Landscape Features and Traditional Streets Character in Malaysia

Nor Haslina Ja'afar[1], A.Bashri Sulaiman[2], Shuhana Shamsuddin[2]

[1] Universiti Kebangsaan Malaysia (UKM), Selangor, Malaysia
[2] Universiti Teknologi Malaysia (UTM),
International City Campus, Kuala Lumpur Malaysia

mell_ina@yahoo.com

Abstract

The aim of this paper is to explore the landscape features that contribute towards the character of a successful traditional street environment. The case study was conducted on three streets in Melaka Historical City, namely, Tukang Besi Street, Tukang Emas Street and Tokong Street. Mixed-method was used in this study that involved visual survey, direct observation, user perception (questionnaires, in-depth interviews and mental mapping) and an in-depth interview with policy-makers. The result shows that landscape features can be characterized into two main categories: appearance and function.

Keywords: Traditional street, landscape, character, historical, (Jacob 1993)

1.0 Introduction

Many scholars suggested that the main role of streets in urban setting is as a public realm where social interaction through a variety of human behav- iour can be seen, such as walking, talking, playing, lingering and observ- ing (Jacob, 1993). Thus, the uniqueness of streets can be seen through their environment and by their social and cultural significance.

1.1 Issues and Problems

In the face of rapid urbanization, many physical features of public open spaces have changed, affecting the soft and hard landscape character, particularly in the old towns. The soft landscape (natural and man-made) play an important role in the place making. This problem faced by Melaka historical site, the Padang Pahlawan where the setting was changed from recreation to shopping area (Harun & Said, 2010). Harun and Said (2010) further suggested that the domination of hard landscape contributes to the *'placelessness'* of Padang Kota Lama, Penang. In Malaysian traditional streets, the sidewalk can take the form of a five-foot way. However, new buildings do not capture this character where the pedestrians are exposed to the elements (Shuhana et al 2007).

Therefore, it is essential to ensure that the unique character of old towns is preserved for future generations. This study focused on the physical elements in order to establish the landscape features that contribute towards the traditional street characters. Tukang Besi Street, Tukang Emas Street and Tokong Street in Melaka town were chosen because they have a unique identity and character, especially from socio-cultural aspects, mixed-use and places of worship (mosque, Indian temple, and Chinese temple) to support the religious needs of the community (MPMBB 2010).

Character in this study is defined as the combination of man-made and natural elements that generate the identity of a place that retains local uniqueness (Miskell 2008). This study also involves describing and explaining the special and negative characteristics (Miskell 2008). The significance of the study is that it will provide conceptual alternative references for designing future streets that act as a public realm.

2.0 Literature Review
Landscape and Traditional Streets

Landscape here refers to soft and hard landscape where soft landscape are elements that represent nature, such as water and topography. Hard landscape was categorised as the man-made features designed to complement the soft landscape (Mehta 2007).

Streets are defined as space enclosed in order to generate movement created through buildings, trees, walls or any combination of those elements (Shuhana et al 2007). Traditional comes from the word *'tradition'*, which relates to the concept of *'time'* and *'heritage'* of the place. These concepts are essential in order to create a distinctive atmosphere (physical and spiritual aspect) that distinguishes between a traditional and a new street where priority is given to the local needs (Shuhana et al. 2007). The concept of heritage refers to the historical period of the place, which portrays its own development and changes, through time, which

can be seen through its morphology, social and economic factors (Wrexham County Borough Council 2009). Thus, it creates an environment that reflects what the users felt.

Based on previous research in Malaysia (Shuhana et al 2007), a traditional street would be among the earliest streets of the old towns that determines the pattern of the town. It is flanked by a row of old shop-houses, usually built before 1957. Generally, the buildings have five-foot ways where a variety of diverse activities occur. Normally, the streets have an enclosed quality supporting the transportation modes (e.g., walking and bullock carts) during the era of its construction. It also gives priority to the local needs, where the street name reflected the business activities, informal (e.g., stalls, night market) or/and formal activities (inside the building).

3.0 Methodology

This study adopts a mixed method approach (qualitative as the core) where the case study method was adopted and involves six techniques of data collection (refer to Fig. 1). Observation encompasses visual survey and behavioural observation (Shuhana et al 2002). The purpose of the visual survey is to record the characteristic related to landscape features. The aim of the behavioural observation is to record the activity patterns and their relationship to the physical elements which involves five questions: "what was done (act), when/where was it done (scene), who did it (agent), how they did it (agency), and why (purpose)" (Mehta, 2007). The data collection was conducted on working days (Monday to Friday) and week-ends (Saturdays and Sundays) because of different activity patterns. The activities were recorded using field notes (sketchbook) and photographs (Mehta, 2007).

Twenty-one respondents (street users) were engaged using three techniques, namely, in-depth interview, mental mapping and questionnaires. According to Wan Ismail (2010), there are two types of street users, namely, mobile and static. Mobile users are visitors, they do not engage with the study area daily. Static users on the other hand are residents, shop owners, shopkeepers, vendors and office workers. Both types of users are selected because it is evident from previous studies that the story from local people is important in order to understand the place character through the effectiveness of time in creating the place (Crankshaw 2009). Visitors were chosen because they are better in terms of image/ physical viewpoints compared to residents (Wan Ismail 2010). In-depth interviews with planners and government architects were carried out to complete the data.

The questionnaire was analyzed using descriptive statistics which involved 330 respondents, (5.5% sampling error, 95% confidence level) where *'the cluster and probability sampling'* was involved, as suggested by previous studies using similar respondents (Wan Ismail, 2010). In contrast, the qualitative data from the historical, perceptions and observations sources were analysed using thematic analysis.

4.0 Results and Discussion

The study shows that both landscapes (hard and soft) contribute towards traditional street

character, which can be characterized into two physical categories; attributes and function.

4.1 Attributes

4.1.1 Soft landscape features

The finding suggests that there are six characteristics contributed by soft landscape features in traditional streets. These qualities are: comfort, attractiveness, orientation, human scale, spatial, and symbol.

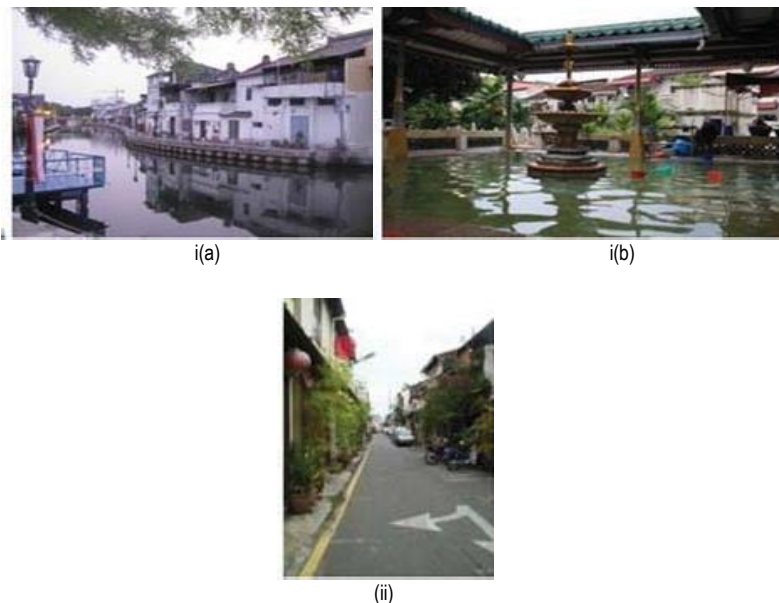i(a)   i(b)

(ii)

Fig. 2: (i) Types of water (a) Melaka River (b) Pool ablution; (ii) Types of vegetation

Comfort is a quality associated with the calmness of the environment experienced through sensory perception, triggered by location and water features (rivers, ablution pools, and individual landscape) (Fig. 2). The importance of water in an urban area is emphasized by Moughtin (2005), where the water movement and the calming effect make a comfortable environment.

Quality of the view could be created by river, vegetation, and topography. The reflections of buildings along the river and the location, types and colour of the vegetation along the street contribute to the quality of that view. The variety and diversity of flowers found in front of the old shop-houses creates some form of personalization (observation). Crankshaw (2009) suggested that variety of vegetation would create diverse textures which is one of the qualities associated with psychological calmness and attractiveness to the users. Topography (referring to St Paul Hill), located near the study area contributes to the quality of

view through the unique development pattern. The urban form follow the contour where the flat land (study area) reflects high-density development (Fig.3). According to Davies (2000), development that follows topography will benefit economic aspects while strengthening the sense of place.
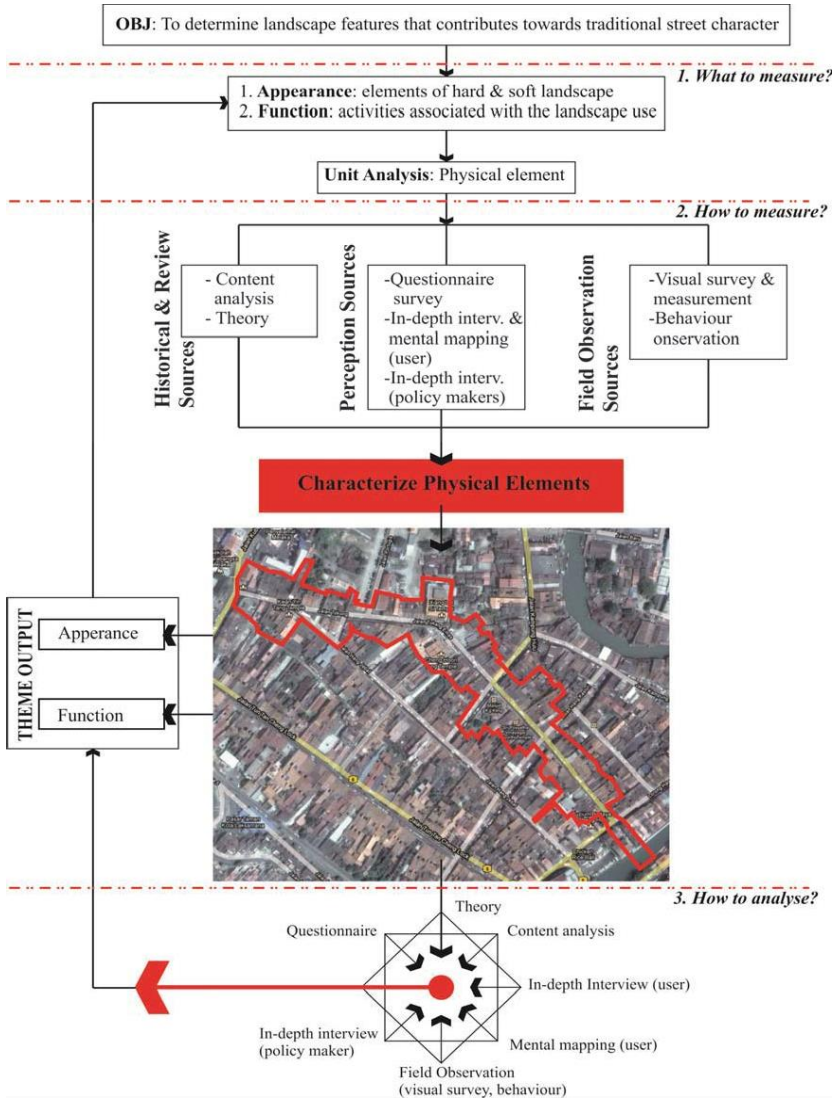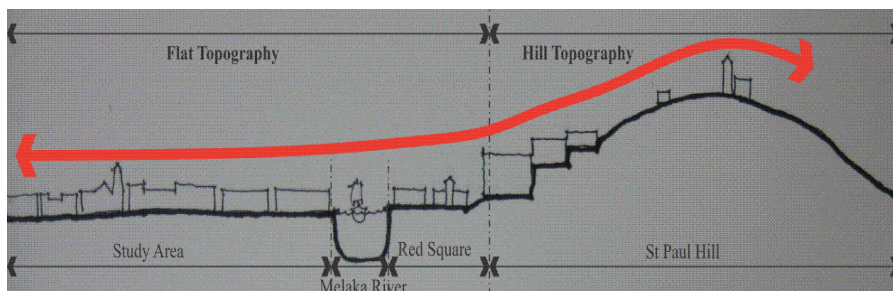

Fig.1: Research framework

Fig. 3: The influence of development and topography

Soft landscape features also contribute to the clarity of the structure where the location of the river reinforced the orientation and acts as the edges to the study area. The features of the vegetation such as singularity, types, colour, size and location also contribute to the clarity of the orientation. The findings also show that the small plants creates a human-scale environment and the row of trees planted along the streets creates a sense of enclosure. Types of the vegetation are also associated with symbol of the place related to the local Chinese belief where bamboo and citrus trees represent prosperity and peace in life (Utusan On-Line 2011).

4.1.2 Hard landscape features

Hard landscape features affect four characteristics of the street, namely, comfort, orientation, safety and symbols of a place. The study shows that comfort contributes to positive and negative feelings of the area. This facility is part of the basic infrastructure of a successful public space (Shaftoe 2008). The appropriate locations of bus stops at the nodes of pedestrian activities (a square) with shade provided by trees, water fountains, and nearby food stalls creates comfortable settings. This finding supports Los Angeles County's (2011) opinion that bus stops are focal points of activities.

The absence of dustbins generates an uncomfortable environment due to residents and traders throwing rubbish at the road junction. This creates inconvenience both physically and visually, as mentioned by the respondents. The absence of bicycle racks resulted in them being in inappropriate parked that block pedestrian movement. Though this is not critical, to encourage their use, proper designs and location of racks must be considered (Los Angeles County, 2011). The small number of benches give a limited choice of where to sit, as mentioned by most respondents. This finding is similar to Mehta's (2007) opinion that benches create a sense of personalization that will encourage human use and social behaviour.

Uncomfortable situations could be influenced by the locations of the bus stops. The distance between the stops (study area) is around 1km whereas Los Angeles County (2011) suggested that the appropriate distance is around 400m or nearer if the stop is in the middle of the town and close to a residential area. Moughtin (2005) opines, that good design of utilities can improve the environment for pedestrians. Lastly, uncomfortable environments

126

could be the result of narrow pavements and poor continuity of the sidewalk. According to Moughtin (2005), sidewalks are an important feature, however, the vertical designation (level of changes) is not compulsory in *'shared space'*. This concept is suitable for streets with narrow widths, as in the study area. A good paving design helps the visual continuity of the street (Moughtin 2005).

Fig.4: Cycling and walking mode transportation

The decorative lightings are found to contribute to the quality of view at night due to the colourful effect along the river together with the *'tang long'* (lanterns) as part of Chinese culture. The night settings contribute toward a sense of place in the form of symbols, which is similar to findings by Davies (2000), leading to an unforgettable experience for the users. The pavement, on the other hand, contributes to the quality of view through the use of natural elements that are found on the sidewalk that portray design and territory through personalization. According to Moughtin's (2005), the pavement design can create a feeling of relaxation and calm.

Signage contributes to clarity of orientation through their location and visibility of design appropriateness. Signage in suitable locations will assists the legibility of a place (Crankshaw, 2009). The clarity of orientation is afforded by the stage and outdoor café through their location. Shuhana et al (2002) mentioned that humans will remember distinctive elements easily.

Safety contributes to positive and negative feelings through street lighting. Safe environments are associated with street frontage and no street lighting (in back lanes) generates insecure feelings as suggested by Shaftoe (2008) where appropriate street lighting is important to create a safe environment.

Finally, symbols of a place (in the study area) are associated with the presence of old Muslim graves and mausoleums. These features show distinctiveness in the middle of the Chinese settlement and become part of the identity. Observation reveals that these old graves and mausoleums are well maintained and true to Alexander's (1977)suggestion that there should not be any development in a grave area to preserve memories of those who have passed away.

4.2 Function
The study suggests that the use of both landscape features (soft and hard) contribute to two types of traditional street activity, namely, local and tourist activities.

4.2.1 Soft landscape features
The study suggests that local community activities are associated with the ablution pool from Kg Kling Mosque. It functions as a place   of ablution for Muslims before they perform their prayers and used in traditional treatment practices. The fruits from the mango tree located within the mosque area, also become an attraction to locals and visitors. According to Shuhana et al. (2002), one of the aspects that contribute to street character is the presence of local community activities.

Tourist activities are found along the Melaka River through cruises, which also attracts local people. As suggested by Shuhana et al. (2002), this activity is able to enhance the function of the river.

4.2.2 Hard landscape features
The findings suggest that local activities are associated with three areas of pavement spaces (sidewalk, five-foot way, and the street itself) and are summarized in four categories (refer to Table 1).

Table 1: Behavioural categories by pavement (Behaviour observation)

Activities categories	Types of activities
Informal business	Seller, buying, selling, cleaning the food, preparing the food
Traffic	Walking, cycling, driving (lorry, car, motorcycle)
Leisure	Observe, playing, talking, drinking, eating, sitting, walking pets, taking photos
Other activities	Drying food, loading and uploading

Observations showed that informal activities, like selling breakfast at the pavement, start from 6:30am until 10:30am. Usually the activities at the five-foot way overflow from inside the building, such as outdoor eating area.

Traffic and other activities can be seen on the street where it is also a place for leisure activities, especially in the evenings by local people. It also support night markets held every Friday and weekend in parts of the study area (Jalan Tokong). During this period, the street become setting for pedestrian and informal activities. Consequently, leisure activities increases as compared to weekdays. In addition, variety of users (local and tourist) can be seen along the pavement creating a diverse activities setting. This finding supported Moughtin's (2005) opinion stressing the function of pavement in providing a hard, dry, non-slippery surface that will generate a diversity of activity through its robustness.

Fig. 5: (a) Informal business (b) Overflow activity (i) five foot-way as eating area
(ii) cleaning & preparation of food at the *'street it -self'*
(c) Social interaction among local community

| (a) | (b) | (c) |

Fig. 6: (a) Variety and diversity of use at badminton court (b) The function of benches: (i) at night (ii) during day time (c) Space for residents to dry food

It could be concluded that local activities are associated with street furniture (benches, street lighting, open stage and badminton court) where they create different social interactions setting, such as chatting and walking with families at night. According to Davies (2000), light will influence activities at night, and benches are an important element to trigger social interaction (Mehta 2007). The badminton court becomes a node through sport activities by teenagers (local people) in the evening (around 5-7pm). In the middle of the afternoon, this court becomes a place to sun-dry coconut husk for cattle feed. Performances occurred on the open stage during the night market where these activities trigger social interaction among the community.

5.0 Conclusion

The study concludes that landscape features contribute to the character of a traditional street, and can be categorized into three main aspects, namely; (i) physical (landscape features), (ii) activity (landscape use) and (iii) meaning (landscape symbols). Physical quality refers to man-made (e.g.; benches) and natural features (e.g., river), also known as tangible aspects, while activities and meanings are the intangible aspects. The physical aspect is essential because it determines the intangible aspects of human behaviour or activity, which reflects its own pattern and also the symbol of the place. The study reveals that natural elements play a significant role in contributing the positive feeling of the place especially regarding water features and vegetation. Planting on streets should be encouraged. Local people enjoy them and the plants create a sense of belonging. Therefore, the appropriate places for plants must be considered. According to Davies (2000), development that adapts to the natural environment will enhance the place's character and therefore, its meaning.

For the hard landscape, there are some design suggestions to improve the character. First, appropriate locations of benches should be considered because they will generate comfortable environment. The continuity and appropriate design of sidewalks including the surface is essential because the quality of robustness will encourage a variety of activities. Dustbins should be place at appropriate locations, street lighting should be considered for back lanes in order to create a safe, comfortable environment for users, especially at night. This has been emphasised by Mehta (2007) in which hard and soft landscape should be considered together and as an integral part of any proposal to create or improve the quality of external spaces.

For future research, the study should focus specifically on behaviour aspect, the influence of old settings compare to modern settings. Thus, it will provide a more comprehensive benchmark in designing streets.

References

Alexander, C., (1977). *A Pattern Language: Towns-Building's-Construction*, New York. Oxford University Press.

Crankshaw Ned, (2009). *Creating Vibrant Public Spaces; Streetscape Design in Commercial and Historic Districts.*,

Islandpress.

Harun, N.Z. & Ismail Said, (2010). Factors Attributes to Placelessness of a Public Place in Historic Town of Penang, Malaysia. In *Proceedings The 5th South East Asian Technical University Consortium (SEATUC) February 24-25, 2011,*. Hanoi University of Science & Technology, Ha Noi Viet Nam,, pp. 166–169.

Llewelyn Davies, (2000). *Urban Design Compendium.*, London: English Partnership/ Housing Corperation.

Los Angeles County, (2011). *Model Design Manual for Living Streets*. MPMBB, 2010.

Mehta, V., (2007). Lively Streets Support Social Behavior. *Journal of Planning Education and Research*, pp.165–187.

Miskell, B., (2008). *Wellington City Urban Character Assessment*, Wellington City Council.

Moughtin, C., (2005). *Urban Design: Green Dimensions*, Architectural Press.

Rancangan Khas. Majlis Perbandaran Melaka Bandaraya Bersejarah, Melaka Bandaraya Bersejarah.

Shaftoe Henry, (2008). *Convivial Urban Spaces*, Earthscan.

Shuhana Shamsuddin et al., (2002). *Penyelenggaraan Garis Panduan bagi Campurtangan Pembangunan di dalam Kawasan Bernilai Sejarah dan Budaya di Malaysia*. Universiti Teknologi Malaysia.

Shuhana Shamsuddin, A Bashri Sulaiman & Ja'afar, N.H., (2007). The City And The Identity Of Streets: The Criteria For Success Of The Traditional Shopping Streets In Malaysia. In *Regional Architecture and Identity in the Age of Globalization*. Proceeesing of CSAAR 2007, pp. 699–710.

Utusan On Line, (2011). Limau Lambang Kemewahan. *Utusan On Line (Utusan.com.my)*.

Wrexham County Borough Council, (2009). *Grosvenor Road Conservation Area Assessment and Management Plan*, Wrexham.