

IMPROVING SOCIAL SUSTAINABILITY THROUGH
CONTEXT-SPECIFIC MIXED-USE HIGH-RISE APARTMENTS
IN TIONG NAM

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ABSTRACT

Generation gap is a very significant component of social sustainability. The traits of this gap depend heavily on the context. Tiong Nam settlement is one of the oldest Chinese residential and commercial areas in Kuala Lumpur. Over the years, the younger generations had moved out, leaving behind the older generations. The lack of public spaces and parks also causes the social interaction as well as communal living to be little to non-existent. Social sustainability plays an important role in forming a vibrant and culturally strong social place. It can be achieved by the connectivity between places and people, making the place as a bonding medium for the people. Despite being one of the oldest Chinese residential areas in Kuala Lumpur, the area is not socially sustainable. The aim of this research was to explore the possibilities of context-specific mixed-use high rise apartments that can improve the social sustainability of Tiong Nam by proposing certain architectural design strategies. The main objectives were first to identify the socio-cultural activities of the existing communities in Tiong Nam, Kuala Lumpur, then, to identify the typologies of communal spaces that can accommodate these socio-cultural activities, and finally to determine design strategies to improve social sustainability through mixed use building on the basis of seven parameters determined through field survey. To achieve the objectives, data were through site observation, interview, questionnaire as well as case studies. The collected data was then analysed through site synthesis, statistical analysis and content analysis. The study found that eating and recreational activities are the major activities of the existing community. It also found that lack of public spaces that can accommodate these context specific activities are the major lacking in this area. Finally, based on the seven parameters, certain design strategies were proposed. It also proposed that a highrise accommodation suitable for the new generation combined with the referred public space could be the best urban solution for this community. The significance of this research lies on the fact that a single mixed use high-rise apartment could be the best architectural solution to bridge the generation gap between the young and old generations of Tiong Nam.

ABSTRAK

Jurang generasi adalah komponen yang sangat penting dalam kemampuan sosial. Keadaan ini bergantung kepada konteks. penyelesaian Tiong Nam adalah salah satu kawasan perumahan dan komersial tertua Cina di Kuala Lumpur. Selama ini, generasi muda telah berpindah, meninggalkan generasi yang lebih tua. Kekurangan tempat awam dan taman-taman juga menyebabkan interaksi sosial serta hidup berkomuniti menjadi kurang. Kemampuan sosial memainkan peranan penting dalam membentuk tempat sosial yang meriah dan berbudaya. Ia boleh dicapai dengan sambungan di antara tempat-tempat dan orang, menjadikannya tempat sebagai medium ikatan untuk rakyat. Walaupun ia adalah salah satu kawasan kediaman tertua Cina di Kuala Lumpur, kawasan itu tidak sosial mampan. Tujuan kajian ini adalah untuk meneroka kemungkinan konteks khusus pangsapuri bercampur yang boleh meningkatkan kemampuan sosial Tiong Nam dengan mencadangkan strategi reka bentuk seni bina tertentu. Objektif utama adalah pertama untuk mengenal pasti aktiviti-aktiviti sosio-budaya masyarakat yang sedia ada di Tiong Nam, Kuala Lumpur, maka, untuk mengenal pasti tipologi ruang perkauman yang boleh menampung aktiviti-aktiviti sosio-budaya, dan akhirnya untuk menentukan strategi reka bentuk untuk meningkatkan sosial kemampuan melalui bangunan bercampur berdasarkan tujuh parameter ditentukan melalui kajian lapangan. Bagi mencapai objektif, data adalah melalui pemerhatian tapak, temu bual, soal selidik dan kajian kes. Data yang diperolehi dianalisis melalui sintesis tapak, analisis statistik dan analisis kandungan. Kajian mendapati bahawa makan dan aktiviti rekreasi adalah aktiviti utama masyarakat yang sedia ada. Ia juga mendapati bahawa kekurangan tempat awam yang boleh memuatkan dalam konteks aktiviti tertentu adalah utama kekurangan dalam bidang ini. Akhirnya, berdasarkan tujuh parameter, strategi reka bentuk tertentu telah dicadangkan. Ia juga mencadangkan bahawa pangsapuri sesuai untuk generasi baru digabungkan dengan ruang awam yang disebut boleh menjadi penyelesaian bandar yang terbaik untuk komuniti ini. Kepentingan kajian ini terletak pada hakikat bahawa penggunaan pangsapuri bercampur boleh menjadi penyelesaian yang terbaik seni bina untuk merapatkan jurang generasi antara generasi muda dan lama Tiong Nam.

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CHAPTER 1

INTRODUCTION

1.1 Introduction

Throughout the past, many different planning discourses and dialogues with the intention to solve housing issues such as “urban sprawl”. The mono-usage, suburban typology that was driven by the usage of automobile had led the urban fabric towards the end of the twentieth century, which has been criticised because of the negative and social effect. “Compact City” was a model established in the 1990s on the ideologies of “New Urbanism” was intended as an answer to urbanisation (Modi, 2014). The concept promotes “mixed-use, high-density” living, developed on public transportation systems that are efficient, pedestrian-friendly neighbourhoods, better chances of social interaction and a generally sustainable system with low energy usage and less pollution” (Burton, Jenks, & Williams, 1996).

This compact urban-living shows that it is more suitable for the city and the public in the sense that it retains the rural area, reducing time and cost on transportation, infrastructure as well as giving opportunities for people to appreciate the vitality of the urban life. Though, it is difficult to interpret the dense urban into a sustainable future of the city. Thus, to achieve this goal, these developments are progressing towards a smarter and more community-based strategies to attain sustainable neighbourhoods by concentrating on the characteristics of the area to nurture a unique sense of place and community, which offers better job opportunities, transport system as well as solutions for housing. Although the concept of high-rise living has started with the introduction of luxurious condominiums, it was still not considered to be satisfactory and socially unsustainable (Modi, 2014).

1.2 Background Study

Kuala Lumpur's population has grown from about 3.1 million in the year 1990 to 5.96 million in the year 2009 and its area has grown from 621 sq kilometre in 1990 to 1,555 sq kilometre in 2009 (The World Bank, 2011) or in another way, it can also be understood that, the average annual rate of geographical growth which is 4.9% has exceeded the mean growth yearly in population which is 3.6%. The trend of "urban sprawl" is going into Selangor state cities surrounding the Kuala Lumpur city consistently (Naeema, Shamsuddin, & Sulaiman, 2016).

This phenomenon has resulted to reduction of rural land on the urban fringe. Not only that, it causes more energy usage due to increase of distance of commuting as well as pollution from vehicular gas emissions (Rimmer & Dick, 2009). Thus, it is vital to limit "urban sprawl" to reduce greenhouse gas emission and in creating more environmentally sustainable cities (The World Bank, 2011). Some of the important aspects that are causing sprawl are high land prices in the city centre, readily available cheaper land on the peripheries of Kuala Lumpur, the better natural environment,

affordable housing prices, as well as the lower cost of living (Syafiee, 2004). Not only that, the rise of vehicle ownership, developments of better road connectivity and public railway transit are also causing urban sprawl (Abdullah, 2003).

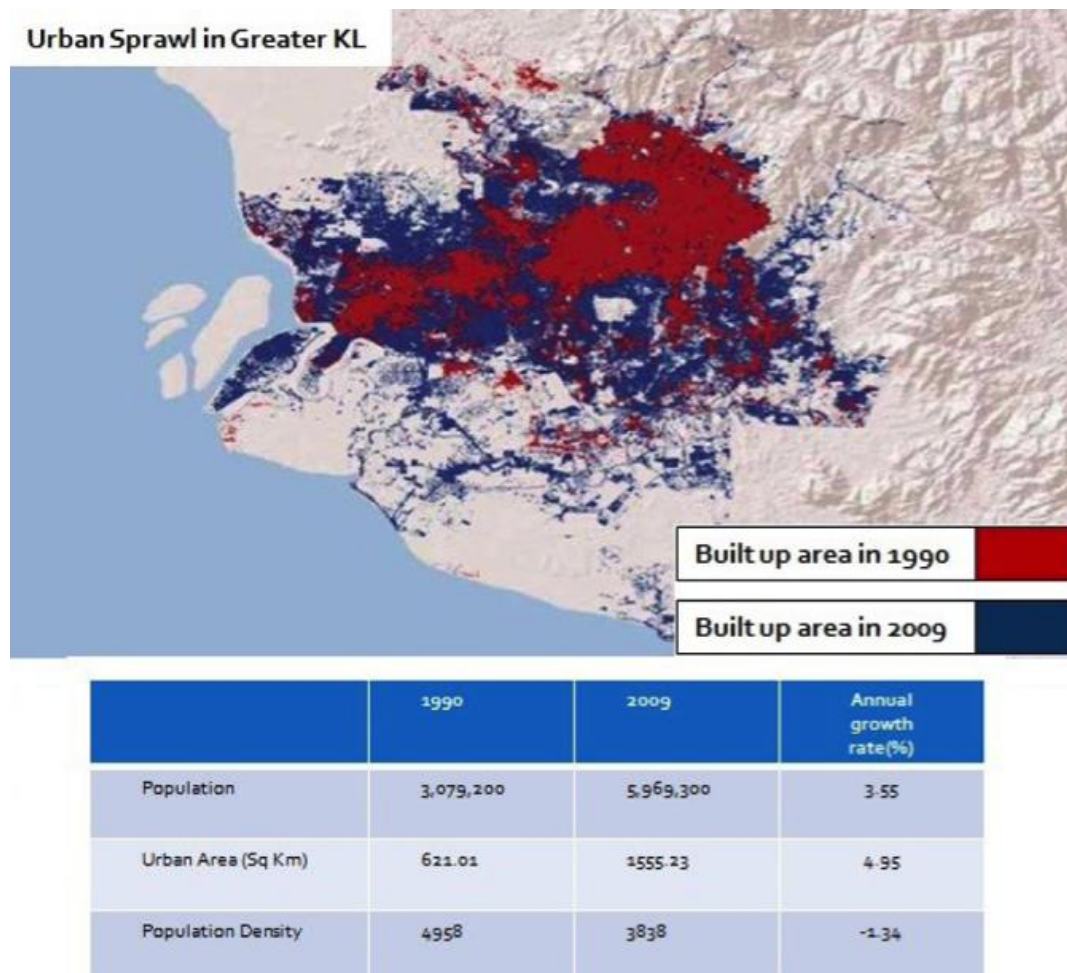


Figure 1.1: Urban sprawl in Greater Kuala Lumpur (*Source: World Bank, 2011*)

This resulted in the increase of costs in energy and environmental aspects, escalated costs of infrastructures and services, reduction of open spaces, as well as deterioration of downtown (Ewing, 1994). Today, Kuala Lumpur is facing the challenges that are threatening its vision of becoming a world-class city by 2020.

1.3 Statement of Problem

High-rise living is becoming a major part in the urban fabric of Malaysian cities. Sites are planned for efficient land usage, maximising the number of units and essentially creating contained communities within each fenced residential scheme. Although there are numerous facilities available in residential blocks, which comprise of common, shared spaces on ground, podium and select intermediate levels, do allow for socialisation amongst residents (Glaeser & Sacerdote, 2000), they are not sufficient. Our trips home are optimised for efficient, impersonal travel, from car to lift to home, with minimal chances for social interaction. With little to no opportunities to come in contact and no reason to purposely seek each other out, meaningful neighbourhood social ties fail to form.

Furthermore, the pressure to reduce costs and gain profits leads developers to maximise sellable area of their projects and minimise unprofitable floor area, which refers to areas other than the residential units and accessory parcels, including the semi-public and semi-private transitional spaces in the building. The public-private contrast in the high-rise, high-density housing environment is obvious by which the private space is where the home ends and the long, narrow semi-public corridor begins. The abrupt intersection and inevitable proximity of these two spaces, joined by a short, semi-private foyer, exposes the private lives of the residents to casual surveillance and scrutiny from passer-by, and the awareness of this situation makes them reluctant to interact with strangers. Transitional spaces are designed to encourage passage and discourage meaningless lingering, however in the proper place and with careful design, they can also become social hubs as the potential for chance encounters in such spaces are high (Aw & Lim, 2016).

1.4 Research Aim, Questions, and Objectives

The aim of this research is to determine the architectural solutions in improving social sustainability through context-specific mixed-use high rise apartments in Tiong Nam. The research questions are: -

- i. What are the socio-cultural activities of the existing communities in Tiong Nam, Kuala Lumpur?
- ii. What are the types of communal spaces that accommodates their socio-cultural activities?
- iii. What are the design strategies that can accommodate these spaces in a mixed use high rise apartment?

The research objectives derived from the research questions are:

- i. To identify the socio-cultural activities of the existing communities in Tiong Nam, Kuala Lumpur.
- ii. To identify the typologies of communal spaces that accommodates their socio-cultural activities.
- iii. To determine design strategies that accommodate these spaces in a mixed use high rise apartment.

1.5 Research Methodology

A qualitative approach is used for this dissertation. To achieve the research objectives stated in subchapter 1.4, the obtained data were analysed through a formal, objective and structured process. Secondary data consists of collected data from journal articles, case studies, reports, books, literature reviews, alumni's thesis as well as articles obtained from the internet were used to support and validate the primary

data which consists of photographs, interview and questionnaire feedbacks. The primary data were analysed accordingly through Site Analysis, Statistical Analysis and Content Analysis which will be further elaborated in Chapter 3.

1.6 Significance of Research

As high rise living is becoming more common in Kuala Lumpur, this research contributed in improving the social sustainability of future high rise housing development as well as integrating with its existing community. Hence, by identifying the socio-cultural activities and behaviours of Tiong Nam and integrating them into high rise housing not only can improve the social sustainability of the high rise housing development itself but also within the Tiong Nam neighbourhood. Furthermore, these architectural solutions in improving the social sustainability of high rise housing will be implemented in the author's Design Thesis (see Appendix B).

1.7 Expected Findings

The author will be able to determine the design strategies that are context-specific that will be incorporated into the author's Design Thesis (see Appendix B) of mixed-use high rise housing towards the end of the dissertation. These solutions could formulate a socially sustainable mixed use high rise housing in Tiong Nam.

1.8 Scope and Limitation

The research scope is limited to the area of Tiong Nam, Kuala Lumpur so that the data obtained and analysed will be context-specific to cater to the local community's needs. Also, the research emphasised on the socio-cultural aspect of the neighbourhood as the intent is to determine context-specific design strategies to improve the social sustainability of the community. The mixed-use high-rise apartment research is limited to social spaces that can benefit both the existing old community and the new younger generation.

1.9 Structure of Dissertation

There are six main chapters in this dissertation. Chapter 1 will be a brief introduction and overview of this research which includes the background study, statement of problem, research aim, questions and objectives, research methodology, significance of research, expected findings, scope and limitation, and the structure of this dissertation. Literature reviews of subjects pertaining to Tiong Nam, social sustainability, generation gap, multi and intergenerational living, mixed-use high rise housing as well as a comparison of social spaces in high and low rise housing will be discussed in Chapter 2. In Chapter 3, research methodology of this dissertation in collecting and analysing the primary and secondary data will be explained. As for Chapter 4, four relevant case studies on social spaces in high rise housing that will aid in achieving the objectives stated in Chapter 1 will be discussed and analysed. The data collected using the research methodologies stated in Chapter 3 will be recorded, analysed and discussed in Chapter 5. Lastly, the results, analysis and discussion will be concluded in response to the research objectives in Chapter 6, including limitations of the research as well as recommendations and further research.

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