

LB/DON/52/03

Original 10

W A T E R I N D W E L L I N G S

NATURE'S WATER AS AN ELEMENT IN URBAN DOMESTIC ARCHITECTURE



A DISSERTATION PRESENTED TO THE FACULTY OF ARCHITECTURE UNIVERSITY OF MORATUWA FOR THE FINAL EXAMINATION IN M. Sc. (ARCHITECTURE) AND FOR THE ROYAL INSTITUTE OF BRITISH ARCHITECTS (RIBA) PART TWO

??

72 "02"
728-1

University of Moratuwa

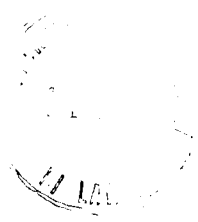


78163

S. P. DEKUMPITIYA
DEPARTMENT OF ARCHITECTURE
UNIVERSITY OF MORATUWA
SRI LANKA
2002

78163

78163





University of Moratuwa, Sri Lanka.
E-Research, Theses & Dissertations
www.thesis.net.lk

Contents.	Page.
Acknowledgements.	iii
List of illustrations.	iv
Introduction.	viii
Abstract.	viii
Topic explanation.	ix
Need of the study.	x
Method of study.	x
Scope and limitations of the study.	xi
<u>Chapter one.</u>	
1.0 Nature of water.	1
1.1 The value of nature.	1
1.2 Water as an element in nature.	5
1.3 Nature's water in Architecture.	6
1.4 The philosophy of water.	8
1.5 The symbolism of water.	10
2.0 Water, emotions and Architecture.	13
2.1 Norm of emotions.	13
2.2 Emotions as a medium of expressions.	14
2.3 Emotions of water in Architecture.	17
<u>Chapter two.</u>	
3.0 Water context in the history of Architecture.	19
3.1 water in classical tradition.	19
3.2 water in Islamic tradition.	21
3.3 water in Chinese tradition.	22
3.4 water in Japanese tradition.	23
4.0 Evolution of the concept of water in Sri Lanka.	25
4.1 Water and traditional Landscapes.	25
4.2 Water and domestic Architecture.	32
5.0 Traditional visions of water in domestic Architecture.	33
5.1 Chinese geomancy. (Feng Shui)	33
5.2 Vastu Shastra.	37

Chapter Three.

7.0 Movement of water in Contemporary domestic Architecture.	39
7.1 changing attitudes of contemporary urban house and its space.	39
7.1.1 Definition of urban house.	39
7.1.2 Urban house and concept of space.	40
7.1.3 Urban house as a microcosm of the city.	42
7.2 Intention of water in a contemporary dwelling.	43
7.3 Water as an expressive element in urban domestic space.	44
7.4 Impact of water in contemporary domestic Architecture.	45
7.4.1 Water and design of space.	
7.4.2 Water and activity pattern.	
• Mr. Anura Ratnavibhushana's house – Moratuwa.	45
• Mr. Niroshana Dahanayake's house - Nugegoda.	50
• Mr. Sarinda Unambuwa's house - kotte.	55
• Mrs. Lilani de Silva's house – Town hall.	59
8.0 Mode of expressions of water in Contemporary domestic space.	63
8.1 Water and sound.	63
8.2 Water and colour.	64
8.3 Water and tranquility.	65
8.4 Water and light.	68
9.0 Water and its influences in western architecture.	70
9.1 Personal house in Chicago, U. S. A - Archt. Tadao Undo.Archt.	70
9.2 Folke Egerstrom' s house in Mexico - Archt. Luis Barragan.	74
9.3 Edgar Kaufmann's house in Pennsylvania, U. S. A. - Archt. Frank Loyed Wright	76
9.4 Alpha Bianca house in Majorca - _Archt. Hasan Fathy.	80
Conclusions.	82
Bibliography.	84

Acknowledgements.

I dedicate my sincere gratitude to Prof. Nimal De Silva, the head, of the department of architecture and Prof. Lakshaman De Alwis, Professor of architecture of the Department of Post Graduate section of the University of Moratuwa, for their kind appreciation to complete the dissertation without hindrance.

Subsequently my extreme gratitude to Dr. S. Manawadu and Architect Gamini Weerasinghe senior lecturers and Architect Damith Fernando and Architect Waruna De Silva lecturers of the department of architecture for their incorrupt contribution and incessant guidance to elevate my effort by giving valuable materials and scopes.

I must also remember Architect Vinod Jayasinghe by giving me relevant examples for the study and lecturer Architect Ravin Gunaratne for his valuable time to being with me as a pillar to bring my effort alive.


To Architect Beanard Gomez and Architect Anura Ratnavibhushana, I present my grateful thanks for their precious contribution to clarify my essay in indistinct situations.

Certainly, it would have not being a true without the effort and encouragement given by my dear colleagues Charuni, Sammani, Hasamali, Anishka, Mihiri, Kithmini, and valuable help given by Indika and Danachandra, always behind with me to the end.

I also extend my regards to *Fani* for her cordiality, inexpressible help and ideas to bring it to its extreme.

Finally the endeavor of mine to be seen alive, is also a result of the love and dedication of my parents and sister, and all those who contributed in numerous ways, though unmentioned commemorates deeply in my heart.

List of illustrations.

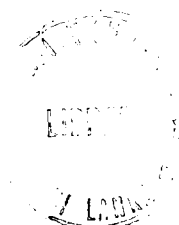
Fig. No.	Description	Page
1.	Lunuganga, Bentota.	1
2.	Lunuganga, Bentota.	1
3.	Interlocking elements.	3
4.	Overlapping elements.	4
5.	Overlapping elements.	4
6.	Natural behaviour of water on rocks.	5
7.	Water is not always presence on earth.	5
8.	Life on earth.	6
9.	Nature creates different moods of humn psuche	6
10.	Sound of water.	6
11.	Still water reflects nature to built form.	7
12.	Detailing of water in built form.	7
13.	Water creates space in architecture.	7
14.	Contemplative water in nature.	8
15.	Water derives human being.	9
16.	When water is seen, it refers source of life.	9
17.	 'Dagaba', the image of the bubble shape.	10
18.	Large living waters.	11
19.	Water as a purifier.	12
20.	Water purifies the soul.	12
21.	Water bring stimulus.	14
22.	Natural emotions of water in nature.	15
23.	Joy of water.	15
24.	Contrasts of natural beauties.	16
25.	Spiritual emotions of water.	16
26.	Spiritual attributes rooted to the psyche.	17
27.	Dynamism of water.	17
28.	Different sound in different built forms.	18
29.	Enchanted space of water.	18
30.	Water has detailed with sculptural figures.	19
31.	Grandeur of water.	20
32.	Sound of water with animal figures.	20

33.	Natural wild life of a Japanese garden.	23
34.	Exaggerated water with animal figures.	24
35.	Ryon ji.	25
36.	Kaludiya pokuna monastery.	26
37.	Water garden at Sigiriya.	27
38.	Detailed water mouth at Anuradhapura.	27
39.	Detailed water mouth at Anuradhapura.	27
40.	Natural water mass with man made forms.	28
41.	Water designs in traditional landscapes in Sri Lanka.	29
42.	A chetty merchant house in Jafna.	32
43.	Elevation and plan.	33
44.	A water pot in front of the house.	35
45.	Relationship of water and house.	35
46.	Intimate space, house at Allen Avenue.	39
47.	Water creates life, house at Borella.	40
48.	House at Colombo.	41
49.	House at Nugegoda.	41
50.	House at Rajagiriya.	42
51.	Continues space, house at Havelock town.	42
52.	House at Jawatta, Moratuwa, Sri Lanka.	43
53.	House at Jawatta.	45
54.	House at Colombo.	44
55.	House at Kotte.	44
56.	House at Nugegoda.	45
57.	House at Dehiwela.	45
58.	The lagoon house, at Moratywa.	45
59.	The lagoon house, at Moratywa.	46
60.	Reflective water.	46
61.	The lagoon house, at Moratywa.	47
62.	Nature's water in the house.	48
63.	The ground floor.	48
64.	First floor.	49
65.	Section.	49
66.	Section.	49
67.	The old house.	50




House at Jawatta, Moratuwa, Sri Lanka.
Electronic Theses & Dissertations

House at Jawatta.



68.	The new entrance.	50
69.	Traditional court yard	51
70.	Still water creates spatial progression.	51
71.	The courtyard.	52
72.	The way to the living.	52
73.	The ground floor.	53
74.	The upper floor.	53
75.	Sectional elevation.	54
76.	Sectional elevation.	54
77.	The entrance to the house.	55
78.	The internal courtyard at the living.	55
79.	Frame view of water.	56
80.	The living.	56
81.	The ground floor.	57
82.	The upper floor.	57
83.	Section.	58
84.	Sectional elevation.	58
85.	The entrance.	59
86.	Living with water.	60
87.	Interior view.	60
88.	Second storey.	61
89.	Third storey.	61
90.	Front elevation.	62
91.	Section.	62
92.	Sound creates spatial progression.	63
93.	House at Rajagiriya.	64
94.	House at Allen Avenue.	64
95.	House at Dehiwela.	65
96.	House at Havelock town.	65
97.	House at Rajagiriya.	65
98.	House at Rajagiriya.	66
99.	House at Allen Avenue.	66
100.	House at Kotte.	67
101.	House at Allen Avenue.	68
102.	House at Havelock town.	68
103.	House at Town hall.	69



104.	Axonometric view.	70
105.	Promenade ramp links the ground floor.	70
106.	The terrace.	72
107.	Rough texture at interior.	72
108.	The ground floor.	73
109.	First floor.	73
110.	Second floor.	73
111.	Out door reflective pool.	74
112.	Water melts with spaces.	74
113.	Water with sound.	74
114.	Ground floor plan.	76
115.	Falling water.	76
116.	Falling water.	77
117.	First floor plan.	78
118.	Main floor plan.	78
119.	South façade.	79
120.	East façade.	79
121.	West façade.	79
122.	Plan of the Alpha Bianca house.	81
123.	 Elevation of Moratuwa, Sri Lanka.	81
124.	Electronic Theses & Dissertations Section: mrt.ac.lk	81

