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Title: Port City Evolution: The History of Kuching's Urban Morphology as a Colonial Entrepot.

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1. Introduction

The urbanisation and growth of many modern cities in Malaysia flourished from their commercial potential within the maritime configuration of the Southeast Asia region (Wang & Jia, 2016). Since the second century, ships sailing between India and China would rely on the changing wind directions of the monsoon seasons, stopping along the coast of Southeast Asia to wait for the next monsoon cycle or meet with their trading partners from the other side of the world (Cleary & Eaton, 1992). During the waiting period, traders and adventurers would set up temporary camps that eventually turned into port settlements - built from non-durable materials like timber and thatch readily found on the forested shores. The temporal nature of these coastal settlements was attributed to their exclusive reliance on trading activity by foreign immigrants of diverse backgrounds, which differed from the more permanent and monumental structures of autonomous indigenous capitals inland that had a closed ecosystem of population and resources (Widodo, 2005, 20-30).

As commodities increasingly flowed, emerging coastal and riverine settlements attracted Western powers fighting to secure strategic trade routes and natural raw materials (King, 1977; Zhao, Wong & Hanfi, 2019). They established control over these commercial entrepots for the intersection of trade, which grew into microcosms of foreign cultures and urban forms under Western rule. In the Straits Settlements of Penang, Melaka and Singapore, British administrators imported planning templates used in earlier colonies - commonly an iron-grid pattern of segregated racial enclaves (King, 1977; Ting, 2008; Zhao et al., 2019; Zubir & Sulaiman, 2004). These strategies to facilitate the governance of the ruling class would often displace the indigenous estuary settlements and existing vernacular urbanity (Harun & Abdul Jalil, 2014; Zubir & Sulaiman, 2004). Hence, many historians have traced the influences of colonial planning from the urban morphology of present-day city centres.

Compared to other colonial cities in Peninsular Malaysia, the urban morphology of Kuching - a colonial port located on the northwest edge of Borneo island, gained little attention from scholars and historians. Initially a riverine trade settlement for indigenous jungle products (Pollard, 1997; Cleary, 1996), Kuching experienced significant growth during the early 20th century under the rule of the Brooke administration, founded by Sir James Brooke and succeeded by his bloodline. Since Kuching was initially insignificant to British authorities and was recognised as a crown colony only in 1946 (Pollard, 1997), the Brooke rulers, known colloquially as the White Rajahs (meaning ‘white king’ in Malay), enjoyed more flexibility in their governance. John Ting (2008) argued that the White Rajahs adopted a hybrid approach to urban planning by encouraging local settlement patterns and wide use of local typologies even in government buildings (Chater, 1994; Ting, 2012; Wahid, 1988). Thus, the current urban fabric reflects the vernacular qualities of its multi-cultural population, with the co-existence of Chinese and Indian shophouse-lined streets on the south bank (Chai, Yien & Ping,

2021) and Malay village clusters around Muslim mosques (Harun & Abdul Jalil, 2014) on the north bank.

This thesis will explore how colonial planning continued to influence the urban developments of Kuching post-independence under the Federation of Malaysia during the late 20th century. The research questions are: (1) What port infrastructures and planning strategies were established in Kuching during the Brooke administration to facilitate their governance as the White Rajahs? (2) How were specific urban strategies adopted by the new federal and state governments post-independence? And why? (3) How have colonial infrastructures and planning continued to influence future urban developments in the city?

The research aims to create a comprehensive timeline of Kuching's urban growth by mapping its evolution from a colonial settlement to the administrative capital of post-independence Sarawak. The historiography will begin by examining the timeline of the three White Rajahs, documenting Kuching's growth under their rule and the short-lived governance of the British crown colony. Then, the mapping methodology will aid in identifying vital moments in the urban history of Kuching that had lasting effects and implications on the future urban morphology, as described in the following chapters. The use of primary and secondary sources will also inform the analysis of the planning policies and treatment of the historic city centre by the newly-established state. Through researching the history and urban morphology in Kuching, we hope to understand why the city has expanded in specific ways under modern governance and whether there were underlying factors resulting from its founding as a colonial port city.

2. Historiography and urban morphology of Kuching

2.1 Beginnings of Kuching settlement

A few years before the arrival of the British to Sarawak in 1839, the Bruneian Malays settled along both banks of the main branch of the Sarawak River Basin. W.J. Chater (1994) stated that the location of the first capital of Sarawak was Tanah Lidah, where the Malay nobles from the Sultanate of Brunei first settled at the fork of the river. There have also been claims of a second capital in the mountainous Santubong region, inhabited by Malay commoners under Governor Mahkota. After an attack from the sea Dayaks, the Malays found Santubong too vulnerable to pirates, while Tanah Lidah was difficult to defend from inland headhunting tribes (Chater, 1994). Thus, Kuching was chosen as the third capital of Sarawak to better defend against the northern coast and land Dayaks higher inland (Image 1).

Even then, the Malay nobles, represented by Prince Muda Hashim and Governor Mahkota, struggled to quell uprisings among the indigenous population. When Hashim learnt of a shipwreck near the mouth of the river, he took the opportunity to shelter the British sailors and send them back to Singapore - where they sang praises about the remote village of Kuching (Pollard, 1997). Shortly after, a British adventurer named James Brooke sailed across the sea, bearing gifts and a message to Hashim. Brooke saw an opportunity to assume power upon his arrival by aligning interests with Hashim and offering military strength to resolve the state of rebellion. Following the rebel's defeat, Hashim declared Brooke the *Rajah* (meaning 'king' in Malay) or governor over Sarawak in 1841. Brooke later settled on the northern banks of the Sarawak River alongside Hashim's house, opposite Governor Mahkota residing on the south bank (Images 2 and 3). In those days, there was only a single row of wooden houses along the swampy banks of the riverfront, broken by a jungle path leading inland known today as Rock Road (Chater, 1994).

James Brooke spent the first few years securing governance over the settlement and the vast stretch of land upstream. He eradicated headhunting and piracy traditions among the indigenous population and defended against Bruineian political influences and rebellions incited by Governor Mahkota. Brooke appointed three Malay *Datus* (meaning 'chief' in Malay) to aid in his administration and gain favour among the Malay community, encouraging the upriver migration of their villages to the cape above the city (Pollard, 1997). Within a few years, the settlement had gained prestige as a port city. The growing stability drew peripheral tribes and traders of different cultures to set up permanent residences near the riverbanks (Image 4). The establishment of the Brooke administration in Kuching marked the beginning of colonial influence on the growth of the port city and its urban morphology.

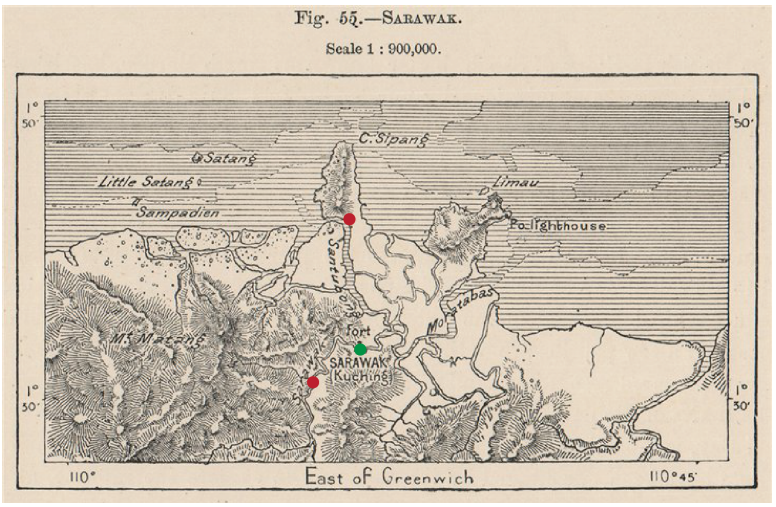

Image 1: Map of the larger Kuching area with the city centre indicated in green and the first two capitals of Sarawak in red - Tanah Lidah to the south and Santubong to the north.
Source: Reclus, É. (1885). Sarawak. antiquemapsandprints.com.

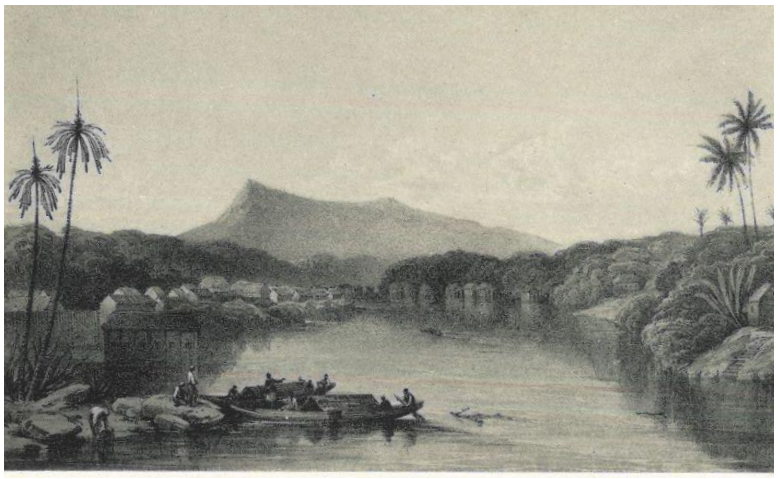

Image 2: Kuching during the early years with the southern bank on the left and Brooke's house on the right.
Source: Runciman, S. (1960). River Sarawak and Kuching. Cambridge University Press. 81, 2a.

Image 3: The north bank of Kuching with Brooke's house pictured in the centre, residency hill in the foreground and clusters of Malay settlements along the banks.
Source: Runciman, S. (1960). Mr Brooke's Bungalow. Cambridge University Press. 129, 4.

Image 4: Map of Kuching in the second year of Charles Brooke's administration (1870).
Source: By the author.

2.2 Urban growth under Brooke's administration (1841-1941)

James Brooke frequently visited Singapore to garner support and recognition from fellow Englishmen and the British government for Sarawak's newfound capital, Kuching. Ultimately, the British government refused to endorse Sarawak's independence as a crown colony amidst criticism of the use of foreign power in crushing local uprisings. Nevertheless, Brooke turned his attention towards advancing the native population using European intelligence, appointing Malay chiefs and local figures of influence to positions in the administration (Tarling, 1992). The establishment of the Council of States in 1855, comprised of councillors of different races, only reaffirmed his conviction in an autonomous local government and foothold of native influences in Kuching.

Similar port infrastructures were built in Kuching and the Straits Settlements to facilitate commercial and political activity - forts, the courthouse and barracks. However, without official British jurisdiction, the Brooke administration had more freedom to incorporate vernacular forms and traditional practices in Kuching's urban development. For example, James Brooke constructed forts based on local knowledge of riverine defence rather than European urban planning strategies (Ting, 2012). Fortified structures in Penang and Melaka stood in locations central to political control and accessibility to the harbour, commonly at the river mouth or near the coast. It was often the first brick building constructed by European traders as a stronghold from where the city would expand (Widodo, 2005, 91). In Kuching, Brooke ordered the construction of several forts on the outskirts as control points along the Sarawak River, where frequent attacks occurred (Ting, 2012). Fort Margherita was only built in 1879 to enhance the aesthetics of the riverfront rather than for defence. The fort sat on the steep rising riverside opposite the main bazaar, guarded by the Sarawak Rangers - a military group formed from the descendants of Malay and Dayak chiefs loyal to Brookes (Chater, 1994).

After James Brooke died in 1868 and his nephew, Charles Brooke, succeeded as the second *Rajah*, Charles invested heavily in improving the public image of Kuching. Brooke followed his uncle's taste in incorporating traditional forms and practices in government buildings. He rebuilt the courthouse in 1874 as a hybrid of Western and indigenous architecture to replace the *ad hoc* office - an abandoned timber building between the Chinese and Indian settlements, repurposed as the centre of governance in 1848. The new courthouse had deep-set verandas that ran around the building, similar to Malay houses, and a *Belian* shingles roof supported by Tuscan brick columns (Image 5). Although it was a modest structure compared to its counterpart in Singapore, the courthouse blended into the urban fabric of the surrounding shophouses while addressing the issues of climate and maintenance (Ting, 2008). Brooke also rebuilt the government residence and renamed it the *Astana* (a variation of '*istana*', meaning 'palace' in Malay). It combined the climatised Anglo-Indian bungalow typology with a traditional double-pitched roof, likely built by Malay carpenters.

Beyond improving government facilities, Brooke gave instructions on various regulations concerning the local settlement in the early 1870s. There were orders mandating a five-foot way for new streets with proper drainage systems in the city centre, and private house owners were encouraged to rebuild their wooden shophouses in brick and more durable roof shingles (Chai et al., 2021; Pollard, 1997). After the great fire in 1884 that destroyed one hundred and ninety shophouses in the Chinese settlement, Carpenter Street was rebuilt in brick within two years connecting to the new Ewe Hai Street towards the east. The open-front shophouse typology referenced the eclectic style developed in the Straits settlements, identified by a continuous pedestrian arcade on the ground floor with internal wells or a backyard (Widodo, 2005, 117). Under Brooke's meticulous command over every detail - from retaining the riverbanks with piles to installing street lamps, the once swampy edge of the Sarawak River became a charming bazaar widely admired by foreign visitors.

Moreover, Brooke planned large-scale urban development projects to accommodate the growing population and improve living conditions. When comparing the maps from 1870 and 1960 (Images 4 and 8), one noticeable difference would be the disappearance of the Gartak River and the Kuching River. During the late 1800s, work commenced to drain and fill in the straggling Gartak River to expand the city westward. The entire area behind India Street was muddy from the stream flowing through it (Image 7), its name deriving from the placement of *gartak* (meaning 'platform' in Malay) to assist pedestrian access (Foo, 2019). The project progressed slowly into the mid-1910s, taking place simultaneously with the construction of shophouses along Khoo Hun Yeang Street, its form constrained by the river bend. Another major undertaking was the construction of a reservoir to improve the water supply amidst frequent cholera outbreaks. The hill from where Kuching River originated was chosen as the site in 1886 and eventually started operations in 1895 (Pollard, 1997). Unfortunately, after the construction of the reservoir, water flow in the Kuching River slowed, resulting in land reclamation for the construction of Temple Street and the Chinese Chamber of Commerce (Chai et al., 2021).

The port city of Kuching grew drastically within the century under the Brooke administration. Western technologies, such as electricity, broadcasting stations and a suspension bridge carrying water over the Sarawak River, were also imported by and large during the third and last *Rajah*'s rule. The increasingly vibrant urban life and stories brought back to the villages inland accelerated the shift in population from rural Sarawak. By the end of the Brooke family administration, Kuching grew from a small trade stop of around 800 people into a population of 35000 (Hew, 2007).

Image 5: The Astana (in the background) sat across the river from the courthouse and commercial centre.
Source:Renteng, J. (1910). Sarawak Antique Postcards. Worthpoint.

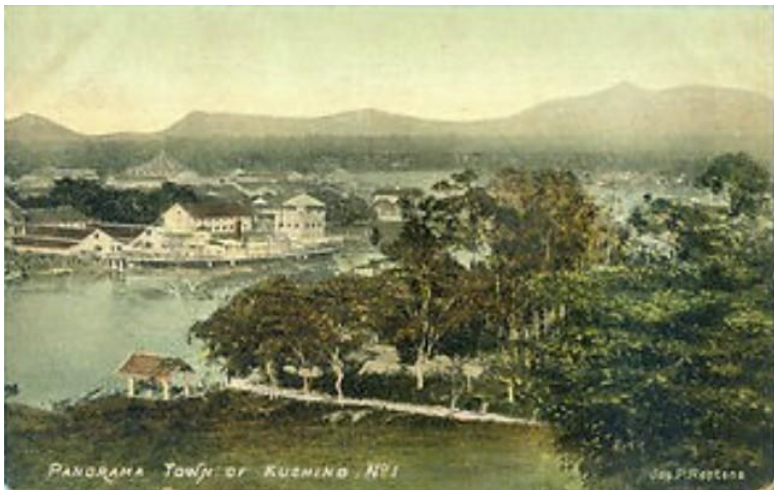

Image 6: Panorama of Kuching, likely from the European residence hill, with views of the docks, square tower and Satok suspension bridge in the background.
Source:Renteng, J. (1910). Sarawak Antique Postcards. Worthpoint.

Image 7: Completed shophouses along Khoo Hun Yeang Street on the right and the river swamp on the left during reclamation.
Source: Foo, V. (2019). Sungai Gartak. Sarawak stories, collections.

2.3 Growth of the port with the city

The economic sustainability of port cities heavily relies on a diverse supply of trade products, and Kuching was no exception. During the British administration, jungle products and small-scale cash crop agriculture served as the primary source of income (Cleary, 1996). Traditional methods of collecting and producing jungle products had been prevalent among the indigenous ethnic groups even before British influence. Boat traders along the Sarawak River would channel these products to port settlements closer to the coast, such as Kuching - where foreign capital profited from their export to Singapore and the wider Southeast Asia region (Cleary & Eaton, 1992; Cleary, 1996).

The Borneo Company - initially set up by James Brooke in 1856 to manage the mining and distribution of natural minerals in rural Sarawak, was responsible for regulating trade products (Ong, 2018). The company set up their office along the south bank of the Sarawak River, just east of the Main Bazaar (Image 4), from where it controlled the import and export of goods through the port. As commerce flourished along Kuching's riverfront, other port facilities such as the Brooke Dry Dockyard (1911), the customs department and various wharves and warehouses emerged to support trade activities along the Main Bazaar. In addition, factories and mills were also constructed near the Borneo Company to curtail the cost of transporting processed products to the port. For instance, sago - one of the main exports of Kuching, was grown in the rural Muka district but milled along the banks of the Sarawak River. The industrial activities expanded towards the east following the river bend, with septic tanks, sawmills and a distillery dotting the area (Image 8). This particular stretch of land would continue to function as the industrial zone in modern-day Kuching due to its prime location within the city centre and ample access to riverine transport.

Recognising the importance of efficient transportation for trade, Charles Brooke initiated plans for a railway track that extended ten miles from the city centre. The tracks, completed in 1916, facilitated the transport of local produce such as gold and antimony to the Main Bazaar, running parallel to Rock Road and leaving a distinctly linear footprint in the present-day road system. In response to the growing economy and prosperity, local and foreign banks also established themselves along Rock Road, boosting Kuching's prestige as a trading port. However, the railway service was discontinued in 1931 due to fiscal deficits, and the train tracks were eventually dismantled and sold as scraps (Pollard, 1997). Today, the abandoned terminal still stands adjacent to the Brooke Dockyard, their juxtaposition serving as a reminder of the Main Bazaar's significance as a hub for trade and commerce.

Another remnant of the city's past as an entrepot was coolie housing on the upper floors of the shophouses along Carpenter Street. Coolie groups of Chinese immigrants were a common sight along the riverfront, handling cargo and incoming shipments (Chai et al., 2021). When trade routes opened

to Hong Kong and China, it brought more funds and labourers searching for employment opportunities. The influx of the Chinese population was encouraged by the White Rajahs, who utilised their labour to explore commercial endeavours in cultivation. Charles Brooke would allocate large areas of land outside the city to Chinese merchants while investing in Chinese immigrants willing to settle in these new town areas to tend to the wet rice farms and crop plantations (Cleary & Eaton, 1992; Runciman, 1960). To avoid capitalistic ventures typical of colonial cities, rubber, oil palm, and tobacco were introduced sparingly to local smallholders of agricultural land. These different facets of port functions and labour distribution left a permanent mark on the demography of urban and rural populations in Kuching.

However, with the continuous growth of commercial activity, there was a growing need for wider wharves to accommodate cargo ships. Following the founding of The Port Authority in 1961, the government decided to move port functions away from the historic city, where land is scarce ("*Continuous growth for Kuching Port Authority*," 2016). As a result, many riverfront infrastructures, which once played a crucial role in the city's economic activities, became disused and eventually demolished during the late 20th century. Nonetheless, Kuching's history as a vibrant port city remained a valuable part of its identity and heritage.

1. THE ASTANA
2. POLICE TRAINING GROUND
3. FORT MARGHERITA
4. BAN HOCK WHARF
5. MARKETPLACE
6. STEAMSHIP WHARF
7. CUSTOMS WAREHOUSE
8. BROOKE DRY DOCK
9. BUS STATION & OPEN-AIR MARKET
10. FORMER TRAIN STATION
11. GOVERNMENT DEPARTMENTS
12. COURTHOUSE
13. POST OFFICE
14. BORNEO COMPANY
15. ST. THOMAS CATHEDRAL
16. SCHOOLS
17. SARAWAK MUSEUM
18. RESERVOIR PARK
19. CONSTABULARY
20. SARAWAK CLUB
21. GENERAL HOSPITAL
22. CHINESE TEMPLE & CHAMBER OF COMMERCE

- GOVERNMENT BUILDING
- COMMUNITY BUILDING
- PORT INFRASTRUCTURE
- LOCAL SETTLEMENT
- ROADS
- WATER BODY
- GREENERY

Image 8: Map of Kuching under late British rule (1960).
Source: By the author.

3. Implications of colonial urbanisation

3.1 Racially segregated settlements

Despite the lack of an iron-grid urban configuration typical of other British settlements, Brooke's treatment towards different racial groups created a segregated distribution of the local population in Kuching. He treated his Malay and indigenous followers similarly to his kin, allowing them to settle around the *Astana* on the north bank and exclusively offering paid positions in his government. The Malay population were predominantly mobile traders before being gradually coaxed into political roles (Hew, 2007), partly due to fierce competition from the increase of Chinese traders taking over riverine trade. On the other hand, Chinese and Indian traders were given land parcels on both sides of the old courthouse on the south bank, forming the commercial hub along the Main Bazaar or harbourfront (Image 4). As for his military force, Brooke was quick to conscript the indigenous Iban tribe after eradicating their culture of piracy (Cleary & Eaton, 1992), encouraging their settling around the rural riverine outposts. However, the separate political, commercial and military roles were not entirely responsible for the divided population along the Sarawak river banks.

Historically, socioeconomic and cultural differences in port cities resulted in a separated population into smaller racial subgroups (Cleary & Eaton, 1992). In Kuching, early Malay settlers had built a small mosque where the *Masjid Besar* (meaning 'great mosque' in Malay) stands today, west of the harbourfront, while the oldest Chinese temple, Siew San Teng Temple, was built in the east before the arrival of James Brooke. It proves the natural segregation of the early population by racial background even before colonial influences. The Chinese community in many port cities would even form strong associations based on their region of birth and spoken dialect from China (Widodo, 2005; Zhao et al., 2019). Away from their home country, migrants and traders naturally converge in communities that share the same language and customs rather than forming an integrated social structure.

The different racially segregated settlements in Kuching translated to a collage of various building typologies from the respective cultures. Similarly to Penang, the Chinese shophouses in Kuching were lined in rows along the main street with smaller alleys in between to connect parallel rows (Wang & Jia, 2016). The shophouses typology - believed to originate from the Canton region, would function as family-owned shops on the street level while the residents lived upstairs (Widodo, 2005). On the other hand, Malay *kampungs* (meaning 'village' in Malay) comprised single-family houses built around figures of power or the mosque - enforcing the spatial dominance of Islamic symbols (Harun & Abdul Jalil, 2014). These houses were also often built on stilts above the riverbank and expanded following the river bend due to their reliance on riverine transport (Cleary & Eaton, 1992). The differing urban strategies would exist simultaneously and prevail in Kuching due to a lack of an overall building code.

3.2 Organic street patterns and land distribution

As the urban population grew and diversified, land distribution was a key issue faced by the Brooke administration. The lack of consistent regulations and planning for future expansions resulted in immediate land being ceded to respective groups without consideration for the city's long-term development. For example, early during James Brooke's administration, the Christian mission led by Reverend Thomas Francis Mcdougall was given a stretch of hilly land behind the city centre (Pollard, 1997), preventing the Chinese quarters from expanding south of Carpenter Street.

The government's lax rule over land distribution also resulted in disorganised road systems and variations of plot sizes in the city. Since the Europeans and the local population heavily relied on riverine transport (Runciman, 1960), there was a lack of effort and foresight in implementing an organised road system beyond the commercial strip along the Sarawak River. When studying maps of Kuching across the century, many roads originated from jungle trails or paths formed in the semi-rural settlements before being appropriated and replaced by expansions of the urban city. However, exceptions exist, such as Rock Road, a former jungle path leading inland (Image 4) and Palm Road - remnants of the former colonial train tracks (Image 8).

Perpendicular to the riverfront, these roads formed an axis where political buildings, port infrastructures and other public centres were concentrated. Facilities reliant on the riverine port, such as the markets and customs offices, lined the southern banks of the Sarawak River while schools, government departments and the hospital were built further to the south to serve the residential areas on either side of this axis. At its core, the courthouse, former barracks and marching field distinctively marked the organisation of the political centre regulated by the British administration (Ting, 2008). Otherwise, the roads were informally drawn by residents, who constructed their quarters where land was readily available, resulting in irregularly-shaped plots connected by organic road networks and cul-de-sacs.

Further analysis of the maps revealed some subtle patterns in the road system. Although irregular, the roads spanning east-west to connect the residential areas delineate expansion rings from the city centre. For instance, Reservoir Road appeared during the 1890s and marked the urban boundary of the early colonial Kuching city centre. Golf Links Road and Central Road delineated the extent of the reservoir park natural reserve and second expansion around the 1930s whereas Green Road and Batu Lintang Road connected off the map to form the Kuching municipality boundary in 1960. Despite future efforts at urban planning for expansions, the disorganised road network remained, causing various traffic issues, especially after the proliferation and dependency on cars.

4. Post-independence urban planning by the federal government

4.1 Integration of the existing infrastructure

After the war, Charles Vyner Brooke, the last White Rajah, ceded Kuching and the colonial state of Sarawak to the British Crown Colony amidst strong opposition (Pollard,1997; Runciman, 1960). Members of the state council and various representatives were unapproving of this cession as talks of independence were ongoing before the Japanese occupation from 1941 to 1945. Nevertheless, Kuching was governed by the British colonial administration until 1963 before being granted the promise of independence to join Malaya - a former British colony, in forming the Federation of Malaysia. This marked a significant moment in the city's history as it transitioned from being under foreign power to becoming a part of a predominantly Malay coalition (Cleary & Eaton, 1992).

The aftermath of independence was marked by racially charged tension and economic challenges. The municipality of Kuching, the capital of Sarawak, was split into two entities, the Council of the City of Kuching South (MBKS) and the Commission of the City of Kuching North (DBKU) (PenHITAM, 2012). The division roughly traces the separation of the Chinese and Malay settlements, with the commercial hub and Chinese settlements on the south bank governed by MBKS while DBKU ministered over the old Malay political core on the north banks and Malay *kampungs*. Therefore, the newly established Malay state government likely had political motives in the physical development of Kuching.

One of the more dramatic changes would be the shift of government functions from the former colonial political axis to the new development areas of the northern bank - part of the Malay core in Kuching (Cleary & Eaton, 1992) (Image 11). The consolidation of government departments and state legislation on land under the governance of the North City Hall reinforces the racial motifs at play post-independence. In Image 9, the now demolished gate and surrounding buildings on the Main Bazaar were heavily influenced by Chinese motifs and typologies, with the Chinese temple spotted in the background. Even then, the text on the highest point of the gate roughly translates to “Long live the King” in Malay, accompanied by the federal coat of arms, reinforcing the recent change of governance in Kuching. Some government services have remained in the southern areas of the city, especially during the earlier years of independence (Pollard, 1997), though many of them were also moved due to spatial limitations.

In the first Malaysia Plan (1966, 147-148), anticipations of higher import and export of palm oil called for investment in a new port facility on the outskirts of Kuching. Eventually, primary and secondary manufacturing industries along the river banks followed suit to seek readily available land. The departure of political and industrial activity from the historic city centre allowed a zoning shift

towards tertiary services and tourism. In 1989, the Sarawak River waterfront was transformed into a hub of tourist activity, with hotels, restaurants and shops taking over the shophouses that once defined the city's centre of multicultural residence and regional trade (Hesson, 2021). The colonial port infrastructures left behind became historic monuments for cultural and leisure purposes rather than functional government buildings. Aiming to raise the value of adjacent lands and deteriorating structures, the one-kilometre-long riverside promenade promoted tourism to fund future developments in the city centre.

Nevertheless, some industries of the multi-faceted port city continued to function in similar capacities. On the land reclaimed from the Gartak River, the Open-air Market still operates as a food centre. The area became available in the 1950s after the fire brigade outgrew its first building and moved to a new location during the Brooke administration. The site’s prime location proximal to the train station and harbour made it an ideal transport hub (Image 9), with a makeshift market and food stalls where residents saw an opportunity to welcome visitors with local delicacies (Tawie, 2020). The construction of a roof over the site in 1971 formalised its operations as a hawker centre, easily identified today by the watchtower spared from demolition. Other entertainment and educational industries, such as cinemas and museums in the city centre, also survived the post-independence shift away from the riverfront. In general, port city functions that did not rely on trade or political activities successfully integrated into the future developments focused on tourism and services in the city centre.

Image 9: Main bazaar during the early years of independence.
Source: Kuching Main bazaar in 1970s. (n.d.). Kucing Berjanggut.

Image 10: The Tower Market in the old days.
Source: Tawie, P. (2020). History of the Tower Market. New Sarawak Tribune.

1 THE ASTANA
2 ADMINISTRATIVE HEADQUARTERS
3 KUCHING COURTHOUSE
4 FUTURE GOVERNMENT DEPARTMENTS
5 OLD MARKETS
6 WATERFRONT PROMENADE
7 CHINESE CULTURAL MUSEUM
8 OPEN-AIR MARKET
9 OLD COURTHOUSE
10 ST. THOMAS CATHEDRAL
11 GOVERNMENT DEPARTMENTS
12 MERDEKA FIELD
13 HOTELS
14 SARAWAK LIBRARY
15 RADIO STATION
16 SCHOOLS
17 SARAWAK MUSEUM
18 RESERVOIR PARK
19 PUBLIC HOUSING
20 SARAWAK CLUB
21 GENERAL HOSPITAL
22 CHURCHES

GOVERNMENT BUILDING
COMMUNITY BUILDING
PORT INFRASTRUCTURE
LOCAL SETTLEMENT
COMMERCIAL BUILDING
ROADS
WATER BODY
GREENERY
ABANDONED/DISUSED

Image 11: Map of Kuching post-independence (1999).
Source: By the author.

4.2 Influences of post-coloniality

This chapter delves into the remnants of colonial themes within the economy, social structures and urban planning of post-independence Kuching. The introduction of urbanity in Kuching intended to sustain the political administration over natural resources and their trade with international markets (Cleary & Eaton, 1992; Kozlowski, Ibrahim, & Zaini, 2022), a concept dispersed from Western civilization to their respective territories through colonial relations during the early 20th century (King, 1977). Due to the heavy focus on commerce - typical of colonial port cities, it jumpstarted the economy of the small island settlement while creating a core-peripheral dependency on surrounding markets, namely Singapore. As a result, modern-day Kuching is still reliant on the import of rice and manufactured products due to its underdeveloped secondary industries in favour of primary agricultural commodities.

Beyond economic structures, the newly established city of Kuching also imported the concept of a metropolitan population (King, 1977). Infrastructure development, such as roads, electricity and piped water, and government investment in agricultural industries (as discussed in Chapter 2.3) drew peripheral tribes from the hinterlands to different facets of the port city. The influx of rural-to-urban migration coupled with the lack of housing provisions created a stark contrast in living conditions compared to self-sufficient indigenous settlements. The resulting urban and rural land allocation, based on occupation and race, led to biased perceptions of social structure and political space. The phenomenon of social engineering is most apparent in laws governing land tenure, with Land Codes established by the Brooke administration to protect Malay and indigenous ownership over certain land reserves (Cleary & Eaton, 1992; Pollard, 1997).

In addition to statutory legislation and municipal control over land, Anthony D. King (1977) outlines colonial influences on the actual design of the planned environment. He traced the export mechanism of Western urban planning from the construction of barracks and fortifications by military experts in the respective colonies. Thereafter, professional organisations dealing with government constructions, land surveys and urban planning were brought in to develop the infrastructure of the port city. In Kuching, the Public Works Department was established by James Brooke as early as 1882 and headed by a British officer of his choosing (Public Works Department (PWD) Sarawak, n.d.). The recruitment of the local population into these departments and the schools instituted to train young professionals further disseminate ideas rooted in Western urban planning within the local system. Today, Malaysian universities pride themselves on the accreditation of the Royal Institute of British Architecture (RIBA, UK), using it as a benchmark for architecture education.

Moreover, the need for urban growth and advancement in early post-independent states is a strong catalyst for local governments to invite foreign stakeholders and influences (Kozlowski et al., 2022). In Southeast Asia, the increasing accessibility to Western liberal ideals and fast-track development schemes naturally displaced traditional community values in favour of modernity. For instance, the concept of 'Garden City' was introduced in Kuching by Abang Kassim, the head planner from the State Planning Unit, in 2004. He declared that the abundance of land and greenery in Kuching and the increase in urban-suburbia migration indicated future city development towards satellite towns (Hamad, Hamid, Hong, & Then, 2004). Although proven unsustainable in the Western world, it was a familiar catchphrase to fuel rapid rural and suburbia development. As a result, the shift of functions and demography away from the city centre created an urban sprawl and disconnected the residents from the city's historic centre (Hamad et al., 2004; Kozlowski et al., 2022). There have also been increasingly more vacant or underused buildings in the city centre since funds for urban regeneration are scarce (Wahid, 1988).

In summary, the research has contextualised the impacts of Western ideals that are still present in post-colonial states, including Kuching. It highlights the importance of pursuing equitable urban growth that complements the need for vernacular heritage preservation and resilient communities to ensure the historic city centre remains connected to modern development.

5. Conclusion

After a thorough investigation, it is evident that colonial urban planning left an irrevocable impact on Kuching's urban morphology and social structures. The import of Western political architecture and commercial functions can be traced from the White Rajah's background and connection to Britain during the early formative years of the settlement (Runciman, 1960). However, it is also important to note that the Brooke administration had more autonomy in their governance and urban strategies than other British colonial cities (Ting, 2008; 2012).

The urban fabric comprised European architecture at its political core, surrounded by various vernacular settlements and typologies according to the building traditions of the residents. The 1870 map of Kuching (Image 4) shows military spatial arrangements typical of other British colonial cities, such as barracks, a marching field and distinct rectilinear plots of land along Rock Road. Additionally, as the new-found city gained prestige within the maritime network of Southeast Asia, the riverfront became the driver for development since it generated the primary source of income from trading activities. Hence, the Main Bazaar was dotted with port infrastructures during the early 20th century (Image 8) as it formed the commercial hub for other supporting industries, including manufacturing, agriculture and transportation (Pollard,1997). The intersection of port activities along the Sarawak River and the political axis of government functions on Rock Road marked the site for the old courthouse, which served as the legislative administration of colonial power. These elements were embedded within the disarray of local settlements, and their footprint remained visible in the city's physical form (Image 11).

The distribution of government buildings under the Brooke administration shaped the fabric of the Kuching city centre and left complex socio-political themes in the current demography. For instance, James Brooke's decision to settle alongside the Malay nobility on the northern banks of the Sarawak River, opposite the administrative and commercial centre, foreshadowed the racially motivated division of municipal control. The Astana residence - a symbol of absolute power, stood directly opposite the old courthouse and Chinese Main Bazaar and functioned together under British rule. After the state of Sarawak gained independence and joined a predominantly Malay federation, government functions and legislative buildings migrated across the bank to areas under the control of the Commission of the City of Kuching North (DBKU), signifying the consolidation of Malay political power within a multi-racial community. Although some state functions and entertainment industries remained under the governance of the south municipal, many historical remnants of coloniality have lost political symbolism and are now treated as tourist attractions (Cleary & Eaton, 1992; Wahid, 1988).

Western architecture continued to shape urban evolution in post-independence Kuching through export mechanisms such as legislation and education. Colonial planning strategies persisted within the Sarawak Land Codes and social engineering policies established during the Brooke era that are still currently enforced. Moreover, the dissemination of modern living ideals was facilitated by professional organisations or universities that set Western standards as their benchmark. The push for progress and globalisation in early post-independent Southeast Asia (Kozlowski et al., 2022) also led to the abandonment of traditional building methods in favour of perceived modern development, such as the concept of garden city and the urban sprawl (King, 1977; Hamad et al., 2004).

In conclusion, the complex urban morphology of modern-day Kuching resulted from the intersection of cultural and political factors in its colonial past. The legacy of colonial urban planning is evident in the urban form and socio-political divisions today, coexisting with vernacular typologies from diverse cultures. By understanding the multiple layers of Kuching's history, we can better appreciate the city's rich cultural heritage and work towards a more inclusive and sustainable urban future.

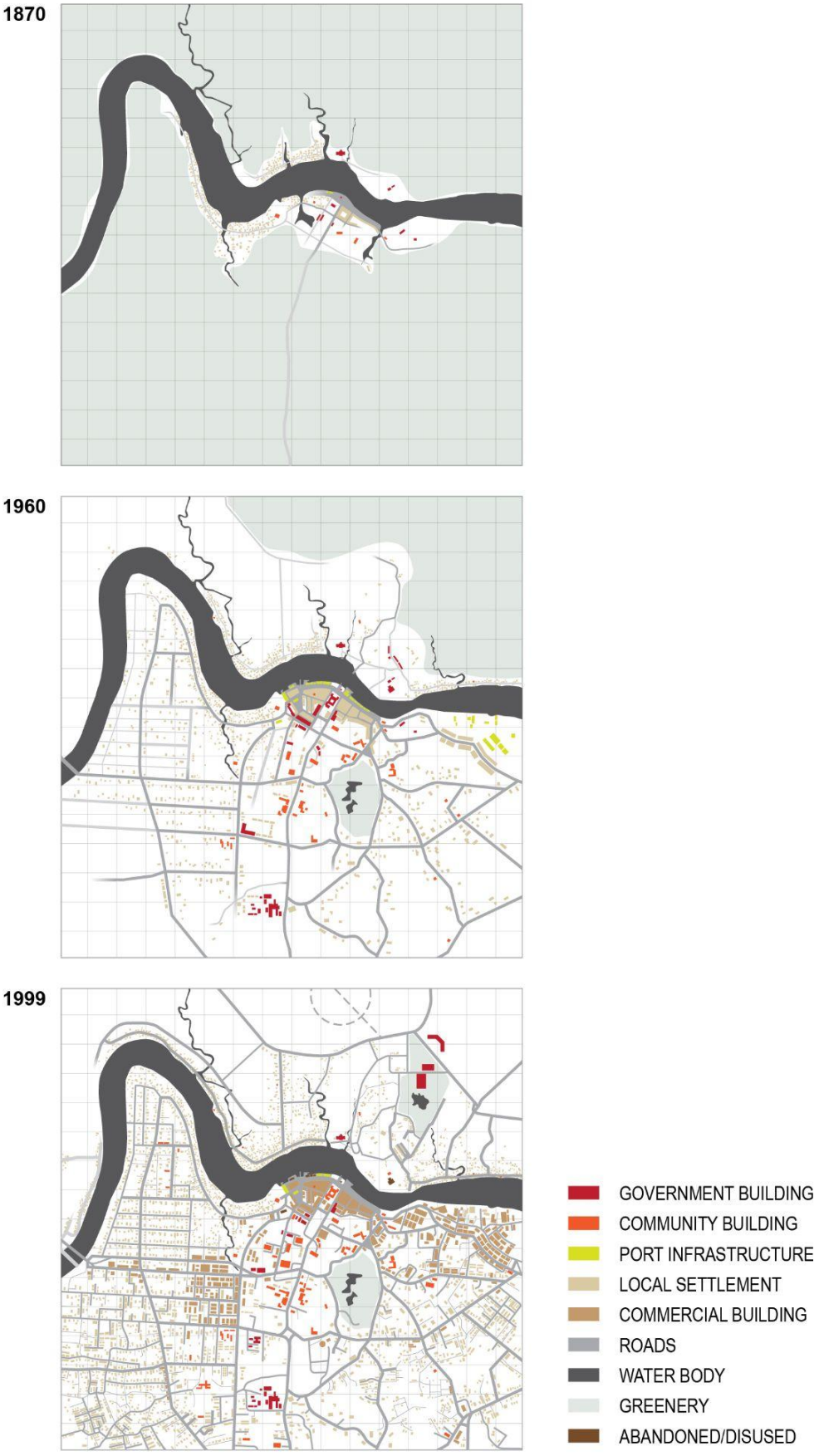

Image 12: Urban morphology of Kuching (1870 - 1999).
Source: By the author.

Bibliography

Chai, Y., Yien, H. H. T., & Ping, T. Y. (2021). *Kuching Old Bazaar: Its history and changes*. Kuching Old Market Community Association.

Chater, W. J. (1994). *Sarawak Long Ago*. Dewan Bahasa dan Pustaka.

Cleary, M. C. (1996). Indigenous trade and European economic intervention in north-west Borneo c.1860–1930. Modern Asian Studies, 30(2), 301–324. Retrieved December 17, 2022, from https://doi.org/10.1017/s0026749x00016486

Cleary, M. C., & Eaton, P. (1992). *Borneo: Change and Development*. Oxford University Press.

Continuous growth for Kuching Port Authority. (2016). Borneo Post. Retrieved March 19, 2023, from https://www.theborneopost.com/2016/04/27/continuous-growth-for-kuching-port-authority/.

Economic Planning Unit, First Malaysia Plan (1966). Retrieved March 19, 2023, from https://policy.asiapacificenergy.org/sites/default/files/1st%20Malaysia%20Plan.pdf

Economic Planning Unit, Second Malaysia Plan (1971). Retrieved March 19, 2023, from https://policy.asiapacificenergy.org/sites/default/files/2nd%20MP.pdf

Foo, V. (2019). *Sungai Gartak*. Sarawak stories, collections. Facebook. Retrieved March 19, 2023, from https://www.facebook.com/sarawakita/posts/sungai-gartak-by-mr-vincent-foo-hiap-khian-of-the-three-tributaries-in-the-city-/2238060209816426/

Hamad, M. H., Hamid, M., Hong, L. F., & Then, J. H. (2004). Defining the Garden City of Kuching. Retrieved December 17, 2022, from http://eprints.utm.my/id/eprint/843/1/Then_Jit_Hiung_%28Malaysia%29.pdf.

Harun, S. N., & Abdul Jalil, R. (2014). The History and Characteristics of Malay Early Towns in Peninsular Malaysia. *Asian Journal of Humanities and Social Studies*, 2(3), 403–409. Retrieved February 20, 2023, from https://www.ajouronline.com/index.php/AJHSS/article/view/1301/706

Hew, C. S. (Ed.). (2007). *Village mothers, city daughters: Women and urbanisation in Sarawak*. Institute of Southeast Asian Studies.

Hesson, R. (2021). *Kuching Waterfront Sarawak Malaysia a Waterfront Park as a catalyst for urban redevelopment 198993*. Northern Architecture. Retrieved March 19, 2023, from https://www.northernarchitecture.us/urban-design-3/kuching-waterfront-sarawak-malaysia-a-waterfront-park-as-a-catalyst-for-urban-redevelopment-198993.html

King, A.D. (1977). Exporting “Planning”: The Colonial and Neo-Colonial Experience. *Urbanism Past & Present*, 5, 12–22. Retrieved December 19, 2022, from http://www.jstor.org/stable/44403550

Kozlowski, M., Ibrahim, R., & Zaini, K. H. (2022). Evolution of cities in Borneo: A kaleidoscope of urban landscapes for Planning Future Resilient Cities. *Archnet-IJAR: International Journal of Architectural Research*, *16*(2), 260–280. Retrieved December 17, 2022, from https://doi.org/10.1108/ARCH-04-2021-0089

Kuching Main bazaar in 1970s. (n.d.). Kucing Berjanggut. Retrieved March 19, 2023, from http://sarawakdotcom.blogspot.com/2020/03/kuching-main-bazzar-in-1970s.html

Ong, E. (2018). *The Borneo Company - (1856-2018)*. Borneo Post Online. Retrieved April 15, 2023, from https://www.theborneopost.com/2018/08/11/the-borneo-company-1856-2018/

PenHITAM. (2012). Kuching North and South [web log]. Retrieved December 19, 2022, from http://mangsiku.blogspot.com/2012/01/kuching-north-and-south.html.

Pollard, E. (1997). *Kuching 1839-1970*. Dewan Bahasa dan Pustaka.

Public Works Department (PWD) Sarawak. (n.d.). Retrieved April 15, 2023, from https://www.jkr.sarawak.gov.my/

Reclus, É. (1885). *Sarawak*. antiquemapsandprints.com. [map] Retrieved December 17, 2022, from https://www.antiquemapsandprints.com/categories/maps-by-cartographer/reclus-elisee/product/sarawak-malaysia-borneo-east-indies-1885-old-antique-vintage-map-plan-chart/P-6-061331~P-6-061331.

Renteng, J. (1910). *Sarawak Antique Postcards*. Worthpoint. Retrieved February 15, 2023, from https://www.worthpoint.com/worthopedia/1910-sarawak-antique-postcards-yacht-434827152.

Runciman, S. (1960). *The White Rajahs: A History of Sarawak from 1841 to 1946*. Cambridge University Press.

Tawie, P. (2020). *History of the Tower Market*. New Sarawak Tribune. Retrieved March 19, 2023, from https://www.newsarawaktribune.com.my/history-of-the-tower-market/

Tarling, N. (1992). Brooke rule in Sarawak and its principles. *Journal of Malaysian Branch of the Royal Asiatic Society*, 65(1), 15–26. Retrieved December 17, 2022, from https://www-jstor-org.tudelft.idm.oclc.org/stable/41493196.

Ting, J. (2008). Colonialism and the Brooke Administration: Institutional Buildings and Infrastructure in 19th Century Sarawak. *Proceedings of the 17th Biennial Conference of the ASAA: 'Is This the Asian Century?'*. Retrieved December 17, 2022, from http://sarawakheritagesociety.com/storage/2015/04/2008-ting-colonialism-and-the-brooke.pdf.

Ting, J. (2012). Courts in Kuching: The development of settlement patterns and institutional architecture in colonial Sarawak, 1847 - 1927. Retrieved December 18, 2022, from https://sarawakheritagesociety.com/storage/2015/04/2012-ting_j_-_courts_in_kuching-libre.pdf.

Wahid, J. B. (1988). *The physical redevelopment of Kuching Downtown, Sarawak, Malaysia: An urban design approach* (dissertation). Retrieved December 17, 2022, from https://core.ac.uk/download/pdf/33361453.pdf.

Wang, H., & Jia, B. (2016). Urban morphology of commercial port cities and shophouses in Southeast Asia. *Procedia Engineering*, 142, 190–197. https://doi.org/10.1016/j.proeng.2016.02.031

Widodo, J. (2005). *The boat and the city: Chinese diaspora and the architecture of Southeast Asian coastal cities*. Marshall Cavendish Academic.

Zhao, L., Wong, W. B., & Hanafi, Z. B. (2019). The evolution of George Town's urban morphology in the straits of Malacca, late 18th century-early 21st Century. *Frontiers of Architectural Research*, *8*(4), 513–534. Retrieved December 18, 2022, from https://doi.org/10.1016/j.foar.2019.09.001

Zubir, S. S., & Sulaiman, W. A. (2004). Deciphering urban cultural heritage, community and the city. *The Sustainable City III.* Retrieved February 20, 2023, from https://www.witpress.com/Secure/elibrary/papers/SC04/SC04024FU.pdf.