LB/DON /87/03

EXAMINATION OF CONCEPTS EMBODIED IN CUSTOMS AND BELIEFS OF THE TRADITIONAL DOMESTIC ARCHITECTURE THAT RESULTED IN A SUSTAINABLE RELATIONSHIP BETWEEN MAN & NATURE



submitted to the Department of Architecture of the

4

University of Moratuwa in partial fulfillment of the requirements for the degree of

Master of Science

in

Architecture

UM Thesis



ACKNOWLEDGEMENTS

Many individuals have contributed in many ways in the final outcome of this dissertation. I express my gratitude to senior lecturer Dr. Samitha Manawadu for his valuable advice throughout the research, which enabled me to select the topic and carry out the research.

I am most grateful to Prof. Nimal De Silva, Senior lecturers Dr. R. Emmanuel, Archt. Channa Daswatta for their valuable support and advise.

It would be impossible to compile a dissertation of this kind without the support of the practitioners in the architectural and the planning professions, who were willing to provide information, drawings, photographs and opinions, especially Archt. Ashley De Vos and Archt. L.K. Karunaratne. And also I am thankful to Prof. J.B. Dissanayake and Prof. Siri Kolamunnage for his guidance throughout the dissertation.

Finally I am greatly indebted to the long sufferance of my parents.



1

÷-

V

TABLE OF CONTENTS

Introduction

+

l

¥

>

1

, **f**

Topic Explanation	01
Justification	02
Methodology	04

Chapter One: Traditional Domestic Architecture of Sri Lanka

Evolution of Sri Lankan tradition of Domestic	
Architecture	06
Settlement Patterns	14
1.2.1 Village Settlements	15
1.2.2 Urban settlements	18
	Architecture Settlement Patterns 1.2.1 Village Settlements

Chapter Two:	Customs and Beliefs related to Domestic Architectu	'e
2.1	Sri Lankan perception of customs and beliefs in	
	traditional societies	22
2.2	Different perceptions of customs and beliefs in	
	Architecture in other Eastern countries	23
	2.2.1 Hindu Perception of customs and	
	beliefs in Architecture.	23
	2.2.2 Chinese Perception of customs and	
	beliefs in Architecture.	26

Chapter Three:	Customs and	Beliefs	of	Traditional	Dome	stic
	Architecture:	A Clas	sifica	ation		
3.1	Customs and Bel	iefs that infl	uence	ed the Selection	of Site	28
	3.1.1 Siz	ze and Shap	e of t	he Site		28

3.1.2	Topography	29
3.1.3	Vegetation	29
3.1.4	Previous uses of the site	30
3.1.5	Other features of the site	30
3 .1.6	Soil conditions	30
3.1.7	Water Source	30
3.1.8	Roads	31
3.1.9	Entrance to the plot	32

3.2 Design of a house

3.2.1	Location of house in the plot	31
3.2.2	Size of the house	33
3.2.3	Shape of the house	34
3.2.4	Main entrance to the house	34
3.2.5	Inner planning of a house	34

3.3

Construction of a house

University of M	Commencement of construction	35
Electronic The www.lib.mrt.ac	Depositing of Nidhan Vastu	37
	3.3.1.2 Examining the 'seehum'	
	of the house owner	37
	3.3.1.3 Obtaining the Nekatha	
	of a house	37
	3.3.1.4 The nekatha for building	
	a new house	38
3.3.2	Preparation of materials for construction	38
3.3.3	Preparation of the site	38
3.3.4	Laying of the foundation	39
3.3.5	Superstructure	39
3.3.6	Landscaping	39

¥.

>

*

Chapter Four:	Impact of Customs and Beliefs in Traditional Sri Lankan Domestic Architecture on maintaining a sustainable		
	relationship with nature: An Analysis		
4.1	The customs, rituals and beliefs that helped to		
	maintain a sustainable relationship with Earth.	43	
4.2	The concepts, which helped to maintain a		
	sustainable relationship with the sun	50	
4.3	The concepts that enhanced the spatial quality	53	
4.4	The concepts that facilitated a sustainable relationship		
	with air	56	
4.5	The design concepts and construction techniques		
	intended for preservation of Water	57	



University of Moratuwa, Sri Lanka. Electronic Theses & Dissertations www.lib.mrt.ac.lk

59

Conclusion References **Bibliography**

+

*

¥

>

*

LIST OF ILLUSTRATIONS

Figure

*

×

۶.

1

0	1	Rock shelters found in Bendiyagala and Pihilegodagalge	7
0	2	A small yeoman's house	9
0	3	A Mud and thatched house	10
0	4	A typical Sinhalese rural house found in Padukulama,	
		Anuradhapura	11
0	5	A typical Sinhalese rural house from North-central province	12
0	6	A layout of a rural village showing the common open space	12
0	7	A house in north central province.	13
0	8	The common open space of a village in north central province	13
0	9	Map showing patterns of migration	14
1	0	Layout of an organic village	16
1	1	Sketch of an organic village	16
1	2	A layout of a Devala gama, Embekke temple	17
1	3	Royal Capital of Kandy in 1744	18
1	4	Ancient city of Anuradhapura	19
1	5	"Vaastu Purusha Mandala"	24
1	6	Cosmology in Vaastu	25
1	7	T'ai Chi Symbol	26
1	8	The Five Elements – Water, Fire, Earth, Wood & Metal	26
1	9	A Chinese public park	27
2	0	Site configurations	29
2	1	"Pada Bedima"	32
2	2	"Bhuma Naga	33
2	3	"Gruha Disa Chakra"	35
2	4	Chart to determine auspicious time	36
2	5	A house in Medawala, near Kandy	44
2	6	A farm house in Medawala	47
2	7	Undurawana Walauwa	47
2	8	'Thappabemi' construction	49



29	A traditional wattle and daub house in North central province.	50
30	Low eaves of a traditional house.	51
31	Plan of a farmhouse in Menikdiwela	52
32	Plan of Parana Walauwe, Ukuwela, Matale	52
33	Figure showing the 'Riyana'	53
34	Plan and photo of Maduwanwela walauwa	55
35	A house in north central province	56
36	Kalugalle Walauwe, Nugawela	57



University of Moratuwa, Sri Lanka. Electronic Theses & Dissertations www.lib.mrt.ac.lk

¥

.

لر