## STATEMENT OF AWARD FOR THESIS

# CHOICE AND FAMILIARITY OF USING CORRIDOR AND SPILL OVER SPACE IN URBAN CENTRE

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## **DEDICATION**

"To my beloved father Ramadan Ali Bakra and mother,

my lovely brothers and my dearest sisters.

For their eternal love, support and encouragement..."

With thanks for all the

years of caring, love, and support.

#### **ACKNOWLEDGEMENTS**

In the name of Allah, Most Gracious.

Praise be to Almighty Allah (Subhanahu Wa Ta'ala) who gave me the courage and patience to carry out this work. Pease and blessing of Allah be upon his last prophet Mohammed (Sallulaho-Alaihe Wassalam) and all his companions (Sahaba), (Razi-Allaho-Anhum) who devoted their lives towards the prosperity and spread of Islam.

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#### **ABSTRACT**

The Street corridors are nowadays one of the most important components of urban space. As one element of the street, pedestrian plays significant role of enhancing and sustaining the quality of an urban space. As an important element of urban form, street function serves as social space, commercial space, cultural space, as well as channels of movements. It is therefore very important to study and propose that how these corridors could be maintained or adapted for future reference and uses. It is also important to understand the underlying principles and design in order to be modified and adapted to new and future settlements. In the process of change, existing situation will be modified to meet new uses of these corridors. It was frequently found that many traces of the existing characteristics are erased. This situation is of loss to the place where traditional built environment is replaced by new with very little sense of continuity from their past situation, depriving the place of its roots and hence their sense of place. The corridors are directly related to the history and culture of the people living in the town. The study established on the significant role of public active street corridors as prerequisite for creating urban livable environments. Therefore it is important to record and determine the urban pattern as well as the character of the urban space of the street corridor for future references.

#### **ABSTRAK**

Jalan Koridor yang sekarang ini salah satu komponen terpenting ruangan bandar. Sebagai salah satu elemen dari jalan, pejalan kaki memainkan peranan penting untuk meningkatkan dan mempertahankan sebuah ruangan bandar. Sebagai unsur penting pembentukan bandar, fungsi jalan adalah sebagai ruangan sosial, ruangan komersil, ruangan budaya, serta saluran gerakan. Oleh kerana itu sangat penting untuk mengkaji dan mencadangkan bahawa bagaimana koridor ini dapat dipertahankan atau diadaptasi untuk rujukan di masa depan dan menggunakannya. Hal ini juga penting untuk memahami prinsip-prinsip asas dan reka bentuk agar dapat diubahsuai dan disesuaikan dengan masa depan. Dalam proses perubahan, situasi yang ada akan diubahsuai untuk memenuhi kegunaan baru koridor ini. Itu sering ditemui bahawa banyak jejak ciri yang ada akan terhapus. Situasi ini hilang ke kawasan persekitaran binaan tradisional diganti dengan yang baru dengan sangat sedikit rasa kesinambungan daripada situasi mereka pada masa lalu, merampas tempat asal dan rasa tempat tersebut. Koridor secara langsung berkaitan dengan sejarah dan budaya masyarakat yang tinggal di bandar. Kajian dilakukan berperanan mengetahui signifikan awam koridor jalan aktif sebagai prasyarat untuk mencipta persekitaran bandar yang layak dihuni. Oleh kerana itu, penting untuk mencatat dan menentukan pola bandar serta watak ruangan bandar jalan koridor untuk rujukan di masa depan

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#### **CHAPTER 1**

#### INTRODUCTION

## 1.1 Background of Study

Corridors connect various landscapes by transporting materials, energy and information. New corridors created by human activities are important factors leading to landscape fragmentation. In the meanwhile, they are also barriers to the connections of different ecosystems. The increase in the number of corridors is the driving factor of landscape fragmentation. The canals and roads provide more convenient conditions for human activity, and thus deteriorated the disturbance in the wetlands. Apart from the transportation function of some corridors, such as canals and roads, others may act as barriers for materials, energy, and species, such as dikes. The corridors also have the ability to absorb and transform materials.

Corridors usually follow the most direct route between two or more major population centers. Sometimes relatively large cities or a string of smaller cities may be located up to 100 miles to one side of the primary corridor. It may be beneficial to arrange for a spur off the main corridor to tap these markets and at the same time justify more frequent schedules on a portion of the main corridor than would otherwise be economically feasible. The spur(s) can be operated with connecting

shuttle service or with a selection of trains from one of the corridor terminals or a combination of both options. As such spurs are complicating factors, the optimal service concept and corridor configuration can only be derived on a site-specific basis. Urban commercial corridors include many of the major roadways that pass through urban areas.

The fact much of the human activities still take place on street corridors which have made the street an important physical element of cities. The street environment has a large role in identifying the city character; high quality streets environments may create livable cities. Street corridors are one of the important physical elements of cities. It is a place where human activities are concentrated. It mainly functions as a channel of movement that connects one place to another. Studies by (Jacobs 1961), recognized the street a communication space, a public space, a place of social and commercial encounters and exchanges, a place to do business, a political space and a symbolic and ceremonial space in the city

A corridor is considered as hallways in a building function. These hallways are places of concentrated movement back and forth, and rooms, where people eat, work, play, or sleep. The corridors serve to link the places of activity. People confined to a single room cannot live in a comfortable or natural manner. In fact, they may not be able to survive for very long at all.

The purpose of building corridor is to provide the following:-

- 1. The safe movement of people during normal daily use.
- 2. The safe transportation of goods and materials.
- 3. A readily apparent, safe and adequate means by which building occupants may exit from building in the event of fire or other serious emergency.
- 4. Adequate access and use by emergency personnel like firefighters.

Corridors are used for different types of movements, depending on the building type and purpose. In case of public buildings such as hospitals, the purpose of corridors is to provide emergency evacuation for patients. This policy prohibits the use of the place for temporary storage of construction material, equipment scheduled for installation, supplies pending movement into lab and offices, surplus materials or similar items which would serve to jeopardize area occupants. Corridor is a significant element of the new urbanism movement because of its inherently civic nature. In the age of metropolis where villages, towns, neighborhoods and districts aggregated in unprecedented quantity, the most universally used public space is the corridors that serve the connectivity and mobility.

The corridor is at the same time connector and separator of neighborhood and districts. Corridors include natural and man-made elements, ranging from wild life trail to rail lines. They are utilized by pedestrian and accommodate the frontage of buildings. Therefore, all these should be landscaped to reinforce their continuity. In addition, in low density area, the corridor may be the providing long distance walking and bicycle trail, other recreational amenities and continuous natural habitat.

#### 1.2 Problem Statement

The ability to predict the movement of people is valuable. Capturing the behavior of occupant movement can be used for level of service analysis of building spaces and in particular designing corridors in buildings. There has been little research to date correlating the design of building corridors to the level of service achieved. It is reasonable to mention that as the number of people traveling along a corridor increases, the average speed of the pedestrians will tend to decrease. As more people occupy the limited floor-space of the corridor, there will be more tendencies for the slower pedestrians to impede the progress of the faster pedestrians since a greater degree of congestion will restrict the lateral movement needed by the faster pedestrians for passing and avoiding the slower walkers.

The way the city grows is directly related to the rules that regulation of land development and the standards for the infrastructure that supports development. These dictate things like the width of streets and sidewalks, the distance between buildings and the street, how many parking spaces a business must have, what type of landscaping must be added.

Each of these items may seem like a minor issue on its own, but when taken as a whole, they create the world we live in and make the difference between having communities we can walk in or where we have to drive everywhere. Changes to regulations and standards can positively impact how growth is distributed, the way the city looks, and how we get around.

The purpose of this research is to study the choice and familiarity of using corridor in order to develop a method to evaluate the level of service of occupants and users in corridors. On the other hand designers can understand how a particular corridor accommodates occupants' and user's movements and activities.

#### 1.3 Research Gap

According to (Loukaitou-Sideris 1993) the numerous corridors which connect these centers have been given only cursory attention, relegated to a role simply as connectors of the centers. Despite their omnipresence and functional significance, very little effort has gone into the studying and understanding of how these corridors function, change, and develop over time, and how physical design and land use changes can affect trip generation and traffic congestion. City planning policy has often ignored the corridor environments. As a result, more often than not urban arterial corridors represent fragmented pieces within the metropolitan region, with poor connections to their surrounding context. Uncoordinated, haphazard, unsightly,

even unsafe development patterns too often characterize these commercial roadway stretches. This is because street corridors in fact play a main role to the quality of life of the people

## 1.4 Aim of Study

The main aim of this study is to find out significance of the corridor as important part of city elements. This study is expected to enhance the economic and commercial activity within the corridors. The findings will also reveal the view of the pedestrians and users about corridors.

## 1.5 Objective of Research

- 1 To identify the functional aspects of the corridor.
- 1. To examine the physical characteristics of active corridors place with the use of some case studies in Melaka city.
- 2. To find out the impact of a corridor on the activity of people in an area.

#### 1.6 Scope of Study

This study investigates the resulting effects of the corridor on the movement of the city residents. This study intends to find out the relation between corridors design strategies and the urban resident's activities, particularly on the physical and social scale.

#### 1.7 Research Question

The following are the questions that the research seek to provide answer for

- 1. What are the functional aspects of street corridors?
- 2. What are the physical characteristics of active corridors places with the use of some case studies in Melaka city?

## 1.8 Significance of the Study

Corridors have significant importance for the movement of both occupants of building and the users in case of places like the restaurant and parks. Different activities take place in corridors for various reasons and the purpose. This research will highlight the different activities that take place in these various corridors, the different uses of these corridors. This research will also identify the impact on the corridor activities due to its users and highlight economic and cultural aspects.

## 1.9 Anticipated Finding

It is expected that the study will determine those factors that influence the choice of space in corridors and the various activities that take place. This research will clarify the impact of the corridors on the activities and the movement of people and reduce the risks that occur on the corridors.

#### 1.10 Research Methodology

#### 1.10.1 Procedure for data collection

The procedure of this study will be carried out by Rational-Deductive Method, which start with the theoretical and literature review and other secondary data connected with the primary data. Analysis of findings will be carried out to examine the improvements to case study area.

## 1.10.2 Primary data (Field Survey)

Data collection will comprise of physical and non-physical information based on the field survey of:

(i) Physical characteristics of urban environment, in this case the physical street environment of the street.

(ii) Non physical information will be based on the kinds of street activities, location of the activity, time of the activity etc.

The type of data will be based on records, words and also numbers. The method of the field survey is on documentation and observation which can be described as follows:

## 1 Inventory of street Corridors

The device to document each unit of the street activities is an Inventory Form. This form is used to record the setting of unit activity and configuration of unit, kinds of activity and also the time period of operation. In order to capture all the street corridors activities in study area, Time Budget Method is used to observe the street corridors activities in several time periods. The observation is divided into several time periods to gain maximum outcome. Friday is equally a suitable day for observation as Muslims and non- Muslims alike take advantage of the working week's longest break for leisure, shopping and other social activities.

#### 2 Physical Mapping

Documentation of the physical elements is extremely useful in the analysis of field survey. This exercise is based on base-map, block plan map and land use map of the street. It is conducted to find the basic data and understanding of the site context and configuration of the informal street activities in the corridors. An inventory of the activities and the street corridors will be used to document each unit of the street corridors and activities along the street, at different times.

#### 1.10.3 Secondary Data

The secondary data was gained from the reference studies of related matter such as; governmental reports will helps to gain significant information to the study area, literatures (books, journals, research papers, newspapers and magazine articles, etc.), local plans and other relevant physical plans and information.

#### 1.10.4 Research instrument

The following instruments are used for data collection purposes:

- Maps and local plan maps are used to understand study area in the context of the city and to gain information on the usage of street. Maps are also useful to record sequences of behavior in a setting where people have a choice of several paths: from home to bus stop, from desk to desk. Analyzing map records in the light of an actual setting can give an idea of the characteristics of popular paths.
- Camera will be used to capture subtleties that other methods may not record, to capture physical settings and behaviours at certain times, the atmosphere, kinds of informal street corridor activities at certain times and places. Camera will be used throughout the research process. At the beginning of the research, still photographs will be used to provide initial overview of the area study. The examination of photographs will help generating hypothesis about the possible issues for further study.
- Inventory Form; to record the setting of a unit, the dimension and configuration, and other information such as kinds of activity and goods, time period of operation, etc.

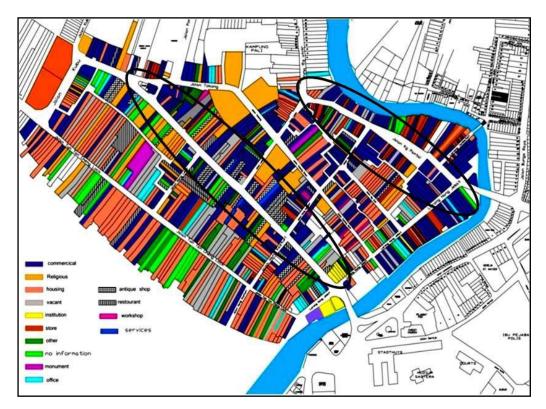
• Notebook and sketchbooks; to record and produce sketches on the spot during the observation

## 1.11 Data Analysis

The analysis of the data will be mainly using descriptive analysis. The descriptive analysis will analyze the frequency of the activities of the corridors, the types of activities and location. A correlation analysis between the strategic design of the corridors, frequency and types of activities can show the relationship of the corridor function and its activities.

## 1.12 Study Area

The study area will focus on two main street corridors in the old conservation area. The people and community in the area are very much influenced by the activities on the corridors. The site context of the propose case study is at the corridors, referring to the impact of the corridors on the activities and the movement of people.



**Figure1.1:** Study Area at Conservation Zone in Melaka City Showing Jalan Hang Jebat and Jalan Kampung Pantai