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#### The Social Impact of Urban Waterfront Landscapes: Malaysian Perspectives

Salina Mohamed Ali, Abdul Hadi Nawawi

 (Salina Mohamed Ali, Lecturer, Department of Landscape Architecture, Faculty of Architecture Planning and Surveying, University Technology MARA (UiTM), 40450 Shah Alam, Selangor, Malaysia, salina7775@yahoo.com)
(Abdul Hadi Nawawi, Associate Professor, Centre of Postgraduate Studies, Faculty of Architecture Planning and Surveying, University Technology MARA (UiTM), 40450 Shah Alam, Selangor, Malaysia, hadinawawi@yahoo.com)

## **1 ABSTRACT**

This study evaluates the social impact of urban waterfront landscape in Malaysia. In Malaysia, waterfront landscape is still new and can be identified as a park for leisure entertainment. Waterfront redevelopment in Malaysia has attracted attention from domestic and overseas researchers only recently. Studies of urban waterfront cases in Malaysia and the introduction of foreign experiences of successful urban waterfront cases emerged in Malaysia in the 1990s. This study addressed the social impact of urban Waterfront Landscape in Kuching Sarawak and Penang Waterfronts. While previous research are well suited for assessing certain social impacts on waterfront environments, such as water quality and design layout, they do not go very far in explaining why people are attracted to these natural features in the first place. A more holistic approach in this research would create a working definition of the waterfront corridor which includes human perceptions. Furthermore, if human motivations are ignored, there is little chance of protecting natural resources such as waterfront. There is an urgent need to examine the waterfront corridor through the eyes of urban residents.

## **2** INTRODUCTION

Urban waterfronts began as commerce centers. They survived on trade. Whether a city or town was located on an inland river or an ocean port, its main focus was on the transportation of goods via water. In the 18 th, 19 th and early 20 th centuries, as the industrial revolution began to take shape and shipping and manufacturing began to become powerful sectors in economic growth, waterfronts too moved forward (L.Zhang, 2000).

In the late 1990s, research agendas have begun to address interesting questions concerning the extent and character of the spread of the phenomenon of urban waterfront redevelopment to newly industrializing countries (NICs) and less economically developed countries (LDCs). Comparatively little attention has yet been paid to the need for and possibilities of urban waterfront redevelopment in many port cities in NICs/LDCs. Urban waterfront redevelopment phenomena have been largely ignored in the developing world until recently (Basset et al., 2002). In the last decade, developing countries have been seeking to revive their historic port cities, in diverse contexts ranging from post-colonialism and globalization to culture revival and tourism development.

Water is a defining force that fundamentally shapes the character of each place it touches. The role of water in transport, industry, sanitation and nourishment made it the raison d'être of human settlement. It is a feature to be honoured and celebrated — not to be treated merely as cosmetic or as just a commodity. Water is an innate and timeless attraction for mankind. People like to be close to water and to play with water. Also, people primarily rely on water for transportation and power. Early human settlements were directly tied to the location of navigable waters. As settlements were established and immigrants arrived, shoreline cities came into being. With technological innovations affecting air, land, water transportation and power generating, many cities' waterfronts deteriorated. Suburban development, which dominated the whole country during World War II, caused many central cities to decline. This accelerated the downtown waterfronts' desolation (Susannah et al., 2007).

Over time waterfronts have been rediscovered, stemming mainly from urban renewal programs following World War II. Along with this rediscovery, public parks have played an important role in urbanization. Like the waterfront, the role of parks in urban life and the park usage, have changed with time.

## 2.1 Problem Statement

This study addressed the social impact towards urban Waterfront Landscape in Kuching Sarawak and Penang Waterfront. While previous research are well suited for assessing certain social impacts on waterfront environments, such as water quality and design layout, it does not go very far in explaining why people are attracted to these natural features in the first place. A more holistic approach would create a

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working definition of the waterfront corridor which includes human perceptions. Furthermore, if human motivations are ignored, there is little chance of protecting natural resource such as waterfront and parks. There is an urgent need to examine the waterfront corridor through the eyes of urban residents and tourist.

#### 2.1.1 <u>The Definition of Water</u>

Water is a defining force that fundamentally shapes the character of each place it touches. The role of water in transport, industry, sanitation and nourishment made it the reason for being of human settlement. It is a feature to be honored and celebrated not to be treated merely as cosmetic or as just a commodity. (Rauno, S 2006). Water is an innate and timeless attraction for mankind. People like to be close to water and to play with water. Also, people primarily rely on water for transportation and power. Early human settlements were directly tied to the location of navigable waters. As settlements were established and immigrants arrived, shoreline cities came into being. With technological innovations affecting air, land, water transportation and power generating, many cities' waterfronts deteriorated.





Figure 1.1 Promenade along the Penang urban waterfront. Figure 1.2 In Kuching Waterfront, water use as a transportation for villagers to across the river.

Over time waterfronts have been rediscovered, stemming mainly from urban renewal programs following World War II. Along with this rediscovery, public parks have played an important role in urbanization. Like the waterfront, the role of parks in urban life and the park usage, have changed with time (Breen & Rigby, 1994)

## 2.1.2 Urban waterfront parks

People have found that parks at the waterfront function as an ideal recreational combination. The new trend is the reclamation of historical waterfronts from years of dereliction to mixed used development, including waterfront parks. Many cities have already successfully made this transition. Kuching waterfront is one such example.

The scale and type of redevelopment of the waterfront varies from city to city due to the patterns of original development. Even so, the basic physical configuration and urban form of each waterfront should continue to respond to new and changing demands, while attempting to maintain its heritage and preserve its natural features. Through studying established waterfront parks, we can learn basic design experiences and lessons (Susannah et al., 2007).

What qualifies as waterfront property? Must an urban waterfront be located on an ocean, or lake? In the development world, waterfront refers to any property that is adjacent to water, be it an ocean, lake, river or stream. Furthermore, waterfront property may only need to seem attached to the water to be considered waterfront, it is not necessarily required to be connected to the water (Breen 1994). Thus, any property that has a strong visual or physical connection to water can be considered waterfront.

Waterfronts, the unique places where land and water meet, are a finite resource embodying the special history and character of each community. Urban waterfronts, like the cities they help define, are dynamic places. The last three decades have witnessed profound changes along abandoned or underused waterfronts. The trend is accelerating in cities around the globe. It applies to canals, lakes and rivers as well as coasts.

With this growing popularity comes a tendency by some to look for the quick solution, to adopt a formula that may have worked somewhere else. In the 1980's it was the "festival marketplace" fad. In the 1990's, it is the "urban entertainment district" and/or stadiums. In a time of pervading sameness and homogenization worldwide this is particularly dismaying because waterfronts above all factors give each community a chance to express its individuality and help distinguish it from others (Basset et al., 2002).







## **3 THE RELATIONSHIP OF CITY AND WATERFRONT**

In many countries, such as China, England, Italy, and America, a great many cities or towns are built on water, along rivers or at their confluences, or on the edge of lakes and seas. The uniqueness of the sitting determines the waterfront's role. One characteristic of waterfront cities is that when arriving by boat, one enters "not on their periphery but in their center". In most cases, the waterfront city growth has radiated from the waterfront. And the particularities of the site and the way the settlement meets the water, determined the form of the city (L.Zhang, 2000). Aligning growth with a river is a common response. Also the landmarks on the skyline immediately behind the edge of the water form the most striking picture of a city.

# 3.1 Criteria for evaluation of Kuching Sawarak and Penang Waterfront Park

We can learn a lot from successful waterfront projects. Each waterfront and its city has a unique history. How the park came to exist, how it grew, and what is included in it cannot be duplicated, but the sequence and results can guide the design or rehabilitation of existing waterfront parks. The case studies show that the ultimate success of any waterfront project is based on how responsive development is to the unique qualities that define that specific waterfront. From the literature review and case studies, three important categories were found that related to the unique characteristics of waterfront. They are the waterfront's history and culture, urban context, natural features and park layout (L.Zhang, 2000).

A site's history reflects the cultural meaning of the waterfront and introduces ways the place evokes people's spiritual connection with it. Urban context guides the functions to be planned into the waterfront that take advantage of, or build upon the waterfronts' energies and activities, and acts as economic and social foundations of a successful waterfront. Natural features are the waterfront's physical and natural attributes that help to determine the waterfront park's layout and influence the activities that build on those in the greater local urban context.

Analysis of successful waterfront parks helps to identify the planning and design guidelines of new waterfront parks or the rehabilitation of existing urban waterfront parks. The guidelines help us identify appropriate detailed qualities, determine their values, and interpret our findings to the design (Basset et al., 2002).

## 4 STUDY AIMS

The aim of this paper is to present an analysis of the social impact of the urban waterfront comparing between Penang waterfront and Kuching waterfront. The specific research questions dealt with here are:

## **5** OBJECTIVE OF THE RESEARCH

The objectives of this research are :

To elucidate factors that attract the people to go to waterfront,

To analyse how waterfront landscape should be designed to able to attract people to the waterfront.

## 6 METHOD

Research methodology normally refers to the principles and procedures of logical thought process applied to the scientific investigation. Bell (1993) suggested that the styles of research might vary from real actions to surveys, case study or experiment. The survey instrument used a variety of approaches, including photos, written questions, and a schematic diagram to understand urban residents' social activities at Kuching and Penang Waterfront. The schematic diagram was used to represent the spatial characteristics of a river corridor, illustrating a typical cross-section through the river corridor included urban area, upland woods, and wetlands. It was used as a tool to help residents define their own perceptual waterfront corridor, as well as to indicate the natural environment that surrounds their urban area.



Table 1.1 : Conceptual framework of characteristic of urban waterfront and its social impact.

The first section consisted of numbers scenes of the waterfronts corridor including those where the river was hidden behind rural area. The second section of the questionnaire contained a series of questions about the value residents placed on the different natural characteristics of the waterfronts corridor. The next two questions focused on potentially positive and negative characteristics of waterfront land. The schematic diagram was used to represent the spatial characteristics of a river corridor, illustrating a typical cross-section through the river corridor included urban area, upland woods, and wetlands. It was used as a tool to help residents define their own perceptual waterfront corridor, as well as to indicate the natural environment that surrounds their urban area.

To measure the human impact on waterfront environments need an approach for identifying baseline information on the issue, construct a plan for actions to be taken to impact the issue, and develop a plan for measuring the impact of the actions on the issue. It will include interviews, observation, focus groups, and surveys.

The objective of sampling in this research was to provide a practical means of enabling the data collection and processing components of research to be carried out whilst ensuring that the sample provides a good representation of the population; i.e. the sample was representative. Unfortunately, without a survey of the population, the representativeness of any sample was uncertain, but statistical theory can be used to indicate the representativeness. Measurements of characteristics, such as the mean, of a sample were called statistics whilst those of a population was called parameters. How to obtain representativeness begins with







consideration of the population. Almost invariably it was necessary to obtain data from only a part of the total population with which this research project was concerned; that part of the population was the sample.

The research population consisted of the public in the Penang and Sarawak waterfront park. The public was chosen because they are the potential users of Penang and Sarawak waterfront park. However, the population was restricted to adults above eighteen years of age. It was restricted to the adult population because the researcher assumed that children and teenagers have different reasons and needs for going to a park. In addition, the activities of children and teenagers in Malaysia are largely subject to their parents' approval and supervision. Even though children might be a reason for going to the park, parents still decide whether or not to go. Furthermore, adults are the largest segment of the population.

#### 7 CONCLUSION

It seems clear that the parks should be created for people. Designers should know how the park is used by the public. They should also know how the public likes to use the park. Talking with park managers, park users and non-users, and implementing behavioral observation in the park help designers identify the park users' population, behavioral patterns and preferences.

A water, as the most attractive asset, makes waterfront parks different from other parks. People who go to waterfront parks like to access the water and join the activities related to the water. The park should provide different ways that people can access the water, from visual enjoyment at a distance to physically feeling the water. When there are not many people at the water's edge or at other viewpoints, the designer needs to investigate if it is because of a lack of seating or other reasons (Basset et al., 2002).

The results finding from this research such as diversified activities and experiences, lack of street furniture's, inefficient infrastructure. Interviewed park visitors most often described the quiet and relaxing aspects of Waterfront Park. When asked about what kind of activities they do at the park, and what they like best about the park, most said relatively passive activities. Ten out of the 39 survey respondents (25%) mentioned walking and watching people. According to the site visit and the survey, young people visit the park less frequently. The reason is partly because the park does not satisfy the recreational demands of young people with its passive activities. Especially compared with the activities provided by the shopping complex, such as the movie theaters, cafes, and retail shops, the park has fewer attractions. This fact was also verified by the Parks Department personnel who used the park least. The parks personnel said that the teenagers use the park less because they feel there is nothing to do in the park.

Designers should notice whether people use the whole park or just part of it. Especially when people often use the areas facing downtown, designers should create attractions at the opposite side and suggest the city develop more land uses near that side, such as residential to increase population coming from that direction. Putting a major activity site in the park center and sufficient signs or map system could also help people use the whole park area.

Artwork and good maintenance helps to increase the park's aesthetic image. But the artworks should not be only for showing; some art needs to be interactive. When the park does not attract young people, the designers need to check whether the park has sufficiently diversified activities. When adding more activity areas for young people, the designers need to consider their locations and buffer any loud noises and traffic flows from the quieter areas.

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