

HUMAN ACTIVITY IN COVERED URBAN SPACE A CASE STUDY OF PETALING STREET, KUALA LUMPUR, MALAYSIA

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ABSTRACT Streets are channels of movement and a symbolic representation of local tradition and culture. In South East Asian cities like Kuala Lumpur, Malaysia, they are avenues for socialization just as what plazas are in Europe. They are publicly acknowledged joints for entertainment of peer groups, family members, and guests alike. The physical quality of a street determines the human activities it could support. The changing identity of Petaling Street activity character with the introduction of a permanent cover for the traditional market altered its original activity pattern. It is therefore imperative to evaluate the impact of the new physical environment on human activities within it. The behavioural analysis of the covered street was conducted to appraise its ability to support or restrict human behaviour. User activities of the environment were observed systematically to establish behaviour pattern of the street. Behavioural mapping, behaviour categorisation and behaviour analysis were carried out to identify the functional characteristics associated with covered streets. The research findings show that there is a very strong functional characteristic of the covered street which is consistent with theories of environmental quality enhances human activity. They play a very important role in determining the user of the street, their activities and behavioural patterns. It also realized that the built environment could be to be manipulated to control human behaviour. The research identified that elements such as pedestrian comfort and adjacent land uses appear to influence the level of use within the pedestrian malls. This research will enhance the understanding of design decisions at different scales, such as the introduction of covered streets in Malaysian traditional mark like Petaling Street.

Keywords Human Activity, street culture, functional aspects, behavioral character in Covered Urban Space a Petaling street

1. INTRODUCTION

This research examines the functional aspect of human activities in a covered urban street in Malaysia, a case study of Petaling Street, in Kuala Lumpur. The primary concern is to evaluate the factors associated with human activities the street. Factors are considered in the nature, location, participants and the schedule of human activities.

The research is a case study that seeks to establish the suitability of covered streets to a variety of functions associated with human activities. To this end, types of activities, participants involved, location of activities, and time schedule are basic parameters that could characterize the street. The function of streets varies with the cultural context. Covered street is a new phenomenon in Malaysian urban scene. Therefore, it is important to characterize the behaviour aspects of the setting.

Petaling Street also known as Chinatown is a human response to the built environment, specifically to meet the needs of its residents, the Chinese traders. It is also a means of identifying cultural differences in the use of the public spaces as well as ascertaining the human activities that are unique to a place. It indicates a changing identity of street activity character. According to Wan Hashimah and Shuhana (2005). The aim of this research is to establish the functional characteristics associated with covered street in Malaysia.

2. Behavioural Categorization

The object of the behavioural mapping was to assess the character of the activities within the covered street, and relate the association between the setting and behaviors; how these activities were related to the physical environment and their spatial relation, social structure of the user and the temporal dimension. Therefore in classifying the behaviour into analytical categories, general descriptions of the various activities were made. The probable activities were identified from the pilot observation and categorized as in table 1 below

Table 1. Summary of the Activities Observed In the Street (Source: Field Survey 2007)

Activity	Observation
Commercial	Buying Selling
Leisure	Looking/observing Sitting Talking/chatting Standing Eating
Traffic	Walking Car Motorcycle

According to Rapoport (1977), this type of analysis enables one to specify the characteristics of behaviour setting systems for various purposes and social groups. However, street form setting for activities such as looking,

sitting, talking, eating and drinking- then certain appropriate physical configurations are more likely to achieve this than others; and some may be so inhibiting as to stop behaviour (Rapoport, 1977, p. 301). Traffic through public space is at the heart of the urban experience, an important factor in generating life and activity (Carmona, 2003.p, 169). Rapoport (1977) and Carmona (2003) both support the selection of leisure, commercial and traffic activities as characteristics street behaviors. In the case of Petaling Street, the covered street settings, as well as the free flowing pedestrian walkway enhance commercial, leisure and human traffic flow.

The other information which is important to this study is the social structure of the user. The information will yield the various groups using the street, their activities and association with space and time. The various social groups were categorized as follows (2).

Table 2. Categories for the Different Sexes (Source: Field Survey 2007)

Social group	Observation
Male age 15 years and above	Male
Female age 12 years and above	Female
Male under 15 years old	Boys
Female under 12 years old	Girls

Note: the coming of age for boys and girls in Malaysia is 15 and 12 years old respectively. On reaching this age they are expected to observe all the duties of a Malay e.g. praying, fasting etc. therefore they are considered as adult.

Environmental determinism of human behavior and vice versa is a normal urban design phenomenon as opined by Whyte (1988). This depends on culture, lifestyle, social networks, age and activity systems.



Figure 1. Shows the different categories of sexes (source: field survey 2007)

From the social categorization of street users in table 2, it is clear that, a variety of age groups, the young and the old alike readily patronize street as supported by (figure 1).

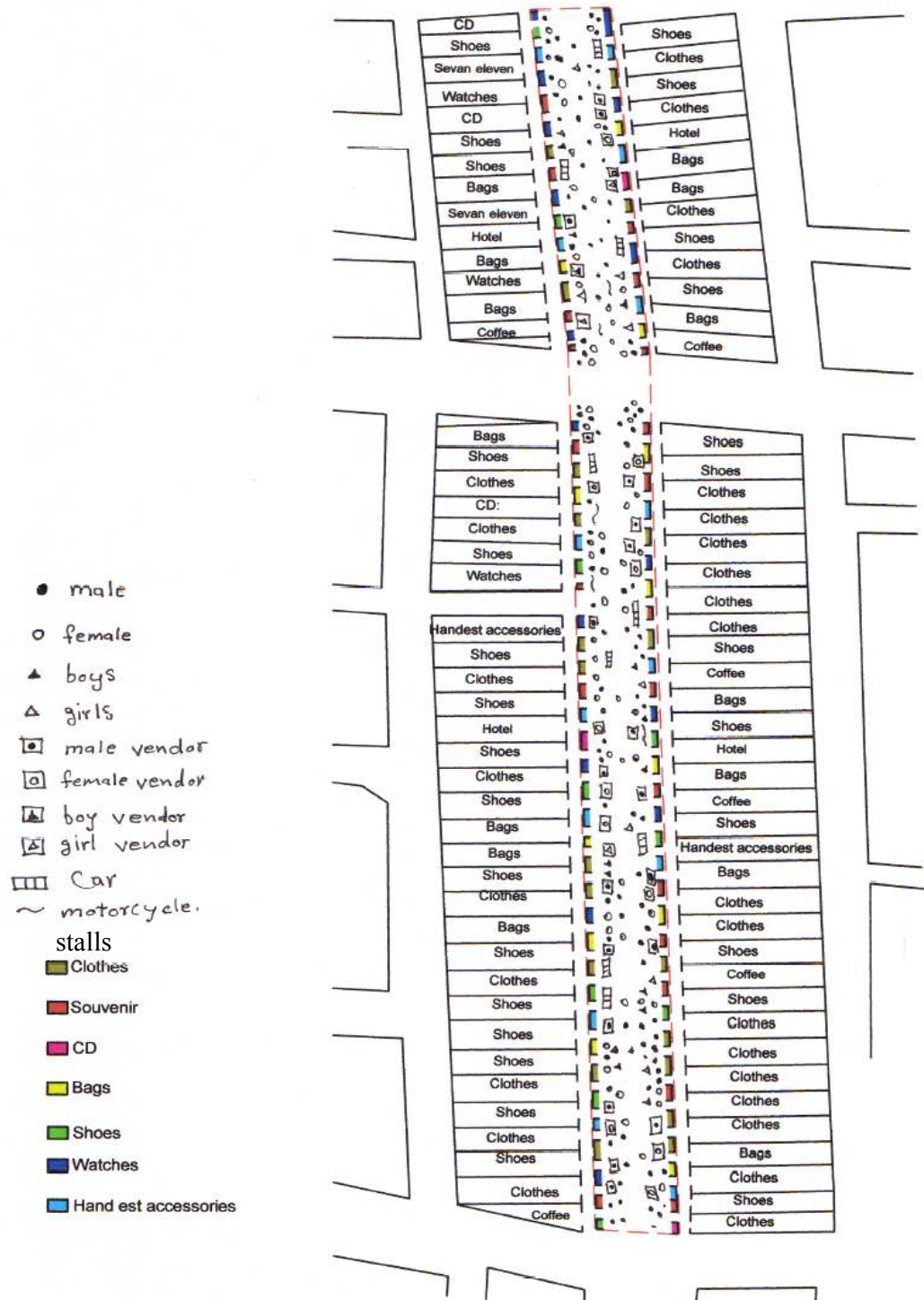


Figure 2. Sample of a recorded data sheet (Source:Field work 2007)

3. Character of street activities

The analysis was done on the behavioural study of street establishing the different types of activities taking place within it. The study will also identified the aspects of the street environment which supporting the activities. Observational data from the study indicates that the characters associated with the street activities can be grouped into three main categories:

- i. Commercial
- ii. Leisure
- iii. Traffic

The table below (table 3) shows the relative frequency of the different activities for the study period from 9.00 am to 11 pm (see also Figure 3).

Table 3. Activities within the Street for the Whole of the Study Period (Source: Field Survey 2007)

Activity	Frequency	Percentage
Traffic	1287	48.5
Commercial	819	30.8
Leisure	549	20.7
Total	2655	100

These activities are generally expected to occur in public streets such as Petaling Street, Kuala Lumpur city centre where they generate life to the place. The environments of the street support these activities by providing physically conducive pedestrian mall, an appropriate setting for them. Rapoport (1977:379) cited Anderson

and Tindall (1972), to suggest that an environment is known for its associated activities, and thus patronized. On the other hand, places that lack the capacities for such activities are impoverished, less used and unknown. The location of Petaling Street in relation to other activity areas of Kuala Lumpur city centre makes it a business hub for pedestrian shoppers,

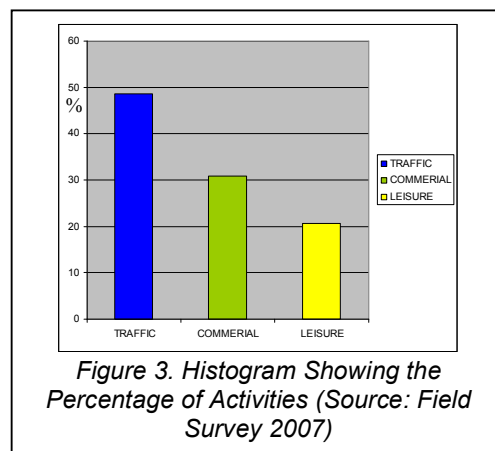


Figure 3. Histogram Showing the Percentage of Activities (Source: Field Survey 2007)

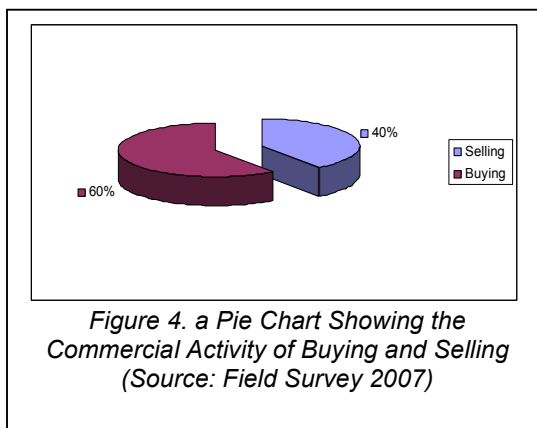
leisure seekers, and passers by. There is a high percentage of people using the street for movement (traffic activities) as detailed in figure 3. This finding converges with Moughtin (2003:138) who cited Lynch's proposition that street is a path enlivened by series of nodes where other paths meet it or where activities intensify to such an extent that place and rest compete for dominance with function of pathway and movement. The following details the level of activities on the street:

i. Commercial Activities

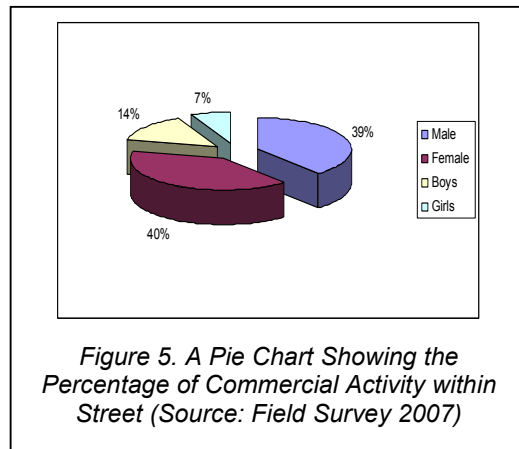
Economic-based street activities is a significant feature and has deep cultural roots amongst the people in cities of developing countries like in Mexico City, in Mexico; Lima, Peru (Pena, 1999) and Kuala Lumpur (Idid, 1985); as well as in urban centres of developed societies such as New York and other European cities (Castells, 1989; Gehl, 1987). The covered street space is not only functioning as a channel of movement but, it is a place to trade, to socialise and even to stay for creation for a time .

Commercial activities on Petaling Street involved buying and selling of a variety of goods and services such as food, arts and craft, clothes, shoes, and electronics. Generally, these are generated by the stalls, the street as well as traders where vendors' sell

merchandise and provide services to pedestrians. This attracts the second largest sample of respondents (31%) during the field observation. It was observed that the commercial activity is at its peak after the disappearance of City Hall operatives, who disperse illegal stalls at the centre of the street. Figures (4) and (6) illustrate the selling and buying activities of 40% and 60% respectively was observed on the street.



The majority of economic-based street activities in Petaling Street are of street vendors, among whom 39% are male and 40% are female. Selling stuffs in permanent stalls are more common among women in Petaling Street, rather than roaming in the street for trading as practiced by illegal traders, mostly men. From observation, the age of vendors are mixed; 32% are younger than 20 years old, 52% are between 20 and 40 years old and the rest are above 40 years old (16%). It is understandable that the age of 20 to 40 is predominant since it is the productive age for the people in general (see Figure 5).



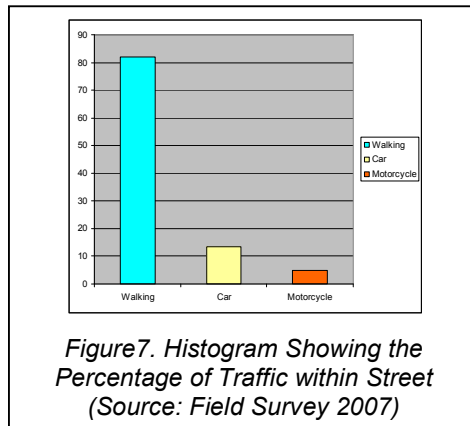
ii. Traffic Use

Heavy pedestrian activities dominate the street, more so that junctions or nodes are a physical feature of the street. On Petaling Street, the meeting point of bazaars used by the pedestrians as well as access for goods transportation generates heavy pedestrian traffic. The justification of highest pedestrian activity is in the multiple options or by-product associated with movement as Carmona (2003) opined. He cited Bill Hiller (1996a, 1996b), who terms; a pedestrian journey in an urban setting is rarely single purpose, as more activities are usually added to the basic motive casually. The mode of traffic observed in the street is as shown below (figure 7). Although the street is pedestrianized, it was observed that vehicles are used for the delivery goods to stalls in the morning.

Table 4. Mod of Traffic within Street (Source: Field Survey 2007)

Mode of traffic	Frequency	Percentage
Walking	1053	81.8

Car	171	13.3
Motorcycle	63	4.9
Total	1287	100

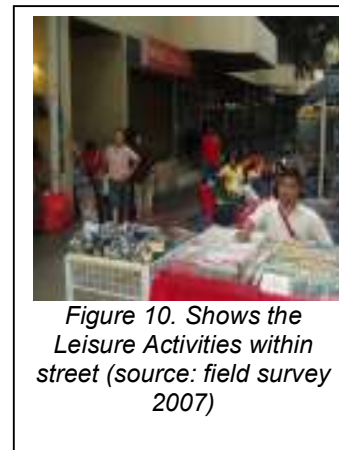
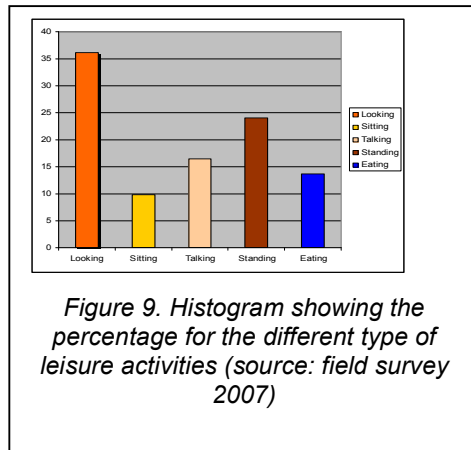


iii. Leisure

It was observed that the percentage of leisure activities occurring in the street is 21%. This could be a result of its spatial quality which is more intimate and sheltered. The climatic condition due to its enclosed nature shades the people from sun and rain. However, thermal comfort is compromised due to poor air movement within the enclosed space. It was observed that sitting activity accounts for the lowest leisure activity of percentage 9.8% with inadequate street furniture for sitting and heavy pedestrian traffic. The different types of leisure activities observed in the street are as indicated below (table 5.5 and figure 5.9) which shows the majority of the people are just looking around and standing.

Table 5. Frequency for the Different Types of Leisure Activities (Source: Field Survey 2007)

Activities	Frequency	Percentage
Looking/observing	198	36.1
Sitting	54	9.8
Talking/chatting	90	16.4
Standing	132	24
Eating	75	13.7
Total	549	100



4. The location of the activities

From the behavioural observation it was found that, consistent with the theory of street, the main traffic movement is on the street perimeter (79.4%) for street which were free from any obstacles (table 6). These paths are situated along the boundary of street that links that activity area around the street. In the Petaling Street, the traffic pattern is also influenced by street hawkers, who use the pedestrian path for trading, in the absence of the city hall (DBKL) operatives. When there are adjoining perimeter stalls, it was observed that the edge of corridor will be the boundary for the traffic path (figure 11). As suggested before, the commercial activities (buying and selling which are largely associated with the street vendors) occur mainly along the perimeter stalls (67.6%, buying 83.1%)

According (Rapoport, 1977), lifestyle, nature, location and timing of activities may be the most useful way of understanding the socio-cultural aspects of the street and integrating approaches such as social networks, activity systems, time allocations, and behaviour settings (Rapoport, 1977, p. 266).

Table 6. The Location of the Activities within the Street (Source: Field Survey 2007)

Location %(row)		Activities				
		Traffic	Selling	Buying	Leisure	Total
Street perimeter	Frequency	1022	221	409	475	2127
	Percentage	79.4	67.6	83.1	86.5	80.1
Street central area	Frequency	265	106	83	74	528
	Percentage	20.6	32.4	16.9	13.5	19.9

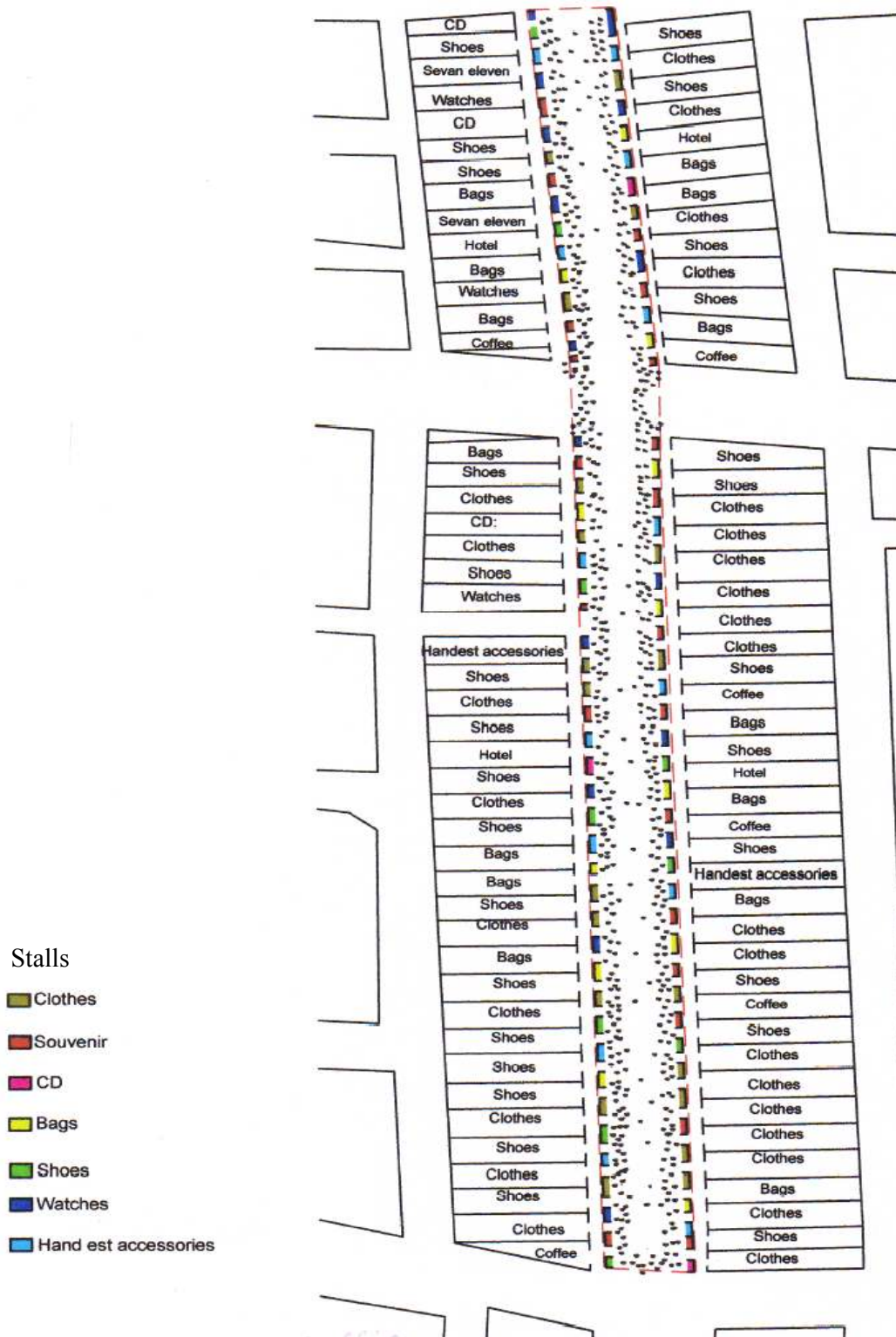


Figure 11. Traffic pattern within street for the whole study period (source: field survey 2007)

5. CONCLUSION

At the last we tried to examine the functional characteristics associated with covered street. It establishes the behavior categories of users as well as patterns of activities within the street. These activities are distributed at different parts of the street. The social structure of users clearly shows the participants in various activities. The temporal aspects of the street shows that weekends attract highest patronage of commercial, leisure and traffic activities due to the trooping of workers, tourists, and other citizens, who take advantage of the week's holiday period to shop, relax and roam about with friends and family. This is followed by Fridays, then working days. The poor rate of activities during working days could be attributed to the high level of white collared inhabitants of Kuala Lumpur who constitute a sizeable population of the city. All these activities relate to Rapoport's (1982) organization of communication, time, space and meaning. The shoppers and leisure seekers respond to the Asian societies' street culture of close interaction in outdoor spaces such as street cafes, exchanging pleasantries, during their free periods, in popular streets (like Petaling), as a way of socializing. The covered nature of the street provides a physical supporting mechanism for the social activities on the street most of the time, even during rains, a common feature of Kuala Lumpur environment (Rapoport, 1977).

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