



UNIVERSITI PUTRA MALAYSIA

**PLACE-BASED ASSESSMENT OF SOCIABILITY OF SHOPPING
STREETS IN THE KUALA LUMPUR CITY CENTRE, MALAYSIA**

MAHBOUBEH RAKHSANIFAR

FRSB 2019 15



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By

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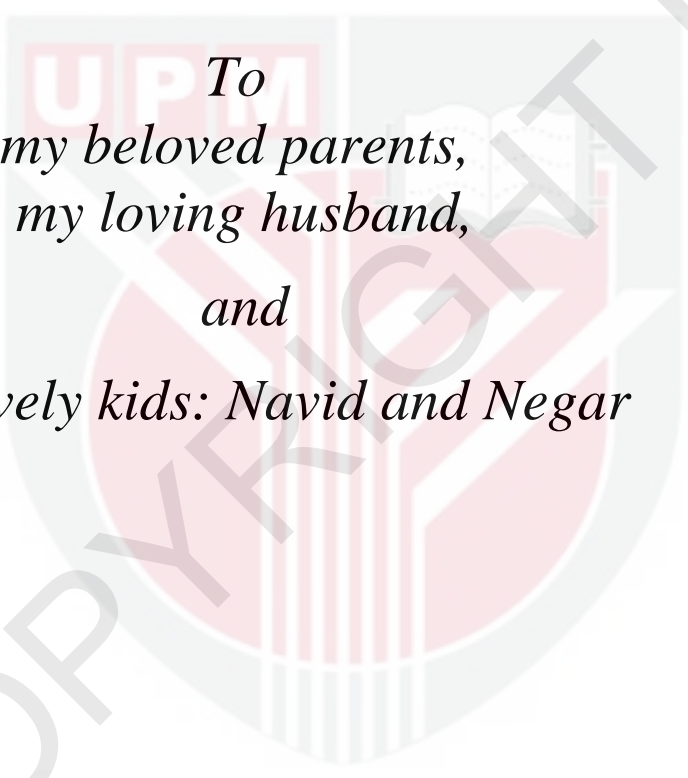
**Thesis Submitted to the School of Graduate Studies, Universiti Putra
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Philosophy**

April 2019

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*To
my beloved parents,
my loving husband,
and
my lovely kids: Navid and Negar*

Abstract of thesis presented to the Senate of Universiti Putra Malaysia in fulfilment of the requirement for the degree of Doctor of Philosophy

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By

MAHBOUBEH RAKHSHANIFAR

April 2019

Chair: Norsidah Ujang, PhD
Faculty: Design and Architecture

The functions of streets as social places have been undermined by the emergence of modern shopping malls that focus on indoor social activities. Streets mainly use as channels for vehicular movement rather than spaces for social activities due to the dominance of car-oriented environment. In the context of Kuala Lumpur city, in spite of the high intensity of pedestrians in the main shopping streets, low social activities observed. The lack of social activities in the main shopping streets could be due to the quality of the physical and the social environmental characteristics. The aim of the research is to determine the street sociability based on the assessment of the people-based and place-based characteristics of selected shopping streets in Kuala Lumpur.

This study employs quantitative research methods. This quantitative cross-sectional study uses two sets of questionnaire surveys to examine SL, PL sociability attributes besides ISL in four main shopping streets namely Jalan Bukit Bintang, Jalan Masjid India, Jalan Petaling and Jalan Tuanku Abdul Rahman. The result obtained using sets of statistical analysis such as: descriptive statistics, correlation, multiple and logit regression, factor analysis, pairwise comparison using SPSS Ver.16 and ANP Super Decision Ver. 2.8.0. The finding of this study lists and orders the level of importance of the SL and PL sociability attributes based on street users' priorities. The finding suggests the safety of crime and traffic and spatial accessibility as the top SL priorities while free entry places, or eateries and services for cheaper prices is the top PL priorities. This study compares two sociability assumptions including peoples' priorities regarding the importance of the sociability attributes and the existing situation of the shopping streets. The finding indicates that the sociability attributes of the street layout do not correspond to the peoples' priorities regarding the importance of the SL/PL sociability attributes. This study highlights the positive contribution of ISL on integrated sociability at both street-level and place-level.

The findings of this study provide a better understanding of the SL and PL characteristics, which support the effort to bring back social activities to the streets as responsive social

spaces while meeting the criteria of the Kuala Lumpur as a world class city. Thus, it introduces a practical method in assessing and predicting street sociability in the context of major cities in Malaysia. In addition, the use of the ANP method expands the body of knowledge in the field of urban planning and design regarding place sociability considering users' priorities of a place.



Abstrak tesis yang dikemukakan kepada Senat Universiti Putra Malaysia sebagai memenuhi keperluan untuk ijazah Doktor Falsafah

**PENILAIAN BERASASKAN TEMPAT TERHADAP KEMOLEHSOSIALAN
JALAN MEMBELI-BELAH DI PUSAT BANDAR KUALA LUMPUR,
MALAYSIA**

Oleh

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Fungsi jalan sebagai tempat bersosial telah terjejas dengan kemunculan pusat membeli-belah moden yang menumpukan kepada aktiviti sosial dalaman. Jalan telah digunakan terutamanya sebagai saluran untuk laluan kenderaan berbanding ruang untuk aktiviti sosial akibat dari dominasi persekitaran berorientasikan kenderaan. Dalam konteks bandaraya Kuala Lumpur, walaupun terdapat pejalan kaki yang ramai di jalan membeli-belah utama, kualiti persekitaran adalah kekurangan utama yang dibentangkan di dalam Pelan Struktur Kuala Lumpur 2020. Kekurangan aktiviti sosial di jalan membeli-belah utama mungkin disebabkan oleh kualiti ciri-ciri fizikal dan persekitaran sosial. Objektif kajian ini adalah untuk menentukan kebolehsosialan jalan berdasarkan penilaian ciri-ciri jalan berasaskan manusia dan tempat di jalan membeli-belah terpilih di Kuala Lumpur.

Kajian ini menggunakan kaedah penyelidikan kuantitatif. Kajian keratan-lintang kuantitatif ini menggunakan dua set soal selidik untuk mengkaji ciri-ciri SL, PL di samping ISL di empat jalan membeli-belah utama iaitu Jalan Bukit Bintang, Jalan Masjid India, Jalan Petaling dan Jalan Tuanku Abdul Rahman. Hasil yang diperolehi dianalisis menggunakan set analisis statistik seperti: statistik deskriptif, korelasi, regresi berganda dan logit, analisis faktor, perbandingan pasangan menggunakan SPSS Ver.16 dan ANP Super Decision Ver. 2.8.0. Dapatan kajian ini menyenaraikan dan menyusun tahap kepentingan sifat SL dan PL yang berdasarkan kepada prioriti pengguna jalan. Dapatan kajian ini mencadangkan keselamatan dari jenayah dan lalu lintas serta akses spatial sebagai prioriti SL yang paling utama manakala tempat masuk yang percuma, atau tempat makan dan perkhidmatan untuk harga yang lebih rendah adalah prioriti PL yang paling utama. Kajian ini membandingkan dua andaian kebolehsosialan termasuklah prioriti masyarakat mengenai kepentingan sifat kebolehsosialan dan keadaan jalan beli-belah sedia ada. Hasil kajian menunjukkan bahawa atribut kebolehsosialan susun atur jalan tidak sesuai dengan prioriti masyarakat terhadap kepentingan atribut kebolehsosialan SL / PL. Kajian ini menekankan sumbangan positif ISL ke atas kebolehsosialan bersepadu di peringkat jalan dan peringkat tempat.

Hasil dapatan kajian ini memberikan pemahaman yang lebih baik tentang ciri-ciri SL dan PL, yang menyokong usaha mengembalikan semula aktiviti sosial kepada jalan sebagai ruang sosial yang responsif dalam memenuhi kriteria Kuala Lumpur sebagai bandar raya bertaraf dunia. Oleh itu, ia memperkenalkan satu kaedah praktikal yang dalam menilai dan meramalkan kebolehsosialan jalan dalam konteks bandar-bandar utama di Malaysia. Di samping itu, penggunaan kaedah ANP mengembangkan pengetahuan dalam bidang perancangan dan reka bentuk bandar mengenai kebolehsosialan tempat yang mengambilkira prioriti pengguna sesuatu tempat.



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This thesis was submitted to the Senate of Universiti Putra Malaysia and has been accepted as fulfilment of the requirement for the degree of Doctor of Philosophy. The members of the Supervisory Committee were as follows:

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LIST OF ABBREVIATIONS

| | |
|-----------|---|
| SL | Street-level: The sociability attributes at the macro-scale level which are more or less similar along the street. |
| PL | Place-Level: The sociability attributes at the micro-scale level in the particular outdoor third places along the streets |
| ISL | Individual Sociability Level: Street users' personal attitudes and tendency toward being engaged in social activities |
| RK | Ranking results: The results of the pair-wised comparison between SL/PL attributes |
| RT | Rating results: The results of the users' assessment regarding the existing situation of the SL/PL attributes in selected shopping streets |
| JBB | Jalan Bukit Bintang |
| JTAR | Jalan Tuanku Abdul Rahman |
| JMI | Jalan Masjid India |
| JP | Jalan Petaling |
| KL | Kuala Lumpur |
| SVS | Social Value of the street: Validation measure of street SL sociability |
| SVP | Social Value of the outdoor third Place: Validation measure of street PL sociability |
| KLCH | Kuala Lumpur City Hall |
| DBKL | Dewan Bandaraya Kuala Lumpur (Kuala Lumpur City Hall) |
| JBPD | Jabatan Perancang Bandar dan Desa (Department of Urban and Rural Planning) |
| Street | A space with the primary essence of movement enclosed by two row of buildings (Bentley, 1985; in: Ujang, 2008), trees, walls or any combination of those elements (Moughtin, 2006). |
| Diversity | Mixed compatible formal and informal land uses and activities together with presence of the people with a mix of ages, ethnic groups and cultural groups |

| | |
|------------------------------|---|
| Accessibility | <p>Economic: Accessibility for all types of economic classes means offering services accessible at all levels of quality and prices</p> <p>Spatial: The freedom or ability of people to achieve their basic needs in order to sustain their quality of life</p> <p>Demographic: Accessibility of the public spaces for variety of people regardless of their economic status or physical abilities</p> |
| Perceived qualities | The experienced value of the place by the street users with regard to sustaining them in healthy, socially rich and economically productive lifestyles that touch lightly on the environment. |
| Seating comfort | how comfortable people feel in a place |
| Visibility | How a place is fitted in with its immediate environment to be in subject to the gaze of everyone else who is occupying that public |
| Place amenities and services | Common elements and services which support social use of a third place like shelter, sitting spaces, cafes and eateries, playgrounds and so on |
| Atmosphere quality | Being lively, playful, and welcoming |
| People, uses, and activities | Function and ‘shared activities’ in the place (formal and informal) |
| Affordability | Place to be reachable for different people with variety of background |
| Public seats | Outdoor seating opportunities provided by a public agency in the form of benches, chairs, and so on. Anyone would be able to use these seats. |
| Commercial seats | Outdoor seating opportunities provided by private businesses, usually in the form fixed benches. |
| Outdoor cafes | On-street cafes which locate the chairs on the street or walkway. Only patrons of these businesses were permitted to use these seats. |
| Integral seating | Outdoor seating opportunities that is adaptively used by the street users for seating like steps, ledges, low walls, etc. |

CHAPTER 1

INTRODUCTION

1.1 Background

Many researchers have suggested that we should be thinking of the street as a social space for pedestrians rather than just a channel for movement (Appleyard, 1981; Gehl, 1987; Jacobs, 1961; Vernez-Moudon, 1991; Mehta, 2013). Streets are a vital component of the urban form and in the city centres (Rahman & Shamsuddin, 2014) where traditionally served three main purposes i.e. for mobility, commerce and social interaction (Habitat, 2013). Pedestrian street life has become a major concern in urban design, planning, management and policy making especially since 1970s with the projects such as 'Life between Buildings' by Gehl (1971¹), 'A Pattern Language' and 'The Timeless Way of Building' by Alexander (1977; and 1979). In addition, Whyte, (1970) in 'The Street Life Project' which published in his seminal book 'The Social Life of Small Urban Spaces' (1980), and Appleyard, (1981) highly emphasized on giving importance to the street environment as a foundation for urban social life. Despite such importance and much efforts focused on this issue, these are not sufficiently explored especially in many developing countries (Guthold, et al., 2008). This is because urban planners still focus their city planning efforts based on the requirements of automobiles rather than people (Aral & Demirbaş, 2016; Kashef, 2016; Zarin, Niroomand, & Heidari, 2015). Accordingly, in spite of vast investments on car-oriented concepts and its related supporting activities, pedestrian-oriented perspectives tend to be undervalued in transportation and traffic planning and practices (Alamouh, et al., 2017; Gehl, 2010). Thus, many modern cities have lost this important social character in their development process. In other words, the development of modern cities has contributed to a great loss of streets significance as spaces for socializing (Ab Rahman, Thani, & Roslan, 2017).

Main role of the streets as dominant public open spaces is to promote social interaction through social activities (Moulay, Ujang, & Said, 2017). In Malaysia, Kuala Lumpur is encountered with the weakening of the social life of the streets. Preliminary observation provides evident that people use the streets a lot but not for social interaction (See appendix A). Loss of social activities might be caused as the quality of the street is not supporting socialization. Similar to the other cities in the world, such unresponsive streets shaped through modernization transformations which undermined the outdoor places with the emergence of modern shopping malls facilitating indoor social activities (Lesan, 2015). Seemingly, the shopping malls and car-oriented street design contribute to the lessening of social function of urban streets in the city (Alabdullah, 2017; Gehtechl & Hook, 2010).

¹ This influential book entitled: *Life Between Buildings* published in Danish in 1971, with the first English translation published in 1987.

People use to privatize the streets spaces informally based on their consumer culture and the need for active and passive engagement and interaction, relaxation, and leisure which supports the concept of public life in the streets (Mehta, 2006). As an example, people might linger on the street corner to relax or might simply sit on the entrance step of a shopping complex to watch street activities and people passing by. Considering informal meaningful public places is an essential counterpart to the street design that must have the ability to support and facilitate peoples' social needs including contact, communication, play, and relaxation, and promote public life, adeptly characterized by Oldenburg, (1981). In this way, introduces 'Third place' as public setting (gathering places) accessible to its inhabitants which play host to informal, casual social interaction and leisure outside of the home and workplace (Oldenburg, 1981). He argued that distinctive informal public gathering places are the essence of the great civilizations as the informal public life is essential to a well-functioning society. 'Third place' concept has received attention from scholars on many field of studies including planning, social and psychological science, and so forth. As an example, extending Oldenburg's work, new third places have been identified like the library, Retirement Community, coffee house (Campbell, 2014; Hawkins & Ryan, 2013; Lin, Pang, & Luyt, 2015; Slater & Jung Koo, 2010), social benefits of the third places have been depicted (Camp, 2015), models for support and attachment have been put forth (Rosenbaum, Ward, Walker, & Ostrom, 2007; Tumanan & Lansangan, 2012), and many have reflected upon how technology and media have possibly expanded the third place concept (Memarovic et al., 2014; Söbke & Londong, 2015). Main characteristics of the third places identified by Oldenburg, (1981) in which he addressed few physical characteristics including the proximity and ease of access from home or work besides likability to provide foods and drink (Mehta, 2006). Thus, Mehta, (2006, 2007, 2013) examined the physical structure of the third places at micro-scale level in the business-owned places. However, the more micro and macro scale level characteristics of the third places need to be explored especially in the field of urban planning and design. Moreover, while Oldenburg seeks to identify the third places that may exist within neighbourhoods, it is necessary to look for the other types of the third places in the whole context of the city including the city centre. In addition, Oldenburg focuses his research work primarily in North America, it is likely that the developed countries may utilize third places differently from developing countries (Crick, 2011). On this basis, this study will concentrate on the micro and macro scale level characteristics of the third places in the shopping streets either authorized business-owned or non-business-owned. The focus is on the sociability of the outdoor third places located along the shopping streets in Kuala Lumpur City Centre. Sociability in this study is defined as: the capacity of the built environment to absorb and accommodate optional or social activities either dynamically or statically (Adapted from Mahdzar, 2008). Outdoor third places are found in the informal places like the small pocket spaces (e.g. street corner, entrance step of the building and etc.) or the formal places such as on-street cafes.

This study is an empirical examination of street users' experiences and assessment of social uses and condition of the selected shopping streets in Kuala Lumpur city centre, Malaysia. Shopping streets are selected as the focus of this study mainly because the enhancement of commercial activities is the main vision of the majority of the countries especially the developing countries like Malaysia (KLCH, 2004). Thus, it investigates its effective factors based on different implementations including: physical, economic, individual and social. In the other words, this study explores the built and non-built environmental factors that leads to formation of the social activities in the shopping

streets. The theoretical basis of this study mainly drew on Barker's theory of 'behavior and setting' (1968) in which he investigates the peoples' behavior in relation to the physical environment. In his theory he emphasized on the importance of the environment as the setting (milieu) and the consequences of human actions and behavior. The former is known as Place-based dimension and the latter is People-based characteristics of the environment (Mehta & Bosson, 2010). Place-based characteristics are those characteristics referring to the street layout such as land use, accessibility, place personalization and so forth. In contrary, this study introduces people-based characteristics as the street users' personal and individual social attitudes. Focusing on the place-based characteristics, this study argues that social activities related to the street as a setting in two different functional scales of macro and micro. Macro-scale characteristics of the street (e.g. accessibility) contributes to the social activities investigated elsewhere (Gehl, 1987; Whyte, 1980; and so forth). In contrary, as urban design concerns, few studies investigate the micro-scale characteristics of the streets contributes to the social activities (Mehta, 2013). The underlying objective of the study is to aid policymaking, planning, and design processes in creating new shopping streets or modifying existing ones to develop the streets as the 'place' for people such that they are able to better afford social interaction.

Based on the brief introduction mentioned above, it can be noted that social activities in shopping streets are the by-products of human actions and behaviour on one hand and the street environment on the other. This study uses a theoretical framework and practical methods to provide rich and detailed information on the possible relationships between street design and their users' activities in the shopping streets and outdoor third places. On this basis, this chapter presents the introduction to the research which is categorized into four main sections. First section of this study explains brief background related to the social life of the streets, definitions of the term 'sociability' and concepts of 'the sociable streets' in urban design literature which is followed by explaining the research problem and issues. The second section explains the research questions, aims and objectives based on the research problem. The third part briefly describes the research methodology employed for the investigation, and the scope and limitation of the research. The last section presents the significance of the research to the development of knowledge and practice in urban design field followed by the overall thesis organization.

1.2 Statement of Problem

The rapid urbanization experienced by many Asian countries has increased awareness about the protection, improvement, and diversification of the functions of public places for a better social life (Moulay et al., 2017; Ujang, 2016; Ujang, Kozlowski, & Maulan, 2018). Many researches addressed enhancement of social interaction through social activities as the main function of the public spaces (e.g. streets) (Moulay et al., 2017); however, many contemporary streets especially in developing countries encountered with erosion of the social life of the streets (Ahmed, et al., 2017; Shamsuddin, Abdul Rahman, & Sulaiman, 2010). The traditional streets have been perceived lively as they accommodate varieties of social activities (Rashid, et al., 2017) including stationary, lingering and sustained activities which are mostly social in nature (Mehta, 2013). In Malaysia, the traditional shopping streets are unique where there are much influenced by the type of retail activities that occur on the street and the ethnicity of the groups

engaged in such trading (Shamsuddin, 2011). One of the major attractions in Kuala Lumpur traditional shopping street is the street activities in which crowds of pedestrians, shoppers and tourists are seen patronizing the shops along the street while socializing (Ahmed et al., 2017). As an example, Jalan Tuanku Abdul Rahman is a traditional shopping street which play significant role as it accommodates varieties of activities (Rashid, et al., 2017); however, in modernization transformation and development, the modern structure might not preserve all the valuable qualities of the traditional streets (social, physical, etc). It might be the reason that currently, in Malaysia one cannot find many examples of street environments that are friendly and accommodating to all users (Rahman, 2013). As an example, there is evident that many people used to and got attached to an informal gathering place at the pocket space of a traditional street which has been replaced by a formal gathering spaces in a modern restaurant. People might not get attached to such a formal place. Thus, developing a street for people especially in the rapid trend of globalization, it seems necessary to explore the fundamental aspects of a street corresponding varieties of people's needs such as social, leisure, etc.

In Malaysian contemporary cities, it is hard to find examples of street environments that are friendly and accommodating to pedestrian users especially in the advent of motorised transportation (Rahman & Shamsuddin, 2014). One of the main problems faced in the Malaysian townscape today is that the streets are overrun by vehicles (Shamsuddin, 2011). In addition to cars, emergence of mega shopping malls leads to undervaluing street social life (Ujang et al., 2018). As it is evident that people fulfil many of the social, functional, and leisure needs in private or virtual realms or to different types of parochial and public spaces (Banerjee, 2001; Rybczynski, 1993). Consequently, the cities experience the changing of city image and place qualities (e.g. social and physical qualities). The results of these transformations are evidently observed in the traditional streets which are constantly replaced by the modern structures. Urbanization in Peninsular Malaysia has developed rapidly which is expected to increase to 75% by 2020 (JBPD, 2006; in: Ujang, 2008). Similar to the other developing countries in the world, the rapid trend of the globalization in many Malaysian cities (JBPD, 2006) causes negative impacts to the urban streets such as: diminishing of significance of public open spaces as a locus of social and cultural interactions. Impact of the rapid development on the city structure addressed in Urban Design and Landscape section of the Kuala Lumpur Structure Plan 2020. These impacts include: the city to be disjointed and lacking in visual and physical coherence. This transformation also results in destruction of the city legibility together with a certain loss of historical continuum and sense of identity (CHKL, 2004). However, this research argues that besides loss of identity, rapid development in KL City caused more critical issues such as altering social fabric of the traditional streets especially in the city center. Accordingly, rapid city development together with the population growth has contributed to the decrease in the quality of the social life in the street environments especially in Kuala Lumpur traditional streets (Rahman, Shamsuddin, & Ghani, 2015) which consequently might have influenced the way the street users behave at these places. This issue become one of the most important concerns in Kuala Lumpur City Center (Ibid). As 'Kuala Lumpur a World class city' is the main vision set up for Kuala Lumpur (KLCH2004), it is of prime importance to analyze the existing infrastructure, find out the existing problems and issues and barriers to build a city which is competing with cities across the world.

As Kuala Lumpur is ranked at number 78th in the World's most liveable city (Shamsuddin, et al., 2013), to be listed among the most liveable cities it is necessary to re-establish the liveability criteria in the city. Street activities especially those which are social in nature are found as one of the main contributors of liveability (Mehta, 2013; Shamsuddin et al., 2013). This highlights the importance of rethinking about social life of the streets considering stationary, lingering and sustained activities in the streets. However, there is evidence that street users mostly observed just walking in the streets and passing by with performing minor social interactions or activities (Ujang et al., 2018). Thus, altering the use of the street from the social and static (stationary, lingering and sustained) to the dynamic (Walking) level considerably reduce the liveliness of the streets (Mehta, 2013). Thus, the question raised which is how does altering the social fabric of the city influence the social value and use of the street? Social value defined as the degree to which different qualities of the built environment impact either positively or negatively on the social relations (Carmona, 2018). Seemingly, despite the growing theoretical and practical efforts that have been carried out in promoting the concept of street for people, studies indicated that the results are still ambiguous and inconsistent (Shay, et al., 2009). On this basis, promoting the more social function of the streets, the more urban design aspects need to be justified which are beyond the addressed urban design principles in KL Structure Plan 2020.

Lack of social activities in the shopping streets could be due to many built and non-built environmental factors such as street users' individual sociability attitudes, macro and microscale street characteristics (Gehl, 1987; Mehta, 2006). Although some built environmental deficiencies addressed in KL Structural Plan 2020 regarding pedestrian-related issues, the Plan focuses more on tackling its structural forms rather than the social structure. It does, however, highlight the protocols for the social program but it lacks the practical solutions for the enhancement of the social fabrics of the street spaces. Thus, to achieve the 'KL as a world class city' vision set up for the KL in the KL Structure Plan 2020, it is expected to concentrate on all essential city functions such as the physical, functional, social, economic, etc. Hence, to develop the streets as the places for people, the development will not be sympathetic to the needs and priorities held by the street users without proper understanding on the significance of the social activities to the street life and factors influencing the place sociability. It is necessary to keep in mind that weakening of the social life of the streets does not necessarily mean lowering the intensity of the pedestrians along the streets. In Malaysia, highest concentration of the pedestrian observed in Kuala Lumpur in which some of the streets in the city center reached 100 pedestrian/hour or higher volume of pedestrian traffic (Arshad, et al., 2016). These streets include Jalan Bukit Bintang (JBB), Jalan Tuanku Abdul Rahman (JTAR), Jalan Masjid India (JMI), and Jalan Petaling (JP). In spite of the high intensity of pedestrians in the main shopping streets of Kuala Lumpur city center, major deficiencies addressed in Kuala Lumpur Structure Plan 2020 regarding the quality of pedestrian environment which might adversely affect the intensity of social activity within the streets. The question raises as: what are the reasons that might influence low intensity of the social activities in the shopping streets in the KL shopping areas?

The main problem of the research relates to lessening social qualities in traditional streets and specifically the high intensity of pedestrian movement in spite of the low intensity of the social activities in the four shopping streets in the Kuala Lumpur city Centre. To confirm the existence of the loss of social activities as the problem in the shopping streets

in Kuala Lumpur, this study conducted the preliminary observations in JTAR and JBB using gate observation and snapshot observation techniques (See appendix A for detail). The results of the observation indicate that in spite of the high volume of pedestrian movement in the selected shopping streets (at least 600 movement per 5 minute), very low level of social activities observed. The volume of social activities is optimized in a few common outdoor gathering places in the streets like Entrance Steps of Sogo Shopping Complex in Jalan Tuanku Abdul Rahman (JTAR) which accommodates the frequency of 988 social activities per hour including stationary, lingering, sustained activities (mean pick hour). However, no social activities observed in many other street spaces in JTAR. The questions are what makes some parts of the street sociable while the other parts of the street do not offer any social activities? And should all street spaces be sociable?

The results of the preliminary observation indicate that pedestrian tend to walk in the shopping streets performing variety of activities including window shopping, eating and drinking, talking on the phone and so forth. It can be concluded that the streets are seemingly well-developed to be conducive to the walking activities as they accommodate high volume of the walking activities. In contrary, low level of the social activities could indicate that such streets are not conducive to support people's engagement with social activities. Interestingly, it raises an argument that a walkable street might not necessarily be sociable. Figure 1.1 presents the frequency distribution of the dynamic and static activities in Jalan Tuanku Abdul Rahman. As illustrated, high intensity of movement observed (i.e. walking and in/moving out for the shops), low intensity of stationary activities recorded. In another example, preliminary observation indicates that Jalan Petaling accommodates high volume of the pedestrian movement which mainly includes shoppers, tourists and hikers. In contrary, lack of the social activities observed in this street. Based on the two-way interaction between people and environment (Rapoport, 1976), it can be interpreted, that JP might afford pedestrian walking while it does not support social activities. On this basis, the main problem found is the lessening of the social activities in the shopping streets in KL city center. Lack of social interaction due to the lack of places for them to engage in social interaction in the city is reported as one of the reasons for residents' dissatisfaction about the quality of life in the city (KL Structure Plan 2020). Shopping streets are the focus of this study since enhancement of the commercial activities is one of the main priorities noted for the city in the Structure Plan.

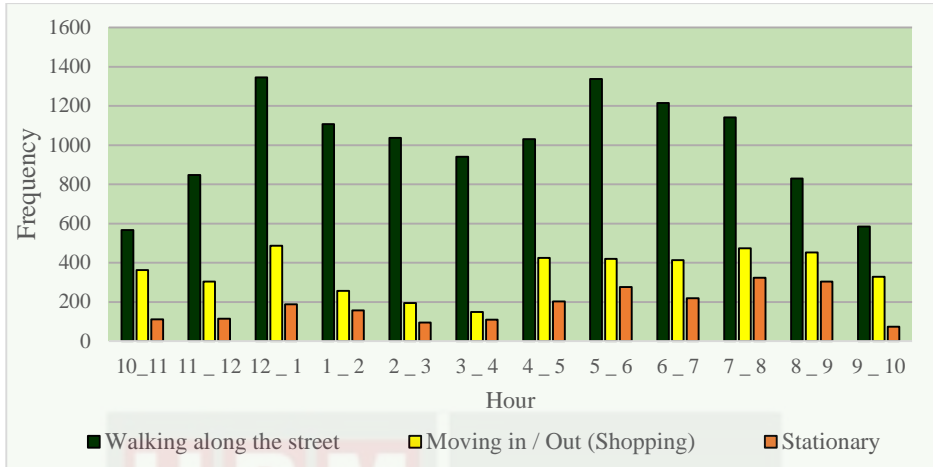


Figure 1.1 : Distribution of dynamic and static activities in Jalan Tuanku Abdul Rahman²

(Source: Author, gate observation and snapshot observation survey, (2015))

Considerable works have been done to establish the relationship between people-based and place-based aspects of sociability within public realms. As an example, macro-scale physical factors addressed as effective factors such as socioeconomic, location, accessibility, major destinations, density, major natural features, and so on (Cervero & Kockelman, 1997; Ewing & Cervero, 2010; Saelens, Sallis, & Frank, 2003). On the other hand, Mehta, (2013) investigated the micro-scale urban design physical factors such as personalization, permeability, shading, etc. To investigate the issue relating to sociability in the shopping streets, this study examines both place-based and people-based aspects underlying social activities. Regarding the place-based characteristics, this study integrates macro and micro scale characteristics of the streets. The macro-scale characteristics defined as Street-Level attributes (SL) highlights the street characteristics as a whole which are more or less similar along the street such as ease of access, safety of crime and traffic and diversity of uses and activities in the street, and the micro-scale characteristics called Place-Level attributes (PL) concentrates on the particular characteristics of the common outdoor gathering places (third places) in the selected streets such as place visibility, place amenities and facilities. However, comprehensive results cannot be obtained by considering the use of the streets for social purposes at the street-level or place-level separately. Some streets seem livelier than others while they present similar street-level factors. On the other hand, distinct variations between the streets uses are observed even in those streets with similar place-level characteristics in the third places.

Thus, this research justifies the SL attributes together with the PL attributes which might be conducive to the street sociability. SL and PL attributes need to be considered together

² The observation in JTAR carried out at the distance between Jalan Parliman intersection to Maju Junction intersection (Left side of the street). The frequency of the activities counted in 5 minutes of every one-hour interval starting 10 Am and ending at 10 Pm.

since incidence of social activities might be caused either by SL or PL attributes. At same time, it might be contributed to both. The SL attributes might affect the quality or perceived PL attributes. For instance, a place might be well designed in terms of the decor and ambience (PL) but it might be located in a poorly accessible area (SL). Or in another example, the street might be planned with compatible land uses (SL) but the gathering places might not be facilitated by the activity-supporting features like benches (PL). Thus, people might not want to visit and remain there for social activities. Thus, on condition that the social activity investigation focuses only on one of the either SL or PL attributes of the street layout, another remaining characteristics would be undervalued. So that, it is necessary to integrate SL and PL (macro and micro) attributes contributing to the social activities to cover wider area of knowledge about social activities in shopping streets.

Besides street and place level attributes which contribute to the social activities, the street users' personal and individual sociability level (ISL) affect intensity and quality of the social uses and activities in the shopping streets. On this basis, this study introduces the Individual Sociability Level (ISL) as the people-based aspect of the sociability as the street users' personal attitudes and tendency towards being engaged in social activities. On this basis, the main target set up for this study is to ensure the practical solutions for development and enhancement of the social fabrics of these shopping streets based on the integration of the SL, PL and ISL attributes. Thus, street sociability is determined as the key emphasis of this study. Street sociability deals with the street on one hand (SL and PL attributes) and street users whom performing dynamic or static activities on the other hand (ISL attributes). Thus, as mentioned earlier this dissertation is an empirical examination of pedestrian social activities in relation to the different characteristics of the street in Kuala Lumpur City Centre. The main objective of this study is to determine to what extent the SL and PL attributes in the shopping streets together with ISL would be conducive and responsive in promoting pedestrian social activities. Two main research problems are addressed in relation to this study:

The study first argues that there is a need for an examination on the theoretical and practical implementations of different factors affecting social life of the streets in different fields of study including: architecture and planning, social and health sciences, economy, transport and other related disciplines. The factors affecting street's social life might have spatial, physical, economic, individual or social dimensions. Designing the street for people need the attention of different fields and expertise (e.g. social science, human geography, environmental behaviour, sociology, transport, planning, economic and psychology). As an example, in the economic field, there is much growing evidence that valuable benefits have been reported as by-products of pedestrians walking in urban spaces such as basic mobility, consumer cost savings, cost savings (reduced external costs), efficient land use, community liveability, improved public health, and economic development (Litman, 2017). These go beyond the economic value of walking when we consider the other types of pedestrian activities especially those which are social in nature. Despite such significance, urban design literature rarely addressed and measured the value of the social activities for the street users.

The second issue raised in this study addressed the particular need to establish theoretical underpinning in the field of urban planning and design. It is to develop the theoretical and operational frameworks based on street users' priorities and experiences regarding a

sociable street. This framework might be developed with a balance relationship between sociability factors at the two main scales of the macro (street-level) and micro (place-level). The rationale behind this approach is that some streets seem certainly livelier than others even though they have similar macro-scale level factors. In contrast, distinct variations between the streets uses are observed even in those streets with similar micro-scale level characteristics. People can sit on an on-street cafes or a public bench. Also, they can find a highly accessible street to choose for their social gathering or meeting friends. That is why it is necessary to look for street sociability factors in both micro and macro levels of scales. On this basis, this study needed to focus on two aspects: looking at what streets could offer to people to support their social activities and what specific sitting places could offer to street users.

1.3 Research Question

This study focuses on users' assessment and satisfaction of the physical characteristics, use, and the level of the social activities of shopping streets. The main research question is: How to redevelop social function of the shopping streets based on weakened local traditional structure? Accordingly, the following sub-research questions are raised to address the research problem:

- (i) What are the street users' priorities and requirements regarding the essential SL/PL characteristics of a good sociable shopping street?
- (ii) To what extent the existing situation of the SL/PL attributes in the shopping street correspond to the street users' priorities regarding the characteristics of a good sociable shopping street?
- (iii) How ISL contributed by the SL and PL attributes can support street sociability in the shopping streets?
- (iv) How to develop a practical sociability framework to bring back social activities to the shopping streets?

1.4 Research Aim and Objectives

The aim of the research is to establish the relationship among the SL, PL and ISL attributes with the street sociability. The following objectives measure the impacts of the place-level and street-level attributes of the shopping streets on street sociability:

- (i) To identify priority order of the importance of the particular SL/PL sociability attributes in making a sociable place (based on the street users' priorities);
- (ii) To analyze the priority order and existing situation of the SL/PL sociability attributes in selected cases.
- (iii) To analyze the effect of the ISL together with the SL and PL attributes on the street sociability.

- (iv) To propose sociability framework for improving street sociability in outdoor third places in selected shopping streets in Kuala Lumpur City Center

1.5 Methodology

This study employs both quantitative and qualitative research methods. Literature review is selected as the strategy of inquiry to explore the theoretical framework of sociability. Then, a cross-sectional survey on case study is carried out in order to examine the main problem of this study. Answering research questions, this study attempts to be exploratory and deductive. General approach of this study highlights the (a) street users' experiences of the social qualities of the particular shopping streets are the key source of references and evidence (Cheshmehzangi & Heat, 2012) in understanding place sociability and identification of sociability priorities. (b) identification of the place/street sociability concerns variety of aspects including: economic, personal, social and the physical aspects of a place which all need to be examined (c) People-based and place-based aspects need to be integrated to fully investigate the street/place sociability. In this regard, the selected shopping streets are investigated based on street users' experiences and satisfaction about the street layout as a 'setting' together with their ISL as 'behaviour' component. Figure 1.2 presents the components of the street sociability based on the research approach.

The study applied on-site questionnaire survey of residents, workers, and visitors to elicit their evaluation and satisfaction toward the street environment and social activities in order to examine the effect of people-based and place-based aspects of the street sociability. Two different survey instruments were developed to measure the following objectives:

- Survey I examines the Street-level (SL) sociability attributes of the shopping streets
- Survey II examines the place-level (PL) sociability attributes of the shopping streets in the outdoor third places

To make the analysis easier to interpret, similar survey design was applied in both questionnaires based on the established theoretical basis. To analyse the surveys, two sets of software used including IBM SPSS Statistic Version 22 and Super Decision Version 2.8 (Analytical Network Process (See chapter 3).

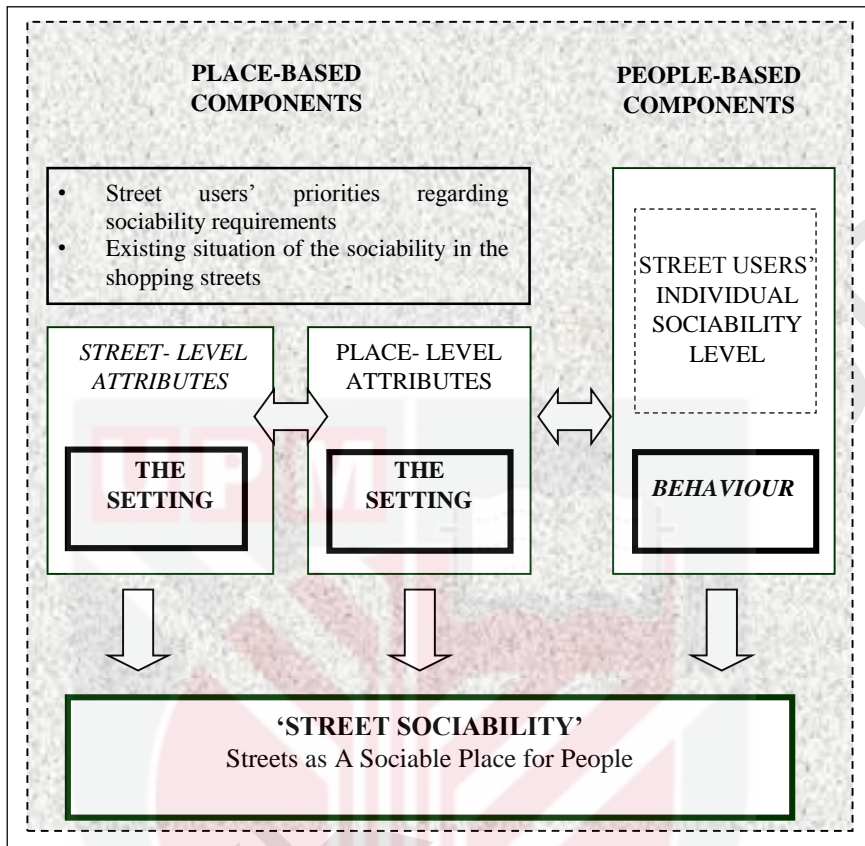


Figure 1.2 : General research components

(Source: Author)

The survey conducted the multiple sets of the observation at both preliminary and final phase of this research (see chapter 3 for details). The activity count has been done in the preliminary stage of the study using ‘gate observation’ and ‘snapshot activity observation’ techniques. The main aim of the activity observation is to ensure that the main problem identified in this study exist in the local context of Malaysia. The field observation includes variety of observations regarding building and street elements such as: building uses, walkway width, street furniture etc. The results of the filed observation assist the researcher to better interpret the questionnaire results and support the findings.

1.6 Scope and Limitation

This study considers and define the six important underlying aspects including:

- (a) People-based and Place-based components of the street sociability
- (b) Scales of the street sociability: Street-Level and Place-Level

- (c) Street users' evaluation on sociability situation of the selected shopping streets on one hand and sociability priorities considering their demographic characteristics on the other hand
- (d) The subjective measures of the physical, spatial, social, and economic characteristics
- (e) Personal and Socio-demographic characteristics of the street users, Individual Sociability Level (ISL)

This study seeks to examine street sociability based on people-based (Behavior) and place-based (Setting) aspects. The study introduces the former as the people's Individual Sociability Level (ISL) while the latter includes Street-Level (SL) and Place-Level (PL) attributes of the streets. On this basis, to explore the street sociability, the study investigates variation in physical, spatial and economic characteristics of different settings besides documenting street users' functional roles. On this basis, the scopes and limitations of the study are listed as following:

(a) The street

Similar to many other academic researches, this research is limited by two main aspects of time and cost in the practical phase. Due to the time limitation and the relevance of the topic to the selected context, the study is focusing on one type of streets: the shopping streets within a commercial district in the city centre of Kuala Lumpur. These streets are well-known as the best shopping streets in the town namely: Jalan Bukit Bintang (JBB), Jalan Masjid India (JMI), Jalan Petaling (JP), and Jalan Tuanku Abdul Rahman (JTAR). All streets have old and new buildings which are mostly commercial in the ground floors. With regards to a wider area, the study will only focus on the shopping districts because it relates strongly with public spaces and public activities which is one of the main concerns of urban design (Ujang, 2008). Shopping streets offers varieties of functions including: leisure, work, shopping, and so forth. That is what it is useful to investigate the social functions of the streets in the shopping streets.

(b) Sociability definitions and social activity

Different scholars in different fields such as psychology and social science addresses the sociability based on differing principles and approaches. This study limits the sociability definition based the urban design issues and components in which the focus is on the 'street sociability' as the ability of the street to be conducive to the social activities. In this way the 'activity' is defined as: 'the specific behavioural manifestation of man-environment relations constituting a form of purposeful transformation of matters of information (Shamsuddin et al., 2013). This study adopts the Mehta's definition (2013) as social activities refers to any stationary, sustained, and lingering activities which are social in nature. Besides that, the study adds optional and social walking to the social activities defined by Mehta, (2013) which is more explained in Chapter 2.

(c) Streets and sociability attributes (Matters of scale)

In the context of environmental design, the components and attributes associated with criteria of good and successful sociable place are varied based on differing principles and approaches. The study will limit the discussion based on the components and attributes of place which are strongly relevant to urban design and the local issues and concerns (refer to Chapter 2). The study categorizes the sociability attributes according to their scales of functions as (a) Street-level attributes (Macro-scale) refer to those attributes of the street which are more or less common in the street layout. The street-level attributes might be formed based on the sets of relations and configurations with the neighbouring streets, neighbourhood or the wider context of the city like the accessibility attributes. Moreover, they do not belong to any single building unit or the specific proportion of the street; in contrast, each single unit and all street segments tie together to shape the particular street-level attribute which perceived by the street users. (b) the Place-Level attributes (Micro-scale) refer to the attributes of the particular common outdoor gathering places in the streets (third places). These distinctive micro-scale attributes of the places are specifically varied among different places along the street such as place visibility. Place-level specifically refers to the common seating places along the street which are either formally designed for seating like public benches, and on-street cafes or informally adopted by the street users to sit, relax, wait, meet friends and so forth like the entrance steps of the shopping malls (Plazas).

This study examines the SL and PL sociability attributes subjectively based on the street users' experiences and assessment. This research argues that beside the indoor gathering places, the outdoor gathering places are growing. This includes the integral places such as the entrance step of a shopping complex that many people used to sit there to rest, relax, and watch people passing by or street activities. This place would also accommodate variety of public arts, musician, showmen and vendors. Thus, the study focuses on the sociability of the common outdoor gathering places in the shopping streets considering SL, PL attributes.

(d) Considering street users' Individual Sociability Level

As many individual factors affect experience of the people about the successful social place, this research considers the individual sociability level together with demographic characteristics in examining street sociability. The demographic characteristics include: gender, age, nationality and race, academic background and monthly income. Considering multi-culture nature of Malaysia, there are likely to be ethnic differences in experiences and attitudes towards social activities in the streets. That is why in the sampling phase it is considered that the samples should be selected randomly in a way that cover all major races including: Malay, Indian and Chinese.

1.7 Significance of the Study

In the context of urban planning and health science, streets design for people would be positively associated with economic growth (Hiebert, Rath, & Vertovec, 2015), physical health (Curl, Ward Thompson, & Aspinall, 2015; Thompson & Kent, 2014), crime reduction (Khder, Mousavi, & Khan, 2016; Kim & Park, 2017), and a sense of community (Hassen & Kaufman, 2016; Whyte, 1988). On the other hand, the concept of 'street for people' is highlighted because they have significant roles in promoting public pedestrian life and social interactions (Appleyard, 1981; Gehl, 1987; Jacobs, 1961; Lynch, 1984; Oldenburg, 1981; Tibbalds, 2012; Vernez-Moudon, 1991). However, valuable social features of the traditional streets have been destroyed through modernization transformations in many cities like Kuala Lumpur. These transformations might have influenced the way the users experienced, perceived and felt about the streets. Consequently, the perceived quality of public life is disrupted by the changing of meanings of the place through the alteration of the urban fabric, city culture and socio-physical environment. Enhancement of the quality of public life is one of the main urban design and planning objectives noted in the Malaysian national vision - Vision 2020. Accordingly, the issue of lessening social activities in the streets seems critical in Kuala Lumpur. Dealing with this issue, Urban Design Guideline for Kuala Lumpur City Centre highlights some pedestrian related proposals such as linking the pedestrian walkways or designing elevated pedestrian roots which ensure easy orientation and movement of the pedestrian (KLCH, 2016). However, what considered as the critical issue in KL streets is beyond pedestrian mobility aspects which point out to the deeper issue of weakening social activities. Thus, to encourage people to remain in the streets longer and participate in social activities the other alternatives need to be investigated. On this basis, question rises that what are the priority needs to enhance social life of the streets? And would it be possible to enhance social life of the streets by improving the physical planning of the streets? In this regard, KL Structure Plan (2020) addresses 'lack of informal places for social and cultural activities' as one of the critical urban design issues concerning Kuala Lumpur streets. It might consequently have resulted in the weakening of the social life of the streets. Providing such informal places can add to the richness of the city living by bringing life back to the streets (KLCH, 2016). This study is crucial because it provides meaningful experience on social interaction in existing outdoor informal places to explore the requirements of such interaction and social activities. It would help to create a vibrant and lively public space based on enhanced urban design elements and qualities. The significance of the investigating social uses of the shopping streets and its effective factors which set as the main concern of this are briefly discussed in the following sections. The main concern of this study is on the urban design knowledge and practice.

(a) The need for integration of the macro and micro scale study of street sociability

As acknowledge in this research, existing literature in the field of urban design do not address any research concentrating on the street sociability based on integrated scales of the SL and PL worldwide as well as Malaysian context. Pervious research on sociability addressed sociability based on either micro-scale factors (Mehta, 2013) or macro-scale

factors (Whyte, 1980). However, a knowledge gap exists on the linkage between the micro and macro scale factors contributing street sociability. This gap might mislead the city planner, designer or the researcher in managing to make any changes in sociability statues of the particular streets. To make an example, people might not be willing to engage in any social activities in a very high accessible street (Macro) because of the lack of the sitting amenities and services in particular common gathering places (Micro). In the other cases, people might not be eager to participate in any social activities in a rich articulated and personalized gathering places (Micro) because of then lack of the safety of crime and traffic in the street (Macro). This study argues that integration of the macro (SL) and micro (PL) scale factors contributing by the street sociability can be of importance to the urban design researchers and authorities especially those whom concentrate on the concept of the 'place'. Thus, the study will strengthen the body of knowledge in the field of urban design in the Malaysian context by integrating SL and PL attributes of the shopping streets in defining the place sociability. As shown in the example, if integration of the SL and PL are not considered in the studies of the place sociability, the success of the developed places might be lost. The main intention of this study is to assist urban policymaking, planning, and design of new streets or the modification of existing ones such that they are able to better afford social interactions.

(b) The need for integration of the economic aspects of the sociability in urban design practices

In the field of urban design, the economic aspect of the street sociability has not been adequately investigated while the other aspects such as: physical are more explored. It is argued that in success of the shopping streets to be social places, the economic implementations of the shopping streets were at least as important, often more so than the other physical aspects of the streets especially in the developing countries like Malaysia (Litman, 2017). Variety, price and quality of the commercial goods and services addressed as the economic aspects of the shopping streets. Integration of the economic aspects and the other aspects of the shopping streets including: physical, social and spatial can be of importance to the city planners and designers in rethinking the streets as places economically and demographically accessible for all people. Thus, this research considers the economic aspects underlie street/ place sociability in developing the theoretical framework at both SL and PL attributes.

(c) The need for exploring pedestrian activities beyond its walking aspects

This research is important in sustaining social activities in the shopping streets. The aim is to avoid developing the streets as the monofunctional spaces as a channel for the movement. Under the tropical weather, even without visible design landscape in the street (Sulaiman, et al., 2017) concludes that users will still continue walking despite the weather affecting them. This research goes beyond pedestrian walking since the meaning of place complied with the social activities rather than walking. Study on the social activities in the shopping streets can enhance the value of the places as an attractive shopping attraction thus benefit the economy of the place and city as a whole.

This study helps to ensure that the further sociability development on the study area would encourage more social activities and vibrancy and it will then boost the economic profit of retailers and shop-owners. Without proper understanding on the significant of the social activities to the street users and factors influencing the place sociability, the intervention work will not be sympathetic to the needs and priorities held by the users on the streets.

1.8 Thesis Organization

This thesis is organized into five chapters as follows:

Chapter 1 introduces the main research problems underlying this research and explains the importance of exploring the problem in the field of urban design. It provides a brief background about sociability in shopping streets within the scope of the study. This is followed by defining the research questions and research methodology.

Chapter 2 describes the theoretical framework underlying the study which is obtained through critical and detailed literature review. As a basis for inquiry, the study adopts a theoretical framework and methods in environmental behaviour, social sciences, and planning fields. This study builds on Barker's (1968) 'concept of behaviour setting' which examines everyday human behaviour with relation to its physical settings. It also adopts Oldenburg's (1981) 'third place theory' which determines six characteristics of the places that are between home and work called "third place". Hillier's (1996) theory of 'cities as the movement economies', which suggests that there is a multiplier effect between land uses and movement is also taken as a foundation of this study. Hillier's (1996) theory was extended to cover social activities in Mahdzar's (2008) work.

Chapter 3 presents the research method and the study locations. For the purpose of this study four main shopping streets in Kuala Lumpur City in Malaysia were selected for examination of the sociability based on street users' experiences. The selected shopping streets were Jalan Bukit Bintang, Jalan Tuanku Abdul Rahman, Jalan Petaling, and Jalan Masjid India. The data collection phase is introduced which includes: survey components, sampling and instrumentation, procedure, and measures.

Chapter 4 presents a) the results and discussion regarding the SL attributes might be conducive to the street sociability. This chapter is divided into two main sections: the first section presents the general overview of the SL attributes in the selected shopping streets and the second section demonstrates the results of the statistical analysis of the SL phase which is recorded and measured based on the street users' experiences and satisfaction. b) This chapter also focuses on the Place-Level attributes (PL) of the sociability in the selected shopping streets. Similar to chapter 4, this chapter is divided into two sections: the first section explains the brief description regarding the common

outdoor gathering places in the selected shopping streets. The second section present the results of the PL survey which measures street users' experiences and satisfaction about PL sociability attributes in the studied shopping streets.

Chapter 5 concentrates on the discussion on the SL and PL results based on the current literate and local issues. The study analyses selected shopping streets according to the proposed SL and PL attributes of the shopping streets in order to develop integrated SL-PL model which are associated with street sociability and pedestrian social activities in general. The result would be interpreted and discussed based on the existing current literature, urban design theories and local shopping culture in Malaysia.

Chapter 6 present the conclusions based on the theoretical framework, case study results and the discussions. This is followed by the research implementation, limitation and knowledge contributions.

REFERENCES

- Ab Rahman, Z., Thani, S. K. S. O., & Roslan, R. (2017). Demystifying the Roles of Streets towards Improving Urban Quality of Life. *Environment-Behaviour Proceedings Journal*, 2(5), 427–437.
- Abdullah, A. M., & Ismail, A. S. (2012). Urban Unfriendliness in Streetscape: A Case Study of Jalan Tuanku Abdul Rahman. *Sustainability In Built Environment I*, 34.
- Aboiron, J., & Aubin, J. (2016). Influence of Store Atmosphere on the Shopper's Behavior: The Case of Yves Rocher. *Journal of Business and Economics*, 7(12).
- Ahmed, I. F. M., Kamarudin, K. H., Ungku, U. N. S., & Rahman, A. (2017). SD 13- Preliminary Examination Of Design Characteristics Of A Pedestrian Friendly Shopping Street In Kuala Lumpur. *Sustainable and Resilient Cities: The Way Forward*, 17.
- Alabdullah, M. M. (2017). Reclaiming urban streets for walking in a hot and humid region: the case of Damman city, the kingdom of Saudi Arabia. The University of Edinburgh.
- Alamouh, S. J., Ja'afar, N. H., Husini, E. M., & Wan, W. N. (2017). SD 7-Comfort Character For Traditional Street Users, A Case Study Of Rainbow Street, Amman. *Sustainable and Resilient Cities: The Way Forward*, 10.
- Alexander, C. (1979). *The timeless way of building* (Vol. 1). New York: Oxford University Press.
- Alexander, C., Ishikawa, S., Silverstein, M., Jacobson, M., Fiksdahl-King, I., & Angel, S. (1977). *Pattern Language Towns, Buildings, Construction*. New York: Oxford University Press.
- Appleyard, D. (1981). *Livable streets*. Berkeley and Los Angeles, CA: University of California Press.
- Appleyard, D. (1991). Foreword. In Moudon, A. V. (ed.). *Public streets for public use* (pp. 5- 8). New York: Columbia University Press.
- Aral, E. A., & Demirbas, Ö. O. (2016). Pedestrians' Perception Of Sub-Spaces Along Urban Roads As Public Spaces—Case Of Eskişehir Road In Ankara. *METU Journal of the Faculty of Architecture*, 32(1).
- Arifin, R., Hashim, M., Ngah, M. S. Y. C., Nayan, N., & Saleh, Y. (2017). Tahap kebisingan trafik dan kesannya terhadap persekitaran pengajaran-pembelajaran sekolah di pusat bandar Kuala Terengganu (Traffic noise and its impact on school teaching and learning environment in Kuala Terengganu city center). *Geografia-Malaysian Journal of Society and Space*, 11(4).
- Arshad, A. K., Bahari, N. I., Hashim, W., & Halim, A. G. A. (2016). Gender differences in pedestrian perception and satisfaction on the walkability of Kuala Lumpur city

- center. In *MATEC web of conferences* (Vol. 47). EDP Sciences.
- Bacon, E. (1967). *Design of cities*. New York: Viking.
- Bahadure, S., & Kotharkar, R. (2015). Assessing Sustainability of Mixed Use Neighbourhoods through Residents' Travel Behaviour and Perception: The Case of Nagpur, India. *Sustainability*, 7(9), 12164–12189.
- Bahrainy, H., & Bakhtiar, A. (2016). Urban Design Urban Design Definition Definition, Knowledge Base and Principles (pp. 5–28). University of Tehran Science and Humanities Series. https://doi.org/10.1007/978-3-319-32665-8_2
- Banerjee, T. (2001). The future of public space - Beyond invented streets and reinvented places. *Journal of the American Planning Association*, 67(1), 9–24.
- Barker, R. (1968). *Ecological Psychology*. California: Stanford University Press.
- Bates, Kai. (2013), Making Pedestrian Malls Work: Key Elements of Successful Pedestrian Malls in the US and Europe. Master Terminal Project University of Oregon.USA.
- Bayón, M. C., & Saraví, G. A. (2013). The cultural dimensions of urban fragmentation: Segregation, sociability, and inequality in Mexico City. *Latin American Perspectives*. <https://doi.org/10.1177/0094582X12468865>
- Bentley, I. (1985). *Responsive environments: A manual for designers*. Routledge.
- Bernard, H. R. (2006). *Research methods in Anthropology: Qualitative and Quantitative Approaches*. Rowman Altamira. <https://doi.org/10.1525/aa.2000.102.1.183>
- Bernhardt, A., & Stoll, L. (2010). Creating Third Places Places where communities gather. *Downtown Economic*, (172).
- Bertolini, L., & Dijst, M. (2003). Mobility Environments and Network Cities. *Journal of Urban Design*, 8(1), 27–43. <https://doi.org/10.1080/1357480032000064755>
- Bhowmik, S. K. (2010). *Hawkers in the Urban Informal Sector: A Study of Street Vendors in Seven Cities*. New Delhi: NASVI.
- Blaga, O. (2013). Pedestrian zones as important urban strategies in redevelopment of community – Case study : Alba Iulia. *Transylvanian Review of Administrative Sciences*, 9(38), 5–22.
- Blichfeldt, B. S., & Mikkelsen, M. (2013). Vacability and sociability as touristic attraction. *Tourist Studies*, 13(3), 235–250.
- Bloch, P. H., Ridgway, N. M., & Sherrell, D. L. (1989). Extending the concept of shopping: An investigation of browsing activity. *Journal of the Academy of Marketing Science*, 17(1), 13–21. <https://doi.org/10.1007/BF02726349>

- Boarnet, M. G., & Crane, R. (2001). *Travel by design: the influence of urban form on travel*. London: Oxford University Press.
<https://doi.org/10.1177/0042098008099355>
- Brighton & Hove - Public Space Public Life. (2014). Gehl Architect.
https://issuu.com/gehlarchitects/docs/issuu_448_brighton_and_hove_pspl
- Bryman, A., & Cramer, D. (1994). *Quantitative Data Analysis for Social Scientists* (revised e). London: Routledge.
- Bryman, A., & Cramer, D. (2012). *Quantitative data analysis with IBM SPSS 17, 18 & 19: A guide for social scientists*. London: Routledge.
- Camp, B. H. (2015). *A study of third place: Benefits of shared leisure practices in public gathering places*. Middle Tennessee State University.
- Campbell, N. M. (2014). Designing retirement community third places: Attributes impacting how well social spaces are liked and used. *Journal of Interior Design*, 39(4). <https://doi.org/10.1111/joid.12035>
- Campbell, N. M. (2015). Third Place Characteristics in Planned Retirement Community Social Spaces. *Journal of Architectural and Planning Research*, 32(1), 55–67.
- Cao, X. (2008). Exploring causal effects of neighborhood design on travel behavior using stratification on the propensity score. *Paper 09-0155 on the Transportation Research Board 88th Annual Meeting CD-ROM*. Washington, DC.
<https://doi.org/10.1068/a4269>
- Cardoso, R. D. C. V., Companion, M., & Marras, S. (2014). *Street Food: Culture, Economy, Health and Governance*. London: Routledge.
- Carmona, M. (2003). *Public Places, Urban Spaces: The Dimensions of Urban Design*. Architectural Press. <https://doi.org/10.1111/febs.12167>
- Carmona, M. (2018). Place value: place quality and its impact on health, social, economic and environmental outcomes. *Journal of Urban Design*, 1–48.
- Cervero, R., & Kockelman, K. (1997). Travel demand and the 3Ds: Density, diversity, and design. *Transportation Research Part D: Transport and Environment*. [https://doi.org/10.1016/S1361-9209\(97\)00009-6](https://doi.org/10.1016/S1361-9209(97)00009-6)
- Cervero, R., Sarmiento, O. L., Jacoby, E., Gomez, L. F., & Neiman, A. (2009). Influences of Built Environments on Walking and Cycling: Lessons from Bogotá. *International Journal of Sustainable Transportation*, 3(4), 203–226.
<https://doi.org/10.1080/15568310802178314>
- Chai, X. (2011). *Redesign of a demolished neighborhood: creating a healthy, safe and sociable Cabrini Green in Chicago*. University of Illinois at Urbana-Champaign.
- Chang, D. (2002). Spatial choice and preference in multilevel movement networks. *Environment and Behavior*, 34(5), 582–615.

<https://doi.org/10.1177/0013916502034005002>

- Cheshmehzangi, A., & Heat, T. (2012). Urban Identities: Influences on Socio-Environmental Values and Spatial Inter-Relations. *Procedia - Social and Behavioral Sciences*, 36, 253–264. <https://doi.org/10.1016/j.sbspro.2012.03.028>
- Ching, F. D. K. (1979). *Architecture: Form, Space, & Order*. Van Nostrand Reinhold.
- Chitrakar, R. M., Baker, D. C., & Guaralda, M. (2016). Urban growth and development of contemporary neighbourhood public space in Kathmandu Valley, Nepal. *Habitat International*, 53, 30–38. <https://doi.org/10.1016/j.habitatint.2015.11.006>
- Choudhury, A. (2008). *Identifying the Criteria That Sustain Livable Streets*. The University of Arizona.
- Creswell, J. W. (2008). *Research Design: Qualitative, Quantitative and Mixed Approaches* (3rd Edition). SAGE Publications, Inc; 3rd edition. <https://doi.org/10.2307/1523157>
- Crick, A. P. (2011). Rethinking Oldenburg: Third Places and Generation Y in a Developing Country Context. *International CHRIE Conference-Refereed Track*. 7.
- Cullen, C. (1961). *The Concise Townscape*. London: Van Nostrand Reinhold Company. <https://doi.org/10.1017/CBO9781107415324.004>
- Curl, A., Ward Thompson, C., & Aspinall, P. (2015). The effectiveness of “shared space” residential street interventions on self-reported activity levels and quality of life for older people. *Landscape and Urban Planning*, 139, 117–125. <https://doi.org/10.1016/j.landurbplan.2015.02.019>
- Curtis, C. (2008). Planning for sustainable accessibility: The implementation challenge. *Transport Policy*, 15(2), 104–112.
- DBKL. (2004). *Draft Kuala Lumpur Structure Plan 2020*.
- De Nadai, M., Vieriu, R. L., Zen, G., Dragicevic, S., Naik, N., Caraviello, M., ... Lepri, B. (2016). Are safer looking neighborhoods more lively?: A multimodal investigation into urban life. In *Proceedings of the 2016 ACM on Multimedia Conference* (pp. 1127–1135).
- du Toit, L., Cerin, E., Leslie, E., & Owen, N. (2007). Does walking in the neighbourhood enhance local sociability? *Urban Studies*, 44(9), 1677–1695. <https://doi.org/10.1080/00420980701426665>
- Duxbury, N. (2008). *Under construction: The state of cultural infrastructure in Canada*. Centre of Expertise on Culture and Communities.
- ECEDG (European Commission. Environment Directorate-General). (2004). *Reclaiming city streets for people: chaos or quality of life?*. Office for Official Publications of the European Communities.

- Erkip, F. (1997). The distribution of urban public services: the case of parks and recreational services in Ankara. *Cities*, 14(6).
- Ewing, R., & Cervero, R. (2010). Travel and the built environment. *Journal of the American Planning Association*, 76(3), 265–294. <https://doi.org/10.1080/01944361003766766>
- Ewing, R., & Clemente, O. (2013). *Measuring urban design: Metrics for livable places*. Island Press.
- Ewing, R., Hajrasouliha, A., Neckerman, K. M., Purciel-Hill, M., & Greene, W. (2016). Streetscape Features Related to Pedestrian Activity. *Journal of Planning Education and Research*. <https://doi.org/10.1177/0739456X15591585>
- Ewing, R., & Handy, S. (2009). Measuring the Unmeasurable: Urban Design Qualities Related to Walkability. *Journal of Urban Design*, 14(1), 65–84. <https://doi.org/10.1080/13574800802451155>
- Fauzi, A. F., & Aditiana, A. (2018). Spatial Analysis in Determining Physical Factors of Pedestrian Space Livability, Case Study: Pedestrian Space on Jalan Kemasan, Yogyakarta. In *IOP Conference Series: Earth and Environmental Science*. <https://doi.org/10.1088/1755-1315/123/1/012042>
- Fellows, R., & Liu, A. (2003). *Research Methods for Construction*. *Quarterly Journal of Economics* (2nd ed.). <https://doi.org/10.11113/jt.v70.2804>
- Fellows, R., & Liu, A. (2008). *Research Methods for Construction* (3rd ed.). Oxford, Malden, MA: Wiley-Blackwell.
- Ferreira, R. (2014). “‘Bushwick was Mine,’ ‘Bushwick es mio:’ Gentrification and the Emotional Displacement of Latinas.” *Senior Projects Spring 2014, Paper 12*. Retrieved from http://digitalcommons.bard.edu/senproj_s2014/12
- Flanagan, C. (1999). *Early socialisation sociability and attachment. Psychology for A level*. London: Routledge
- Forsyth, A., Hearst, M., Oakes, J. M., & Schmitz, K. H. (2008). Design and destinations: Factors influencing walking and total physical activity. *Urban Studies*. <https://doi.org/10.1177/0042098008093386>
- Forward, S. (2001). Walking, communication and practice: attitudes and motivations. *Road User Characteristics With Emphasis On Life-Styles, Quality Of Life And Safety - Proceedings Of 14th Ictct Workshop Held Caserta, Italy*.
- Francis, M. (1984). Mapping Downtown Activity. *Journal of Architectural and Planning Research*, 1, 21–35. <https://doi.org/10.2307/43028671>
- Gehl, J. (1987). *Life Between Buildings*. New York: Van Nostrand-Reinhold.
- Gehl, J. (1989). A Changing Street Life in a Changing Society. *Berkeley Planning Journal*. <https://doi.org/10.5811/westjem.2011.5.6700>

- Gehl, J. (1996). *Life between Buildings*. Copenhagen, Arkitektens Forlag.
- Gehl, J. (2002). *Public Space and Public Life City of Adelaide*. Adelaide City Council
- Gehl, J. (2010). *Cities for people*. Island Press; 2nd None ed. edition
- Gehl, J. (2011). *Life between buildings: using public space*. Island Press.
- Gehl, J., & Gemzøe, L. (2004). *Public spaces-public life*. Copenhagen: Arkitektens Forlag.
- Gehl, J., & Hook, W. (2010). *Our Cities Ourselves: 10 Principles for Transport in Urban Life*. Institute for Transportation & Development Policy
- Gehl, J., Kaefer, L. J., & Reigstad, S. (2006). Close encounters with buildings. *Urban Design International*, 11(1), 29–47. <https://doi.org/10.1057/palgrave.udi.9000162>
- George Street Concept Design. (2013). Gehl Architect. City of Sydney. https://www.cityofsydney.nsw.gov.au/data/assets/pdf_file/0020/154154/George-Street-Concept-Design-Part-1.pdf
- George Street 2020 - A Public Domain Activation Strategy. (2015). City of Sydney. https://www.cityofsydney.nsw.gov.au/data/assets/pdf_file/0010/308827/George-Street-2020-A-Public-Domain-Activation-Strategy_Part3.pdf
- Giles-Corti, B., Broomhall, M. H., Knuiaman, M., Collins, C., Douglas, K., Ng, K., ... Donovan, R. J. (2005). Increasing walking: How important is distance to, attractiveness, and size of public open space? In *American Journal of Preventive Medicine*. <https://doi.org/10.1016/j.amepre.2004.10.018>
- Goffman, E. (1959). *The Presentation of Self in Everyday Life*. NY: Doubleday: Garden City.
- Goldsmith, H. H., Buss, A. H., Plomin, R., Rothbart, M. K., Thomas, A., Chess, S., ... McCall, R. B. (1987). Roundtable: What is temperament? Four approaches. *Child Development*, 505–529.
- Gomez, L. F., Sarmiento, O. L., Parra, D. C., Schmid, T. L., Pratt, M., Jacoby, E., ... Pinzón, J. D. (2010). Characteristics of the built environment associated with leisure-time physical activity among adults in Bogotá, Colombia: a multilevel study. *Journal of Physical Activity & Health*, 7 Suppl 2(Suppl 2), S196-203. Retrieved from <http://www.ncbi.nlm.nih.gov/pubmed/20702907>
- Guan, Y. S. (Ed.). (2014). *The Other Kuala Lumpur: Living in the Shadows of a Globalising Southeast Asian City*. Routledge
- Guetzkow, J. (2002). How the arts impact communities. *Centre for Arts and Cultural Policy Studies*, 7–8.
- Guthold, R., Ono, T., Strong, K. L., Chatterji, S., & Morabia, A. (2008). Worldwide Variability in Physical Inactivity. A 51-Country Survey. *American Journal of*

Preventive Medicine. <https://doi.org/10.1016/j.amepre.2008.02.013>

- Habitat, U. N. (2013). Streets as public spaces and drivers of urban prosperity. *Nairobi: UN Habitat*.
- Harnik, P. (2006). The excellent city park system: what makes it great and how to get there. *The Humane Metropolis: People and Nature in the 21st - Century City*.
- Hasanuddin, L. (2003). *A comparative analysis of perception of urban landmarks between designers, non-designers and laypublic : Kuala Lumpur Malaysia*. University of Sheffield.
- Hass-Klau, C. (2015). *The pedestrian and the city*. London. Routledge.
- Hassen, N., & Kaufman, P. (2016). Examining the role of urban street design in enhancing community engagement: A literature review. *Health & Place*. <https://doi.org/10.1016/j.healthplace.2016.08.005>
- Hawkins, C. J., & Ryan, L. A. J. (2013). Festival spaces as third places. *Journal of Place Management and Development*. <https://doi.org/10.1108/JPMD-02-2013-0002>
- Helling, A. (1998). Changing intra-metropolitan accessibility in the US: evidence from Atlanta. *Progress in Planning*. [https://doi.org/10.1016/S0305-9006\(97\)00032-9](https://doi.org/10.1016/S0305-9006(97)00032-9)
- Hickman, P. (2013). “Third places” and social interaction in deprived neighbourhoods in Great Britain. *Journal of Housing and the Built Environment*. <https://doi.org/10.1007/s10901-012-9306-5>
- Hiebert, D., Rath, J., & Vertovec, S. (2015). Urban markets and diversity: towards a research agenda. *Ethnic and Racial Studies*. <https://doi.org/10.1080/01419870.2014.953969>
- Hillier, B. (1996). Cities as movement economies. *Urban Design International*. <https://doi.org/10.1057/udi.1996.5>
- Hillier, B., & Hanson, J. (1984). *The Social Logic of Space*. Cambridge: Cambridge University Press,.
- Hillier, B., Penn, A., Hanson, J., Grajewski, T., & Xu, J. (1993). Natural Movement-or, configuration and attraction in urban pedestrian movement. *Environment and Planning B: Planning and Design*, 20, 29–66. Retrieved from <http://eprints.ucl.ac.uk/1398>
- Ho, W., He, T., Lee, C. K. M., & Emrouznejad, A. (2012). Strategic logistics outsourcing: An integrated QFD and fuzzy AHP approach. *Expert Systems with Applications*, 39(12), 10841–10850. <https://doi.org/10.1016/j.eswa.2012.03.009>
- Hong, J., Shen, Q., & Zhang, L. (2014). How do built-environment factors affect travel behavior? A spatial analysis at different geographic scales. *Transportation*. <https://doi.org/10.1007/s11116-013-9462-9>

- Husseiny, A. M. El, & Husseiny, A. A. El. (2012). Integration of Static and Dynamic Spaces in Historic Cairo: A Community Spirit that May Vanish. *Procedia - Social and Behavioral Sciences*. <https://doi.org/10.1016/j.sbspro.2012.12.259>
- Isa, M., & Kaur, M. (2015). *Kuala Lumpur street names: A guide to their meanings and histories*. Marshall Cavendish International Asia Pte Ltd.
- Israt, A. S., & Adam, M. (2017). An investigation of physical attributes relevant to the informal street hawking in the urban spaces of Dhaka city. *Journal of Design and Built Environment*, 17(1).
- Iveson, K. (2007). *Publics and the City*. Oxford: Blackwell.
- Izenberg, J. M., & Fullilove, M. T. (2016). Hospitality Invites Sociability, Which Builds Cohesion: a Model for the Role of Main Streets in Population Mental Health. *Journal of Urban Health*. <https://doi.org/10.1007/s11524-016-0027-z>
- Jacobs, A. B. (1993). *Great Streets*. Massachusetts: MIT Press.
- Jacobs, A., Macdonald, E., & Rofe, Y. (2002). *The Boulevard Book: History, Evolution, Design of Multiway Boulevards*. Cambridge, Massachusetts: MIT press.
- Jacobs, J. (1961). The Death and Life of Great American Cities. In *New York*. Vintage Books. <https://doi.org/10.2307/794509>
- Ja'afar, N.H., 2006. Kriteria Kejayaan Jalan Tradisional di dalam Menarik Pengunjung (Criteria of Successful Traditional Street in Attracting Visitor). Universiti Teknologi Malaysia. Unpublished Theses Degree of Master Architecture
- Ja'afar, N. H., & Usman, I. M. (2009). Physical and transportation elements of traditional street in Malaysia. *European Journal of Social Sciences*, 9(4), 669-676.
- Ja'afar, N. H., Sulaiman, A. B., & Shamsuddin, S. (2012). The contribution of landscape features on traditional streets in Malaysia. *Procedia-Social and Behavioral Sciences*, 50, 643-656.
- JBPD. (2006). *National Urbanisation Policy*. Federal Department of Town and Country Planning. (JBPD), Peninsular Malaysia.
- Joh, K., Boarnet, M., Nguyen, M., Fulton, W., Siembab, W., & Weaver, S. (2008). Accessibility, Travel Behavior, and New Urbanism: Case Study of Mixed-Use Centers and Auto-Oriented Corridors in the South Bay Region of Los Angeles, California. *Transportation Research Record: Journal of the Transportation Research Board*. <https://doi.org/10.3141/2082-10>
- Joh, K., Nguyen, M. T., & Boarnet, M. G. (2012a). Can Built and Social Environmental Factors Encourage Walking among Individuals with Negative Walking Attitudes? *Journal of Planning Education and Research*, 32(2), 219–236. <https://doi.org/10.1177/0739456X11427914>
- Johansson, A., Helbing, D., Al-Abideen, H. Z., & Al-Bosta, S. (2008). From crowd

- dynamics to crowd safety: a video-based analysis. *Advances in Complex Systems*, 11(04), 497–527.
- Jones, P., Roberts, M., & Morris, L. (2007). *Rediscovering mixed-use streets: the contribution of local high streets to sustainable communities*. Policy Press in association with the Joseph Rowntree Foundation.
- Kallus, R. (2001). From abstract to concrete: Subjective reading of urban space. *Journal of Urban Design*. <https://doi.org/10.1080/13574800120057818>
- Kaparias, I., Bell, M. G. H., Miri, A., Chan, C., & Mount, B. (2012). Analysing the perceptions of pedestrians and drivers to shared space. *Transportation Research Part F Traffic Psychology and Behaviour*, 15(3), 297–310. <https://doi.org/10.1016/j.trf.2012.02.001>
- Kashef, M. (2016). Urban livability across disciplinary and professional boundaries. *Frontiers of Architectural Research*, 5(2), 239–253.
- Keleg, E. M. M., Salheen, M. A., & Abdellatif, M. (2015). Understanding people's needs for a vivid public realm as a key step towards enhancing the modern Arab cities' identity. *Transformation of the Urban Character of Arab Cities since the Late Last Century*, 201, 201.
- Khder, H. M., Mousavi, S. M., & Khan, T. H. (2016). Impact of Street's Physical Elements on Walkability: a Case of Mawlawi Street in Sulaymaniyah, Iraq. *International Journal of Built Environment and Sustainability*. <https://doi.org/10.11113/ijbes.v3.n1.106>
- Kim, D., & Park, S. (2017). Improving community street lighting using CPTED: A case study of three communities in Korea. *Sustainable Cities and Society*. <https://doi.org/10.1016/j.scs.2016.09.016>
- King, A. C., Blair, S. N., Bild, D. E., Dishman, R. K., Dubbert, P. M., Marcus, B. H., & Al., E. (1992). Determinants of physical activity and interventions in adults. *Medicine and Science in Sports and Exercise*, 24, S221–S236.
- KLCH, K. L. C. H. (2004). Draft Kuala Lumpur Structure Plan 2020, Dewan Bandaraya Kuala Lumpur, Kuala Lumpur.
- KLCH, K. L. C. H. (2016). Urban Design Guidelines for Kuala Lumpur City Centre, Dewan Bandaraya Kuala Lumpur, Kuala Lumpur.
- Koh, P. P., & Wong, Y. D. (2013). Comparing pedestrians' needs and behaviours in different land use environments. *Journal of Transport Geography*. <https://doi.org/10.1016/j.jtrangeo.2012.08.012>
- Kok, V. J., Lim, M. K., & Chan, C. S. (2016). Crowd behavior analysis: A review where physics meets biology. *Neurocomputing*. <https://doi.org/10.1016/j.neucom.2015.11.021>
- Kongeve, Gl. (2012). Public Spaces in Copenhagen: A guide to Copenhagen... Gehl

- Koskela, H., & Pain, R. (2000). Revisiting fear and place: Women's fear of attack and the built environment. *Geoforum*. [https://doi.org/10.1016/S0016-7185\(99\)00033-0](https://doi.org/10.1016/S0016-7185(99)00033-0)
- Kozlowski, M., Ujang, N., & Maulan, S. (2015). Performance Of Public Spaces In The Kuala Lumpur Metropolitan Region In Terms Of The Tropical Climate. *Alam Cipta*, 41–51.
- Krier, R. (1979). *Urban space*. New York: Rizzoli.
- Kwan, M.-P., & Weber, J. (2008). Scale and accessibility: Implications for the analysis of land use–travel interaction. *Applied Geography*, 28(2), 110–123.
- Lai, L. Y., Said, I., & Kubota, A. (2013). The roles of cultural spaces in Malaysia's historic towns: The case of Kuala Dungun and Taiping. *Procedia-Social and Behavioral Sciences*, 85, 602-625.
- Lamit, H. Bin, Ghahramanpouri, A., Nia, S. S., & Torabi, M. (2012). Identifying “ Third Places ” In Relation To Business Premises In Meldrum Walk. In *6th international symposium South East Asian Technical University Consortium (SEATUC)*. Retrieved from publication.fab.utm.my
- Lang, J. (1987). *Creating Architectural Theory: The Role of the Behavioral Sciences in Environmental Design*. Van Nostrand Reinhold.
- Latif, F. M., Nordin, N. A., & Au-Yong, C. P. (2017). Rekabentuk bagi keselamatan bandar di Kuala Lumpur: Satu ulasan kritis (Urban design for a safe city: A critical review of Kuala Lumpur). *Geografia-Malaysian Journal of Society and Space*, 11(9).
- Lau, J. C. Y., & Chiu, C. C. H. (2003). Accessibility of low-income workers in Hong Kong. *Cities*, 20(3).
- Lennard, S. H. C., & Lennard, H. L. (1995). *Livable Cities Observed*. IMCL Council. Carmel, CA: Gondolier Press.
- Lesan, M. (2015). Public Streets for Multicultural Use: Exploring the Relationship between Cultural Background, Built Environment, and Social Behaviour. Victoria University of Wellington
- Leyden, K. M. (2003). Social Capital and the Built Environment: The Importance of Walkable Neighborhoods. *American Journal of Public Health*. <https://doi.org/10.2105/AJPH.93.9.1546>
- Li, M. (2012). A Waste Management System for Small and Medium Enterprises Engaged in Office Building. Queensland University of Technology. 375.
- Lin, H., Pang, N., & Luyt, B. (2015). Is the library a third place for young people? *Journal of Librarianship and Information Science*.

<https://doi.org/10.1177/0961000614532303>

- Litman, T. A. (2017). *Economic value of walkability*. Victoria Transport Policy Institute.
- Llewelyn-Davies. (2000). *Urban Design Compendium. English Partnerships/Housing Corporation*. <https://doi.org/10.1080/00994480.1973.10732231>
- Lobo, C. (2004). *The role of environmental perceptions in sense of place : Case studies of neighborhoods in Phoenix, Arizona*. Arizona State University. UMI Proquest Digital Dissertation.
- Loukaitou-Sideris, A. (2006). Is it safe to walk? Neighborhood safety and security considerations and their effects on walking. *Journal of Planning Literature*. <https://doi.org/10.1177/0885412205282770>
- Lynch, K. (1960). *The image of the city* (Vol. 11). Cambridge, MA MIT press.
- Lynch, K. (1984). *Good city form*. Cambridge, MA: MIT Press.
- Mackie, P. K., Bromley, R. D. F., & Brown, A. M. B. (2014). Informal Traders and the Battlegrounds of Revanchism in Cusco, Peru. *International Journal of Urban and Regional Research*. <https://doi.org/10.1111/1468-2427.12161>
- Mahdzar, S. S. B. S. (2008). *Sociability vs accessibility urban street life*. University of London, University College London (United Kingdom).
- Mahdzar, S. S. S. (2013). Streets for People: Sustaining Accessible and Sociable Streets in Pasir Gudang City Centre. In *Proceedings of the Ninth International Space Syntax Symposium*. Seoul: Sejong University.
- Mahdzar, S. S. S., Mahdzar, S., & Jaberolansar, S. (2014). A Review of Effective Factors of Urban Design with an Emphasis on Pedestrian Movement, *Journal of Basic and Applied Scientific Research*. 4(5), 97–104.
- Mahdzar, S. S. S., Saari, N. S., & Jaberolansar, S. (2016). Planning Integrated Stop Transit for Pedestrian Using Space Syntax Analysis Case Study: Pasir Gudang City. In *10th Seatuc Symposium*.
- Mahmoudi Farahani, L., & Lozanovska, M. (2015). The social life of historical neighbourhoods: case study of a Middle Eastern city, Shiraz. *Journal of Architecture and Urbanism*, 39(3), 176–187. <https://doi.org/10.3846/20297955.2015.1088416>
- Marshall, S. (2009). *Cities: Design and Evolution*. New York: Routledge.
- Masihi, V. M., Modiri, A., Rashidpour, N., & Zoghi, A. (2015). Explanation of functional factors affecting the success of public spaces and providing a model for assessing success through its functional dimension. *International Journal of Architectural Engineering & Urban Planning*, 25(2).
- Maslow, A. (1954). *Motivation and Personality*. New York: Harper and Row.

- Massam, B. (1975). *Location and Space in Social Administration*. London: Edward Arnold.
- Mateo-Babiano, I. B. (2012). Public life in Bangkok's urban spaces. *Habitat International*. <https://doi.org/10.1016/j.habitatint.2012.04.001>
- McDonald, N. C. (2008). The effect of objectively measured crime on walking in minority adults. *American Journal of Health Promotion*, 22(6), 433–36.
- McIntosh, J., Trubka, R., Kenworthy, J., & Newman, P. (2014). The role of urban form and transit in city car dependence: Analysis of 26 global cities from 1960 to 2000. *Transportation Research Part D: Transport and Environment*, 33, 95–110. <https://doi.org/10.1016/j.trd.2014.08.013>
- Meade, L. M., & Sarkis, J. (1999). Analyzing organizational project alternatives for agile manufacturing processes: An analytical network approach. *International Journal of Production Research*. <https://doi.org/10.1080/002075499191751>
- Mehta, V. (2006). *Lively Streets: Exploring The Relationship Between Built Environment And Social Behavior*. University of Maryland.
- Mehta, V. (2007). Lively Streets: Determining Environmental Characteristics to Support Social Behavior. *Journal of Planning Education and Research*, 27(2), 165–187. <https://doi.org/10.1177/0739456X07307947>
- Mehta, V. (2013). *The street: A quintessential social public space*. Routledge. <https://doi.org/10.4324/9780203067635>
- Mehta, V. (2014). Evaluating Public Space. *Journal of Urban Design*. <https://doi.org/10.1080/13574809.2013.854698>
- Mehta, V., & Bosson, J. K. (2010). Third Places and the Social Life of Streets. *Environment and Behavior*, 42(6), 779–805. <https://doi.org/10.1177/0013916509344677>
- Memarovic, N., Fels, S., Anacieto, J., Calderon, R., Gobbo, F., & Carroll, J. M. (2014). Rethinking Third Places: Contemporary design with technology. *Journal of Community Informatics*.
- Mohammadi, F. (2016). A Decision Support System for Demolition Safety. Universiti Teknologi Malaysia.
- Mokhtar, K. S., & Rahman, N. H. A. (2017). Urbanisation process and the prevalence of tuberculosis in Malaysia. *Geografia-Malaysian Journal of Society and Space*, 11(3).
- Moniruzzaman, M., Olaru, D., & Biermann, S. (2017). Assessing the accessibility of activity centres and their prioritisation: a case study for Perth Metropolitan Area. *Urban, Planning and Transport Research*, 5(1), 1–21.
- Montgomery, J. (1998). Making a city: urbanity, vitality and urban design. *Journal of*

Urban Design. <https://doi.org/10.1080/13574809808724418>

- Morris, J. M., Dumble, P. L., & Wigan, M. R. (1979). Accessibility indicators for transport planning. *Transportation Research Part A: General*. [https://doi.org/10.1016/0191-2607\(79\)90012-8](https://doi.org/10.1016/0191-2607(79)90012-8)
- Moulay, A., Ujang, N., & Said, I. (2017). Legibility of neighborhood parks as a predictor for enhanced social interaction towards social sustainability. *Cities*, 61(November), 58–64. <https://doi.org/10.1016/j.cities.2016.11.007>
- Musoni, F. (2010). Operation murambatsvina and the politics of street vendors in Zimbabwe. *Journal of Southern African Studies*. <https://doi.org/10.1080/03057070.2010.485786>
- Nasar, J. L. (1998). *The evaluative image of the city*. Sage Publications.
- Newman, O. (1972). *Defensible Space: Crime Prevention Through Urban Design*. New York: Macmillan.
- Ocalir-Akunal, E. V. (2016). *Using Decision Support Systems for Transportation Planning Efficiency*. (E. V. Ocalir-Akunal, Ed.). IGI Global. <https://doi.org/10.4018/978-1-4666-8648-9>
- Oldenburg, R. (1981). *The Great Good Place*. Berkeley, CA: University of California Press.
- Oldenburg, R. (1999). *The great good place: cafes, coffee shops, bookstores, bars, hair salons, and other hangouts at the heart of a community*. New York: Marlowe and Company.
- Ozbil, A., Peponis, J., & Stone, B. (2011). Understanding the link between street connectivity, land use and pedestrian flows. *Urban Design International*. <https://doi.org/10.1057/udi.2011.2>
- Pain, R. (2001). Gender, race, age and fear in the city. *Urban Studies*. <https://doi.org/10.1080/00420980120046590>
- Paltridge, B., & Starfield, S. (2007). *Thesis and Dissertation Writing in a Second Language. English*. <https://doi.org/10.1016/j.jeap.2008.10.002>
- Pasaogullari, N., & Doratli, N. (2004). Measuring accessibility and utilization of public spaces in Famagusta. *Cities*. <https://doi.org/10.1016/j.cities.2004.03.003>
- Porta, S., & Renne, J. L. (2005). Linking urban design to sustainability: Formal indicators of social urban sustainability field research in Perth, Western Australia. *Urban Design International*. <https://doi.org/10.1057/palgrave.udi.9000136>
- Pozos-Brewer, R. (2015). *Coffee Shops : Exploring Urban Sociability and Social Class in the Intersection of Public and Private Space*. Swarthmore College. Dept. of Sociology & Anthropology

- Prochaska, J. O. (2013). Transtheoretical model of behavior change. In *Encyclopedia of behavioral medicine* (pp. 1997–2000). Springer.
- Prochaska, J. O., & DiClemente, C. C. (1983). Stages and processes of self-change of smoking: toward an integrative model of change. *Journal of Consulting and Clinical Psychology*, *51*(3), 390.
- Public Spaces and Public Life Adelaide. (2011). Gehl Architect. City of Adelaide
- RAFEH, I. (2014). *The Effects of the Tramway on Public Spaces in Tours*. University François Rabelais/ Polytech.
- Rahman, N. A. (2013). User-friendly street in Malaysia. UK: Doctoral dissertation, University of Nottingham.
- Rahman, N. A., & Shamsuddin, S. (2014). A User-Friendly Street in the Context of Malaysia. *On Sustainable Urban Design For Liveable Cities (SUDLiC 2014)*, 144.
- Rahman, N. A., Shamsuddin, S., & Ghani, I. (2015). What Makes People Use the Street?: Towards a Liveable Urban Environment in Kuala Lumpur City Centre. *Procedia - Social and Behavioral Sciences*, *170*, 624–632. <https://doi.org/10.1016/j.sbspro.2015.01.064>
- Rakhshanifar, M. (2011). *Configuration vs. Attractors accounting pedestrian movement in the cases of Qiyam and Emam Street*. University Technology Malaysia.
- Rakhshanifar, M. (2018). A Decision Support System For Demolition Waste Management. Universiti Teknologi Malaysia.
- Rapoport, A. (1976). *The mutual interaction of people and their built environment*. Walter de Gruyter.
- Rapoport, A. (1990). *History and Precedent in Environmental Design*. New York: Plenum Publishing Corporation.
- Rashid, S. A., Wahab, M. H., Rani, W. N., & Ismail, S. (2017). Safety of street: The role of street design. In *AIP Conference Proceedings* (Vol. 1891, p. 20008). AIP Publishing.
- Rogers, S. H., Halstead, J. M., Gardner, K. H., & Carlson, C. H. (2011). Examining Walkability and Social Capital as Indicators of Quality of Life at the Municipal and Neighborhood Scales. *Applied Research Quality Life*, *6*(201). <https://doi.org/10.1007/s11482-011-9144-8>
- Rosales, N. (2011). Towards the modeling of sustainability into urban planning: Using indicators to build sustainable cities. *Procedia Engineering*, *21*, 641–647. <https://doi.org/10.1016/j.proeng.2011.11.2060>
- Rosenbaum, M. S. (2006). Exploring the social supportive role of third places in consumers' lives. *Journal of Service Research*. <https://doi.org/10.1177/1094670506289530>

- Rosenbaum, M. S. (2009). Restorative servicescapes: Restoring directed attention in third places. *Journal of Service Management*.
<https://doi.org/10.1108/09564230910952762>
- Rosenbaum, M. S., Ward, J., Walker, B. A., & Ostrom, A. L. (2007). A cup of coffee with a dash of love: An investigation of commercial social support and third-place attachment. *Journal of Service Research*.
<https://doi.org/10.1177/1094670507303011>
- Rudofsky, B. (1969). *Streets for People: a primer for Americans*. Garden City, NY: Doubleday.
- Rybczynski, W. (1993). The New Downtowns. *Atlantic Monthly*, 27(5), 98–106.
- Saarloos, D., Joh, C.-H., Zhang, J., & Fujiwara, A. (2010). A segmentation study of pedestrian weekend activity patterns in a central business district. *Journal of Retailing and Consumer Services*, 17(2), 119–129.
<https://doi.org/10.1016/j.jretconser.2009.11.002>
- Saelens, B. E., Sallis, J. F., & Frank, L. D. (2003). Environmental correlates of walking and cycling: Findings from the transportation, urban design, and planning literatures. *Annals of Behavioral Medicine*.
https://doi.org/10.1207/S15324796ABM2502_03
- Samadi, Z., Yunus, R.M. & Alam, S., 2012. Urban Heritage Street ' Revitalizing Attributes. *Asian Journal of Environment Behaviour Studies*, 3(January), pp.69-78.
- Sarmiento, O. L., Schmid, T. L., Parra, D. C., Díaz-del-Castillo, A., Gómez, L. F., Pratt, M., ... Duperly, J. (2010). Quality of life, physical activity, and built environment characteristics among colombian adults. *Journal of Physical Activity & Health*, 7 Suppl 2(Suppl 2), S181-95. Retrieved from <http://www.ncbi.nlm.nih.gov/pubmed/20702906>
- Satariano, W., Ivey, S., Kurtovich, E., Kealey, M., Hubbard, A., Bayles, C., ... Prohaska, T. (2010). Lower- body function, neighborhoods, and walking in an older population. *American Journal of Preventive Medicine*, 38(4), 419–28.
- Sepe, M. (2013). *Planning and place in the city: Mapping place identity. Planning and Place in the City: Mapping Place Identity*. <https://doi.org/10.4324/9780203076149>
- Shahideh, S. (2013). Analyzing the Quality of Pedestrian Street in the Case of Istiklal Street in Walled City of Famagusta. Gazimağusa, North Cyprus: Eastern Mediterranean University.
- Shamsuddin, S. (1997). *“Identity of place: A case study of Kuantan town centre, Malaysia.”* University of Nottingham.
- Shamsuddin, S. 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. Proceesing of CSAAR 2007*, pp. 699-710

- Shamsuddin, S., & Ujang, N. (2008). Making places: The role of attachment in creating the sense of place for traditional streets in Malaysia. *Habitat International*, 32(3), 399-409.
- Shamsuddin, S., Abdul Rahman, N., & Sulaiman, A. B. (2010). How walkable is our city? Its influence in creating sustainable city centre design. In *International Conference Sustainable Architecture & Urban Design*.
- Shamsuddin, S. (2011). Townscape Revisited: Unraveling the Character of the Historic Townscape in Malaysia. *Penerbit UTM Press*.
- Shamsuddin, S., Rasyiqah, N., Hassan, A., & Sulaiman, A. B. (2013). Liveability of Kuala Lumpur City Centre : An Evaluation of the Happiness Level of the Streets ' Activities. *International Journal of Humanities and Social Sciences*.
- Shay, E., Rodriguez, D. A., Cho, G., Clifton, K. J., & Evenson, K. R. (2009). Comparing objective measures of environmental supports for pedestrian travel in adults. *International Journal of Health Geographics*. <https://doi.org/10.1186/1476-072X-8-62>
- Shigematsu, R., Sallis, J. F., Conway, T. L., Saelens, B. E., Frank, L. D., Cain, K. L., ... King, A. C. (2009). Age differences in the relation of perceived neighborhood environment to walking. *Medicine and Science in Sports and Exercise*, 41(2), 314–21. <https://doi.org/10.1249/MSS.0b013e318185496c>
- Shou, T. D., & Lin, M. C. (2018). Apply analytic network process (ANP) to analyze the Decision factors of relief resources allocation: a case Study in Taipei street trees recovery in post -disaster. *Journal of Engineering & Technology (An International Bi-Annual Journal)*, 4(1), 1–8.
- Simmel, G. (1896). in Kurt Wolffe (ed.) *Georg Simmel 1858-1918*. Columbus: Ohio State University Press.
- Simmel, G. (1949). The Sociology of Sociability. *American Journal of Sociology*, 55(3).
- Sinnett, D., Williams, K., Chatterjee, K., & Cavill, N. (2011). Making the case for investment in the walking environment. A review of the evidence. University of the West of England, Bristol.
- Slater, A., & Jung Koo, H. (2010). A new type of “Third Place”? *Journal of Place Management and Development*. <https://doi.org/10.1108/17538331011062658>
- Söbke, H., & Londong, J. (2015). A Social Network Game as virtual Third Place: Community Enabler in Virtual Learning Environments? In *Proceedings of World Conference on Educational Multimedia, Hypermedia and Telecommunications 2015*.
- Southworth, M., & Ben-Joseph, E. (1996). *Streets and the Shaping of Towns and Cities*. New York: McGraw-Hill.

- Stutter, N. (2017). *The Social Life of Street Food: Exploring the Social Sustainability of Street Food in Hanoi, Vietnam*. Cardiff University.
- Sulaiman, A.B. and Shamsuddin, S (2001). "The Vanishing Streets in Malaysia Urbanscape". In Pu Miao (Ed),. *Public Places in Asia Pacific Cities. Current Issues and Strategies*. Norwell, MA: Kluwers Academic Press. 137-149
- Sulaiman, N., Ayu Abdullah, Y., & Hamdan, H. (2017). Street as Public Space - Measuring Street Life of Kuala Lumpur. In *IOP Conference Series: Materials Science and Engineering*. <https://doi.org/10.1088/1757-899X/245/8/082025>
- Sun, C. (2010). *The Role Third Places Play In Facilitating Acculturation For International Students In The U S*. Faculty of California State University, Chico.
- Sung, T. K. (2015). The creative economy in global competition. *Technological Forecasting & Social Change*, 96.
- Swapan, A. Y. (2013). 'Third Place'-an Urban Regeneration Strategy. In *Paper presented at the international conference on engineering research, innovation and education (ICERIE), SUST, Sylhet, Bangladesh*.
- Talen, E. (2000). Measuring the public realm: A preliminary assessment of the link between public space and sense of community. *Journal of Architectural and Planning Research*. <https://doi.org/10.1080/10643389.2012.728825>
- Tarudin, N. F., Firdaus, Muhammad, Rashid, A., & Nurul Elma Kordi, Elmi Alif Azmi, T. N. A. T. A. (2016). The Improvement on the Sidewalk in Commercial Areas at City Center in Malaysia. *Journal of Applied Environmental and Biological Sciences*, 6(9S), 35–38.
- Tauber, E. M. (1972). Why Do People Shop? *Journal of Marketing*. <https://doi.org/10.2307/1250426>
- Tenth Malaysian Plan. (2010). *Putra Jaya, EPU, Prime Minister's Department*.
- Thompson, S., & Kent, J. (2014). Connecting and strengthening communities in places for health and well-being. *Australian Planner*. <https://doi.org/10.1080/07293682.2013.837832>
- Thwaites, K. (2010). The Experiential Landscape. Retrieved from <http://www.elprdu.com/about.%0Ahtml>
- Thwaites, K., Helleur, E., & Simkins, I. M. (2005). Restorative urban open space: Exploring the spatial configuration of human emotional fulfilment in urban open space. *Landscape Research*. <https://doi.org/10.1080/01426390500273346>
- Thwaites, K., Simkins, I., & Mathers, A. (2011). Towards Socially Restorative Urbanism: Exploring Social and Spatial Implication for Urban Restorative Experience. *Landscape Review*, 13(2).
- Tibbalds, F. (2012). *Making people-friendly towns: Improving the public environment in*

towns and cities. Taylor & Francis.

- Traunmueller, M., Marshall, P., & Capra, L. (2016). ... when you're a Stranger: Evaluating Safety Perceptions of (un) familiar Urban Places. In *Proceedings of the Second International Conference on IoT in Urban Space* (pp. 71–77). ACM.
- Tseng, S. M. (2012). Correlations between external knowledge and the knowledge chain as impacting service quality. *Journal of Retailing and Consumer Services*. <https://doi.org/10.1016/j.jretconser.2012.04.004>
- Tumanan, M. A. R., & Lansangan, J. R. G. (2012). More than just a cuppa coffee: A multi-dimensional approach towards analyzing the factors that define place attachment. *International Journal of Hospitality Management*, 31(2), 529–534.
- Ujang, N. (2008). Place attachment towards shopping districts in Kuala Lumpur City Centre, Malaysia. Universiti Putra Malaysia.
- Ujang, N. (2012). Place Attachment and Continuity of urban place identity. *Procedia-Social and Behavioral Sciences*, 49. <https://doi.org/10.1016/j.sbspro.2012.07.014>
- Ujang, N. (2016). Defining Place Attachment in Asian Urban Places through Opportunities for Social Interactions. *Environment-Behaviour Proceedings Journal*, 1(1), 28–35.
- Ujang, N., Kozłowski, M., & Maulan, S. (2018). Linking place attachment and social interaction: towards meaningful public places. *Journal of Place Management and Development*, 11(1), 115–129.
- Urban Life Account. (2013, 2015). Technical and Environmental Administration. City of Copenhagen. www.kk.dk
- Ultav, Z. T., Çağlar, T. N., & Durmaz Drinkwater, S. B. (2015). Architectural literary analysis: Reading “The Death Of The STREET” Through Ballard’s literature and Trancik’s “Lost Space.” *Metu Journal of the Faculty of Architecture*. <https://doi.org/10.4305/METU.JFA.2015.2.10>
- Vernez-Moudon, A. (1991). *Public Streets for Public Use*. New York: Columbia University Press.
- Wan Hashimah, W.I. (2010). User’s Perceptions of Shopping Activities in the Historic City of Malacca. *Asian Journal of Environment-Behaviour Studies*, 1(3), 73-82.
- Wang, G. (2011). Public Walking Space. A study of Commercial Pedestrian Streets in Copenhagen, Stockholm and Nanjing. Blekinge Institute of Technology Spatial Planning with an emphasis on Urban Design in China and Europe
- Wardono, P., Hibino, H., & Koyama, S. (2017). Effects of Restaurant Interior Elements on Social Dining Behavior. *Asian Journal of Environment-Behaviour Studies*, 2(4), 43–53. <https://doi.org/10.21834/aje-bs.v2i4.209>
- Watkins, R., Meiers, M., & Visser, Y. (2012). *A Guide to Assessing Needs: Essential*

tools for collecting information, making decisions, and achieving development results. Washington DC: World Bank. <https://doi.org/10.1596/978-0-8213-8868-6>

Watson, S., & Studdert, D. (2006). *Markets as sites for social for social interaction: spaces of diversity.* Joseph Rowntree Foundation and Policy Press.

Whitehead, J. C. (2002). Incentive Incompatibility and Starting-Point Bias in Iterative Valuation Questions: Reply. *Land Economics*, 78, 285–297. <https://doi.org/10.2307/3654746>

Whyte, W. H. (1980). *The Social Life of Small Urban Spaces.* *Urban Life.* Urban Life. <https://doi.org/10.1088/1751-8113/44/8/085201>

Whyte, W. H. (1988). *Rediscovering the center city.* *New York: Double-Day.*

Whyte, W. H. (2000). *How to Turn a Place Around.* Projects for Public Space Inc.

Ybarra, O., Burnstein, E., Winkielman, P., Keller, M. C., Manis, M., Chan, E., & Al., E. (2008). Mental exercising through simple socializing: social interaction promotes general cognitive functioning. *Personality and Social Psychology Bulletin*, 34.

Yin, L. (2013). Assessing Walkability in the City of Buffalo: An Application of Agent-Based Simulation. *Journal of Urban Planning and Development*, 139(September), 166–175. [https://doi.org/10.1061/\(ASCE\)UP.1943-5444.0000147](https://doi.org/10.1061/(ASCE)UP.1943-5444.0000147).

Yin, R. K. (2009). *Case Study Research: Design and Methods*(4th Ed.)Thousand Oaks, CA: Sage. <https://doi.org/10.1097/FCH.0b013e31822dda9e>

Zainal Abidin, N. (2017). *Designing sustainable city centre regeneration in Malaysia: the case of Kuala Lumpur.* University of Birmingham.

Zakaria, J., & Ujang, N. (2015). Comfort of Walking in the City Center of Kuala Lumpur. *Procedia - Social and Behavioral Sciences*. <https://doi.org/10.1016/j.sbspro.2015.01.066>

Zakariya, K. (2006). Refining tourist's place experience through placemaking: a case study on middle east tourists in kuala Lumpur city centre. Universiti Teknologi Malaysia.

Zakariya, K. (2011). *Fleeting feast: mapping and accommodating temporary markets.* RMIT University.

Zarin, S. Z., Niroomand, M., & Heidari, A. A. (2015). Physical and Social Aspects of Vitality Case Study: Traditional Street and Modern Street in Tehran. *Procedia - Social and Behavioral Sciences*. <https://doi.org/10.1016/j.sbspro.2015.01.068>

Zeisel, J. (1984). *Inquiry by Design: Tools for Environment Behavior Research.* *Inquiry by Design: Tools for Environment Behavior Research.* <https://doi.org/10.2307/2066778>

Zhu, X., Yu, C. Y., Lee, C., Lu, Z., & Mann, G. (2014). A retrospective study on changes

in residents' physical activities, social interactions, and neighborhood cohesion after moving to a walkable community. *Preventive Medicine*. <https://doi.org/10.1016/j.ypmed.2014.08.013>

Zimring, C., Joseph, A., Nicoll, G. L., & Tsepas, S. (2005). Influences of building design and site design on physical activity: Research and intervention opportunities. In *American Journal of Preventive Medicine*. <https://doi.org/10.1016/j.amepre.2004.10.025>



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LIST OF PUBLICATIONS

- Rakhshanifar, M., Taghvaei, F., Taheri, N. Sociability and accessibility in cases of Malaysia. (2011). International conference on simulation and modelling and development - Kuala Lumpur – Malaysia. ISI cited publication in IEEE
- Taghvaei, F., Rakhshanifar, M., Taheri, N. Social community in the case of Mehriz – Iran. (2011). Proceeding: International Conference on Sustainable Development. Sharjah – UAE. (April 2011)
- Dehgahn, F., Rakhshanifar, M. Ecological sustainability in cases of Iran. (2011). Proceeding: International Conference on Sustainable Development. Sharjah – UAE. (April 2011)
- Rakhshanifar, M., Loon Wai, C. Configuration vs. attractors and others. (2011). 8th space syntax symposium - San diago (accepted abstract)
- Rakhshanifar, M., Ujang, N. Relationship between Micro-scale Physical Elements of the Shopping Streets and Pedestrian Movement. (2018). Accepted in Journal of Sustainable Development
- Rakhshanifar, M., Ujang, N. Prioritizing Sociability Attributes of Main Streets in A Multi-Cultural Context (2019). Accepted for inclusion in the epochal issue of open house international — Urban transformations in rapidly growing contexts (Scopus).
- Rakhshanifar, M., Ujang, N. People-based and Place-based characteristics of the street sociability (2019). Accepted in: Journal of Academia Baru. (in press)



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