UNIVERSITI TEKNOLOGI MARA

A STUDY ON METAPHYSICS AND ITS INFLUENCE IN COMMERCIAL BUILDING DESIGN

NOR ANISWATI BINTI AWANG LAH

Thesis submitted in fulfillment of the requirements for the degree of Master of Science (Built Environment)

Faculty of Architecture, Planning and Surveying

February 2018

ABSTRACT

This thesis presents the findings of a study on functional performance of commercial buildings. Comparison between traditional and modern physical design and planning approaches and practices were carried out by reviewing and analysing selected buildings and premises. The main aim of the study is to gauge if the selected building designs are in compliance with any metaphysical theories. In order to achieve the main aim of the study, three major Asian cultures; the Chinese-Buddhist, Indian-Hindu, and Malay-Islam, are reviewed on metaphysical approaches in building design. It was found that there are similarities in principles towards achieving the occupants' well-being. Functionality is prioritised and rituals are performed at ensuring the wellbeing and prosperity of future occupants. The Chinese-Buddhist practice is based on Feng Shui, the Indian-Hindu tradition is based on Vastu-Vidya and the Malay-Islam exploits religious teachings written in a manuscript titled Tajul Muluk. Comparisons between traditional and modern physical design and planning approaches and practices were made by reviewing and analysing current and selected buildings or premises. A total number of 15 commercial premises were identified and these were categorized under the labels "performing", "non-performing" and "benchmark performance". An observational procedure was devised in the analysis process, which was based on technique done previously by others. The findings reveal some evidence that metaphysics had certain influence towards functional performance of the commercial buildings. The results seemly suggested that the metaphysical approach in planning and design could be considered to complement the modern design practices. However, further analysis needs to be carried out involving larger number of samples and area coverage to confirm the findings of the present study. The overall findings of the study allowed for an 'indicator' on the functional performance for building design been established. The 'indicator' can be used to assist the performance of different types of buildings together with other suggestions and recommendations. It is believed that the 'indicator' may be useful in enhancement of building functional performance as well as to improve the social environment of the community living in the built environment.

ACKNOWLEDGEMENT

Firstly, I would like to express my heartfelt gratitude and thanks to the Dean of Architecture, Planning and Surveying Faculty, Assoc. Prof. Dr Masran Saruwono, the supervisor for my research for his endless support and advice, and without whom this work would not have been so successfully completed. His open-mindedness and supervisory experience have been a motivating force and a delightful experience in my journey to complete this research. I would also like to express the same gratitude and thanks to the Director of UiTM Post Graduates Studies, the Director of Unit Penyelidikan dan Inovasi MARA (UNI), Mr. Kamaruzaman b. Jaffar and Mrs Mazni Sulaiman as the Deputy Director of UNI. Without their continuous encouragement and assistance, this work would not have been so effectively completed.

I would also wish to extend my gratitude to Professor David Koh for his support, criticisms, consultation and encouragement while I was conducting this research. My thanks and gratitude go to all the Directors of Mara's State Office, especially Pejabat MARA Negeri Selangor and Negeri Sembilan. A special thanks is forwarded to all the MARA staff for their help, especially with data collection.

My appreciation goes to the ex-directors of the KKTM Rembau, Mr. Noor Zainee Syah Ibrahim, Mr Rizal Effendi Razali and its current Director, Mdm Suriani Ramli, I would like to express my heartfelt gratitude for their interest and support in my research. I found their comments and suggestions in the early stage of the research particularly helpful.

I am also greatly indebted to my fellow research colleagues in KKTM Rembau, for their continuous support and encouragement. My acknowledgement is also due to my sponsor, *Unit Penyelidikan dan Inovasi MARA* for the financial support and MARA staff scholarship.

Last, but by no means least, to my parents and other members of my family, I appreciate their sincere encouragement and prayers.

TABLE OF CONTENTS

		Page
CO	NFIRMATION BY PANEL OF EXAMINERS	iii
AU'	THOR'S DECLARATION	iv
ABS	STRACT	· v :
ACI	KNOWLEDGEMENT	vi
TABLE OF CONTENTS LIST OF TABLES		vii xi
CH	APTER ONE: INTRODUCTION	1
1.1	Research Background	1
1.2	Problem Statement	2
1.3	Aim and Objectives of The Research	4
1.4	Scope of Study	5.
1.5	Theoretical Framework of Research	5
1.6	Significance Of Study	7
1.7	Organization of Thesis	7
CH	APTER TWO: LITERATURE REVIEW	9
2.1	Definition of Terms	9
2.3	Environmental Design And Sustainability	10
	2.3.1 The Concepts of Sustainability in Built Environment	10
2.4	Theories In Modern Design	14
	2.4.1 Vitruvian Ideas about Functional Design	14
2.5	Traditional Practices in Design – Three Asian Cultures	17
	2.5.1 The Chinese Feng Shui	17
	2.5.2 The Indian Vastu-Vidya	18
	2.5.3 The Malay-Islamic Tajul Muluk	19
2.6	Metaphysics and Approaches in Design	24
	2.6.1 Overview on Metaphysical Approach	24

CHAPTER ONE INTRODUCTION

Architects and designers shoulder the responsibility for the buildings designed by them, and to meet expectations. Famous architects Le Corbusier and Van Doesburg in 1924 stressed the importance of functionality as "the ultimate goal of design". A good design reflects the product that fits its purpose. If it works, then it automatically looks good, apart from performing and sustaining its function.

Surprisingly several buildings that were built did not even perform their intended functions at the very beginning or functionally deteriorated just a few years after completion. The Pruitt Igoe housing scheme in St Louis, USA is such an infamous example. The housing complex, designed by Minoru Yamasaki was initially planned as modern and ideal apartments for community living but later turned into a notorious place, which had to be torn down just after 25 years. Similarly, the Suleiman Courts in Kuala Lumpur was built under the direction of the First Prime Minister and supposedly symbolised the progress of an independent and modern Malaysia. Its however, experienced the same fate as Pruitt Igoe. Completed in 1957, the Suleiman Courts survived barely 20 years due to defective works.

A major shopping complex has been built on the site where Sulaiman Court stood, and at present is thriving. This shows that there are situations in which functionally non-performing buildings can be converted into performing ones, by way of appropriate planning and design. The question now is, whether the physical planning of buildings that relies on a modern approach is sufficient to predict the performance of a building once in operation. Are there other factors to be considered during the planning and design stages?

1.1 Research Background

The issues related to non-functional buildings are common, and they happen everywhere. Some buildings are considered functional when the building fits its purpose, whereas others are considered not functional if they fail to do so. Which