buildings were not of the political and cultural elite or the state—as was in the case of Muzium Negara discussed earlier—but of the marginalized Chinese-speaking community. Both Nanyang University and Chung Cheng High were key institutions of Chinese language education in a context where Chinese language education was unrecognized and marginalized by the colonial state.[37] While the Singapore Chinese Chamber of Commerce could be seen as representing the wealthy and influential Chinese business elite, its traditional role as the intermediary between the colonial state and Chinese community was threatened—and the prestige it acquired through performing that role was eroded—in the transition from laissez-faire colonial rule to state-dominated interventionist postcolonial rule.[38] As such, the ethnocentric approach to architectural representation in these buildings could be understood less as the

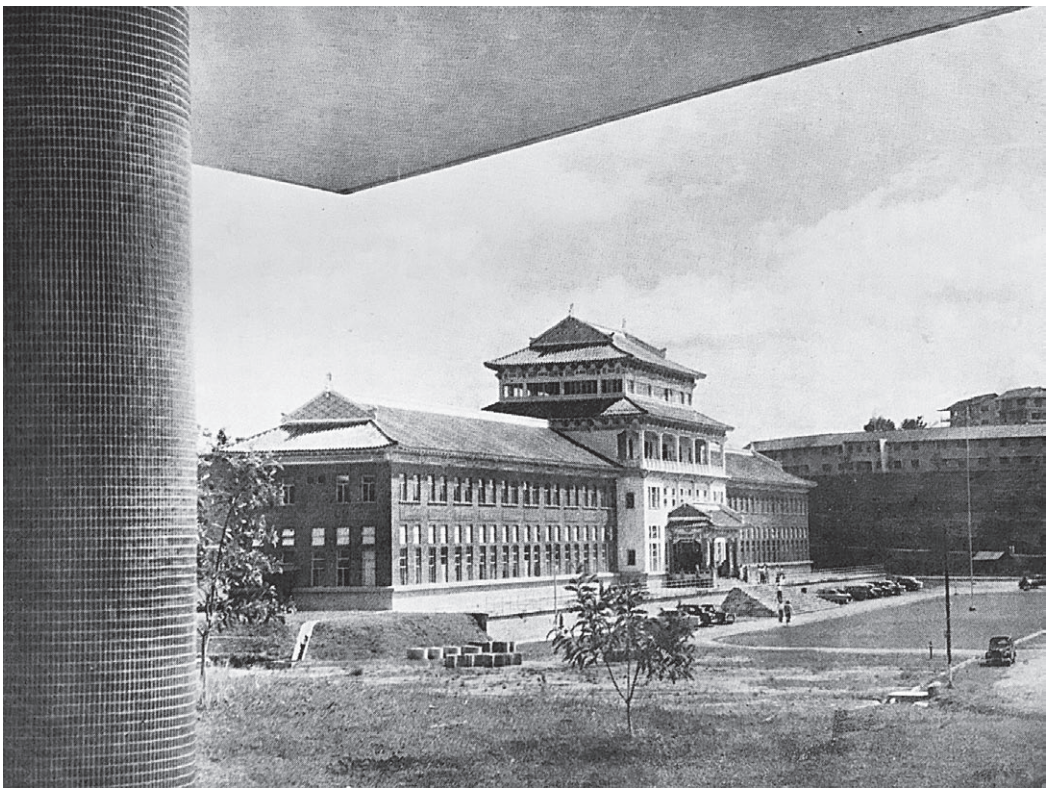

Fig. 13.1 Exterior view of Nanyang University Library and Administration Building, from *Journal of Society of Malayan Architects*, 1959.

aestheticizing of the political primacy of a certain ethnic group than as a form of resistance against such cultural dominance.

Tropical Architecture in between the Universal and the Local

If an ethnocentric approach to architectural design in Malaya meant the exclusive use of architectural symbols and motifs associated with one particular ethnic group, what would constitute a multiethnic and multicultural approach to architectural design in Malaya? The two main professional groups that dominated the architectural scene in Malaya in the 1950s—expatriate colonial architects, mostly British, and local architects—appear to share a common position. The former group responded to the official call from the British colonial government for Malayan architecture through a series of discussions and debates in *PETA, the Journal of the Federation of Malaya Society of Architects*.[39] The journal featured numerous articles on the various types of historical architecture in Malaya. Despite giving serious attention to historical architecture, the journal's editors arrived at a consensus against the addition of elements or motifs taken directly from historical

architecture—"local touches" as they called them—to mid-twentieth-century buildings.[40] This position reflected the biases of mid-twentieth-century European modernism. Modernist architects advocated a universal abstract language; they tended to be against the use of ornament and deemed the application of recognizable, unabstracted elements from vernacular architecture to be aesthetically unacceptable. As a result, these colonial architects fell back on the modernist faith in fundamental principles and agreed that Malayan architecture should, first and foremost, deal with something more fundamental: the climatic conditions of Malaya.[41]

Besides *PETA*, the other architectural journal in Malaya was *Rumah*, the journal of the rival professional organization, the Society of Malayan Architects, later renamed the Singapore Institute of Architects. Unlike the Federation of Malaya Society of Architects, which consisted primarily of British expatriates, the Society of Malayan Architects was comprised of only local architects, almost all of them of Chinese ethnicity.[42] Unsurprisingly, *Rumah* also featured articles that discussed Malayan architecture. These were sometimes explicit, as in the case of Eu Jin Seow's article on "Malayan Touch," which was an attempt to find inspiration in the traditional kampong house.[43] By seeing and evaluating the vernacular through the modernist lens of economy, functionality, tectonics, and climate-responsiveness, Seow argued that the vernacular offered lessons in "efficient planning and sound construction," revealed "so much talent in local handicraft and so many opportunities for uses and experimentation with [local] materials," and demonstrated varied solutions to "man's continual struggle . . . against the elements."[44] At other times, the discussion of Malayan architecture was implicit, embodied in allusions to the "local." For instance, in an article on the architectural education at Singapore Polytechnic, Lim Chong Keat, Tay's teacher, emphasized the "local conditions of climate, sociology, material resources and attainable techniques" in the school's pedagogy. Lim also noted that Singapore Polytechnic's architectural pedagogy should "learn from local traditions and usages" while striving for "a vital and progressive attitude in the practice and instruction of architecture."[45]

It is difficult to generalize about the local designers' position on Malayan architecture, however, given their diverse output, which included Muzium Negara and the Nanyang University Library and Administration Building, mentioned earlier as examples of an ethnocentric approach to architecture. For the more progressive among the local architects, such as Lim Chong Keat, Eu Jin Seow, Alfred Wong, and William Lim, climate was certainly one of the many local conditions to which Malayan architecture should respond. These architects' embrace of tropical architecture could be attributed to a number of factors. They were English-educated Chinese elite from wealthy and well-established families in colonial society.[46] Unlike members of the marginalized Chinese-speaking community, or

the Malay nationalist elite who spearheaded the aforementioned ethnocentric architectural representations, there was no reason for these members of the cosmopolitan "Anglophone domiciled community" to assert any ethnocentric identification.[47] Many of these architects received their architectural education overseas in Manchester, London, and Melbourne, before formal architectural education was offered in Singapore, and they were all trained in the modernist paradigm, in which climate was regarded as an important determinant of architectural form. A central part of this modernist paradigm in the mid-twentieth century would include celebrating exemplars of tropical architecture by modernist masters such as Le Corbusier and Oscar Niemeyer in India, Brazil, and other places. For these local architects, not only did tropical architecture appear to be race-neutral, having no historical baggage, it was also associated with the modern and the progressive.

The Chinese Malayan architects did not just unquestioningly accept or internalize metropolitan discourse on tropical architecture, however. Tropical architecture discourse, they believed, had a tendency to reduce and simplify the complexity of living in a particular environment into a set of technical parameters.[48] This was especially evident in Lim's review of David Oakley's *Tropical Houses: A Guide to Their Design* (1961) in *Rumah.* Lim commented that the book appeared to be written for "naïve or underdeveloped readers" and the examples shown appeared "distilled as it were for Batsford and for Bedford Square!"[49] Batsford was the book's publisher and Bedford Square was the address of the Department of Tropical Architecture at the Architectural Association, where Oakley taught. Through this critique, Lim implied that the information in the book was so condensed that it was only suitable as a textbook for British architecture students. The book had little relevance to the readers of *Rumah*—that is, local architects who had to deal with a much more challenging set of socioclimatic conditions on the ground.

If the local architects did not indiscriminately adopt tropical architecture as prescribed by the metropole, how was the tropical architecture they produce different? First, like the artists involved in the creative merdeka, they closely studied indigenous Malay culture, specifically vernacular houses. As we saw earlier, Seow sought to draw inspiration from the vernacular in his quest for a "Malayan touch." Furthermore, the Society of Malayan Architects named its journal *Rumah*, the Malay word for house. The cover of *Rumah* featured an elevation drawing of the Rumah Melaka, or the Malaccan vernacular house. This was a measured drawing done by Wee Chwee Heng, another one of Lim's students at Singapore Polytechnic. Wee, together with Tay, were part of a group of first-year students that Lim brought on a field trip to various sites along the west coast of Malaya to familiarize them with regional variations of the traditional Malay house. To be sure, many modernist architects were fascinated by vernacular architecture, so what these local architects were doing was not particularly unusual. What is exceptional was the

Fig. 13.2 Exterior view of the Singapore Conference Hall and Trade Union House. Private collection of Lim Chong Keat.

manner in which the vernacular was incorporated into the tropical architecture they designed, especially in the case of the Singapore Conference Hall and Trade Union House (SCHTUH).

Designed by Lim together with his partners at Malayan Architects Co-Partnership, William Lim Siew Wai and Chen Voon Fee, the SCHTUH is one of the key buildings of postindependence Singapore.[50] As its name suggests, it was built to serve two main functions. First, it was designed to host major international conferences and cultural events of the newly independent nation—gatherings such as the Afro-Asian Trade Union Conference held just after the building's official opening on October 15, 1965.[51] Second, it was to be the headquarters of the unified labor movement in Singapore. Although the building is now no longer called the Trade Union House, the building was originally conceived primarily, in the words of Devan Nair, secretary-general of the unified trade union movement, "to honour a tryst" between the government and the labor movement. As the minister of Culture and Social Affairs, Othman Wok, put it, the aim was to build a headquarters that was "commensurate with the dignity of labour."[52] The multiethnic People's Action Party (PAP) government came into power during the late 1950s by allying itself with the labor movement. The control of the various trade unions by the PAP government and the subsequent establishment of tripartitism between workers, employers, and the PAP government were central to attracting foreign direct

Fig. 13.3 Interior view of the naturally ventilated concourse of the Singapore Conference Hall and Trade Union House, with the auditorium and related conference hall facilities to the right and the facilities of the trade union house to the left. Private collection of Lim Chong Keat.

investment to Singapore, resulting in its rapid economic growth from the 1960s onward.

Lim and his partners won the commission in one of the major open architectural competitions in postwar Singapore in 1962. Architecturally, their design was conceived as a highly integrated solution to the complex site, programmatic, and environmental requirements. The original building was dominated by a large butterfly roof that unified the two main elements of the building underneath it: the auditorium and related conference hall facilities on one side and the facilities of the trade union house on the other side. Located between the two was a naturally ventilated concourse (figures 13.2 and 13.3). From the concourse, stairs led to the other levels of the buildings, including the foyer of the conference hall at the second level. All these were visible from the outside as only glass curtain walls separated the interior from the exterior. The foyer also opened out to large cantilevered terraces, which were expressed as floating concrete trays. The glass curtain walls were protected by the overhanging cantilevered roof and two long strips of louvered screens hanging from the roof. These features allowed the curtain wall to

stop short of the roof, leaving gaps for hot air to escape, thus creating air movement to naturally ventilate the concourse. These horizontal elements of the building were anchored by five vertical service cores.

A cursory evaluation suggests that the design of the SCHTUH adhered to the design language and spatial strategies of tropical modern architecture, particularly in its clarity of structure, fluidity of composition, and spatial ambiguity between inside and outside. But its design also created a new and unusual effect, as Tan Kok Meng noted:

> Aesthetically, the varying portions of the facades that come under shade at changing times of the day seem to add another dimension to the elevational composition. The aesthetic is thus one of layering, of degrees of transparencies and reflectivity. This poetically brings out the qualities of tropical shade, with its rich tones, shielded from harsh tropical light. The Corbusian use, typified at Chandigarh, of chiaroscuro, of modulation of shadow versus light and mass versus voids, especially the aesthetic function in the use of the *bris-soliel* [*sic*], is most sensitively transformed here into a modulation of layers of transparencies and tactilities that almost acquires a textile quality.[53]

No wonder the SCHTUH was regarded by Tay as "an innovative attempt at evolving a modern tropical design language [in Singapore and Malaysia] that has not been matched since."[54]

The building, however, was not just designed to be in dialogue with the international discourse of tropical architecture. It was designed to emphasize and incorporate the local—the Malayan—both literally and symbolically. Lim and his partners specified local materials, particularly hardwoods like *merbau*, *mersawa*, and *keranji* for wall and floor finishes; they also employed local craftsman to fabricate the furniture and commissioned local artist Khoo Sui Hoe to paint a huge mural within the building. Just as the young architects, who were in their early thirties when they won the competition, were given the opportunity by the state to build their capacity and demonstrate their capability with the important commission, the architects themselves wanted to provide similar opportunities for these local suppliers, builders, and artists. Within the building itself, surrounded by layers of glazing, screens, and cantilevered roofs and balconies, were highly abstracted representations of traditional woven mats made of *mengkuang* (screw pine leaves or local species of *Pandanus atrocarpus*) found in Malay houses (figure 13.4).[55] Instead of screw pine leaves, the patterns were created using colorful glass mosaics.

Where did the mengkuang mat patterns come from and how could we understand their incorporation in a modernist building like the SCHTUH? As we noted earlier, Lim was interested in vernacular Malay architecture and he took his

Fig. 13.4 View of the external wall of the auditorium covered with glass mosaics based on patterns derived from weaved mengkuang mats. Photograph taken when the building was still under construction. Private collection of Lim Chong Keat.

students on outings to study and carry out measured drawings of Malay houses.[56] Thus, the patterns could have been inspired by his knowledge of the mengkuang mats he saw in Malay houses. Such knowledge of traditional Malay arts and crafts was also common among British administrators-scholars—such as the aforementioned Mubin Sheppard—who romanticized the Malays and their cultures. Hence, Lim's use of the mengkuang pattern could also be seen as being influenced by this form of colonial knowledge. Indeed, Lim has a collection of drawings by Carl Alexander Gibson-Hill (1911–1963), a medical doctor and a prominent British administrator-scholar, who also happened to precede Sheppard as the editor of the *Journal of the Malayan Branch of Royal Asiatic Society* (*JMBRAS*). Some of the materials in Gibson-Hill's collection went to Lim sometime after he passed away in 1963, when the construction of the SCHTUH was about to commence. They included a series of large, beautiful measured drawings of mengkuang mats of vernacular Malay houses probably prepared as illustrations for articles in *JMBRAS* that Gibson-Hill was editing (figure 13.5). Seen as such, could the abstracted mengkaung mat patterns found in the SCHTUH be read as an unconscious postcolonial extension of colonial romanticism?

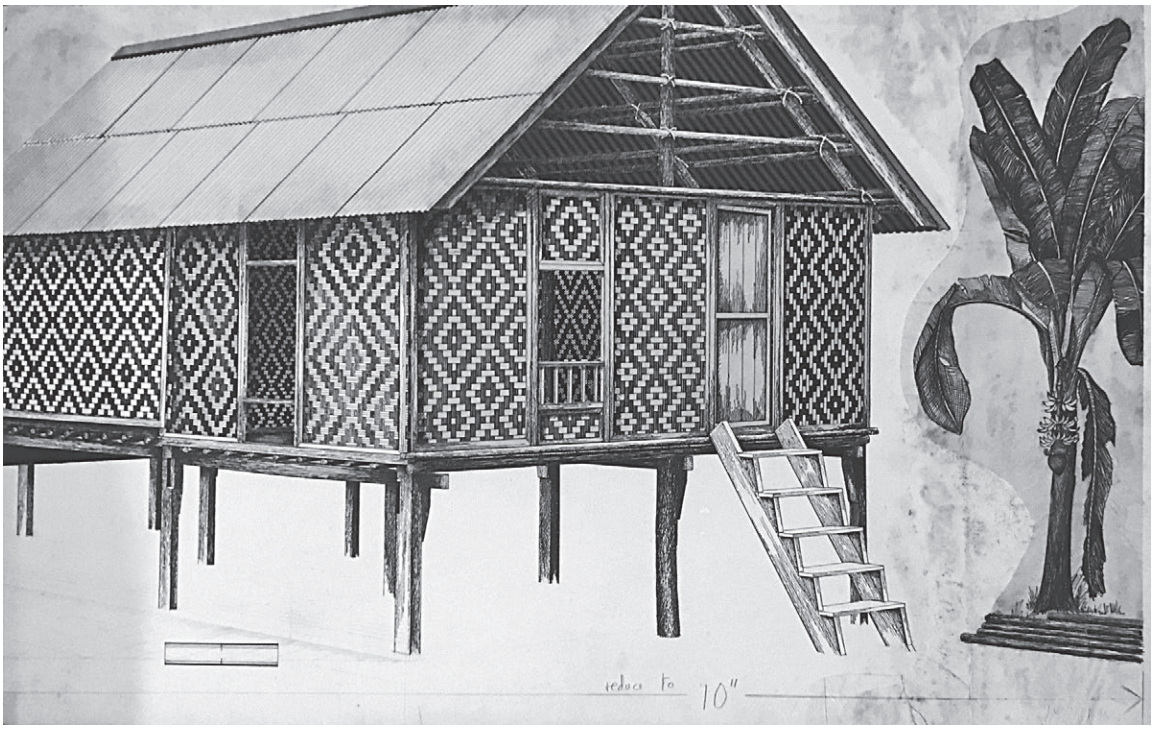

Fig. 13.5 One of the measured drawings of mengkuang mats originally from Carl Alexander Gibson-Hill's collection that is now kept by Lim Chong Cleat. Private collection of Lim Chong Keat.

There were, however, distinct differences between the SCHTUH and Muzium Negara in the ways "Malayness" was represented. Unlike with the Muzium Negara, where the symbols and motifs associated with Malay arts and culture were literal and highly visible on the exterior, the mengkuang patterns in the SCHTUH were highly abstracted and only appeared on interior surfaces within a modernist shell. If we go beyond formal analysis to examine the production of these architectural components to ascertain their plausible meanings, we would notice that while the Malay symbols and motifs at the Muzium were fabricated by traditional Malay craftsmen, the mosaic walls of mengkuang patterns were built by modern Chinese construction workers. Both form and process suggest that the mengkuang patterns at the SCHTUH were removed from the racial knowledge associated with colonial romanticization of the Malays.

Despite his interest in the vernacular architecture of the region, Lim has always insisted that, like other prominent southeast Asian modern architects such as Leandro Locsin and Sumet Jumsai, his own works "illustrated an unself-conscious international design criteria."[57] He argued that these southeast Asian architects were international architects through and through, and they were only coincidentally national architects. In his words: "Their national importance lies in the fact that their architects are nationals in residence, serious about their urban responsi-

Fig. 13.6 Buckminster Fuller sketching his ideas about three-way woven basketry, triangular structures used for rafts in Bali, at the first Campuan meeting, 1976, convened by Lim Chong Keat, who is sitting next to Fuller. Private collection of Lim Chong Keat.

bilities and are not transient foreigners. Generally, the major regional practitioners have come to terms with world building techniques, and by training and experience, have been ready to design more significant projects not only in their own cities but also in other parts of the world." Lim's statement suggests a form of cosmopolitanism, one that does not distinguish, in the hierarchical sense, between the national and the international, the local and the global, subordinating one to the other. This cosmopolitanism is perhaps best captured in Lim's friendship with the visionary architect and engineer Buckminster Fuller, and particularly in Lim's enthusiasm for Fuller's rather unorthodox understanding of Southeast Asia. For Lim, Fuller "had a world-view of South East Asia" that was based on Fuller's "speculative prehistory" of the region.[58] Instead of holding the conventional view of the southeast Asian region as "a cultural Johnnie-come-lately," Fuller argued that the region was the cradle for early human civilization.[59] Fuller noted that the warm water of the South Pacific (broadly corresponding to island Southeast Asia) was the "most logically propitious place for humans to survive and prosper within

our planetary biosphere."[60] Inhabitants of this region became "natural hydraulic inventors," building rafts and boats to sail and connect between landmasses. In the process, they "learned that triangles are the only structurally stable patterns for the interbracings, outriggings, and sparring of their sailing canoes and catamarans."[61] One of the main pieces of evidence that Fuller mobilized to support his argument was the three-way woven baskets found solely in the region (figure 13.6). Unlike the square, two-way woven basketry found in the rest of the world, the three-way weaves are much more structurally robust.

Through his structural reasoning, Fuller's prehistory of the South Pacific reconstructs and even helps to redeem the region. Instead of being consigned by the colonial discourse on the tropics to a geography of insalubrity and backwardness, Southeast Asia was recuperated as a zone of fundamental innovation and early civilization. Likewise, weaving was no longer just a particular form of traditional craft practiced by backward people, it had a universal structural logic that could be seen as a precursor to the three-way gridding of a sphere in Fuller's sophisticated geodesic geometry. Fuller wrote part of this speculative prehistory during his tours of the region with Lim, and at the Campuan meetings that Lim convened in the 1970s and early 1980s. It is perhaps fitting that we end this chapter on what could be described as the cosmopolitan tropical architecture of Lim and his partners with a broadened, albeit unconventional, understanding of the tropics and its traditions.