

## **UNIVERSITI PUTRA MALAYSIA**

# PUBLIC EVALUATION OF STREETSCAPE IN KUALA LUMPUR CITY CENTER, MALAYSIA

**SOHA SOLTANI** 

FRSB 2017 14



## PUBLIC EVALUATION OF STREETSCAPE IN KUALA LUMPUR CITY CENTER, MALAYSIA



Thesis Submitted to the School of Graduate Studies, Universiti Putra Malaysia, in Fulfillment of the Requirements for the Degree of Master of Science

## **COPYRIGHT**

All material contained within the thesis, including without limitation text, logos, icons, photographs and all other artwork, is copyright material of Universiti Putra Malaysia unless otherwise stated. Use may be made of any material contained within the thesis for non-commercial purposes from the copyright holder. Commercial use of material may only be made with the express, prior, written permission of Universiti Putra Malaysia.

Copyright © Universiti Putra Malaysia



## **DEDICATION**

In the name of Allah, I dedicate this thesis to everyone who deserves to live in a better city and society that we love. Truly specially, I dedicate this thesis to my parents and my lovely husband who always love and support me.



Abstract of thesis presented to the senate of Universiti Putra Malaysia in fulfillment of the requirement for the degree of Master of Science

## PUBLIC EVALUATION OF STREETSCAPE IN KUALA LUMPUR CITY CENTER, MALAYSIA

By

### **SOHA SOLTANI**

## May 2017

Chairman : Norsidah Binti Ujang, PhD Faculty : Design and Architecture

Physical elements, mainly landscape features shape streetscapes of cities. The review of literature demonstrates that pride, symbolism, attachment, recognizability, and fulfilment are the attributes of images of a street associated with people's experience and perception. The problem pursued in this study is that inconsistency among physical elements weakens images of streets in the city center of Kuala Lumpur. Hence, the study aims at enhancing the images of streets in the City Center of Kuala Lumpur. The objectives of the study are: (1) to identify the existing physical elements of Tuanku Abdul Rahman (JTAR) and Bukit Bintang Streets (JBB) for improving the imageability of the city center of Kuala Lumpur, and (2) to determine the role of physical elements in forming the images of Tuanku Abdul Rahman (JTAR) and Bukit Bintang (JBB) Streets in making the city center of Kuala Lumpur more imageable.

In light of the objectives aforementioned, the researcher employed a sequential mixed method to gather the data. First, a systematic observation study documented the real condition of physical elements of the two streets. Followed by that, a self-administered questionnaire survey investigated public evaluation of physical elements of streetscapes in the study areas. To strengthen the findings, the data gathered from both methods were converged through triangulation method. The researcher chose 330 participants via the time interval sampling method from passers-by, shoppers, workers, office workers, shopkeepers, shop-owners, and local residents who were familiar with study areas. The results demonstrated that transparency and seating spaces contributed to memorable images of streets in the city center of Kuala Lumpur the most and the least respectively. This study falls under a practical urban study that offers insights into development of future streetscapes. The findings present pragmatic suggestions that assist urban designers in bringing psychological comfort into urban contexts.

## PENILAIAN ORANG AWAM TERHADAP SKAP JALAN DI PUSAT BANDAR KUALA LUMPUR, MALAYSIA

Oleh

## **SOHA SOLTANI**

#### Mei 2017

Pengerusi : Norsidah Ujang, PhD Fakulti : Rekabentuk dan Senibina

Elemen fizikal terutamanya elemen landskap membentuk landskap jalan (streetscape) bandar. Kajian literatur menunjukkan bahawa kebanggaan, simbolisme, ikatan, memorability, recognizability dan kepuasan adalah sifat imej jalan yang berkaitan dengan pengalaman dan persepsi pengguna. Permasalahan yang dikemukakan dalam kajian ini adalah ketidakseragaman fizikal elemen melemahkan imej jalan di pusat bandar Kuala Lumpur. Matlamat kajian ini ialah untuk meningkatkan imej tempat iaitu jalan utama di pusat bandar Kuala Lumpur. Objektif kajian ini adalah: (1) untuk mengenal pasti elemen fizikal yang sedia ada di Jalan Tuanku Abdul Rahman (JTAR) dan Jalan Bukit Bintang (JBB) untuk meningkatkan imageability pusat bandar Kuala Lumpur; dan (2) untuk menentukan peranan elemen fizikal dalam membentuk imej Jalan Tuanku Abdul Rahman (JTAR) dan Jalan Bukit Bintang (JBB) untuk menjadikan pusat bandar Kuala Lumpur lebih *imageable*. Berdasarkan objektif di atas, penyelidik menggunakan kaedah campuran berturutan untuk pengumpulan data. Kaedah pertama ialah kajian pemerhatian sistematik yang merekod keadaan sebenar elemen fizikal di dua jalan tersebut. Kemudian, soal selidik bagi mengkaji penilaian orang awam terhadap elemen fizikal landskap jalan (streetscape) di kawasan kajian. Untuk mengukuhkan dapatan kajian, data yang diperolehi daripada kedua-dua kaedah telah dikumpulkan melalui kaedah triangulasi. Penyelidik telah memilih 330 responden menggunakan kaedah persampelan sela masa yang terdiri daripada pengguna jalan, pembeli, pekerja, pekerja pejabat, penjaga kedai, pemilik kedai dan penduduk tempatan yang biasa dengan kawasan kajian. Dapatan kajian menunjukkan transparensi paling menyumbang kepada memori imej jalan di pusat bandar Kuala Lumpur manakala ruang tempat duduk adalah penyumbang terendah. Kajian ini adalah termasuk di dalam kajian bandar praktikal yang memberikan cadangan kepada pembangunan landskap jalan (streetscape) pada masa hadapan. Hasil dapatan kajian menunjukkan cadangan prakmatik yang boleh membantu pereka bentuk bandar dalam memberi keselesaan psikologikal ke dalam konteks bandar.

### **ACKNOWLEDGEMENTS**

Foremost, I am extremely thankful to God; for without his mercy and beneficence, I would not be successful in achieving my goals.

Next, I would like to express my thanks and appreciation to each of the following:

Great thanks to Universiti Putra Malaysia and the Faculty of Design and Architecture.

My warmest thanks go to my supervisor, Dr. Norsidah Ujang and co-supervisor, Dr. Faizawati Binti Abdul Aziz who sincerely assisted me during my research.

My warmest thanks go to my dear husband, Dr. Amir Hossein Askari, for his encouragement during my research.

Special thanks to my dear parents and my sibling, for their encouragement and support throughout my research period.

I certify that a Thesis Examination Committee has met on 18 May 2017 to conduct the final examination of Soha Soltani on her thesis entitled "Public Evaluation of Streetscape in Kuala Lumpur City Center, Malaysia" in accordance with the Universities and University Colleges Act 1971 and the Constitution of the Universiti Putra Malaysia [P.U.(A) 106] 15 March 1998. The Committee recommends that the student be awarded the Master of Science.

Members of the Thesis Examination Committee were as follows:

## Osman bin Mohd Tahir, PhD

Associate Professor LAr. Faculty of Design and Architecture Universiti Putra Malaysia (Chairman)

## Nobaya binti Ahmad, PhD

Associate Professor Faculty of Human Ecology Universiti Putra Malaysia (Internal Examiner)

## Hasanuddin Lamit, PhD

Associate Professor Universiti Teknologi Malaysia Malaysia (External Examiner)

NOR AINI AB. SHUKOR, PhD

Professor and Deputy Dean School of Graduate Studies Universiti Putra Malaysia

Date: 8 August 2017

This thesis was submitted to the senate of Universiti Putra Malaysia and has been accepted in partial as fulfillment of the requirement for the degree of Master of Science. The members of the supervisory committee were as follows:

## Norsidah binti Ujang, PhD

Associate Professor Faculty of Design and Architecture Universiti Putra Malaysia (Chairman)

## Faizawati binti Abdul Aziz, PhD

Senior Lecturer
Faculty of Design and Architecture
Universiti Putra Malaysia
(Member)

ROBIAH BINTI YUNUS, PhD

Professor and Dean School of Graduate Studies Universiti Putra Malaysia

Date:

## **Declaration by graduate student**

I hereby confirm that:

- this thesis is my original work;
- quotations, illustrations and citations have been duly referenced;
- this thesis has not been submitted previously or concurrently for any other degree at any other institutions;
- intellectual property from the thesis and copyright of thesis are fully-owned by Universiti Putra Malaysia, as according to the Universiti Putra Malaysia (Research) Rules 2012:
- written permission must be obtained from supervisor and the office of Deputy Vice-Chancellor (Research and Innovation) before thesis is published (in the form of written, printed or in electronic form) including books, journals, modules, proceedings, popular writings, seminar papers, manuscripts, posters, reports, lecture notes, learning modules or any other materials as stated in the Universiti Putra Malaysia (Research) Rules 2012;
- there is no plagiarism or data falsification/fabrication in the thesis, and scholarly integrity is upheld as according to the Universiti Putra Malaysia (Graduate Studies) Rules 2003 (Revision 2012-2013) and the Universiti Putra Malaysia (Research) Rules 2012. The thesis has undergone plagiarism detection software.

Signature:	Date:	
Name and Matric No: S	oha Soltani, GS33964	

## **Declaration by Members of Supervisory Committee**

## This is to confirm that:

- the research conducted and the writing of this thesis was under our supervision;
- supervision responsibilities as stated in the Universiti Putra Malaysia (Graduate Studies) Rules 2003 (Revision 2012-2013) were adhered to.

Signature:		
Name of		
Chairman of		
Supervisory		
Committee:	Associate Professor Dr. Norsidah binti Ujang	
Signature:		
Name of		
Member of		
Supervisory		
Committee:	Dr. Faizawati binti Abdul Aziz	

## TABLE OF CONTENTS

			Page
ABST ACKI APPR DECI LIST LIST	ROVAL LARAT OF FIG OF TAI	GURES	i ii iii iv vi x xii xiii
CHA	PTER		
1	GEN 1.1 1.2 1.3 1.4 1.5 1.6 1.7 1.8 1.9 1.10 1.11	Research Questions Research Objectives Research Significance Research Methodology Operational Definitions The Scope of Research	1 1 2 3 3 3 3 4 4 4 4 4 5
2	2.1 2.2 2.3 2.4 2.5 2.6 2.7	Introduction Streets in The City 2.2.1 Definition Of A Street 2.2.2 Types of Streets Role of Streets in an Urban Context Image of a Place Place Perception and Imageability Image of a Street Streetscape 2.7.1 Definition of a Streetscape 2.7.2 Streets and Streetscapes in Malaysian 2.7.3 Perception of a Streetscape 2.7.4 Evaluation of Streetscape 2.7.5 Physical Elements of a Streetscape	6 6 6 7 8 9 10 11 13 14 15 15
3	3.1 3.2 3.3	Conclusion  THODOLOGY  Introduction  Research Design  Methods	21 23 23 23 24
	3.4	The Study Areas	25

	3.5	The Variables of the Study	25
	3.6	Data Collection Procedures	25
		3.6.1 Questionnaire Survey	27
	3.7	Sample Size	29
	3.8	Sampling Method	29
	3.9	Data Analysis	30
		3.9.1 PearsonCorrelationAnalysis	30
	3.10	Conclusion	31
4	RESU	ULTS AND DISCUSSION	32
	4.1	Introduction	32
	4.2	Results of Field Observation(Study Area 1)	32
		4.2.1 The Physical Elements(JBB)	33
		4.2.2 Study Area 2	43
	4.3	The Demographics of Participants	54
		4.3.1 Age	55
		4.3.2 Gender Group	55
		4.3.3 Ethnicity	56
		4.3.4 Educational Background	56
		4.3.5 Working Group	57
		4.3.6 Main Purpose	57
		4.3.7 Occupation	58
		4.3.8 Level of Familiarity	59
		4.3.9 Frequency of Visit	60
	4.4	Descriptive Analysis of Physical Elements	61
	4.5	Influence of Physical Elements on the Street Images	62
	4.6	The Building Facades that Contribute to the Images	64
	4.7	Triangulation of the Findings	71
	4.8	Conclusion	71
5	SUM	MERY OF FINDING	72
	5.1	Introduction	72
	5.2	Physical Elements and The Image of Streets	72
	5.3	Transparency and Image of Streets	73
	5.4	The Implication and Contribution of The Findings	74
	5.5	Recommendations for Future Studies	75
	5.6	Conclusion	75
REFER	RENCI	ES	76
APPEN	DICE	$\mathbf{S}$	88
<b>BIODA</b>	TA O	F STUDENT	97

## LIST OF FIGURES

Figure 2.1	Research design process, adapted from ujang (2008)	Page 12
2.2	Research design process, adapted from ujang (2008)	17
2.3	Research design process, adapted from ujang (2008)	22
3.1	Research design process, adapted from ujang (2008)	24
3.2	Data Collection Procedures	26
4.1	Jalan Bukit Bintang	33
4.2	Views of part A: in Jalan Bukit Bintang	34
4.3	Views of part B: in Jalan Bukit Bintang	35
4.4	Views of part A and B: Jalan Bukit Bintag	36
4.5	Bukit Bintang intersection	37
4.6	Views of partC: Jalan Bukit Bintang	38
4.7	Views of partC: Jalan Bukit Bintang	39
4.8	Views of part D: Jalan Bukit Bintang	40
4.9	Views of part D: Jalan Bukit Bintang	44
4.10	Views of Part A: Tuanku Abdul Rahman	45
4.11	Views of Part B: Tuanku Abdul Rahman	46
4.12	Views of Part B: Tuanku Abdul Rahman	47
4.13	Views of Part B: Tuanku Abdul Rahman	48
4.14	Views of part C: Tuanku Abdul Rahman	49
4. 15	Views of part C: Tuanku Abdul Rahman	50
4.16	Views of part D: Tuanku Abdul Rahman	51
4.17	Jalan Tuanku Abdul Rahman	54
4.18	Buildings of Jalan Bukit Bintang	64
4.19	Buildings of Jalan Tuanku Abdul Rahman	65
4.20	Views of Pavilion	67
4.21	View of Sephore	67
4.22	Views of Starhill Gallery	67
4.23	View of BB Plaza	68
4.24	View of Lot 10, JBB	68
4.25	View of CIMB Bank, JBB	68
4.26	View of Shophouses, JTAR	69

4.27	View of SOGO, JTAR	69
4.28	View of Maju Junction, JTAR	69
4.29	View of Pertama Complex, JTAR	70
4.30	View of Pawagam Coliseum, JTAR	70
4.31	View of Premiera Hotel, JTAR	70



## LIST OF TABLES

Table 2.1	Theoritical framework	Page 14
3.1	Sampling Errors For Different Sample Sizes	30
4.1	The Results Of Field Observation On Jalan Bukit Bintan Right Side	41
4.2	The Results Of Field Observation On Jalan Bukit Bintan Left Side	42
4.3	The Results Of Field Observation On Jalan Tuanku Right Side	52
4.4	The Results Of Field Observation On Jalan Tuanku Left Side	53
4.5	Frequency Of Participants According To Their Age Groups	55
4.6	The Frequency Of Participants According To Their Gender	55
4.7	The Frequency Of Participants Based On Their Ethnicities	56
4.8	The Frequency Of Participants According To Their Educaational	57
4.9	Frequency Of Participants According To Their Working Place	57
4.10	Frequency Of Participants According To Their Purpose Of	58
4.11	The Frequency Of Participants According To Their Occupation	59
4.12	Frequency Of Participants According To The Level Of Familiarty	60
4.13	Frequency Of Participants According To Times Of Visiting	60
4.14	Attractive Building Facades On JBB and JTAR	61
4.15	Correlation Between Visual Qualities And Physical Features	61
4.16	Correlation Between Visual Qualities And Elements And Place	62
4.17	Model Summary <sup>B</sup> For The Factors Influencing JBB's Image	63
4.18	Attractive Building Facades on JBB and JTAR	66

## LIST OF ABBREVIATIONS

JTAR Jalan Tuanku Abdul Rahman

JBB Jalan Bukit Bintang

DBKL Dewan Bandaraya Kuala Lumpur



#### **CHAPTER 1**

#### INTRODUCTION

### 1.1 Background of the Study

Streets, as important elements in a city, constitute a significant part of the public open spaces in urban areas and are the most important symbols of the public realm. Streets are the places where people can regularly visit and commune with friends, neighbors, coworkers, and even strangers (Mehta, 2007). A street is generally a type of public open space that has been the center of attention in numerous studies related to the environment design (Lynch, 1960; Krier, 1991; Moughtin, 2003). Prior to giving a suitable definition to a street, it is essential to analyze and understand its physical elements (Jacobs, 1961). This introduces a street as a public road in cities or towns where houses or buildings flank it on both sides (Shuhana et al., 2004). Therefore, it is a dynamic space that instills the sense of movement (Carmona et al., 2003).

In the urban design, streets are the main constituents of the faces of cities (Carmona et al., 2003). Streets with their physical elements that give a strong sense of enclosure play an important role in making city images (Carmona et al., 2003). The design of a city that materializes different components of a city including its streets is an attempt that forms the image of a street. The correspondence between users and their cities with the aid of the new identity that the cities have obtained, has stressed the necessity of having a suitable living environment as well as achieving a high quality of life (Bulduk, 2012). Qualities, elements, and materials underpin the urban identity (Cheshmehzangi, 2013). As Relph (1976) asserted, the urban identity relates to 'physical features or appearance, observable activities and function, and meanings or symbols'. The physical elements and features are a 'navigation mechanism' as well as a 'visual tool' with which the image of a place is appreciated (Cheshmehzangi, 2013). The urban image of a place bases a mental map that is formed through physical elements or activities of which (Tazilan et al., 2008). The place image is an important variable of place identity. Understanding places originates from the elements that make their images. Image of a place is delineated by the physicality of its constituting elements such as buildings, softscape, hardscape, street furniture, etc. Places might be imageable on their own, but more importantly, what makes them associated with others is the awareness of signage and symbolism (Ngesan et al., 2013). Hence, identity is linked to the meanings and perception held by people in relation to their environment (Ujang, 2012b). A significant factor linked to the experience of urban environments, here streets, is the way people perceive, interpret, and analyze the visual elements that shape images of such spaces (Oktay, 2002). The physical elements of streets, as the main places in urban contexts, help people create images of streets in their minds that form the place identity. The direction in which people tend to move their eyes when inspecting images can reveal the different influences on eye guidance in scene perception (Foulsham & Kingstone, 2010).

The past memories associated with the places that etch socio-cultural meanings on people's minds play a significant role in making urban places, such as streets, memorable (Shuhana, 2011). The reason is found in that the past memories that relate to particular

visual elements of the places establish a signage and symbolism system in mind (Ngesan et al., 2013). This signifies that physical forms, elements, and features reflect place image. Creating distinctive images of the study streets complies with City Hall Kuala Lumpur's vision in strengthening the weak visual identity in most areas of the City Center of Kuala Lumpur. City Hall Kuala Lumpur (2008) stressed the lack of streetscape consistency along main streets as well as the lack of broad visual linkages in the City Center. Review of the relevant literature in Malaysia demonstrates that achieving the main objective of the current study, which addresses identifying the role of the physical elements of streets in the City Center of Kuala Lumpur in making their images, is significant and worth studying. As such, streets are visually comfortable for the users in the City Center and impart aesthetic values to the cityscape. This significantly contributes to the development and establishment of urban identity for Malaysian cities.

### 1.2 Problem Statement

Although Southeast Asian streets are complex in nature, studies that regard them as public places are scant. Most of the current related studies rely on the Western contexts that may not have any significant role in improving the image of streets in the Southeast Asian urban contexts, especially Kuala Lumpur (Oranratmanee & Sachakul, 2014). The emergence of new buildings has created a monotonous urban image in most main streets in Malaysia (Hashimah & Shuhana, 2005). Subsequently, most of the new building facades are not consistent with their context. This chaos has brought about an urban threat for the image of traditional streets in the City Center of Kuala Lumpur (Ja'afar et al., 2012). In addition, due to the newly urban modification, the five-foot walkways of traditional shophouses, as important constituents of main traditional streets in Malaysia, are wider and their heights are no longer responsive to human scale. In most urban developments in Malaysia, the scenario has been worse when there is no provision of the five-foot way in the new buildings constructions (Ahmad Bashri & Shuhana, 2002; Ja'afar, 2006; Ja'afar et al., 2012). The five-foot walkways are the arched walkways with large columns in front of buildings with continuous arcaded walkways and pedestrians walking along the street in the absence of sidewalks. They provide shade to the travelers as well as the opportunity to have a closer look at the merchandise displayed by the shopkeepers. Hence, lack of five-foot walkways in the new projects is an urban threat for the images of streets by decreasing the values and meanings associated with the past memories of such spaces.

As a concomitant of rapid urbanization and modernization, change of most of the physical elements of public open space, especially streets has negatively affected the soft and hard landscape of the streets in old cities in Malaysia (Haslina et al., 2012). In Kuala Lumpur, cutting trees along Masjid India Street has changed a place for relaxation created by shaded trees to a roofed pedestrian bazaar (Ja'afar, 2006). Users stressed the role of trees of Tuanku Abdul Rahman Street in memorability and imageability of the place (Abdul Rahman, 2012). Bachok et al. (2004) in their study on Tuanku Abdul Rahman Street found out that street furniture, as an important visual element, has created an obstruction to pedestrian flow, which tarnishes people's evaluation of its image. A review of the research conducted on historical zones in the City Center of Kuala Lumpur reveals that inconsistency among the physical elements of building facades negatively influences the image of a place such as a region, district, and more specifically a street

(Askari & Dola, 2009). More specifically, the piecemeal building development in Kuala Lumpur has extensively affected the quality of streetscapes that is the overall character and continuity of streets as represented by building frontages, soft landscape, and hardscape. Lack of streetscape visual consistency and landscape amenity along major streets in the Kuala Lumpur reduce people attachment along the streets and thus they do not stay long, which leads to unmemorable streets (City Hall Kuala Lumpur, 2008). In conjunction with the issues aforementioned, the problem pursued in this research is that inconsistency among physical elements weakens images of streets in the City Center of Kuala Lumpur. Therefore, this requires a rigorous study to identify the physical elements that play a significant role in configuring memorable images of streets. This is to preserve the local identity of Malaysian urban centers, in particular the city of Kuala Lumpur.

#### 1.3 Research Aim

Referring to the important role of physical elements in forming image of a place, the aim of this study is to help to enhance streetscape in the City Center of Kuala Lumpur.

### 1.4 Research Questions

The research questions addressed in this study are as follows:

Research Question 1: What is the existing condition of physical elements of Tuanku Abdul Rahman and Bukit Bintang Streets in the City Center of Kuala Lumpur?

Research Question 2: What are the physical elements that play an important role in forming the images of Tuanku Abdul Rahman and Bukit Bintang Streets in the City Center of Kuala Lumpur?

## 1.5 Research Objectives

The objectives of the study are as follows:

RO 1: To identify the existing physical elements of Tuanku Abdul Rahman and Bukit Bintang Streets for improving the imageability of City Center of Kuala Lumpur

RO 2: To determine the role of physical elements in forming the images of Tuanku Abdul Rahman and Bukit Bintang Streets in making City Center of Kuala Lumpur more imageable

### 1.6 Research Significance

Taking measures to improve the visual definition, continuity, and streetscape characters of the major road network that provides a greater coherence within the urban areas is one of the goals stated in Kuala Lumpur Structure Plan 2020. This visual consideration

focuses on improving the identity of the city as well as enhancing the streetscape features in the City Center of Kuala Lumpur (City Hall Kuala Lumpur, 2008). Therefore, this goal pursued by the City Hall Kuala Lumpur clearly underlies the importance of the current study in identifying the physical elements that improve images of the streets in the City Center of Kuala Lumpur. This creates visually strong bonds between people and their built-environment, which enhances the public life in the City Centers.

## 1.7 Research Methodology

Complying with the research objectives to identify the physical elements of street images, the study adopts a sequential mixed method. In the first stage of data collection, the researcher documents the real condition of physical elements of the study streets through an observational study. Followed by that, review of the theories supported by the results derived from the field observation forms the structure of the questionnaire survey that evaluates people's perception. In fact, the questionnaire survey targets at identifying the role of physical elements in forming images of the streets. In addition, the data gathered from both methods were converged through triangulation method.

## 1.8 Operational Definitions

The following definitions give a clearer insight into the study aim and objectives.

- 1) Street: it is a place that houses physical elements forming a 3-dimensional image in the observers' minds.
- 2) Distinctiveness: it refers to the mental image that is formed in the observers' minds due to the particularity of the physical elements of a place.
- 3) Place image: it is the mental image of a place as the combination of both physical elements and the memories associated with the place.
- 4) Transparency: it refers to the visual access to function of the buildings.

## 1.9 The Scope of Research

This study focuses only on the effect of the physical elements, such as seating spaces, soft landscape, building facades, and transparency, on the image of streets. Therefore, the scope of research falls under practical and exploratory in the field of environmental psychology that covers people's evaluations of a memorable streetscape in the field of urban design

## 1.10 The Limitation of Research

This study aims to identify people's evaluation of image of streets in response to their physical elements. Due to time limitation in data collection, the study only focuses on Tuanku Abdul Rahman Street and Bukit Bintang Street. The study areas respectively

represent traditional and modern streets in the City Center of Kuala Lumpur. As Bentley (1985) stated, historical parts of cities in most cases portray urban images stronger than newer parts of city. Bukit Bintang Street is a main shopping street with modern and international images characterized by a wide pedestrian walk. It is the place with hotels standing alongside modern shopping malls, retails, and entertainment spots. Shuhana (2011) stated that tourists' evaluation of images of streets differs from that of locals due to their low level of familiarity. Therefore, the researcher chose the locals with high level of familiarity who have a stronger evaluation of the environment compared to the tourists.

#### 1.11 The Structure of Thesis

The structure of this study covers five chapters, which include introduction, literature review, methodology, findings and discussions, and summary of findings. Chapter 1 presents the background of study. This chapter also outlines the framework of the research including the problem pursued, the research aim and objectives, the research significance, scope, and limitation. Chapter 2 reviews the literature on the definition of streets, place image, and the role of physical elements in outlining the images of streets. Overall, this chapter pursues an analytical review of previous studies that develops a better understanding of guides and arguments for the study. Chapter 3 outlines the research methods employed. It discusses the development of the research strategies and the procedures of carrying out the research. The field observation as the first technique of data collection is explained. The next section discusses the process of quantitative approach as well as its main data collection instrument, a self-administered questionnaire survey. Separate sections elaborate on the way this type of data collection is prepared, structured, and carried out. In addition, the study areas are introduced and discussed in relation to the aims and objectives of research. Lastly, this chapter presents a comprehensive understanding of the analysis methods employed to ensure the most reliable findings. Chapter 4 presents the way the data collected from the field observation and the questionnaire surveys are analyzed to achieve the objectives of research. The findings are discussed in response to the achievement of objectives as well as contribution to the relevant urban theories. Chapter 5 summarizes and concludes all the discussions from the previous chapters. It reiterates the main findings of research and their implications for the future implementations. This chapter also provides some insights into better conducting the future studies. It also sums up some practical suggestions in relation to the role of physical elements in improving the urban images of the study areas.

#### REFERENCES

- Abdul Rahman N., (2012). User Friendly Street in Malaysia. University of Nottingham. Unpublished Theses Degree of Doctor of Philosophy
- Agnew, J. (1987). Place and Politics: the Geographic Mediation of State and Society. Boston: Allen & Unwin.
- Akalin, A., Yildirim, K., Wilson, CH., & Kilicoglu, O. (2009). Architecture and Engineering Students' Evaluations of House Façades: Preference, Complexity and Impressiveness. Journal of Environmental Psychology, 29(1), 124-132.
- Alexander, C. (1977). A Pattern Language. Oxford University Press.
- Alexander, C., Ishikawa, S., & Silverstein, M. (1977). A Pattern Language: Towns, Buildings, Construction. Oxford: Oxford University Press.
- Alexander, C., Neis, H., & Anninou, A. (1987). A new theory of urban design (Vol. 6). USA: Oxford University Press.
- Arefi, M. (1999). Non-place and Placelessness as Narratives of Loss: Rethinking the Notion of Place, (May 2013), 37–41.
- Asgarzadeh, M., Lusk, A., Koga, T., & Hirate, K. (2012). Measuring oppressiveness of streetscapes. *Landscape and Urban Planning*, 107(1), 1–11. doi:10.1016/j.landurbplan.2012.04.001
- Askari, A. H., Dola, K. B., & Soltani, S. (2013). An evaluation of the elements and elements of historical building façades in the context of Malaysia. *URBAN DESIGN International*, 1–12. doi:10.1057/udi.2013.18
- Appleyard, D., 1981. Livable Streets. Univ. of California Press, Berkeley.
- Baloglu, S., and McCleary, K. (1999). A Model of Destination Image Formation. *Annals of Tourism Research*, 26(4), 868–897.
- Banerjee, T. (2001). The Future of Public Space: Beyond Invented Streets and Reinvented Places. *Journal of the American Planning Association*, 67(1), 9–24.
- Beerli, A., and Martı'n, J. D. (2004). Factors Influencing Destination Image. *Annals of Tourism Research*, 31(3), 657–681.
- Berlyne, D. (1974) Studies in the New Experimental Aesthetics, New York, Wiley
- Bor,W.1981. "A Question of Urban Identity" in Planing and Architecture. Sharp,D.(ed). Essay Presented to Arthur Korn by the Architectural Association.

- Bourbia, F., & Boucheriba, F. (2010). Impact of street design on urban microclimate for semi arid climate (Constantine). *Renewable Energy*, *35*(2), 343–347. doi:10.1016/j.renene.2009.07.017
- Brill,M(1989) Transformation nostalgia and illusion in public life and public space. In Public Places and Spaces, I Altman and EH Zube (eds.). Plenum Press, New York
- Brown, B., Perkins, D. D., & Brown, G. (2003). Place attachment in a revitalizing neighborhood: Individual and block levels of analysis. *Journal of Environmental Psychology*, 23(3), 259–271. doi:10.1016/S0272-4944(02)00117-2
- Brown, G., & Raymond, C. (2007). The relationship between place attachment and landscape values: Toward mapping place attachment. *Applied Geography*, 27(2), 89–111. doi:10.1016/j.apgeog.2006.11.002
- Brown, G., and Gifford, R. (2001). Architects Predict Lay Evaluations of Large Contemporary Buildings: Whose Conceptual Properties? *Journal of Environmental Psychology*, 21(1), 93-99.
- Bulduk, B. (2012). An Analysis of the Use of Urban Furniture in City Advertising in Terms of Aesthetic/Visual Appreciation Training: City Design. *Procedia Social and Behavioral Sciences*, 46(C), 3279–3283. doi:10.1016/j.sbspro.2012.06.051
- Bulut, Y., & Atabeyoğlu, Ö. (2007). Fountains as urban furniture in historical urban structure and usage culture: Erzurum city case. *Building and Environment*, 42(6), 2432–2438. doi:10.1016/j.buildenv.2006.08.022
- Burton, E., & Mitchell, L. (2006). *Inclusive Urban Design: Streets for Life*. Great Britain: Architectural Press.
- Carmona M, Heath M, T., OC, T. & Tiesdell, S. (2003). *Public Spaces Urban Spaces*. New York, NY: The Architectural Press. Castells, 2003);
- Charkhchian, M., & Daneshpour, S. A. (2009). Interactions among Different Dimensions of a Responsive Public Space: Case Study in Iran. *Journal of Review Of Urban & Regional Development Studies*, 21(1), 14-36.
- City Hall Kuala Lumpur. (2008). Draft Kuala Lumpur 2020 City Plan (Vol. 2). Kuala Lumpur: Percetakan Nasional Malaysia Berhad.
- City Hall Kuala Lumpur. (2010). Kuala Lumpur Structure Plan 2020. Retrieved from http://www.dbkl.gov.my/pskl2020/english/index.htm.
- Creswell, W. J. (1994). Research design: qualitative and quantitative approaches. Sage Pub.

- Context, R. (n.d.). Chapter 2: Livability. *City of Battles Ground, Washington* 2004-2024 *Comprehensive Plan.* Battles Ground. Retrieved from https://www.cityofbg.org/index.aspx?nid=319
- Cooper, C. (1974). The House as Symbol of the Self, in J. Lang et al. (eds.) *Designing for Human Behaviour: Architecture and the Behavioural Sciences* (pp. 130-46). Dowden, Hutchinson and Ross, Stroudsburg.
- Cooper, D. (1998). Regard between strangers: diversity, equality and the reconstruction of public space. *Critical Social Policy*, 18(57), 465–492. doi:10.1177/026101839801805702
- Davies, L., (2000). Urban Design Compendium, English Partnership UK.
- City Hall Kuala Lumpur. (2008). Draft Kuala Lumpur 2020 City Plan (Vol. 2). Kuala Lumpur: Percetakan Nasional Malaysia Berhad.
- Dempsey, N., Bramley, G., Power, S., & Brown, C. (2011). The social dimension of sustainable development: Defining urban social sustainability. *Sustainable development*, 19(5), 289-300.
- De Vaus, D. (1991). Surveys in Social Research, Routledge.
- De Vaus, D. A. (1991). Surveys in social research (3rd ed.). London North Sydney, NSW, Australia: UCL Press; Allen & Unwin.
- De Vaus, D., (1996). Surveys in social research. 4th ed. London: UCL Press.
- De Vaus, David (2002). Surveys in Social Research. London: Routledge
- DIPNR, N. (2004) *Neighbourhood Character, Sydney*, NSW Department of Infrastructure Planning & Natural Resources.
- DOWNS R AND STEA D (ED) (1973), *Image and environment : Cognitive mapping and spatial behaviour*, Chicago : Aldine Press.
- DOWNS R AND STEA D (1977), *Maps in mind Reflections on cognitive mapping*, Harper and Row Publishers.
- Env. Planning Act 1979
- Francis, J., Giles-Corti, B., Wood, L., & Knuiman, M. (2012). *Creating sense of community: The role of public space*. Journal of Environmental Psychology, 32(4), 401–409.
- Frank, L. (2010). Streetscape design: perceptions of good design and determinants of social interactiom.
- Fink, A. (2003) *The Survey Handbook*, 2nd edn. USA, Thousand Oaks: Sage Publications.Fiske 1987

- GARNHAM H L (1985), Maintaining the sense of identity A process for the preservation of town character, PDA Publishers corporation, Mesa Arizona.
- Gehl, J., & Gemz & L. (1996). Public spaces, public life. Copenhagen: Arkitektens
- Gehl, J., Gemz &, L., & Rogers, R. (2008). *New City Spaces*. Washington, DC: Island Press.
- Gehl, J. (2007). Public spaces for a changing public life. In C. Ward Thompson & P. Travlou (Eds.), *Open space: People space* (pp. 3e9). Abingdon, UK: Taylor and Francis.
- Gehl, J. (2011). *Life between buildings: Using public spaces*. Washington DC. : Island press.
- Gehl, J. (2010). Cities for people. Washington DC.: Island press.
- Gertrud,J., 1992Urban Uses and Identity of Place, Aristidis, A.,Karaletsou, C. and Tsoukala, K. (eds.), Socio-environmental Metamorphoses (Proceedings 12<sup>th</sup> International Conference of the IAPS), Chalkidikik, Greece, 11-14 July 1992. Availble from: http://iaps.scix.net/cgi-bin/works/Show?iaps\_12\_1992\_1\_111.
- Gifford, R., Hine, D. W., Muller-Clemm, W., JR, D. J. R., and Shaw, K. T (2000). Decoding Modern Architecture: A Lens Model Approach for Understanding the Aesthetic Differences of Architects and Laypersons. *Journal of Environment and Behaviour*, 32(2), 163-187.
- Giovanni De Franciscis (1987), *The elements of identity of an urban place*, Centro Internazionale di Studi Sul Disegno Urbano Firenze, Ainea Editrice.
- Gjerde, M. (2011). Visual evaluation of urban streetscapes: How do public preferences reconcile with those held by experts? *Urban Design International*, 16(3), 153-161.
- Goodey B And Gold J R (1987), "Environmental perception: The relationship with urban design", *Progress in Human Geography*, Vol. 11, No. 1, March, pp 126-133.
- Goldsteen J B And Elliot C D (1994), Designing America creating urban identity, Van Nostrand Reinhold.
- GREENE s {1992), "Cityshape: Communicating and evaluation of community design", *APA Journal*, Vol. 58, No. 2, pp 177-189.
- Gu, H., & Ryan, C. (2008). Place attachment, identity and community impacts of tourism—the case of a Beijing hutong. *Tourism Management*, 29(4), 637–647. doi:10.1016/j.tourman.2007.06.006
- Hall, T. (2003). Opening Up Public Art's Spaces: Art, Regeneration and Audience. Advances in Art, Urban Futures, 3, 49-57.

- Han, M.-H., Joo, M.-K., Kim, J.-T., & Oh, Y.-K. (2011). Seasonal Preferences and Interactions of Visual/ Auditory Elements of Streetscape in Namwon City, Korea. *Indoor and Built Environment*, 20(1), 162–170. doi:10.1177/1420326X10394481
- Harun, N.Z. & I. Said, 2010. Factors Attributes to Placelessness of a Public Place in Historic Town of Penang, Malaysia. In Proceedings The 5th South East Asian Technical University Consortium (SEATUC) February 24-25, 2011,. Hanoi University of Science & Technology, Ha Noi Viet Nam., pp. 166-169.
- Haslina, N., Bashri, A., & Shuhana, S. (2012). Social and The Contribution Of Landscape Features On Traditional Streets In Malaysia, *00*(2011).
- Hernandez, B., Hidalgo, M. C., Salazar-Laplace, M. E., & Hess, S. (2007). Place attachment and place identity in natives and non-natives. *Journal of Environmental Psychology*, 27.
- Hoinville, G., and Jowell, R. (1978). Survey Research Practice. London: Heinemann Educational Books.
- Holloway, L., & Hubbard, P. (2001). *People and place*. Harlow: Pearson Education.
- Hussain, N.H.M. & Ahmad, S., 2010. Malay Landscape: Typical Design for Cintemporary House at Desa Wawasan. *Asian Journal of Environment-Behaviour Studies*, 1(3), pp.38-47.
- Institute of Transportation Engineers (ITE) 2010
- Ja'afar, N.H., 2006. Kriteria Kejayaan Jalan Tradisional di dalam Menarik Pengunjung (Criteria of Successful Traditional Street inAttracting Visitor). Universiti Teknologi Malaysia. Unpublished Theses Degree of Master Architecture
- Ja'afar, N. H., Sulaiman, A. B., & Shuhana, S. (2012). The Contribution of Landscape Features on Traditional Streets in Malaysia. *Procedia Social and Behavioral Sciences*, 50(July), 643–656. doi:10.1016/j.sbspro.2012.08.067
- Jacobs, B. A. B. (1993). Great Streets. Cambridge, MA: MIT Press.
- Johnson, B., & Christensen, L. B. (2011). Educational Research: Quantitative, Qualitative, and Mixed Approaches. USA, Thousand Oaks: SAGE Publications.
- Kadir, M. A. A., & Othman, N. (2012). Towards a Better Tomorrow: Street Trees and Their Values in Urban Areas. *Procedia Social and Behavioral Sciences*, 35(December 2011), 267–274. doi:10.1016/j.sbspro.2012.02.088
- Kendal, D., Williams, N. S. G., & Williams, K. J. H. (2012). Drivers of diversity and tree cover in gardens, parks and streetscapes in an Australian city. *Urban Forestry & Urban Greening*, 11(3), 257–265. doi:10.1016/j.ufug.2012.03.005

- Kilicaslan, C., Malkoc, E., & Turel, H. S. (2008). Comparative Analysis of Traditional, Modern, and Renovated Streets in Physical, Visual, and Life Aspects; A Case Study on Buca District -- Izmir (Turkey). *Indoor and Built Environment*, *17*(5), 403–413. doi:10.1177/1420326X08096608
- KLCH (2016). *Urban Design Guidelines for Kuala Lumpur City Centre*. Kuala Lumpur : Dewan Bandaraya Kuala Lumpur
- Korpela, K. M. (1989). Place-identity as a product of environmental self-regulation. Journal of Environmental Psychology, 9, 241–256
- Krupat..T E (1985), *Peo~ in. cities : The urban environment and its effects, New York :* Cambridge University Press.
- Kyle, G. T., Mowen, A. J., & Tarrant, M. (2004). Linking place preferences with place meaning: An examination of the relationship between place motivation and place attachment. *Journal of Environmental Psychology*, 24(4), 439–454. doi:10.1016/j.jenvp.2004.11.001
- Lang, J. (1987). Creating architectural theory: The role of the behavioral sciences in environmental design. New York: Van Nostrand Reinhold.
- Lewicka, M. (2005). Ways to make people active: The role of place attachment, cultural capital, and neighborhood ties. *Journal of Environmental Psychology*, 25(4), 381–395. doi:10.1016/j.jenvp.2005.10.004
- Lewicka, M. (2008). Place attachment, place identity, and place memory: Restoring the forgotten city past. *Journal of Environmental Psychology*, 28(3), 209–231. doi:10.1016/j.jenvp.2008.02.001
- Likert, R. (1932). A Technique for the Measurement of Attitudes. Archives of Psychology, 22(140), 1-55.
- Li, L. I., Yang, K. U. N., SHIMOKAWA, T., OYAMA, I., & KITAMURA, S. (2013). Investigation of factors affecting the evaluation of streetscapes in Japan and China. *International Journal of Affective Engineering*, 12(1), 1-10.
- Lindal, P. J., & Hartig, T. (2013). Architectural variation, building height, and the restorative quality of urban residential streetscapes. *Journal of Environmental Psychology*, *33*, 26–36. doi:10.1016/j.jenvp.2012.09.003
- Linday, N. (1978). *It all comes down to a comfortable place to sit and watch*. Landscape Architecture, 68, 492-497.
- Low, S.M., & Altman, I. (1992). *Place attachment: A conceptual inquiry*. New York and London: Plenum Press.
- Lynch, K. (1960). Kevin Lynch: The Image of the City 1. MIT Press.
- Lynch, K (1972), What time is this place?, Cambridge, MA: The MIT Press.

- Lynch, K. (1971). Site Planning. MA: MIT Press, Cambridge.
- Madanipour, A. (1996). Design of Urban Space: an Inquiry into a Social-spatial Process. New York: John Wiley & Sons Inc.
- Manzo, L. C. (2006). Finding Common Ground: The Importance of Place Attachment to Community Participation and Planning. *Journal of Planning Literature*, 20(4), 335–350. doi:10.1177/0885412205286160
- Matsuoka, R. H., & Kaplan, R. (2008). People needs in the urban landscape: Analysis of Landscape And Urban Planning contributions. *Landscape and Urban Planning*, 84(1), 7–19. doi:10.1016/j.landurbplan.2007.09.009
- Mcguinness, J. (2007). The Journal of North Neighbourhood notes: texture and streetscape in the Médina of Tunis, (January 2013), 97–117.
- Meagher, S. M. (2007). Philosophy in the streets. City, 11(1), 7–20. doi:10.1080/13604810701200722
- Mehta, V. (2007). Lively Streets: Determining Environmental Elements to Support Social Behavior. *Journal of Planning Education and Research*, 27(2), 165–187. doi:10.1177/0739456X07307947
- Vikas Mehtaa\*. (2008). Walkable streets: pedestrian behavior, perceptions and attitudes.

  Journal of Urbanism: International Research on Placemaking and Urban
  Sustainability. doi:10.1080/17549170802529480
- Mehta, V., & Bosson, J. K. (2009). Third Places and the Social Life of Streets. Environment and Behavior, 42(6), 779–805. doi:10.1177/0013916509344677
- Mehta, V., & Bosson, J. K. (2010). Third places and the social life of streets. *Environment and Behavior*, 42(6), 779-805.
- Mehta, Vikas. (2009). Look Closely and You Will See, Listen Carefully and You Will Hear: Urban Design and Social Interaction on Streets. *Journal of Urban Design*, 14(1), 29–64. doi:10.1080/13574800802452658
- Mehta, V. (2013). The street: a quintessential social public space. Routledge.
- Mehta, V. (2014). Evaluating public space. Journal of Urban Design, 19(1), 53-88.
- Mitra, A., & Lankford, S. (1999). *Research Methods in Park, Recreation, and Leisure Services*. Champaign, Illinois: Sagamore Publishing.
- Montgomery, Charles. (2013). *Happy City, Transforming Our Lives Through Urban Design*. New York: Farrar, Straus and Giroux.
- Moughtin, J. C. (2003). Urban Design: Street and Square. Oxford: Architectural Press.
- Moughtin, C, (2006). Urban Design: Street and Square, London: Architectural Press.

- Mourthe, C. R., & De Menezes, J. B. (2000). Ergonomics Methodology for Comparative Study of Street Furniture in Different Cities. *Proceedings of the Human Factors and Ergonomics Society Annual Meeting*, 44(8), 28–31. doi:10.1177/154193120004400807
- Muijs, D. (2004). *Doing Quantitative Research in Education with SPSS*. London: SAGE Publications.
- Nachmias, D., & Nachmias, CH (1981). Research Methods in the Social Sciences. New York, USA: St. Martin's Press.
- Nagaoka, A., Ogawa, R., & Tsuchiya, T. (2013). Affective Engineering for Streetscape Analysis: Evaluation of Traditional Japanese Mud Walls Using a Self-Organizing Map. In *Systems, Man, and Cybernetics (SMC), 2013 IEEE International Conference on* (pp. 1132-1137). IEEE
- Naoi, T., Airey, D., Iijima, SH., and Niininen, O. (2006). Visitors' Evaluation of a Historical District: Repertory Grid Analysis and Laddering Analysis with Photographs. *Journal of Tourism Management*, 27(3), 420–436.
- Nasar J (1979), Siedel, A D and Research, Theory "The evaluative image of the city" in Danford S (eds.), Environmental Design: and Application, EDRA 10, Washington, DC: EDRA, PP..; 38-45
- Nasar, J. L. (1984). Visual Preferences in Urban Street Scenes: A Cross-Cultural Comparison between Japan and the United States. *Journal of Cross-Cultural Psychology*, 15(1), 79–93. doi:10.1177/0022002184015001005
- Nasar, J. L., & Hong, X. (1999). Visual Preferences in Urban Signscapes. *Environment and Behavior*, *31*(5), 671–691. doi:10.1177/00139169921972290
- Nasar, J. L., StampsIII, A. E., and Hanyu, K. (2005). Form and Function in Public Buildings. *Journal of Environmental Psychology*, 25(2), 159-165.
- Ngesan, M. riduan, Karim, H. A., & Zubir, S. S. (2013). Image of Urban Public Park during Nighttime in Relation to Place Identity. *Procedia Social and Behavioral Sciences*, 101, 328–337. doi:10.1016/j.sbspro.2013.07.207
- N. H. Ja'afar and Ismar M.S. Usman. (2009). Physical and Transportation Elements of Traditional Street in Malaysia. *European Journal of Social Sciences*, 9(4), 669–676.
- Norberg-Schulz, C (1971), *Genius Loci Towards a phenomenology of architecture, New York*: Rizzoli International Publications Inc. 3
- Oranratmanee, R., & Sachakul, V. (2014). Streets as Public Spaces in Southeast Asia: Case Studies of Thai Pedestrian Streets. *Journal of Urban Design*, 19(2), 211-229.
- Özdemir, İ. M., Tavşan, C., Özgen, S., Sağsöz, A., & Kars, F. B. (2008). The elements of forming traditional Turkish cities: Examination of houses and streets in

- historical city of Erzurum. Building and Environment, 43(5), 963–982. doi:10.1016/j.buildenv.2006.05.008
- 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*, 10, 51-64.
- Project for Public Space. (2001). *How to Turn a Place Around*—A Handbook for Creating Successful Public Spaces. New York: Project for Public Spaces, Inc.
- Proshansky, H. M. (1978). The city and self-identity. *Environment and Behavior*, 10, 147–169.
- Proshansky, H.M., Fabian, A.K., & Kaminoff, R. (1983). Place-identity: Physical World Socialization of the Self. *Journal of Environmental Psychology*, 3(1), 57–83.
- Rapoport, A. (1980). Human Aspects of Urban Forms: Towards a Man-Environment Approach to Urban Form and Design. Great Britain: A. Wheaton & Co. I.td, Exeier.
- Raymond, C. M., Brown, G., & Weber, D. (2010). The measurement of place attachment: Personal, community, and environmental connections. *Journal of Environmental Psychology*, 30(4), 422–434. doi:10.1016/j.jenvp.2010.08.002
- Relph, E. (1976). Place and Placelessness. London: Pion.
- Rigsby, B. (1999). Aboriginal people, spirituality and the tradition ownership of land. *International Journal of Social Economics*, 26, 963e973.
- Rijnks, R. H., & Strijker, D. (2013). Spatial effects on the image and identity of a rural area. *Journal of Environmental Psychology*, 36, 103–111. doi:10.1016/j.jenvp.2013.07.008
- Ryan, R. (2005). Exploring the Effects of Environmental Experience on Attachment to Urban Natural Areas. *Journal of Environment and Behavior*, 37(1), 3-42.
- Rybczynski, W. 1993. The new downtowns. Atlantic Monthly 271:98-106. Saelens,
- Rykwert, J. (1988). The Idea of a Town: The Anthropology of Urban Form in Rome, Italy and the Ancient World. (Vol. 68, p. 2561980). New Jersey: The MIT Press.
- S.Bachok et.al., 2004. Light-rail Transit Stations and Pedestrianisation: Case Studies of Travel Patterns and Behaviours at Tunku Abdul Rahman Street and the Central Market, Kuala Lumpur. In Walk21-V Cities for People, The Fifth International Conference on Walking in the 21st Century, June 9-11 2004, Copenhagen, Denmark.
- Said, E. (1978). Orientalism. New York: Vintage Books.

- Saleh, M. A. E. (1998). Place identity: The visual image of Saudi Arabian cities. *Habitat International*, 22(2), 149–164. doi:10.1016/S0197-3975(97)00033-7
- Samarasekara, G. N., Fukahori, K., & Kubota, Y. (2011). Environmental Correlates That Provide Walkability Cues for Tourists: An Analysis Based on Walking Decision Narrations. *Environment and Behavior*, 43(4), 501–524. doi:10.1177/0013916510379350
- Samarasekera, D. (2005). *Study on the role of streetscape elements in the urban spaces of the city of colombo*. University of moretuwa.
- SCOFFHAM (1987), "Built form and cultural identity" in The identity of urban environment, Centro Internazionale Cii studi Sul Disegno Urbano, Firenze, Alinea Editrice •
- Shuhana, S. (1997). *IDENTITY OF PLACE A Case Study Of Kuantan town centre, Malaysia. By.* University of Nottingham.
- Shuhana, 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. doi:10.1016/j.habitatint.2008.01.004
- Shuhana, S. (2011). Townscape Revisited (p. 176). Penerbit UTM.
- Shuhana, S., Hassan, N. R. A., & Bilyamin, S. F. I. (2012). Walkable Environment in Increasing the Liveability of a City. *Procedia Social and Behavioral Sciences*, 50(July), 167–178. doi:10.1016/j.sbspro.2012.08.025
- Shuhana, S., Sulaiman, A. B., & Amat, R. C. (2012). Urban Landscape Factors That Influenced the Character of George Town, Penang Unesco World Heritage Site. *Procedia Social and Behavioral Sciences*, 50(July), 238–253. doi:10.1016/j.sbspro.2012.08.031
- Shaftoe, H. (2008). Convivial Urban Spaces: Creating Effective Public Places. London: Earthscan Publications.
- Shirvani, H. (1985). The Urban Design Process. New York :Van Nostrand Reinhold Company.
- Shokouhi, M., & Gharai, F. (2006). Enhancing the streetscape as the cultural heritage of the city ( case study : Shemiran area , north of Tehran ), 1–9.
- Sibley, D. (1995). Geographies of exclusion. London: Routledge.
- Siu, K. W. M. (2005). Pleasurable products: public space furniture with userfitness. *Journal of Engineering Design*, 16(6), 545–555. doi:10.1080/09544820500273383
- Spokane, A. R., Lombard, J. L., Martinez, F., Mason, C. a, Gorman-Smith, D., Plater-Zyberk, E., Brown, S. C., et al. (2007). Identifying Streetscape Features

- Significant to Well-Being. Architectural science review, 50(3), 234–245. doi:10.3763/asre.2007.5029
- Steele, F. (1981). Sense of Place. Boston, Massachusetts (p. 1981). CBI Publishing Company, Inc.
- Sucher, D. (2003). City Comforts Urban Village by David Sucher Excerpt.pdf. City Comfort Inc.Seattle.
- Sulaiman, A.B. & Shuhana, S. (2002). Urban Morphology of Melaka, Melaka Bandaraya Bersejarah.
- Sulaiman, A. B., Mai, M. M., Utm, P., & Penerbit, P. (2008). *Urban design Issue*. In M. M. M. Ahmad Bashri Sulaiman (Ed.), (p. 174). Univision Press.
- Sulaiman, A Bashri, Shuhana, S., Campus, I. C., & Masjid, J. (2012). Traditional Street Activities In Kuala Lumpur City Centre, 2(1), 93–105.
- Tazilan, M., Samsul, A., & Salleh, H. (2008). Sustainable Design Elements for Urban Street Micro-Architecture in Malaysia. ... *Alam Cipta Fakulti Rekabentuk Dan Senibina*, 35–44. Retrieved from http://psasir.upm.edu.my/2500/
- The Government of Hong Kong Spacial Administrative Regin. (2006). Planining Department of Hong Kong. Retrieved from: http://www.pland.gov.hk/pland\_en/tech\_doc/hkpsg/full/ch11/ch11\_text.htm
- Thomas, R. M. (2003). Blending Qualitative and Quantitative Research Methods in Theses and Dissertations. United States: Corwin Press.
- Tucker, C., Ostwald, M. J., Chalup, S. K., & Marshall, J. (2004). A method for the visual analysis of the streetscape. In 38th Annual Conference of the Architectural Science Association ANZASCA and the International Building Performance Simulation Association Australasia (pp. 134–140). University of Tasmania, School of Architecture.
- Ujang, N., & Dola, K. (2001). Linking Activity and Place Attachment Dimensions in Enhancing the Sense of Place, 59–67.
- Ujang, N. (2008). Place Attachment Towards Shopping Districts In Kuala Lumpur, Malaysia. PhD tThesis, Universiti Putra Malaysia
- Ujang, N. (2012). Place Attachment and Continuity of Urban Place Identity. *Procedia Social and Behavioral Sciences*, 49, 156–167. doi:10.1016/j.sbspro.2012.07.014
- Walker, A. J., & Ryan, R. L. (2008). Place attachment and landscape preservation in rural New England: A Maine case study. *Landscape and Urban Planning*, 86(2), 141–152. doi:10.1016/j.landurbplan.2008.02.001
- Walmsley, D.J. (1988). Urban Living. New York: John Wiley and Sons.

- Warnaby, G. (2009). Look up! Retailing, historic architecture and city centre distinctiveness. *Cities*, 26(5), 287–292. doi:10.1016/j.cities.2009.06.002
- Whyte, W. H. 1980. The social life of small urban spaces. Washington, DC: Conservation Foundation.
- Yeang, K., 1992. The Architectural of Malaysia. The Pepin Press.
- Yin, R.K., (2009) Case Study Research: Design and Methods (Fourth Edition). SAGE Publications
- Zacharias, J. (2001). Pedestrian Behavior Pedestrian Behavior and Perception in Urban Walking Environments. *Journal of Planning Literature*, 16(1), 3–18. doi:10.1177/08854120122093249
- Zadeh, F. A., & Sulaiman, a. B. (2010). Dynamic street environment. *Local Environment*, 15(5), 433–452. doi:10.1080/13549831003735403
- Zakaria, K. B. (2006). Refining Tourist's Place Experience Through: A Case study on Middle East A Tourist In Kuala Lumpur City Center.
- Zeisel J. (1981), Inquiry by design, Publishing Company, Monterey.