WAY OF PRACTICE OF BUDDHISM AND BUDDHIST RELIGIOUS ARCHITECTURE

AN ANALYTICAL STUDY OF THE ARCHITECTURAL EXPRESSIONS,
PRESENT IN THE BUDDHIST TEMPLE ENVIRONMENT, WHICH
FACILITATE THE MODE OF BEHAVIOR (WAY OF PRACTICE) OF
THE BUDDHIST DEVOTEE

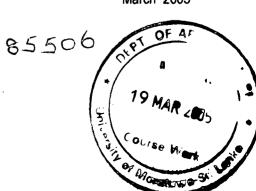


A Dissertation presented to the Faculty of Architecture
Of the University of Moratuwa
For the M.Sc. (Architecture) examination

72"05"
72(043)

E.G.L.M.E. Hewage M.Sc. (Architecture) Session 2004/2005 March 2005





DECLARATION

I declare that this dissertation represents my own works, except where due acknowledgement is made and that it has not been previously included in a theses, dissertation or report submitted to this university or any other institution for a degree / diploma or other qualification.

UOM Verified Signature

(E.G.L.M.E.Hewage)

UOM Verified Signature

(Internal supervisor)



į

ACKNOWLEDGEMENT

My sincere gratitude to each and every one for their keen interest and involvements in many ways to make this dissertation a reality.

My sincere thanks to,

Archt. Vidura Sri Nammuni – Head of the department, Department of Architecture, University of Moratuwa, for been a source of inspiration when I'm a student in 5th year, helped me to develop my thinking to look at Architecture in a meaning full way....

Dr. Upendra Rajapakshe - lecturer, 5th year Master, Department of Architecture and dissertation co-coordinator, for the initial guidance, advice and comments throughout the study.

Atchitect Jayanath Silva, senior lecturer, Faculty of Architecture. For the discussions, warnings and constructive criticisms.

Dr. Samitha Manawadu, senior lecturer, Faculty of Architecture. For the initial discussions, reviews and guidance.

Architect Lalith Muthukumarana, visiting lecturer, Faculty of Architecture. For the discussions and arguments regarding the unclarified areas.

Mandawella Gunarathane Thero, senior teacher in the Rahula vidyalaya, Mulleriyawa. For providing me the valuable instructions on Buddhism and Buddhist culture.

Kollupitiye Mahinda Sangarakkita thero, Senior lecturer, Buddhist and Pali studies, University of Kelaniya. For providing me information and the valuable discussions specially regarding the Buddhist philosophy.

A special word of gratitude is also due to my friend Madhuwanthi Sirisene for holding valuable discussions which made apparent the problems confronted with in writing a dissertation.

And also my thanks to my brother in-laws Chamara Hewege and Thilak Hewege, for assisting me in experiencing the temples and to Mr Indika Perera for helping me in preparing the computer and printing this document.

And my special thanks to my dear sister Samya Madhushani and my patents for helping me throughout the entire work, and also to my mother and father in-laws for specially providing me vehicles for the site visits.

Finally my particular thanks to my dearest husband for all the support and continuous encouragement.

CONTENTS

	Page
DECLARATION	1
ACKNOWLEDGEMENTS	11
CONTENTS	111
LIST OF ILLUSTRATIONS	VII
ABSTRACT	XIII
SUMMARY	XV
DIAGRAMATIC CONCEPT OF THE STUDY	XXI
INTRODUCTION	
Topic explanation Intention of the study Importance of the study Method of study Scope and limitations	1 2 3 4 5
Chapter One	
ART, ARCHITECTURE, EXPRESSION AND HUMAN BEHAVIOUR	
1.1 Architecture as an Art	7
1.2 Expression in Art inversity of Moratuwa, Sri Lanka.	8
1.3 Signs and symbols as means of expressions	9
1.4 Expression in Architecture	10
1.5 The physical environment as a modifying factor Of human behavior	14
1.6 The facilitation of the appropriate human behavior through the correct use of Architectural expression	15
1.7 Concluding Remarks	16
Chapter Two	
BUDDHISM, THE WAY OF PRACTICE OF BUDDHISM AND THE DEVOTEE	
2.1 Origin of Buddhism	17
2.2 An introduction to Buddhism	17
2.2.1 Buddhist teaching, the essence of Buddhist philosophy	
2.3 Origin of way of practice of Buddhism	22

2.3.1	Position of the devotee in the Buddhist society	23
2.3.2	Impact of Buddhism on devotee	24
	(a)'Saddha'	24
	(b) Sought refuge in the 'Tripal gem'	25
	(c)Practice 'sila'	25
2.3.3	The conceptual framework for Sri Lankan	
	Buddhist thinking	25
	(a) Conception of universe and cosmic time	26
	(b) Conception of Rebirth	26
	(c) Conception of 'Kamma'	26
2.3.3	Buddhist activities	26
	(a) 'Punyakarma'	27
	(b) 'Charitta karma'	29
	(c) 'Shanthi karma'	29
2.4 Way of p	ractice of Buddhism	30
2.4.1	'Time and place'	31
2.4.2	'Preliminary preparation'	31
2.4.3	'Way of practice'	32
2.5 Impact of	'Way of practice', on devotee mentality	34
2.6 Concluding	Electronic Theses & Dissertations g remarks, lib mrt.ac.lk	38
Chapter Three		
	THE BUDDHIST TEMPLE ENVIRONMENT, AS CHITECTURE, IN ORDER TO FACILITATE THE HISM	
2.1 May of pr	actice of Buddhism, devotee mentality and the	
	qualities of religious Architecture	39
	priate expressive qualities of the temple	
environmei		42
3.3 i ne identii Architecture	ied expressive qualities and their implication in	
3.3.1		43
3.3.2	F y	47
3.3.3	Expression of Mystery	51
	Expression of Dominance	53
3.3.5	i ·	55
3.4 An outline	of temple Architecture	57

(b)	Shrines and sanctuaries Ecclesiastical buildings Residential buildings	58 58 58	
3.5 Major elem	•	58	
•	Chaitya – Dagaba	59	
3.5.2	Bo – tree	60	
	Image house (Pilimage) Preaching hall (Banasalawa)	60 61	
	Lagumge (Awasa)	62	
	Uposathagara	62	
3.5./	Other Architectural edifices	62	
3.6 Concluding	Remarks	63	
Chapter Four			
	OF THE RELATIONSHIP BETWEEN, WAY OF BUDDHIST RELIGIOUS ARCHITECTURE	PRACTICE	OF
4.1 Introduction to	case studies	64	
4.2 Case study - ty	/pe one	65	
through Its Arch	s of Buddhist temple environment, as achieved itecture, to facilitate the devotee practice of		
Buddhism 4.2.1 Pathway	leading to the temple	65	
4.2.2 Entrance	www lib met ac Ik	66	
4.2.3 Above to	enter and entrance to the temple premises	68	
4.2.4 Entering i	in to the temple	71	
4.2.5 Offer flow	ers and worship the Dagaba	72	
4.2.6 Worship t	the Bo-tree	74	
4.2.7 Worship t	he image house	75	
4.2.8 Listening	to 'bana' preaching at 'Dhamma salava'	81	
4.2.9 Give alms	s to the monks, at 'dana salawa'	83	
4.2.10 Expressi	ve qualities of the temple complex as a whole	84	
the exp	pression of formality through layout planning and ression of dominance created through the three onal image	84	
, , , , , , , , , , , , , , , , , , ,	pression of purity created through the 'maluwa' e use of water	85	

4.3 Case study – type two	88
The expressive qualities of the Royal temple, Suduhumpola at Kandy As achieved through its Architecture, in order to facilitate, the way of Practice of Buddhism	,
4.3.1 Background study of the Royal temple Suduhumpola at Kandy	88
4.3.2 Pathway leading to the temple	88
4.3.3 Entrance transition	90
4.3.4 Above to enter and entrance to the temple premises	91
4.3.5 Entering in to the temple	92
4.3.6 Offer flowers and worship the Dagaba	93
4.3.7 Worship the Bo tree	94
4.3.8 Worship the image house	95
4.3.9 Listening to 'bana' preaching at 'dhamma salawa'	97
4.3.10 Awasage or the residence of the monks	98
4.3.11 Expressive qualities of the temple complex as a whole	98
(a) Expression of formality through layout planning	98
(b) Expression of dominance created through the three dimensional image and layout planning	99
The second of th	100
CONCLUSION	101
LIST OF REFFERENCES 1	104

LIST OF ILLUSTRATIONS

1.	Liverpool Cathedral	Page 12
2.	New Town hall – Stockholm	12
3.	Roman Palazzo punt Diamant	13
4.	Skidmore Ewings and Memll's John Hancock Center - Chicago	13
5.	Porta di Santa Spirito - Rome	13
6.	Pitti Palace - Florance	13
7.	The essence of Buddhism	20
8.	Alms giving to the 'Sangha', as a way of practicing 'Punnyakarma'	27
9.	'Pujas' Done to the Buddha as a way of practicing 'Punnyakarma'	28
10.	'Pamsakula' rite as a 'Charitrakarma'	29
11.	Preliminary preparations before going to the temple	34
12.	Passing a long distance, with flowers in hand, to visit the triple gem	34
13.	Sprinkling the flowers to symbolize the purification	35
14.	Offering flowers to show the respect on Buddha	35
15.	Lighting oil lamps and incense	36
16.	Pouring a pot of water to help the growing of the sacred Bo-tree	36
17.	Murmuring gathas and practicing 'Bhavana'	37
18.	Respecting the Sangha	37
19.	Spanish steps – Rome	44
20.	Athens, Stoa of attalos	44
21.	The Taj Mahal – India	44
22.	The formal linear garden at vaux - le - uicomte, near Paris	45
23.	The temple of heaven – Beijing	45
24.	Nave of Amiens Cathedral	45
25.	The Pathenon – elevation – Rome	46
26.	Athens, Stoa of attalos	46
27.	Nave of Amiens Cathedral	46
28.	A village temple in Sri Lanka	47
29.	The inner chamber of the Temple of Tooth Relic - Kandy	47
30.	Adam's peak, Sri Lanka	48
31	Temple of Horus – India	48

32.	Lingaraia temple Bhubaneswar - Orissa	48
33.	Luxor, temple of Amon	48
34.	Interior within church in Ronchamps	49
35.	Great pyramids in Egypt	49
36.	Stonehenge	50
37.	Stupa of Borobudur in Jawa	50
38.	Dome of the rock – Jerusalem	50
39.	Cave sanctuary at Karil	51
40.	Interior of St. John Nepomuk, Munich	52
41.	Sagrada familia church , Barcelona	52
42.	Hypostyle hall , Carnak	52
43.	Temple of 'Neptune', Paestum	53
44.	Acropolis, view of the Agora Athens	54
45.	Funerary temple of queen Hatshepsunt, Deirel, Bihari	55
46.	A Muslim church	55
47.	Ryoanji , temple garden – Japan	56
48.	Courtyard garden , Kam gano shrine , Kyoto	56
49.	The 'Stupa' of the royal temple Wattarama - Kegall	59
5 0.	Bo-tree of the temple Lankathilake at Kandy	60
51.	Image house of the royal temple of Wattarama - Kegall	61
52.	View of the temple Lankathilake, fron the opposite hillock	65
53.	Quality of seclusion is achieved by a long pathway in the	
	royal temple of Wattarama – Kegall	65
54.	Natures beauty in the pathway leading to the temple of	
	Lankathilake – Kandy	66
55.	Flight of steps leading to the temple of Degaldoruwa - Kandy	66
56.	Entrance transition achieved through decorative gate-ways, the newly	
	built gateway of the temple of Kelaniya	67
57 .	Earlier the entrance transition of the Kelaniya temple	67
58.	At the temple of Warana in Nittambuwa, achieves the entrance	
	transition through a long flight of steps	67
59.	The simple entrance way of Padeniya temple at Kurunegala	68
60.	The entrance way of the Kelaniya temple	68

61.	Pathway and the open gate house of the Gadaladeniya temple - Kandy	69
62.	Rock cut stepping and the entrance house of the Gadaladeniya	
	temple – Kandy	69
63.	The entrance door to the hall from the lobby area, Gadaladeniya	
	temple – Kandy	70
64.	The enclosed hall, Gadaladeniya temple, Kandy	70
65.	First sight, when entered in to the Royal temple, Kelaniya	71
66.	White sand 'maluwa', temple of Kelaniya	71
67.	Ruwanweliseya (Dagaba) at Anuradhapura	72
68.	E nderagalla temple near Kandalama lake	72
69.	Kaluthara 'Bhodhi' at Kaluthara	72
70.	Ruwanweliseya at Anuradhapura	73
71.	Bo-tree at the temple of Welbodhiya at Kandy	74
72.	Bo-tree at the Royal temple Degaldoruwa	74
73.	Planning arrangement of the Padeniya temple at Kurunegala	75
74.	Planning arrangement of Pallekubura Vihare, image house - Kandy	75
75 .	Plan of the image house, Gadaladeniya temple - Kandy	76
76.	Image house, Degaldoruwa temple - Kandy	76
77.	The main doorway of the shrine of the temple Padeniya	77
78.	Doorway of the shrine at Lankathilake - Kandy	77
79.	Image house of the Dambulla rock cut temple	78
80.	Interior of the image house Dambulla	78
81.	Image house at Gadaladeniya temple	79
82.	Sudhodarama temple at Dehiwala	79
83.	The interior of the cave temple Dambulla	80
84.	The intrior of the cave temple Dambulla	80
85.	The interior of the Degaldoruwa temple - Kandy	81
86.	The elevated chair , kept at the center of the 'dhamma salawa'	
	at Padeniya temple, Kurunagala	81
87.	The 'Dhamma salawa' of Maddepola temple	82
88.	The interior of the 'Dhamma salawa' Padeniya temple, Kurunagala	83
89 .	The plan of the 'Dhamma salawa' Padeniya temple, Kurunagala	83
QΛ	The temple of the Tooth relic Kandy	84

91. The Royal temple of Wattarama – Kegall	85
93. The pond of the sacred Tooth relic in Kandy	86
94. Seema malakaya, Colombo	87
95. Long pathway leading to the Suduhumpola temple and the surrounding	
natural beauty	89
96. Middle way of the long pathway and the vision of the temple in a	
much higher elevation, expresses the sacredness	89
97. Straight flight of steps, at Suduhumpola	90
98. Formality through the repartition of stone steps	90
99. The gradual unpeeling expresses the sacredness of the temple	91
100.The stone, water sprinkler symbolizes the quality of purity	92
101.The clean golden sand 'maluwa' expresses the purity	92
102. The white washed image house expresses the purity through its color	92
103.The flight of steps leading to the stupa at the highest position	93
104. Gradual unpeeling of the stupa, increases the sacredness	93
105.White washed stupa and the surrounding environment – purity	93
106.The raised platform of the Bo-maluwa, adding extra sacredness	94
107.The hexagonal shape of the Bo-maluwa, represents the formality	94
108. The white washed image house expresses the dominance and purity	95
109.The decorative main entrance doorway to the image house	95
110.The decorative and comparatively small internal doorway	96
111.The Buddha statue is so huge compared to the doorway	96
112.The exterior view of the Preaching hall	97
113.The interior argument of the preaching hall	97
114.The internal court yarded Awasa	98
115.The layout plan of the Suduhumpola temple	99

ABSTRACT

Art is considered as a medium of expression for human thoughts, desires, emotions and ideas. The signs and symbols act as the vehicle for the communication of the different expressions. In Architecture too, various signs and symbols are used to communicate ideas through Architectural expressions of the spaces and elements.

The expressions which evoke negative or wrong types of emotions create difficulties and uncomfortabilities in achieving required life goals of the human being mainly through their inability to indulge in the correct behavioral patterns.

It is essential to accommodate appropriate Architectural expressions in the built environment in order to facilitate the correct behavioral patterns of the user. This concept is illustrated by considering the way of practice of Buddhism of the Buddhist devotee in the setting of the temple environment.

The Buddhist religion is a disciplined way of life that progressively leads to the elevation of the mind. But it is so complex and comprehensive for the common man to understand. By understanding that the Buddha himself in the 'Parinibbana suttra' had explained a way of practice for the uneducated common man in order to develop his/her mind for the understanding of the great philosophy, the Buddhism.

Through this way of practice, it is expected to develop 'Saddha', 'Sila' and trust in Triple gem (Buddha, Dhamma, and sangha) among the mentality of the Buddhist devotee. These three achievements guide the devotee in understanding the deeper aspects of the philosophy, and finally to the extinction of all sufferings.

The way of practice of Buddhism leads to achieve above mentioned aspects through evoking the positive emotions like formality, hierarchical consideration, faithfulness, truthfulness, respectfulness, obedience, awareness, consciousness, mental and physical purity. But the way of practice alone cannot achieve this successfully, the temple environment which the devotee practice has a leading role.

It is clear that the way of practice of Buddhism and the Buddhist religious Architecture go hand in hand in evoking the positive emotions among devotee mentality on the correct place at the correct time.

The appropriate expressive qualities which facilitate in evoking the identified emotions are Formality, Sacredness, Mystery, Dominance, Purity and Tranquility. These qualities can be identified as the major components of the primary expressive quality of the temple environment.

The temple environment achieves these appropriate expressive qualities through its Architectural planning arrangements, spaces, places and elements by being the facilitators in evoking the correct emotions among Buddhist devotee through the Way of practice of Buddhism.

The fact that the physical built environment is determined by the behavior of the human being is well illustrated by the various fashions and styles of built forms which appeared in consecutive time periods in the Architectural history.

The two types of processes between the built environment and the human behavior can be identified as a reciprocal process in which each one is interdependent on the other.

Hence, Architecture is a process of concretizing suitable built environments to accommodate the human living patterns as well as required emotions and is a process of concretizing the human living patterns by the built forms, once built.