

THE STUDY OF SOCIAL SUSTAINABILITY AND LIVELINESS IN
JALAN WONG AH FOOK, JOHOR BAHRU

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DEDICATION

To my great father, my lovely mother, my affectionate sister for your love, support and advice. Without you, I just could not have done this.

THANK YOU!

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ABSTRACT

Street is considered the major public space in urban fabric. It acts as a meeting place for different social groups and urban activities. Among the different types of street is where carriageway space has been recognized to pedestrian use. In order to invite leisure walking and numerous social and economic activities, pedestrian streets try to make city centre more pedestrian friendly and lively that involves the presence of an active street life. As liveliness is derived from the way activity, this study aimed to provide rich and detailed information on the liveliness of pedestrian streets in the context of Johor Bahru. In this case, physical and social attributes of place making is utilized to examine which criteria have influence on user's perception and satisfaction in the street with Jalan Wong Ah Fook, Johor Bahru as a case study. This study adopts the questionnaire survey as a quantitative method to evaluate resident's perception while the observation survey was used confirm findings the aforementioned method. The research findings proved that accessibility to open space, facilities and amenities as physical indicators in one hand, and on the other hand safety, privacy and social interaction as social attributes of place making play a significant role on creating quality of street, use and satisfaction. The general results of this study noted that both physical and social attributes of place making have influence on the presence of users within a street. Also the study appraise present some suggestions for improving the quality of street as a main indicator to enhance better quality of living.

ABSTRAK

Jalan dianggap tempat awam utama dalam asas bandar. Jalan berfungsi sebagai satu tempat pertemuan untuk kumpulan sosial berbeza dan aktiviti-aktiviti bandar. Antara pelbagai jenis jalan ialah di mana ruang jalan raya telah dikenali sebagai penggunaan tidak imaginatif. Dalam menggalakkan pengguna bersiar-siar dan menjalankan aktiviti ekonomi dan sosial, pejalan kaki cuba untuk menjadikan pusat bandar lebih menarik, mesra dan rancak yang melibatkan kehadiran satu kehidupan jalanan aktif. Ini kerana kemeriahan ialah sumber daripada kegiatan Jalan. Kajian ini bertujuan untuk memberi lebih banyak maklumat terperinci mengenai kemeriahan jalan-jalan dalam konteks Johor Bahru. Dalam kes ini, sifat-sifat fizikal dan sosial ruang digunakan untuk mengkaji kriteria yang mempunyai pengaruh pada tanggapan dan kepuasan pengguna terhadap kajian kes di Jalan Wong Ah Fook, Johor Bahru. Kajian ini memilih kaedah soal selidik sebagai satu kaedah kuantitatif untuk menilai tanggapan pemastautin manakala tinjauan pemerhatian digunakan mengesahkan penemuan-penemuan kaedah terdahulu. Penemuan penyelidikan membuktikan kebolehcapaian untuk kawasan terbuka, kemudahan-kemudahan dan servis-servis merupakan penunjuk-penunjuk fizikal dan selain itu, privasi dan interaksi sosial juga memainkan peranan yang penting dalam mencipta kualiti jalan, penggunaan dan kepuasan. Keputusan umum kajian ini menyatakan yang kedua-dua sifat fizikal dan sosial tempat mempunyai pengaruh pada kehadiran pengguna-pengguna dalam satu laluan. Tambahan pula, kajian ini menilai beberapa cadangan untuk meningkatkan kualiti jalan apabila satu penunjuk utama untuk meningkatkan kualiti hidup yang lebih baik.

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CHAPTER 1

INTRODUCTION

1.1 Background of the study

Since the publication of *Our Common Future* by the Brundtland Commission in 1987 (WCED, 1987), the concept of sustainable development has become increasingly significant as a target for creating a better future for the world, economically, socially and environmentally. Operating in contradiction with efforts to create a more sustainable future are factors such as an ever-increasing population, and more importantly, an almost exponential growth in the use of resources, many of them non-renewable (Elkin et. al., 1991). Within this situation, the role of the world's urban areas in determining whether sustainable development is an achievable goal is becoming increasingly significant, with the world's urban population more than doubling

since 1950, and being expected to double again to reach 6.2 billion by 2050 (Rodrigue, 2005).

In light of diminishing global resources and much environmental degradation, the prospect of a new century raises serious questions about the health and livability of future cities. In the last century our cities and towns were transformed significantly from an efficient fabric to sprawling low density suburbia. This process not only impacted adversely our natural habitat, but also exhausted the vitality of traditional urban places. The effluent suburban culture created its own self contained communities with employment centres, shopping malls and office parks, abandoning the centre and yielding too much decay and human blight.

The emergence of sustainable design offers tangible promises; its holistic approach to the crises of the environment makes for a reliable connection between nature and culture. Its importance to our search for ecologically balanced urban environments lies in its ability to optimize our vital human-environmental support systems, while providing sustainable promise to future generations. Also as part of its appeal, sustainable design offers city planners and architects the insights with which to create livable places that emphasize continuity in human habitation and interconnectedness between people and places.

1.2 Importance of study

A sustainable city must be a place where people want to live and work. Closer examination suggests that social acceptability comprises two broad

concepts –social equity and the sustainability of the local community. The social dimension of sustainability therefore incorporates issues of social justice, social inclusion, social capital and social cohesion. Social equity can be defined in terms of ease of access to local services, facilities and opportunities. A community which is sustainable displays high levels of what is formally described as social capital and/or social cohesion that can be translated as pride in and attachment to the locality, good social interaction, safety/trust and stability. These attributes offer residents what can be summarized as a good ‘quality of life’. Overall social sustainability is reflected in high levels of satisfaction with home and neighbourhood, and an appreciation of the local environment.

For most aspects of sustainability of community (particularly pride/attachment, stability, neighbourhood and home satisfaction, and perceived environmental quality) lower density suburbs appear ‘best’. These aspects of the social dimension challenge the ‘compact city’ orthodoxy, but there are some counter-balancing benefits of compactness in the equity aspect of social sustainability, particularly access to services. The complexity of the relationship with density is reinforced by the finding that social interaction is best at medium densities, while some aspects are neutral (e.g. community participation).

Some care has to be taken in the interpretation of these relationships as they are also partly the result of factors not directly linked to urban form, such as housing tenure and the social composition of neighbourhoods. In general, disadvantages of compactness are more marginal once socio-demographic characteristics of residents are controlled for. Poverty is often more important than urban form – who lives where, and whether they are able to choose where they live, matters. However, accessibility to key services, including a supermarket, within the neighbourhoods are identified as very important for

different groups of residents such as the unemployed, older people and young families and play a significant role in social and community life.

A sustainable city or eco-city is a city designed with consideration of environmental impact, inhabited by people. A sustainable city can feed itself with minimal reliance on the surrounding countryside, and power itself with renewable sources of energy.

1. Different agricultural systems
2. Renewable energy sources
3. Various methods to reduce the need for air conditioning
4. Improved public transport
5. Optimal building density
6. Solutions to decrease urban sprawl

To date, the majority of architectural and urban projects deemed exemplary in terms of sustainability have been rated primarily according to technical criteria. But sustainable urban design implies much more than this. As architects and urban designers, we use the term “sustainability” more broadly, mainly to refer to design discipline – design that factor in urban and social sustainability. Several private companies have done pioneering work in promoting sustainable urban design and deserve special recognition for their efforts.

Sustainability in architecture and urbanism covers a wide spectrum of technical and non-technical aspects. At the technical end, we have energy conservation, recycling, environmental management and ecology; at the non-technical end, we have factors influencing social behaviour and spatial organisation, which are obviously vital in determining the sustainability of urban concentrations. We define sustainable urban design using this formula:

$$\begin{aligned} &\text{Sustainable urban design} \\ &= \\ &\text{Urban and social sustainability} \\ &+ \\ &\text{Technological sustainability} \end{aligned}$$

1.3 Aims of study

To produce a liveable (responsive) urban environment through the participation of people in urban areas, the primary goal and the specific objectives of this study can now be stated. The primary goal of this study is to identify the characteristics of the spatial configuration of socially sustainable cities. To pursue this goal, the following four objectives are adopted:

- 1) To examine approaches to social sustainability for urban regeneration
- 2) To identify the main criteria for urban social sustainability
- 3) To ascertain how users respond to criteria of social sustainability

1.4 Research Questions and Procedures

The major purpose of this study is to identify the configuration characteristics of socially sustainable cities the spatial configuration of a city can be described through several concepts. Each concept represents different aspect of the configuration, and is referred to in the theory as a *description...*, the relationship between all spaces within the city. In this relationship, any change occurring with one space affects how all other spaces interrelate to one another. Because spaces are created through the arrangement of physical components such as buildings, the relocation of one component such as a building block affects how every other component connects, i.e., the travelling route to and from all other spaces.

Similarly, social sustainability refers to the ability of a city to sustain orderly relationship among its diversified residents and for them to meet their hierarchy of needs at the present and for the future. To maintain orderly relationship among diversified residents presupposes that these diversified residents more or less meet their hierarchy of needs. And since social sustainability is the ultimate objective of this study, a long term orderly relationship among the diversified residents in a city is where the study begins and ends.

In summary, the research question of this study is what the characteristics of the spatial of a socially sustainable city are. The research procedures can be stated as follows.

- 1) How do people respond to aspects of social sustainability in urban areas?
- 2) What are the most significant aspects of social sustainability preferred by people in urban areas?

- 3) How can social sustainability improve quality of life in urban areas?

1.5 Scope of study

The scope of the research is based on the degree of pedestrian's perception and satisfaction of people in Jalan Wong Ah Fook in Johor Bahru. The people perception will help to recognize which qualities of social sustainability can contribute to upgrade the quality of living. The liveliness qualities especially are based on physical and social criteria of street. Research tries to identify which criteria of place making can contribute and improve quality of social sustainability and liveliness. 70 respondents in different categories of ages and genders are selected to evaluate their perceptions and degree of satisfaction with physical and social quality of open space in the neighbourhood.

1.6 Significant of study

Jane Jacobs was an urban philosopher whom for decades preached about the significance of social sustainability in a city. In her 1961 book *The Death and Life of Great American Cities*, Jane Jacobs stated:

Dull, inert cities, it's true, do contain the seeds of their own destruction and little else. But vital cities have marvellous innate abilities for understanding communicating, contriving, and inventing what is required to combat their difficulties ... Lively, diverse, intense cities contain the seeds of their own regeneration, with energy enough to carry over for problems and need outside themselves.

1.6.1 Why is social sustainability important?

Social sustainability is examined as an independent and equally recognized dimension of sustainable urban development through an integrated approach to the analysis of sustainability.

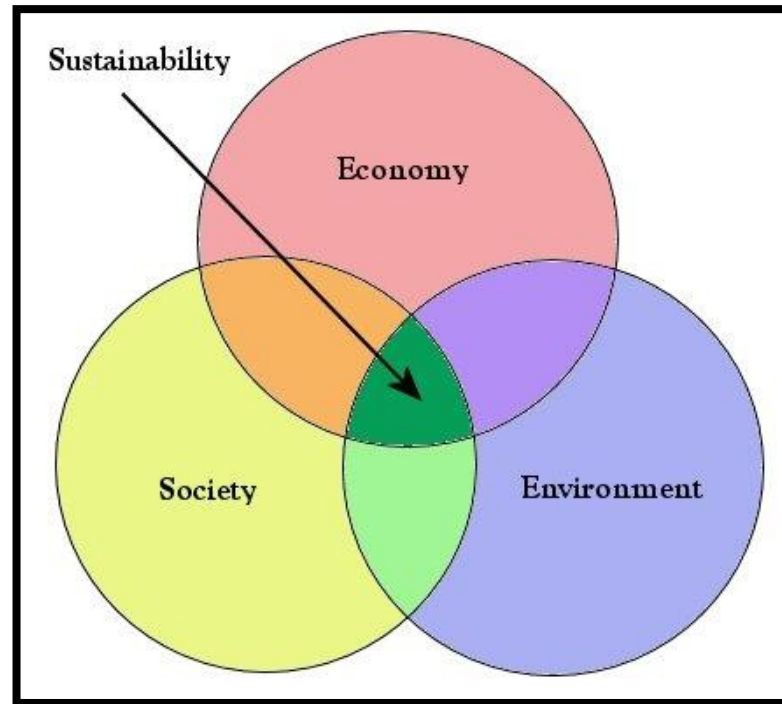


Figure1.1 Diagram of the relation social sustainability

1.7 Methodology and Research Operation

The selected methodology combines three research approaches,

- 1) Literature Review for Secondary data
- 2) Research Questionnaire for Primary Data
- 3) Respondents will be users and visitors to study area and 70 in numbers.

1.7.1 Secondary data

The secondary data are obtained from the reference studies of related matter such as, literature (books, journals, research paper, newspaper and magazine articles, etc), local plans and other relevant physical plans and information. This chapter has illustrated the research design by emphasizing the procedures adopted in the collection and analysis of data. It can be argued that the choice of methodology adopted is based on extensive review of previous researches as well as existing theories on research methods. The field observation method was adopted also resulted in a reliable research technique being used and this could enrich the data collected. By adopting such an approach, it is hoped that there will be comprehensive data to cover the various aspects of the study problem.

1.8 Research Methodology and Techniques

The study has adopted the quantitative and qualitative methodology where the quantitative approach is used to evaluate the questionnaire and qualitative approach adopt techniques namely the visual survey of observation. Cross analysis will be used to analysis the data from survey questionnaire and in continue photos from observation approbate the results.

A survey questionnaire was prepared to record resident's answers. It is designed into separated parts such as physical attributes and social attributes to analyse and examines resident's perception and satisfaction about open space in their neighbourhood. These findings were analyzed descriptively through

the use of frequency analysis, percentage, cross tabulation and triangulations. One cross tabulation in comparing to one or two other gives best results such as the relationship among two or three variables which can make good theoretical frameworks for future design. Below figure 1.1 shows research design which is done by author to achieve research goal and objectives.

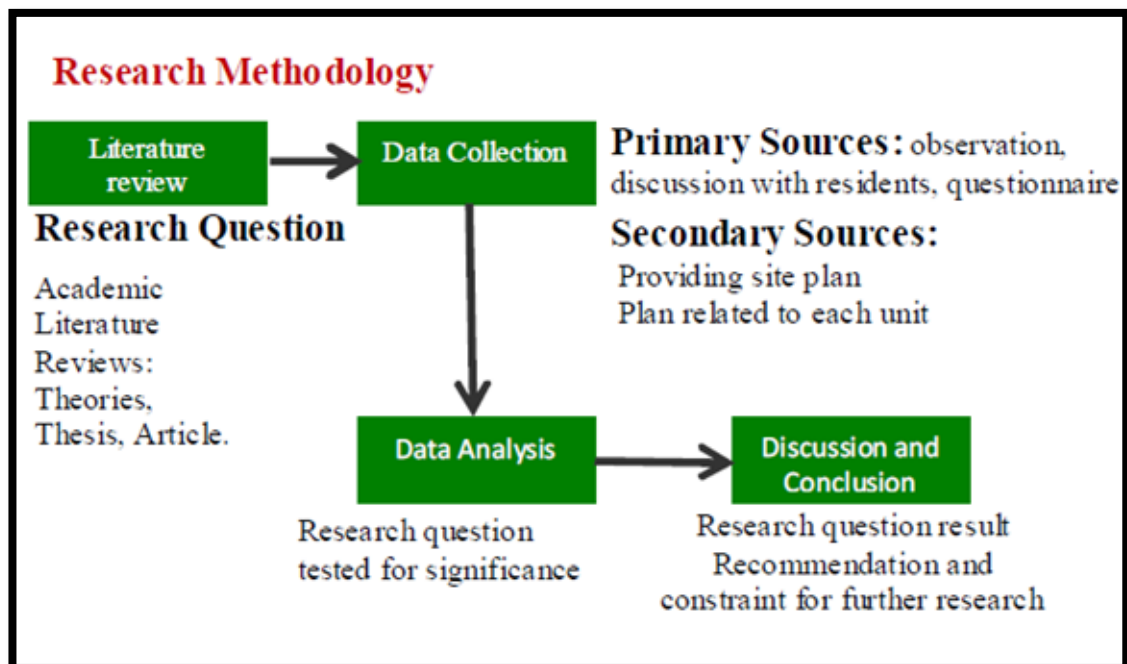


Figure1.2 Research design and methods

A review of the literature was first carried out in order to understand the current debate on the traditional architecture heritage and how it functions in the everyday activities of the village communities. It includes contributions from architects, social scientists, urban designers, planners, geographers, sociologists, and psychologists.

1.9 Study area

The street was selected for the study is Jalan Wong Ah Fook in Johor Bahru which is a street located in city centre and recently some improvement occurred in the city centre. There was aimed to enhance the city centre district in a way to be more pedestrian friendly and bring the sense of social sustainability and liveliness to the street.

1.10 Research Framework

Generally, the thesis has five main chapters. Chapter one presents an introduction of research where it introduces problem statements, research significance, anticipation, research questions and objectives, scope of study, and also research methodology. Chapter two mainly is focused on literature review relevant to the topic. In general, the topic includes human perception and satisfaction, social sustainability and liveliness in street, high density living, landscape design in liveliness and contribution of place making attributes on quality of place making. Chapter three discusses the research methodology relevant to research objectives. Also it describes the methods and techniques utilized in the research case study. Chapter four contains data analysis of research where statistical data's are described. Cross tabulation and triangulations will be used together to examine the relation among physical and social qualities of open space. It evaluates the premises required for

quality of public space. This chapter explains a number of ingredients that are responsible for making open spaces appropriate for users. The consideration of such ingredients can also be useful for designing open spaces in residential areas in general. This includes accessibility, climate comfort, facilities and amenities, aesthetics values, privacy, safety and social interaction. Chapter five consist of research finding from chapter four where the author recommends and suggests several solutions to promote the quality of social sustainability and liveliness in streets.

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