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INFLUENCING FACTORS ON PLACE ATTACHMENT IN RIVERBANKS: A CASE STUDY OF MALAYSIA

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Abstract

The development plan of riverbanks often changes over time, and the physical environment of the riverbank indirectly affect the place identity. Physical changes of a place may contribute to reduce the place attachment and meaning of the place. In the setting of urban design, some debates led to the physical component of interest and activity to develop atmosphere and place identity, but research on open space areas has received less consideration. Thus, this study focused on the place attachment and the influencing factors in the context of open space along riverbanks. Surveys were conducted on a sample of 330 respondents of selected two study areas, namely Kuching Waterfront in Sarawak and Lumut Waterfront in Perak. The results show that the place attachment affects user's perception of public space at the riverbank. The results further indicate that the form and the level of engagement of the attachment, and user familiarity with the place are the most influencing factors on place attachment. Therefore, this study as an addition to the human relationship with the place and give important implications to architects, urban designers and urban planners to produce a better and well-organised open space.

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1. Introduction

Place attachment arises over personal experience with the environment. Attributes such as recreational opportunities, cultural values, length of residence, natural environmental qualities, and mobility have been exposed to affect the attachment development (Beery & Jonsson, 2017). Open space in urban areas and the relationship between humans and the environment has been around since the 1900s (Jellicoe & Jellicoe, 1975). Researchers seek to examine the aspects of the human relationship with the environment. A healthy relationship that exists between emotional excitement (affective) and functions or relationships between people with some locations can grow a sense of place, a process known as place attachment. Place attachment involves two related scopes: place identity and place dependence (e.g. Anton & Lawrence, 2016). The former relates to functional attachments which are the status of a place and conditions that make activities (Stokols & Shumaker, 1981). Place identity represents how physical and emblematic features of places are personified in an individual's sense of identity (Devine-Wright, 2013); this occurs through a long-term, complex process where place becomes a befitting part of a person's identity (Anton & Lawrence, 2016; Lewicka, 2008).

Based on a study carried out by Alexander, Neis, and Alexander, (2012), the physical characteristics connected with place attachment affect the individual's sense of attachment. The results emphasised status of the physical characteristics in supporting the term of place attachment. The psychological state of well-being resulting from access to places or situations that put pressure on the separation of the place may also affect human perception to the public (Giuliani, 2003). Hidalgo and Hernandez (2001), have stated the classification of place attachment as the link between a special place with an individual, articulated through integration between emotion and influence, belief, knowledge, action and behaviour. There are four different scopes in place attachment including place dependence, place identity, place affect and place social bonding (Ramkissoon, Smith, & Weiler, 2013). Although the aforementioned studies have highlighted the multidimensionality of place attachment, only a few studies have taken into consideration place attachment as a multidimensional concept study.

According to Gieryn (2000), place attachment produced from a variety of factors such as cultural activities, social and personal experiences, architecture and geography of the place. The loss of a place and its meaning would have a negative impact on individual identity and community, memory and history as well as the psychological balance. Hidalgo and Hernandez (2001) suggested that the main features of a place attachment are a desire to maintain a close attachment to objects that reflect feeling of a place. Conjunction with this study is linked to the elements of attractions, the frequency of visits and familiarity. Therefore, the place attachment may be considered as variables that can be used to measure the sense of place based on the emotions and reactions of the users on the characteristics of the places in the city which is an important part of the quality assessment of urban design.

Based on Danisworo and Martokusomo, (2000), one of the issues in the design of the city in connection with the redevelopment of the waterfront is a transformation of quality and identity degradation due to inappropriate physical disturbance. The physical variations in the environment lead to a clash of insights of users and has proven to change the landscape of the city and interrupt the sense of place. The sense of place connection can be established over the activities, meaning and physical elements in human experience to the community. Space appropriation affects one factors of forming the

sense of place, namely the physical environment, which then raises the residents understanding of the riverfront space. Sense of place then influences the level of satisfaction (Maharani & Evawani, 2019). Based on Wheeler (2004), the hasty pace of urbanisation causes a sudden transformation in the environment in terms of modern image and structure that affected the value of public atmosphere. Character can be worn due to an act of generic urban environments, economic globalisation, ecosystems, local communities, history and culture.

Migration of people from the countryside to cities in search of jobs increased industry and lead to the growth in population. The redevelopment of port visits can restore the social and economic activities, the environment and land use to the cities that suffered a setback. The concept of this reconstruction came from several sources such as the port of Baltimore, London Canary Wharf, and the Sydney Darlington port. In Malaysia, cities such as Melaka, Kuala Lumpur, Kuching, Kota Bharu and Kuantan exist along the river (Andaya & Andaya, 2001). Blessed with a body of water as the river has a great and vast potential for tourism in Malaysia.

2. Problem Statement

The development of riverbanks is enhancing by new signs of life. Areas that once dominated by industry are now opening to redevelopment new public spaces and to revitalise the old areas. Most of the riverbanks often start in crumbling shape, any development tends to be welcomed. However, decision makers eager for solutions to uninspired design and development plans that constrict public use (Ethan, 2013). Some riverbanks are effectively privatised with one-dimensional commercial activity like hotels or convention centres, others with housing that discourages non-resident from using the space. When one particular use of the riverbank can dominate, the long-term potential of the waterfront is degraded (Ethan, 2013).

This research attempts to find out why some of the riverbanks in Malaysia is still poor in terms of character, reflecting the different features and the absence of place identities. Moreover, external influences such as globalisation triggered the riverbanks and eliminates the building and space with the traditional culture and values as well as falling the role of public open space as a place of cultural and social interaction. Place attachment is highly interrelated with the value of the user knowledge on the site. This study observes the importance of emotional and functional areas of public open spaces to people who occupy a territory. The identity of the place must be checked by understanding the meaning of place attachment and the factors that affect the bond.

3. Research Questions

The research questions identified in this study that need to answered are as follows:

- What are the levels of emotional and functional attachments towards open space and accessibility in Kuching Waterfront (KW) and Lumut Waterfront (LW)?
- What are the most influencing factors affecting the place attachment in the study areas?

4. Purpose of the Study

The current study pursues to measure the level of place attachment that exists on the riverbanks in Malaysia. Attachment in this study refers to the effectiveness of physical contact with the function or the relationship between users with a specific place. The purpose of this study is to classify the capability of the place attachment and the features that effect user’s perception in the context of open space on the riverbanks in Malaysia.

5. Research Methods

This study concentrations on identifying the features that affect place attachment. Riverbanks in the centre of Bandar Kuching, Sarawak and Bandar Lumut, Perak, were chosen as the case study. These areas have been selected based on socio-cultural, physical characteristics and functions. The two areas also have waterfront promenades as public open space with a variability of activities. Furthermore, this study areas are among the pioneers of riverbank developments in Malaysia (Yassin, Eves, & McDonagh, 2010), located in the centre of town and known as public open spaces among the public. The study is quantitative in nature, thus promoting users to respond to a set of self-administered questionnaires. Apart from providing their demographic information, participants responded to a questionnaire survey that reflects place attachment between individuals and the place. The population of the study area is heterogeneous with the various ages, races and occupations. A stratified random sampling method is used to select the samples from the population. The population is first split into groups based on the study areas: KW and LW. In each strata, random sampling method was used to select the samples. The study focused on local users and tourists from Malaysia. In the survey, 330 respondents took part and willing to answer questions to complete the questionnaire. Each area is represented by 165 respondents consisting of the moving and static users. This research is focusing on local users and tourists from Malaysian because the attachment experience of some locations is stronger than foreigners. Moving respondents randomly selected from users who are in an open space at the time study was conducted and identify areas surveyed. User static (such as a store owner, shopkeepers, and hawkers) are selected based on the interval of space on the ground floor open space (space shopping/stores and kiosks). To measure the place attachment concept, the study focused on both emotional and functional attachments. A four-point Likert scale was used to measure the respective indicators of place attachment. Table 1 presents the items used to measure place attachment. Eight and four items were used to measure emotional attachment and functional attachment, respectively.

Table 01. Place attachment with respective indicators

Construct	Items
Emotional attachment	<ol style="list-style-type: none"> 1. I feel happy to be here 2. I feel safe to be here 3. Being here make me forget about my problems 4. I am very attached to this place 5. This place gives meaning to me 6. I am always thinking positive of this place 7. This place satisfying me 8. If I have opportunities, I want to be here longer

Functional attachment	<ol style="list-style-type: none"> 1. No other location better as this location 2. I feel more comfortable at this location 3. This place is the best location to meet my goals 4. This location is very important for me
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6. Findings

The survey shows that the majority of respondents aged 18-24 years, followed by 25-49 years, and 50-64 years. Almost 60% of the respondents were women. Regarding ethnic background, the majority of respondents are Malay, followed by Chinese, Indian and Ibanian.

To answer the first research question, the level of functional and emotional attachments was measured. The survey on the functional attachment indicates positive responses. In terms of functional attachment, the results of statistical analysis show that the mean values are 2.72 (KW) and 2.70 (LW) from the value of 4.0, indicating that the respondents felt comfortable and fulfilling the role and function to be there than anywhere else. This refers to certain characteristics related to the area, indicating that the area is compatible with the respondents' activities. They are very satisfied with the improvement of infrastructure in the area. Furthermore, the results indicate that emotional attachment has a higher positive response than functional attachment. In terms of emotional attachment, the mean values are 2.75 (KW) and 2.48 (LW) from the value of 4.0. Both of these areas are considered a meaningful and fun area. LW respondents felt that coming to the open space is the most satisfying because of the influence of recreational activities and shopping as the main attraction to the place, where LW showed the highest percentage of respondents approved.

In order to answer the second research question, the current study extracted a number of factors based on the literature and examined the level of their effectiveness. The main factors consist of engagement, familiarity, culture and ethnicity, and sense of belongings towards the riverbanks. Based on the results of the study, the attachment to open space along riverbanks affected by the *engagement*, the role and the needs of the user. It can be concluded that the longer and more frequent engagement to the open space, a stronger attachment been felt. The majority of respondents stated that they were *familiar* with the area because of the engagement and the frequency of visits made. In terms of *culture and ethnicity*, the results indicated that there are little differences in emotional attachment, and socio-cultural functions among different ethnic groups.

With regards to the level of *proud and sense of belonging*, the results indicated that the mean values are 2.84 (KW) and 2.74 (LW) from the value of 4.0, implying that the proud and sense of belonging to a place is quite strong. The results obtained in parallel with the length of the period of engagement and level of familiarity and meaning on it. However, the results indicate that engagement and familiarity with the place are the most influencing factors on place attachment in the study areas.

7. Conclusion

This study defines the place attachment has an important influence on the sense of place. Numerous meanings are interpreted in attachment emotional, social and function, as well as influenced by the familiarity, engagement, and culture and ethnicity. The study indicated that continuous and frequent

engagement would contribute closeness to places. The findings indicated that engagement and familiarity are the most influencing factors in shaping place attachment.

Riverbank open spaces in KW and LW have become significant to users as a place for economic, cultural diversity and recreation attractions. The historical status of open space as one of the earliest open public space in Kuching and Lumut produce a lot of sense to the user in contributing the level of attachment to their place. The results indicate that familiarity with waterfront reflected in the ability for users to identify the location and elements in it. It relates to the location understanding, visual recognition associated with the capacity to recognise the place and the interaction of the places they visit. Respondents also associate familiarity with the physical elements that frequented the elements, such as space or shop they use in their activities. Respondents also identified the waterfront as a place that familiar to them, while there were others who said the famous buildings and sites that attract them.

Research has made it vibrant that the place attachment must be one of the features to be considered in the design of urban revitalisation. Place attachment developed based on the quality of tangible and intangible familiarity and uniqueness by users. It is important to interpret the space as a place for a unique feature not only caused by an external physical appearance of the city and then the perception of generalised to place it. It is understood that place experience raised by the sense of place and spirit of place as the atmosphere and interpreted in attachment emotional, function and socio-cultural as well as the meaning as defined by the user.

The investigation showed that the riverbanks in KW and LW are important in supporting the continuity of activities as a centre of attraction and a means of highlighting the cultural diversity and identity of the individual or group. The investigation concluded that the place attachment is a factor that must be considered in the designing of places in the city in particular when redevelopment (revitalisation) become one of the choices. Research to further strengthen the knowledge and practice of urban design in filling the gap between the meaning of relating to the sense of place physical element and the place attachment in the context of the riverbanks in Malaysia. Various elements, relationships, and dimensions that explain the meaning related with physical elements developed as a guideline for any redevelopment and research on places that are appropriate to the context. The investigation also decided that experience to a place not only to physical but also psychology and perception. Both aspects are interconnected and attachment to the place and affect the sense of place. Place attachment is a positive element that can contribute to the sustainability of the sense of place and place identity that gives individual satisfaction, psychological and joy to the users.

Although the findings are generally consistent across the study areas, there are some noteworthy aspects for improvement. First, due to time and cost constraints, the researchers are only able to focus on two case studies in Malaysia which are in the peninsula and East Malaysia. The study calls for further research for a better understanding the dynamics of sense of belonging and place attachment in riverbanks. The second limitation refers to number of factors evaluated in examining the place attachment. There is no doubt that both physical and social features of a place might affect the level of place attachment (Marzbali, Abdullah, Razak, & Tilaki, 2014). As the study focused on a limited number of factors, future research might bring new insights to the body of knowledge by considering a broad range of factors on place attachment.

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