Universiti Teknologi MARA

A Cross-Cultural Comparison on Preferences Towards Selected Urban Landscape Planting Compositions

Noriah Othman

Thesis submitted in fulfillment of the requirements for the degree of

Doctor of Philosophy

Faculty of Architecture, Planning & Surveying

April 2004

ACKNOWLEDGEMENTS

I wish to express my deepest gratitude to Professor Dr. Wan Mohamad bin Wan Abdul Kadir and Associate Professor Dr. Mizan bin Hitam, for their patience, guidance, support, advice and constant encouragement throughout this study and for making this thesis possible.

I would also like to extend my appreciation and gratitude to Universiti Teknologi MARA, for granting me the financial assistance and study leave to complete this thesis. I am also deeply indebted to my colleagues and friends especially, Encik Hisham bin Ariffin, for their support and assistance throughout the research. My heartfelt gratitude is extended to Associate Professor Dr. Rasimah binti Aripin, Associate Professor Kamariyah Kamsah, Associate Professor Anuar bin Mohd. Noor, Associate Professor Dr. Dasimah binti Omar and Madam Asha Latha for their sincere contributions during the writing of this thesis. Special thank is also forwarded to Encik Tahir bin Man from the Department of Landscape, Majlis Bandaraya Shah Alam, for providing me with invaluable information on the development of landscape in Shah Alam. To the public and the experts who participated in this study, I will always cherish their cooperation and contributions.

To my husband, Abu Bakar bin Mohd. Ali and my two children, Mohd. Azizi and Nur Liyana, I would like to express my "thank you" for their love, understanding, sacrifice and patience throughout my study.

TABLE OF CONTENTS

		Page
ACK	NOWLEDGEMENTS	ii
TAB	LE OF CONTENTS	iii
LIST	OF TABLES	viii
LIST	OF FIGURES	xi
ABB	REVIATIONS	xv
ABS	TRACT	xvi
СНА	PTER 1 – INTRODUCTION	
1.1	Introduction	1
1.2	The Scenario of Landscape Development in Malaysia	4
1.3	Background of the Research Area	5
1.4	Problem Statement	11
1.5	Objectives of the Research	18
1.6	Conceptual Framework of the Research	19
1.7	Significance of the Research	22
1.8	Scope of the Research	24
1.9	Research Questions and Hypotheses	25
	1.9.1 Research Questions	25
	1.9.2 Hypotheses	25
1.10	Assumptions and Limitations	28
	1.10.1 Assumptions	28
	1.10.2 Limitations	28
1.11	Definition of Terms	29
1.12	Organization of the Thesis	31
	PTER 2 – LITERATURE REVIEW	ع. شد
2.1	Introduction	34
2.2	Aesthetics, Natural and Cultural Landscape	34
2.3	Model of Environmental Aesthetic	36
2.4	Role of Senses in Environmental Aesthetics	38
	2.4.1 Visual Senses	39
	2.4.2 Hearing Senses	40
	2.4.3 Tactile Senses	41
	2.4.4 Smell and Taste	41
	2.4.5 Kinesthesia	42
2.5	Paradigms in Landscape Perception	42
	2.5.1 Expert Paradigm	43
	2.5.2 Psychophysical Paradigm	44
	2.5.3 Cognitive Paradigm	46

LIST OF TABLES

Table		Page
1	Summary of Objectivist and Subjectivist Paradigm	50
2	Preference Matrix	56
3	Frequency of Respondents based on Ethnic Groups	112
4	Frequency of Respondents based on Ethnic Groups and Gender	113
5	Age Group of Respondents	114
6a	Education Levels of Respondents	115
6b	Breakdown of Respondents' Education Level	116
7a	Occupation among the Members of the Public	117
7b	Occupation among the Expert Group	117
8	Monthly Income among the Members of the Public	118
9	Mean Comparison for Landscape Planting Categories	120
10	Analysis of Variance of Planting Categories	121
11a	Mean Rating for Open Space Planting	122
11b	Mean Rating for Street Planting	125
11c	Mean Rating for Planting near Buildings	128
12	Factor Analysis for Open Space Planting	130
13	Factor Analysis for Street Planting	138
14	Factor Analysis for Planting near Buildings	146
15	Summary for Factors of Each Planting Category	153
16	Mean Comparison of Underlying Perceptual Categories between Groups	182
17	Comparison of Mean Rating between Age and the Perceptual Categories	186

A CROSS-CULTURAL COMPARISON ON PREFERENCES TOWARDS SELECTED URBAN LANDSCAPE PLANTING COMPOSITIONS

Abstract

A perception study with respect to urban landscape planting was carried out in Shah Alam city. The importance of such study has become increasingly essential due to the public's awareness on landscape planting around the city area.

The aim of this study is to explore and to compare the preferences of an urban multiracial community. There is a need to carry out such a study because urban planting in the city should reflect the multi-racial nature of a society. Firstly, the study tries to identify if there are any significant differences in preferences for landscape planting among the three major ethnic groups i.e. the Malays, the Chinese and the Indians. Secondly, the study compares the underlying perceptual categories of their respective preferences. Thirdly, the relationships between people's preferences and their demographic backgrounds are evaluated and subsequently investigated. Lastly, the study explores reasons for preferences among the groups. In trying to achieve objectives one, two and four, a comparison of results was made with the expert group as to evaluate the differences in preferences between the public and the experts.

Using the Likert-type scale, the respondents evaluated 66 photographs, which were arranged randomly. The photographs consisted of three categories of landscape planting namely open space planting, street planting and planting near buildings. The respondents were also asked to choose two photographs from each category i.e. one photograph that they liked most and one photograph they liked the least and subsequently to give reasons for their preferences.

The findings reveal that all groups rated street planting category the highest and open space planting the lowest. The experts rated both the above categories relatively higher that the public. The Malays rated a higher preference for street planting than the Chinese and the Indians. For planting near buildings, the Indians rated a higher preference than the Malays and the Chinese. The results of the factor analysis reveal that seven perceptual dimensions were found in the open space planting category and six perceptual dimensions were found for both street planting and planting near buildings. Some significant differences were noted among the ethnic groups for these dimensions. Overall results show that no significant differences were detected between the demographic variables of the public and the perceptual categories. Results on the reasons for preference indicate that high evaluation was given for landscape planting that has a combination of colours, proper maintenance and which can provide shade to the users and vice versa.

It is hoped that the findings would help to reduce the perceptual gap between the experts and the public and among the ethnic groups in landscape planting thus creating an environment that would be accepted by various groups of people in a multi-racial society.