

Regeneration of the Historic Waterfront of World Heritage Sites in Malaysia – The Case of Penang and Melaka

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Keywords: Malaysia; historic waterfront; world heritage sites;

1. Introduction

'Waterfront' in the context of towns and cities deals with the areas that are in direct contact with the water bodies. Malaysia's Department of Drainage and Irrigation defines the waterfront development as area within 50m or two lots of building from the banks (JPS, 2003) where the water is visually noticeable. An example of an edge as suggested by Lynch (1960) as one of the five elements that people use to structure the urban form. Paumier (2004) stated that waterfront areas as a vital assets where changes in transportation and economics have made land and buildings available for reuse. Waterfront regeneration is gaining momentum in urban regeneration that many cities around the world needed to bring back the abandoned or underutilised inner city harbours as a place to work, live and play. Many opportunities for successful redevelopment had emerged in rehabilitation of urban waterfront areas where the present trend sees recreation and tourism as a catalyst for redevelopment (Craig-Smith and Fagence, 1995). In the United States, Japan, United Kingdom, Caribbean and Australia, a set of principles and guidelines were used for the achievement of sustainable urban environments to be implemented.

2.0 Development of Historical Waterfront

Breen (1996) suggested that waterfront development can be categorised into six types which relate to the heritage, commercial, recreational, residential, cultural,

educational, environment as well as working and transportation waterfront. The historic waterfronts were usually regenerated as maritime conservation and adaptive reuse of wharf, lighthouse and ferry preservation atmosphere where such developments can be a major boost to municipalities, helping to revitalise areas and bring good businesses (Wagner, 2008). Marshall (2001) opined that the waterfront regeneration projects are able to relate to both our past and future. It is related to the past through the production in the industry, to the period of remarkable expansion and development, to the no longer existed economic structure and to the present where we have compromised the product of our growth and benefit with the environmental degradation of the water bodies. Historically, the waterfronts are located near the old city centres. They are now related to the future by providing opportunities for cities to be reconnected with their water bodies. At the same time the repositioning of the water edge as part of the place of activity concentration in the urban space will give the opportunity to change its old function to new ones.

The waterfront has a strong tie with their context in terms of social, economic or industrial climate (Fisher et al. 2004). Abandonment of waterfront due to technological changes in the shipping industry has been a major issue (Hoyle, Pinder & Husin, 1988) where many towns face uncertain futures. As a result, waterfront also tends to become a derelict part of the town, on which the community has turned its back. This problem is observed in many cities in Malaysia.

Urban waterfront are special cultural resources which is unique in their potential to improve economic development, public enjoyment and civic identity. Literally, most waterfronts around the world were based on the same principles although they are within different geographic zones and different cultures. The effective reuse has already occurred in many waterfronts. These opportunities is a complex and challenging task which requires understanding of the historical role in the development, current characteristics and other factors that influence the development (Wrenn, 2005).

Historically, the waterfront has been used extensively for land filling operation. In many cities, one of the most prevalent means of enlarging the land area is to place landfill in adjacent waters. The practice presents two major problems; unconsolidated fill and toxic material (George Rainer, 1990). The other problem as observed in Malaysia and Jamaica is the disregard of the heritage value (Craig-Smith and Fagence, 1995). There must be some kind of balance gained between economic gain and cultural gain such as retaining the sense of place.

There is now greater interest in more culturally and leisurely oriented activity for the waterfront with the use of heritage buildings for tourism-related activities and a preference for urban settings. This is a prevailing issue in the context of the historic waterfront in Malaysia where heritage buildings along the waterfront can be given a new life. Krieger (2004) contemplates that the success and appeal of the waterfront

is intrinsically tied to the interrelationship between land side and waterside edges together with the quality of both water and shore. Underused or obsolete urban water bodies and waterfront comes alive when they become desirable places to live and setting for activities. Instead of condemning old waterfront structures to decay and neglect, some cities are taking efforts to preserve and suggest adaptive reuse of the buildings and areas which profits the community economy (Breen and Rigby, 1996).

2.2 Issues on Historical Waterfront in Malaysia

Based on the convention, the UNESCO world heritage sites are considered as “cultural heritage”. The cultural heritage is defined as monuments, groups of buildings and sites with outstanding universal value in history, art, science and aesthetic. Melaka and George Town are two Malaysian historic cities which received a joint status as world heritage site in July 2008. The cities have developed over 500 years through trading and cultural exchanges between East and West in the Straits of Malacca. Both cities have revealed the multicultural heritage through their architecture and characters. George Town unique values lies in its architectural heritage, food, social mosaic and life styles whereas Melaka declares its value through its urban morphology of several periods on the same footprint.

3.0 Research methods

This research examines the approaches to waterfront regeneration and its effects on the contextual integration with the city. Qualitative and quantitative methods were used to allow for identification of common characteristics based on general patterns together with identification of particularities or distinctiveness of places supported by deeper explanation (Norsidah, 2007). In this regards as suggested by Breen and Rigby (1994) a visual survey was conducted to record the present condition using photographic recording and mapping identifying types and locations of development along the waterfront. A questionnaire survey was conducted on 150 adult respondents from both cities, randomly selected on-site to gather the public perception and opinion. The data gathered from both methods were analysed using Statistical Package for Social Science (SPSS) and triangulated to be able to clarify patterns or transformations, differences and the factors associated with these findings.

4.0 The Study Area

The Historic City of Melaka is located in the State of Melaka south of the nation's Capital City, Kuala Lumpur and bordered by the Straits of Malacca to the west. The total area is 172.65 hectares with the world heritage site core zone to be 38.62 ha. and the buffer zone area is 134.03 ha (Figure 1). The core zones comprise of two major areas that is St. Paul's hill civic zone and The Historic Residential and Commercial Zone. The core zone consists of a number of government buildings, museums, churches, urban square, fortress gate, more than 600 shop-houses, commercial as well as residential buildings, religious buildings and tombs on four main streets.

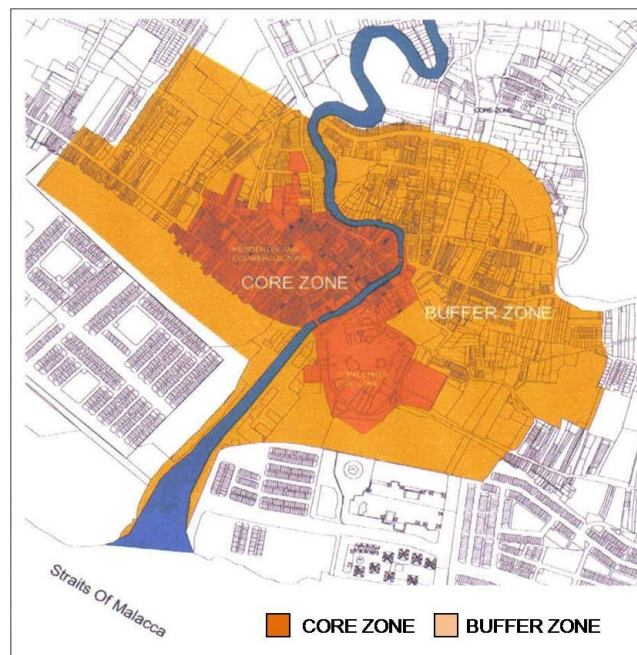


Figure 1: Boundaries of the WorldHeritage Site of Historic City of Melaka

George Town is located on the Penang Island north of Kuala Lumpur and is the second largest urban conurbation in Malaysia. It comprises of a core zone of 109.38 ha and a buffer zone of 150.04 ha (Figure 2). The area is covered and bounded by the Straits of Malacca on the North-Eastern cape of Penang Island, Love Lane to the North-West and Gat Lebu Melayu and Jalan Dr Lim Chwee Leong to the South-West corner as well as consisting of more than 1700 historic buildings.

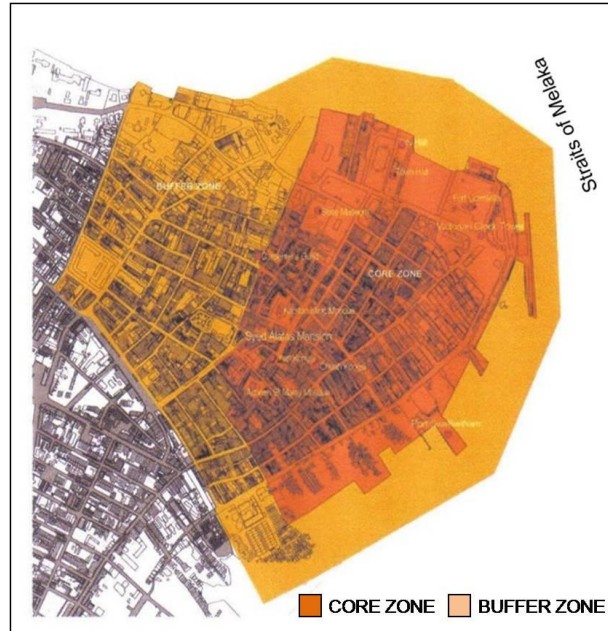


Figure 2: Historic City of George Town

4.1 Morphology

Melaka's history originates in the 15th century through the Malay sultanate period with the Portuguese and Dutch periods beginning in the early 16th century. While George Town represents the British era from the end of 18th century with both cities having been famous port cities in the Straits of Melaka.

The morphological development of Melaka can be traced back to five main phases that is the Malay sultanate, the Portuguese, the Dutch, the British and the Post-Independence until present time period (Figure 4). During 1400's Melaka start to grow into a developing area and received many migrants from the close region and Arab merchants. Many earlier residential areas were built along the waterfront at Melaka River with trading activities concentrating on the western banks close to estuary. The Melaka river mouth played an important role in the evolution of the city where the earlier settlements appear. In the year 1511 until 1641 the Portuguese conquered Melaka and consolidated their position by building a fortress known as A'Famosa (The Famous) at the foot of St Paul's hill, near the Melaka River mouth.

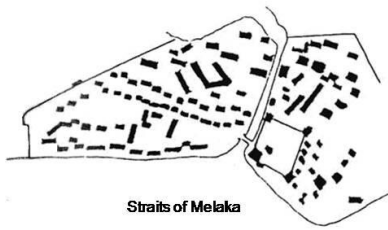
During 1641, the Dutch invaded Melaka in which many new developments and redevelopment were done in and outside the fortress. The city structure and road

network were well planned. The terrace housing areas were also introduced because of the growing number of the city's population. The residential area and buildings along the riverbanks in Melaka town was also influenced by the canal architecture of Dutch town where the buildings were built close to the water edge. The morphology of Melaka also showed close similarities with other Dutch port-towns such as the form of administrative building centre i.e. the Stadthuys, a main street or canal built across the town and a special area for civilian residents. The town centre also had a square as a meeting place for the inhabitants as in other Dutch cities.

In 1824 Melaka came under the British rule and did not have any improvement in the land and sea transportation because the British were paying more attention to George Town and Singapore port cities. During the period of 1900-1910, the Melaka town development was not depended on the river but the road network and this has an effect on the role of the waterfront to the city and its conditions. In 1971, after Malaysia received the independence Melaka embarked on an extensive reclamation of seashore area near the Melaka waterfront (Figure 3). The reclamation which began as early as 1921 during the colonial era due to sedimentation problems change the physical character of the Melaka's original setting where a Padang (a green open space) sets the setting of A'Famosa remains gate instead of the sea shore. Today the reclaimed area becomes a bustling commercial area and the historic centre and St. Paul's hill were detached from the sea. The historic city centre no longer faced the sea front and visual access to the sea from the sea is limited.



Figure 3: View of the reclamation area

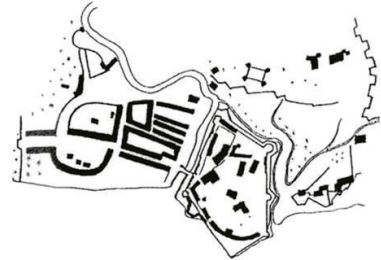


Straits of Melaka

1515



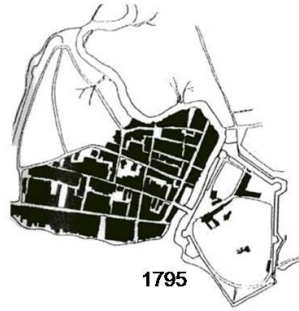
1600



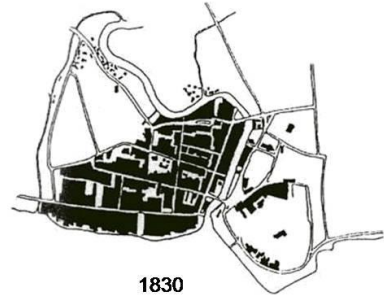
1646



1700



1795



1830



1900-1910



1910-1920



1920-1930



1930-1940



1940-1950



1950-1960

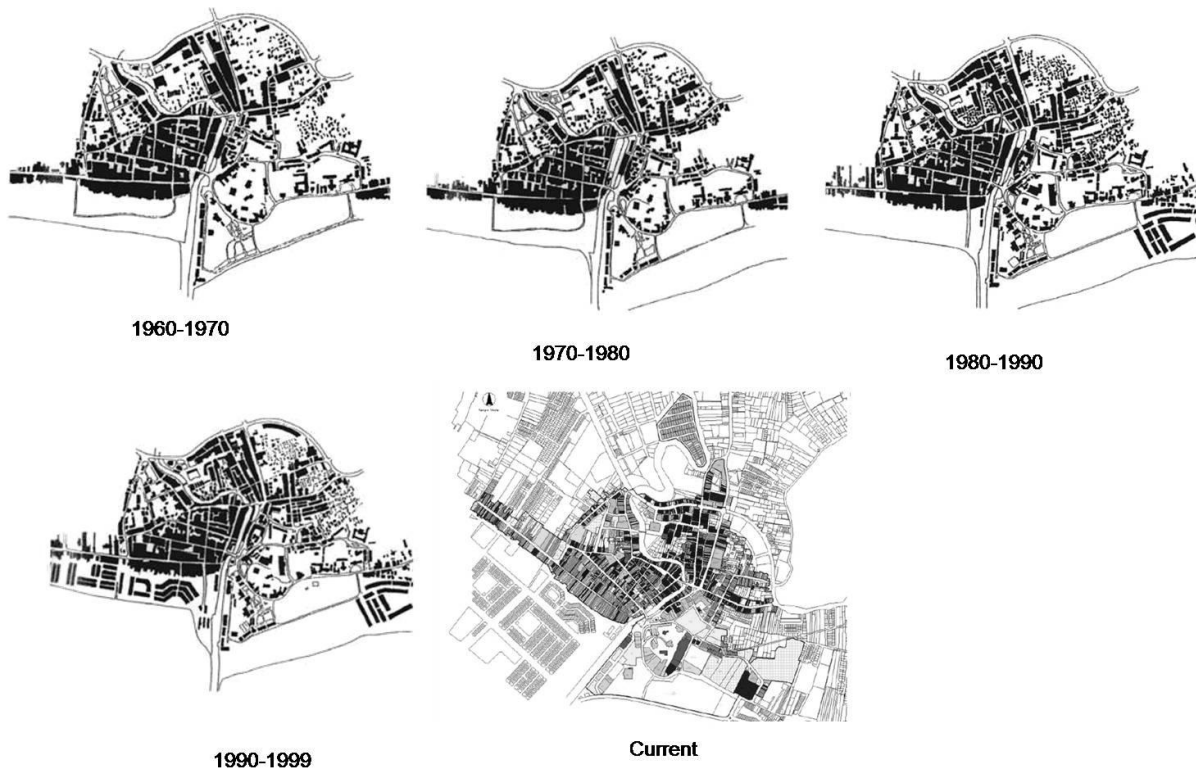


Figure 4: Morphology of Melaka (Source: Shuhana Shamsuddin et.al (2002))

As for George Town morphology, during the year 1786 until 1790, the development of George Town was focused along the waterfront as the water had been the main transportation mode at that time (Figure 6). The waterfront area has been the starting point where the port was a popular trading centre for the international merchants. During this period, Fort Cornwallis was built and the streets networks were full with people from different races. In the year 1791 until 1800, the development of George Town grew towards the settlement area in Lebuh Aceh known as Masjid Melayu Lebuh Aceh village. The expansion of this village took place when Francis Light started to introduce the international trading activities in George Town. The urbanization of George Town started to rise when there were many new settlements or village being opened in Lebuh Aceh. During this time new streets toward the south area were built by the British. This situation showed that the land transportation was well developed and gained importance and can be clearly seen from the sea front.

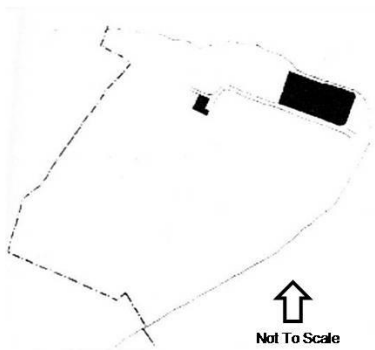
In 1811 until 1820 no major changes were done in George Town. The developments of shophouses, buildings, residential areas as well as Fort Cornwallis and the Aceh village's mosque create an attractive scenery and urban form of George Town. Starting in the year 1821, more buildings and streets were built by the administrative council towards the inland area. The main streets such as Jalan Masjid Kapitan Keling act as a backbone to support the main developments especially along the waterfront.

In 1901, most of the developments were done in the brownfield area and on the open spaces between the buildings. The transportation system was also improved during this time. The clan jetty along the waterfront is the only residential area on the waters housing the Chinese workers who came from mainland China. This is in the form of houses which was built on stilts attached to a jetty on the waters, where those who come from the same clans will build their houses attached to their clan jetty (Figure 5).

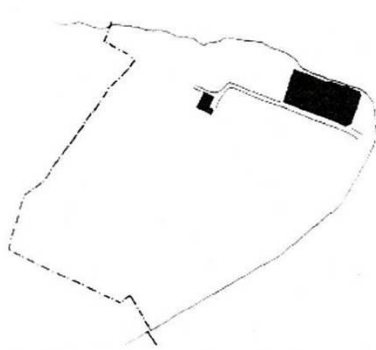


Figure 5: The clan jetty

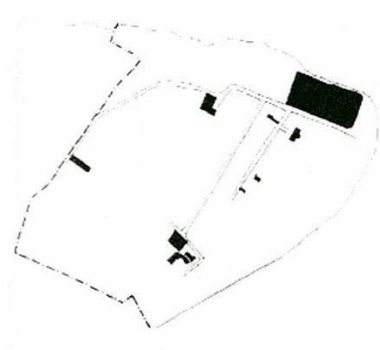
Until 1920's the urban development of George Town was spreading away from the waterfront. This was caused by major improvement of the land transportation with water transportation seems less important during the period until today. Today, there is no major development along the waterfront apart from the marina and commercial buildings at the waterfront near the ferry port. Unlike Melaka, George Town waterfront has not changed significantly with many of the previous activities such as port, ferry terminals, Fort Cornwallis and the clan jetty still remain in its original location.



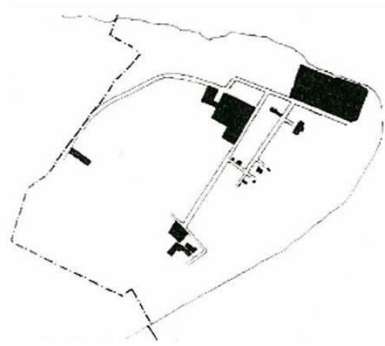
1780-1790



1791-1800



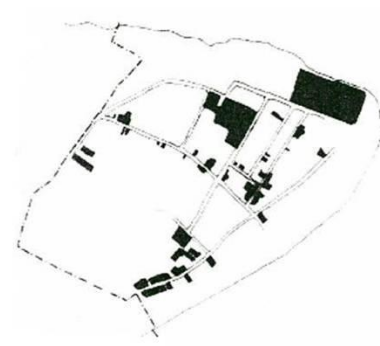
1801-1810



1811-1820



1821-1830



1831-1840



1841-1850



1851-1860



1861-1870



1871-1880



1881-1890



1891-1900

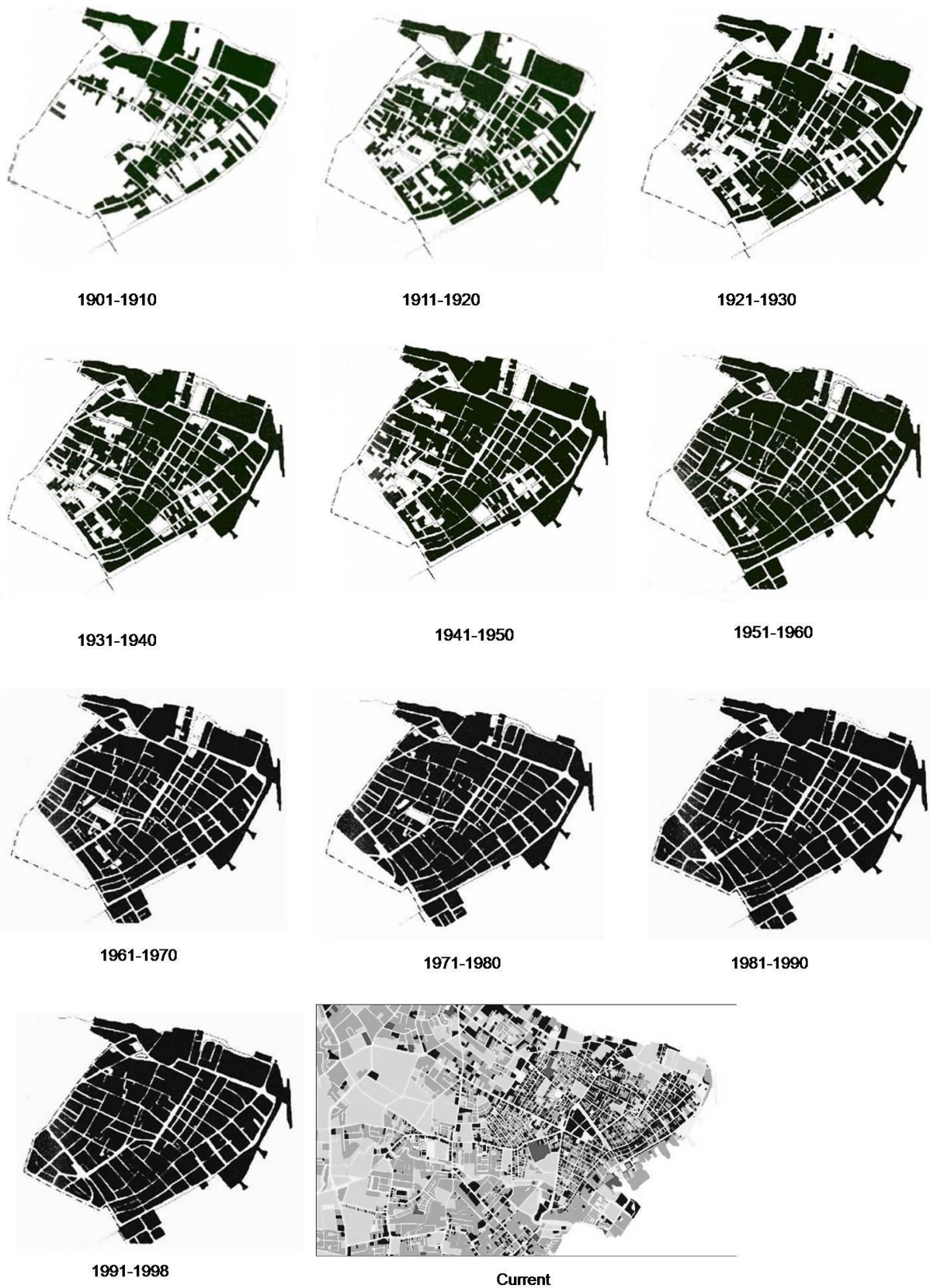


Figure 6: Morphology of George Town Penang (Source: Shuhana Shamsuddin et.al (2002))

Thus, the waterfront had also witnessed the up and down of the both city. During the trading era, both cities were rivals in competing for the ships that sail through the Straits of Melaka to stop by their ports. During the British colonial era in 1807, the fort of A Famosa in Melaka was demolished to avoid the competition with George Town. Today, both cities are bounded together by the world heritage site joint status. Instead of being a threat to the other, they have to join forces to make sure each city will remain a world heritage site to secure the position for the other.

6.0 Approaches to Waterfront Regeneration and Its Effects on Contextual Integration with the City

Due to the recognition as the UNESCO Cultural World Heritage Sites, the local authority of Melaka has outlined an action plan for conservation area which consists of specific guidelines based on the UNESCO's guidelines on the heritage sites. The guidelines are available as reference to keep the future development in line with its status.

The land reclamation had changed the city profile and overall setting of the historic city from facing the sea front to a riverfront city. The new development on the reclamation land breaks away from the historic townscape in terms of scale and proportion, grain and texture of the urban form where the new design is not in keeping with the architectural heritage of the Dutch legacy. The Melaka River, which had many residential buildings with illegal extension along the water edges to accommodate the toilets, became polluted and reduced the physical and visual accessibility to the waterfront. However since 2005, the Melaka administration took a pro-active measure to revive the river through a costly regeneration project that transforms the riverfront. The project cleared the illegal extensions on the river and improves the water quality through a river cleaning program (Figure 7).



Figure 7: The A'Famosa gate and buildings along the Melaka river.

A pedestrian walkway, river boat cruise and a small theme park were built to serve the growing demand for leisure and recreational. The squatters along the upper parts of the river were also relocated and were replaced with board walks where the mangrove swamps are still preserved along the river. Accordingly, the regeneration of the riverfront has given the city an additional public space to provide for the recreational needs that can strengthen the sense of belonging to the riverfront. With the increase in the visual and physical access to the river, the regeneration project has successfully improved the contextual integration between the city and the water.

As for George Town, the uniqueness of its townscape is due to its location at the tip of the island and its port like character. Today its waterfront is still busy with water transportation activities associated with the port and marinas as well as the ferry as a means of transportation. The most important landmark of George Town waterfront is the Fort Cornwallis besides the nearby esplanade and adjacent to Padang or a lawn open space (Figure 8). The area has been an important public place for the city that provides an open view to the sea. The other parts of the waterfront i.e. the port and custom buildings area, the marina development and the clan jetty is still blocked visually with limited public access. However, the historic waterfront of George Town receives less development than the other parts of the waterfront in the island due to its status. The pedestrian linkages along the waterfront are also not continuous. The presence of bus station near the ferry terminal contributes to the noise and air pollution together with the increase of congestion along the waterfront. Currently, the local authority is in the process of preparing a Local Area Plan and Special Area Plan for George Town. Thus, any new development needs to refer to the 2020 Penang Structure Plan where there is a specific policy on the George Town Heritage Sites. However, it did not touch on the importance of the integration of the waterfront with the heritage sites but stresses on the buildings conservation and use. The policy on the integrated beach management which automatically includes the Heritage Sites also neglects the relationship of water and historical aspects of the heritage sites.



Figure 8: The Fort Cornwallis

7.0 Public perception of the waterfront

A sample survey of 150 users from both cities was conducted to assess the user's perception and use of the waterfront in their cities. A majority of the respondents in both cities are satisfied with the conditions of the waterfront where a high majority of them love to visit the waterfront in both cities although the visit is not that frequent (Figure 9). In comparison to George Town, the waterfront of Melaka is more accessible. This is not surprising since George Town's historic waterfront is severed from the city by a busy trunk road making pedestrian access quite difficult. The city centre commercial area is also located quite far from the waterfront compared to Melaka.

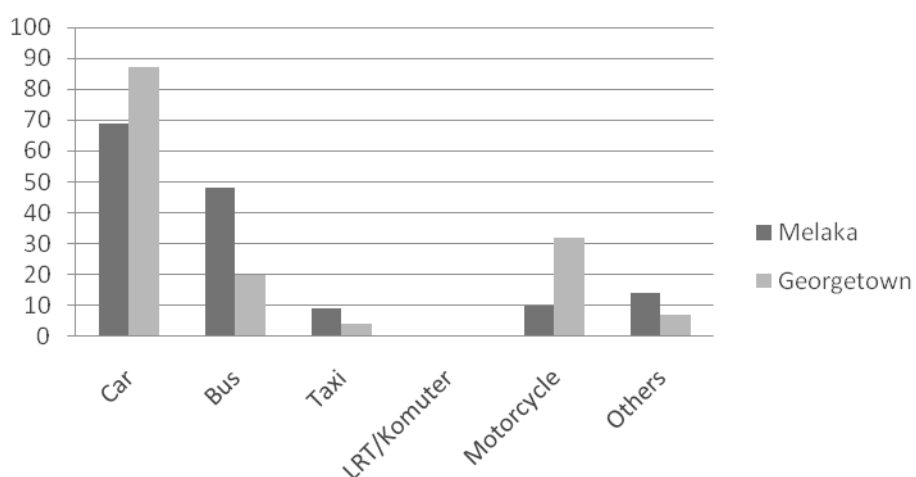


Figure 9: Respondent's mode of transport to waterfront

In George Town, both the physical characteristics and activities are the main attraction of the waterfront whereas in Melaka the physical character is mentioned by a majority of the respondents. Both cities waterfront are regarded as important to the respondents for both cities which suggest a high degree of association between the waterfront and the city's identity (Figure 10).

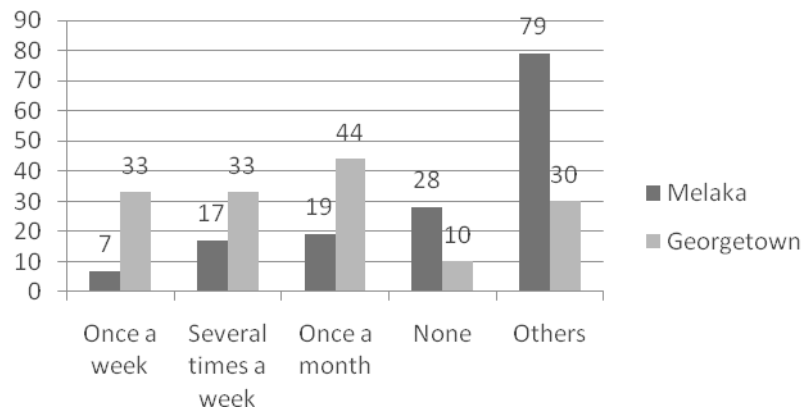


Figure 10: Respondent consent to the waterfront

From the survey, most people come to Melaka city to visit the city rather than coming for specific purposes associated with the waterfront such as recreation or fishing (Figure 11). This is however not the case for Georgetown with 52.7% visiting the waterfront for recreational purposes. Thus, Melaka offers lesser activities at the waterfront compared to Georgetown.

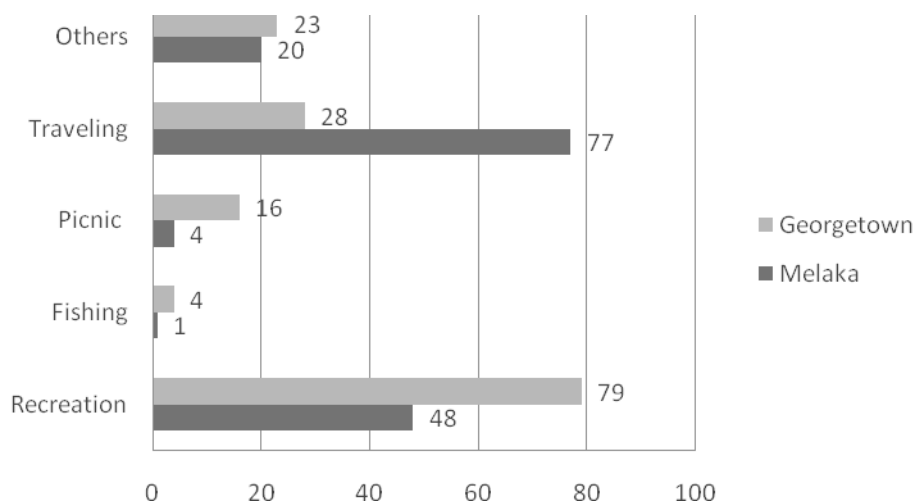


Figure 11: Respondent activities on the waterfront

Physical changes to the waterfront of Melaka are observed more by the Melaka respondents than Georgetown by its respondents (Figure 12). This is consistent with the physical observations on the site where the regeneration of the riverfront and the reclamation of the sea front have transformed the physical character of the city. The changes of the waterfront of George Town are less obvious to the respondents as only a small part of the historic waterfront was developed for the marina development. However, both cities have high accessibility to the waterfront according to the respondents with George Town being less visible than Melaka's waterfront due to the reasons mentioned earlier. The latter can be easily spotted from the city centre.

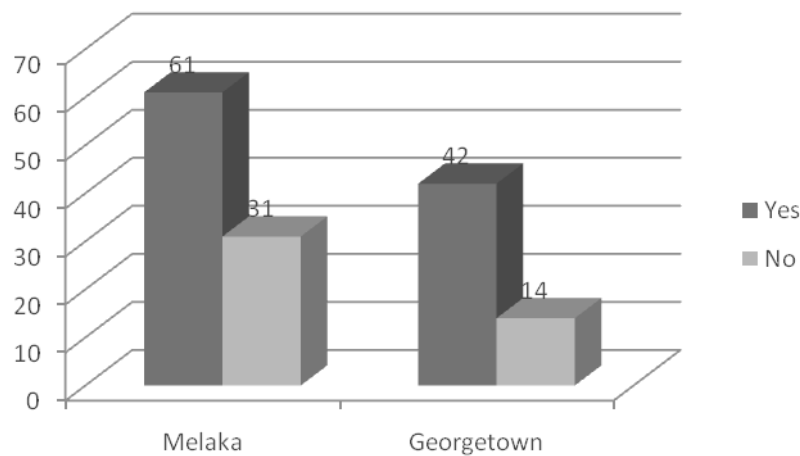


Figure 12: Respondent awareness on the waterfront changes

Majority of respondents in both cities do not agree to any reclamation works to be done on the waterfront (Figure 13). Between the two cities, the respondents identified more problems relating to the waterfront of Melaka compared to George Town. However, majority of the respondents found both waterfronts of the two cities to be free of any problems to prevent them from using them.

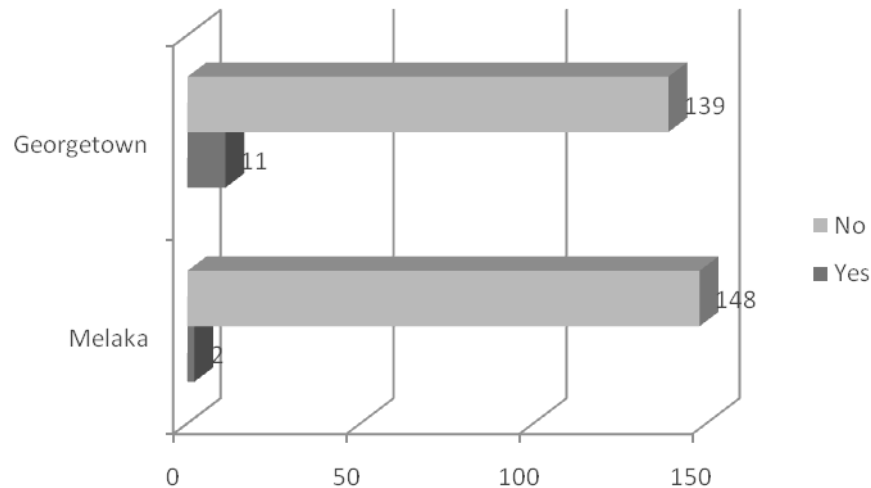


Figure 13: The respondent consent on waterfront reclamation

8.0 Conclusion

The joint status of world UNESCO heritage sites have put pressures for both cities to manage the changes to their built environment as both cities have to ensure their historical significance and uniqueness is still intact as the loss of the status of one will affect the other. However, they each have different approach to the regeneration of the waterfront that influenced its sense of place. Although Melaka lost its seafront setting as a result of the reclamation works, it has taken the advantage of exploiting its river front by integrating it with the city. The river, which used to be hidden from the city, is now not only accessible to the public but also provide the opportunities of giving back the city its public spaces. George Town however, is less forceful in regenerating its historic waterfront due to the sensitive nature of any development taking place in the world heritage site. The lack of a local plan covering the historic waterfront for George Town also meant that development is less coordinated and lacking guidance. At present, George Town historic waterfront still remains detached from the city due to the busy trunk road that divides the waterfront and the city centre. It is observed that the waterfront regeneration must be dealt by having a strong vision for the waterfront which is translated into a development framework resulting in several guidelines to be produced specifically addressing the issues pertaining to the waterfront.

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