

# Visual Preference for Future Kuala Lumpur Riverfront: An Overview

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## Abstract

Rapid urbanization and population growth of Kuala Lumpur city have drastically changed the relationship between the society and the river. It is unfortunate that for years, the Klang and Gombak River has been transformed into a concrete drainage and lost its identity. This is worsened by the lack of aesthetic value and the absence of social activities along the riverside area. 'River of Life' (RoL) project initiated by the Kuala Lumpur City Hall is an ambitious attempt to revitalize the Kuala Lumpur riverfront. Since the proposed riverfront involves in making new public spaces for the community, the community preference for the visual image of the riverfront should be considered. This paper discusses the importance of visual preference and the influencing factors in recreating a successful riverfront. The finding is important to consider in designing Kuala Lumpur future riverfront that suits the character of the city and fulfill the community perceptions.

**Keywords:** *Visual preference, riverfront, revitalization, perception.*

## 1. Introduction

River is the vibrant component of life. In most cases, the city growth has radiated from the river. In recent years, the development of riverfront area especially at city center has been as an innovative way in enhancing the city image. There has been an increasing interest in accommodating the water and river management in the city region. Revitalization of the river in the city has been done to improve the city image and to provide an opportunity for development close to the city center (Butener, 2006).

Current situations in Kuala Lumpur repeats the history of the other riverfront cities in undergone the riverfront transformation. The ensuing development that tends to maximize the strategic location near the river and the effort to tackle the flooding problems made the natural river of Kuala Lumpur change into the huge concrete drain (Shamsuddin, Abdul Latip, Ujang, Sulaiman, & Alfath Alias, 2012). However, it is important to preserve the river in order to sustain the identity of the city towards achieving a sustainable environment. The community perception is important to fulfil the user's satisfaction.

Even a simple rivers provide a source of enjoyment and tranquillity for many who use only the riverbanks, view the river from afar, or who only know that it is there and available. Community member's values and attachment to the river is high impact to the river's scenic beauty, wildlife and geology and appreciate the access that scenic byways and trails afford them (Schroeder, 1996). Harun (2009) points out that the sustainable urban living which maintaining the quality of life of city's residents should become the central focus in future planning and development.

Therefore, this study focuses on the community resident's preferences to enhance the visual quality of the Kuala Lumpur riverfront. The community of Kampung Bharu and Brickfields were chosen as the study areas since this place is located near to the Klang river and they were among the early settlement in Kuala Lumpur city.

## **2. An evolution of Kuala Lumpur Riverfront**

The earliest settlement of Kuala Lumpur was formed at the confluence of Gombak and Klang River founded by Raja Abdullah in 1857 during the search of the new tin mining area. It becomes the main transportation hub and plays a very important role for the development of Kuala Lumpur town. In the early 1890s, Kuala Lumpur was popular as the center for trades tin although it was not yet a modern town (Syala, Latip, Heath, & Liew, 2008). After a few years, the night soil services was introduced that indicated the start of planning activities in the town. The development was organically according to the necessity since there was no proper planning policy available. The construction of the small village along the river could be seen improve the township in the early 1900s (Syala et al., 2008).

Through the economic growth, the tin field around Kuala Lumpur was held back due to the lack of communication which then only relied on the river. Therefore, the road was constructed to replace the river. In 1886s, the railway was built which shortened the journey. The function of the river recorded to be used until the 1910s and the city started loss it's river since the changing of the transportation mode (Shamsuddin et al., 2012). The straightened off the river and raised the bank higher were implemented on the 1930s after the big floods on 1925s.

Since then, the commercial area has expanded further south towards the Brickfield area. The uncontrolled development along the river continued and become worsened when many squatters built along the river by the year 1950s. Furthermore, none of it mentioned the possibilities of the river and the riverfront as potential public space. In the 1960s and 1970s, the new area was opened up for the residential project to accommodate the growing population at the town area. Kuala Lumpur experienced another major flood, and it's stalled all economics and daily activities. The concrete channelizing has been proposed afterward in 1978s for easier maintenance for flood mitigation purpose (Syala et al., 2008).

During the 1970s to 1980s, the increased of the population in the city due to the migration from the rural area for work opportunities. Some efforts have been started in cleaning and channelizing the river since the river became polluted due to the industrial waste from the building along the river. However, the natural form of the river changed

into the huge drain and became dull. Realizing on that, the first policy in Kuala Lumpur Structure Plan (KLSP) 1984 stated the clearly the importance of the riverfront for the public realm (Syala, Latip, Heath, Shamsuddin, & Vallyutham, 1983). The plan also stressed the future consideration of development planning to the surrounding environment as the development control process.

Only recently, the latest KLSP 2020, some modification of the river physically has also changed the Kuala Lumpur city image indirectly. Some positive implementation was seen where the new development strengthened up to open up the urban river as known as RoL project. This bright city development has been worsened by the dirty and dull environment along the river bank area in which spoiled the city appearance, especially to a tourist. Consequently, it is important to determine the preferable visual quality along the Kuala Lumpur riverfront area to enhance the image of the capital city of Kuala Lumpur.

### **3. Visual Perception and Preference**

Numerous study that implied the preference of the human perception towards the environment have proven that are more practical, valid, reliable and systematic approach used to measure the human view of the landscape (R. Kaplan, 1985). According to Kaplan (1983), preference is the product of the perception. Meanwhile, landscape perception is considered as a function of the interaction between the human and the landscape (Ervin H. Zube, James L. Sell, & Taylor, 1982). Zube (1982) highlighted that the human component encompasses experience, knowledge, expectations and social-cultural context of individuals and groups. While, the landscape components includes both the individual elements and landscape as the entities. More precisely, perception is one of the physical-psychological processes through which human acquire information of the environment.

Obviously, the difference between the perception and the preference in term of the level of the thinking process. Preference involves a low thinking process that suitable for participants which include the non-expert rather than the perception. There is no hint in the consciousness of the complex, inferential process that appears to underline the judgment of the preference (S. Kaplan, 1987). Furthermore, people perceived their environment more in the visual form and based on this fact, to understand the environment is easier by using the materials in the visual form. Therefore, preference in the context of this study referred on how much people perceive their future riverfront look like which presented in photographs and they just need to rate them using the preference scale given.

#### ***3.1 Factors influencing the visual preference***

The visual quality of the environment also represents a major concern of the public toward the environment (Nasar, 1990). The theory suggested that to improve the visual city image, planners need to understand how the public evaluate their cityscapes. Matsuoka & Kaplan, (2008) suggests that the main factors accounting for resident's perceptions toward the stream corridors were recreational use, participation, nature and scenery, sanitary management, and water safety. In this regards, Kaplan (1970)

identified the two general variables that aid in the identification of factors important to visual preference that is concerned with the order and structure apparent, and the involvement of interest factors.

Preference is affected by many factors. Among others, some researchers have studied and found that difference culture and ethnicity influence the people's preference. Kaplan & Talbot (1988) points out the same statement in their study regarding preference of difference ethnic towards nature. It may not be surprising that professional and academic experts have different preferences that differ from those of the general public. Tveit (2009) found that the student preferences do not reflect the landscape preferences of the wider public and that future landscape professionals have a different appreciation of visual scale in the landscape than the general public. Therefore, an important limitation to present the study is related to the fact that all participants were the residents in the area in question.

In another finding, people like things that they found familiar (Balling & Falk, 1982). Here, the role of familiarity may well be a source of comfort and to support the preservation movements (Thomas and Kaplan, 1976). However, people do not necessarily prefer what they are familiar with although the preference is affected by familiarity. Therefore, the major concern of public towards the riverfront, familiarity, the structure elements and the sociodemographic are highly preferred as the dimensions that need to be considered in studying visual preference.

### ***3.2 Visual Preference Survey***

As noted above, this research was using the VPS as the methods to evaluate the community's preference of the riverfront of the community appearance. Visual Preference Survey (VPS) is a visualization method to promote democratic design and planning. A. Nelessen (1994) claimed that it is also a research and visioning method that attempts to articulate community resident's impressions of their present community to build consensus for its future (Nelessen, 1994). The survey consists of a photographic images, evaluation forms, optional questionnaires, and analysis techniques to understand and generate the results. The respondents for this case were a community; they will show with the slides images of their town and other places. Then, the respondents were asked to rate numerically these selected photographic images on a scale given. Once the results are generated, the calculated image value is recorded.

Preference surveys have an advantage of accessibility to all types of people. It is an easily completed task for participants who differ regarding education, income, race, and technical abilities (A. Nelessen, 1994). The public agreement on its visual the visual images by selecting like or dislike by meeting based on how the visual meeting their values and, improvements in the evaluative image that can make for offer them a pleasant place to live (Nasar, 1990). Visual preference survey (VPS) are the method that work well for public participation that include the non-expert (Al-Kodmany, 2002).

It was cleared that the design review can have importance impact on the appearance of the community for their future planning. However, conflicts can arise while trying to satisfy in some of these needs in the design of urban landscapes. For example, contact with nature can clash with recreational needs when the preservation of ecological reserves is involved (Gobster & Westphal, 2004). Likewise, aesthetic preference can

conflict with human recreational desires. Therefore, to reduce the conflict arose there is a need to describe the valued human dimension to be focused on.

In fact, as our results and discussion indicated, there is strong support for their existence and validity based upon previous research in landscape perception and environment-behavior studies.

#### **4. Discussion**

There are two main objectives in this paper. First, to demonstrate the relationship between the community preference and the future riverfront image. Second is the factors that influence the preferences. In agreement with the previous findings, the residents images were more extensive, more detailed, and less amorphous than the visitor images (Nasar, 1990; Steinitz, 1968). Van den Berg & Koole (2006) argued that the rural residents showed negative attitudes towards the reconstruction of their area that may give rise to a 'resistance to change'. Since the unutilized space along the river and the worsened image for the city center, the community knows the best solution for their river. Therefore, the community concern towards the river should be identified in the first place in efforts to understand community needs.

Although this study focuses on the visual dimension in urban riverfront design, it is important to identify the general residents liking for particular environments much broader than aesthetic criteria. Nasar (1990) claimed that most cities have implemented design review, but empirical studies of design review are very rare. Some empirical studies (subjective approach) were conducted by Gruehn and Roth (2010) and Roth and Gruehn (2012). However, to make landscape aesthetics assessment applicable in planning practice, objective approaches might provide the necessary simplification (Frank, Fürst, Koschke, Witt, & Makeschin, 2013). The visual appreciation of urban environment is also the product of perception and cognition (Carmona, 2003). It includes on how the observer interprets and judges the information gathered and how it attracted to their minds and emotions. Therefore, recognition of attractive public spaces especially in riverfront area depends on how public appreciates and frequently used that space.

#### **5. Conclusion**

Based on the discussion, there is a need to learn from previous cases to avoid repeating the same mistake and to face the future constraints. Despite the challenge, Kuala Lumpur is going ahead with the project to revitalize its rivers. This research supports the need to integrate users' perception and preference of the most appropriate images for the riverfront. This research will contribute to identifying the influencing factors that reflect the public perception of the riverfront area. The findings are important to ensure that the newly revitalized riverfront in Kuala Lumpur will suit the need of the city inhabitant psychologically and aesthetically.

#### **References**

Al-Kodmany, K. (2002). Visualization Tools and Methods in Community Planning : From Freehand Sketches. *Journal Of Planning Literature*, 17(2), 189–211. <http://doi.org/10.1177/088541202237335>

Ervin H. Zube, James L. Sell, & Taylor, J. G. (1982). Landscape Perception: Research, Application and Theory., 9, 1–33.

Frank, S., Fürst, C., Koschke, L., Witt, A., & Makeschin, F. (2013). Assessment of landscape aesthetics - Validation of a landscape metrics-based assessment by visual estimation of the scenic beauty. *Ecological Indicators*, 32, 222–231. <http://doi.org/10.1016/j.ecolind.2013.03.026>

Gobster, P. H., & Westphal, L. M. (2004). The human dimensions of urban greenways: Planning for recreation and related experiences. *Landscape and Urban Planning*, 68(2-3), 147–165. [http://doi.org/10.1016/S0169-2046\(03\)00162-2](http://doi.org/10.1016/S0169-2046(03)00162-2)

Harun N. Z., Said Ismail, A. M. N. H. (2009). OPEN SPACE DEVELOPMENT IN KUALA LUMPUR CITY: The Early Settlements and The Current Scenario Nor, (October).

Kaplan, R. (1985). The Analysis Of Perception Via Preference: A Strategy For Studying How The Environment is Experienced. *Landscape Planning*, 12, 161–176.

Kaplan, R., & Talbot, J. F. (1988). Ethnicity and preference for natural settings: A review and recent findings. *Landscape and Urban Planning*, 15(1-2), 107–117. [http://doi.org/10.1016/0169-2046\(88\)90019-9](http://doi.org/10.1016/0169-2046(88)90019-9)

Kaplan, S. (1987). Aesthetics, Affect, and Cognition: Environmental Preference from an Evolutionary Perspective. *Environment and Behavior*, 19(1), 3–32. <http://doi.org/10.1177/0013916587191001>

Matsuoka, R. H., & Kaplan, R. (2008). People needs in the urban landscape: Analysis of Landscape And Urban Planning contributions. *Landscape and Urban Planning*, 84(1), 7–19. <http://doi.org/10.1016/j.landurbplan.2007.09.009>

Nasar, J. L. (1990). The Evaluative Image of the City. *Journal of the American Planning Association*, 56(1), 41–53. <http://doi.org/10.1080/01944369008975742>

Shamsuddin, S., Abdul Latip, N. S., Ujang, N., Sulaiman, A. B., & Alfath Alias, N. (2012). How a city lost its waterfront: tracing the effects of policies on the sustainability of the Kuala Lumpur waterfront as a public place. *Journal of Environmental Planning and Management*, (May 2014), 1–20. <http://doi.org/10.1080/09640568.2012.681635>

Steinitz, C. (1968). Meaning and the Congruence of Urban Form and Activity. *Journal of the American Institute of Planners*, 34(4), 233–248. <http://doi.org/10.1080/01944366808977812>

Syala, N., Latip, A., Heath, T., & Liew, M. S. (2008). A MORPHOLOGICAL ANALYSIS OF THE WATERFRONT IN CITY CENTRE , KUALA LUMPUR University of Nottingham , United Kingdom Petronas University of Technology , Malaysia Tim.Heath@nottingham.ac.uk, (Figure 1).

Syala, N., Latip, A., Heath, T., Shamsuddin, S., & Vallyutham, K. (1983). The Contextual Integration and Sustainable Development of Kuala Lumpur ' s City Centre Waterfront : An Evaluation of the Policies , Law and Guidelines, 1–7.

Thomas R. Herzog, Stephen Kaplan, R. K. (1976). The Prediction of preference form familiar urban places. *Environment and Behavior*, 8(4), 627–645. <http://doi.org/10.1177/001391657684008>

Tveit, M. S. (2009). Indicators of visual scale as predictors of landscape preference; a comparison between groups. *Journal of Environmental Management*, 90(9), 2882–2888. <http://doi.org/10.1016/j.jenvman.2007.12.021>

Van den Berg, A. E., & Koole, S. L. (2006). New wilderness in the Netherlands: An investigation of visual preferences for nature development landscapes. *Landscape and Urban Planning*, 78(4), 362–372. <http://doi.org/10.1016/j.landurbplan.2005.11.006>