

MINIMALIST APPROACH IN CONTEMPORARY RESIDENTIAL ARCHITECTURE IN URBAN CONTEXT

A Dissertation Submitted to the

Department of Architecture of the

University of Moratuwa,

for the final examination M.Sc (Architecture)

B. A. P.H. Manorima Faculty of Architecture University of Moratuwa

2007

89489

Abstract

Architecture is considered as a profession and the people who practice it - architectsare also considered as professionals. A professional is defined as;

"Whena professional person agrees to provide his professional services to a client, and no contract exists with terms to the contrary, the professional owes a duty to the client to exercise reasonable, skill and care in conformity with the normal standards of his profession"

(Janssens, D.E.L., Design Build Explained, 1991)

So it is responsible of Architects to provide client with the desired physical and psychological comfort. Therefore it is important to facilitate meaningful architecture to eliminate inappropriate ornamentation and disquietingly ornate architecture, which ignore the spaciousness and meaning.

Within above framework, this dissertation is an attempt to crystallize some thoughts About Minimalist Architecture, which can be seen as the pursuit of simplicity, as well as an ideal design approach which caters for essentialities out of different design approaches.

Gradually people have to satisfy on small plot size of land. Also stressful life style makes the living in tight urban context more complex. So emphasis will be paid to Minimalist approach in contemporary residential in urban context. As the house should be a place of tranquility by banishing disorder, ostentation and vanity to feel it as the master of habitable space.

DECLARATION

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

UOM Verified Signature

Manorima B.A.P.H M.Sc. II (2007) Faculty of Architecture University of Moratuwa Sri Lanka.

I hereby declare that the particulars given above are true and correct.

UOM Verified Signature

Archt: Arosh Gamage. Individual Supervisor

ACKNOWLEDGMENTS

This study much to the assistance and guidance given by all the following to whom I wish to extend my heart full gratitude.

Dr. Harsha Munasinghe, for his guidance and valuable comments given throughout the course of the study.

Architect Arosh Gamage, my dissertation tutor, for the support and inspiration extended to me, in imparting her experiences on the subject, and guiding me. I wish to extend my deep appreciation and gratitude to her for directing many aspects of this study, her precious time expended in this respect.

University of Moratuwa, Sri Lanka.

spect University of Moratuwa, Sri Lanka Electronic Theses & Dissertations

Archt. Anishka and Archt. Roshini for guiding me and being a source of inspiration to the study.

My colleagues, Udayangani, Padma and Imashi, for helping me in numerous ways.

Finally, I'm very grateful to my parents and my brother for encouraging me and their heartiest support.

CONTENTS

	Page
Declaration	i
Acknowledgement	ii
List of Illustrations	viii
Abstract	xiii
Introduction	1
Importance of the study	2
Method of study	3
Scope and Limitation	3
1.0 CHAPTER ONE: Minimalism: the concept in general University of Moratuwa, Sri Lanka. Electronic Theses & Dissertations www.lib.mrt.ac.lk	5
1.2 Minimalism in other disciplines	6
1.2.1 Minimalism in Art	7
1.2.1.1 Minimal Artists' Approaches	
in Art (1960s)	8
1.2.2 Minimalism in Music	
1.2.2.1 Minimal Artist's Approaches	
in Music (1960s)	16
1.2.3 Minimalism in Architecture	17

22
24
24
29
32
33
36
37
39
39
40
40
41
4
44
48
50

2.3 Enh	ancement of Spatial Quality in the Minimalist Space	
2.3.1	Elementary Geometry/Form	51
	2.3.1.1 Two Dimension Form	52
	2.3.1.2 Three Dimension Form	53
	(a) Unity & Architectural Composition	
	to achieve Minimalism	54
	(b) Balanced composition to achieve	
	Minimalism	54
	(c) Scale and proportion to achieve	
	Minimalism	55
	(d) Rhythm & Repetition to achieve	
	Minimalism	56
2.3.2	Use of colour in minimalist space	
	2.3.2.1 Colour & Perception	59
	(a) Psychological effects of colour	59
	(b) Psychology of colour (b) Psychology of colour (b) Psychology of colour (c) Dissertations	60
	2.3 2.2 Minimalism & Colour: Expressive Simplicity	63
2.3.3	Use of materials & textures	68
2.3.4	Use of light in minimalist space	69
2.3.5	Element details in minimalist space	71
СНАРТЕ	R THREE: Minimalist Architectural application in	
	Contemporary residential in urban situati	ons
3.1 Ea	stern approaches in Minimalist architecture with	
Sp	ecial reference to residential	
3.1.1	Tadao Ando	
	3.1.1.1 Back ground	72
	3.1.1.2 Project- Azuma House in Sumiyoshi	74

3.0

	(a) introduction	14
	(b) Architectural appreciation	74
	3.1.1.3 Project - Koshino House, Ashiya (1984)	
	(a) Introduction	76
	(b) Architectural appreciation	76
	3.1.2 Shigeru Ban	
	3.1.2.1 Back ground	77
	3.1.2.2 Project - Curtain wall house in	
	Itabashi – Ku, Tokyo	
	(a) Introduction	78
	(b) Architectural appreciation	78
	3.1.2.3 Project - Wall less house in Karuizawa, University of Moratuwa, Sri Lanka Kitasaku - Gun, Nagano (1997) Electronic Taleses & Dissertations	
	(a) Introduction C.1k	79
	(b) Architectural appreciation	79
	3.1.2.4 Project - Naked House in	
	Kawagoe – Shi (2000)	
	(a) Introduction	80
	(b) Architectural appreciation	80
3.2	Western approaches in Minimalist architecture with	
	Special reference to residential	
	3.2.1 John Pawson	
	3.2.1.1 Back ground	81
	3.2.1.2 Project - John Pawson's house in	82
	London's Notting Hill.	

	(a) Introduction	82
	(b) Architectural appreciation	83
	 Materials 	84
	 Details 	85
3.3 Sri L	ankan architect's approaches in Minimalist	
Arch	itecture with special reference to contemporary	
Resid	lential in urban context	
	*	
3.3.1 Pr	roject - Housing block at Kalubowila	86
	Archit. Arosh Gamage	
	3.3.1.1 Introduction	86
	3.3.1.2 Architectural appreciation	
	(a) Two dimensional form University of Moratuwa, Sri Lanka	87
	(b) (b) Materials Theses & Dissertations	90
	(c) Element details C. 1k	91
3.3.2 P	roject - Chandaka Jayasundere House- Colombo.	93
	Archit. Varuna de Silva	
	3.3.2.1 Introduction	93
	3.3.2.2 Architectural appreciation	
	(a) Two dimensional form	94
	(b) Materials	97
	(c) Element details	97
CONCLUSIO)N	98
BIBLIOGRA	PHV	100

LIST OF ILLUSTRATIONS

- 1. Establishment of Buddhism in Sri Lanka
- 2. Following Buddha's way for a better life.
- 3. Untitled -1968 by Donald Judd
- Tony Smith's sculpture Gracehopper.
- 5. Donald Judd's work untitled.
- 6. Judd's 15 untitled works in concrete.
- 7. Sol Lewitt's simple geometric structures.
- Sol Lewitt Repeated simple geometric forms.
- Sol Lewitt Cubes on Blue ground, 1988, carpet.
- 10. Dan Flavin Monument for V. Tatlin.
- 11. Dan Flavin untitled work of art.
- Dan Flavin's sculptures using Fluorescent light.
- 13. Listing of minimalist artists Electronic Theses & Dissertations
- 14. Steve Reich, one of the pioneers of minimalist music.
- 15. Minimalist approaches "Clapping Music".
- 16. Tony Smith sculpture placed close to ground.
- 17. Donald Jndd's untitled works in mill Aluminum- Marfa gallery, Texas.
- 18. Calvin Klein flagship store, Madison Avenue, New York, 1995.
- 19. Novy Dvur monastery model, cloister facing east.
- 20. People in search for calm environment for meditation at present.
- 21. Interior view of Japanese house, inspired by Zen Buddhism.
- 22. Japanese honse, as an echo of its tradition.
- 23. Asian designs Lunae table lamp.
- 24. Nature with minimal elements it creates enormous effect.
- Sri Lankan monk dwellings at Sigiriya.
- 26. Water gardens at Sigiriya.
- 27. House is a visible symbol of its occupant's identity.
- 28. Living in urban context.

- 29. Moods of entertainment enhance stressful life style.
- 30. Meditation for stressful life style.
- 31. People crowded in urban centers.
- 32. Exterior view of Azuma House in Sumiyoshi, Japan.
- 33. View after drawing the curtain Curtain wall house, Itabashi Ku, Tokyo, Japan
- 34. Aesthetic and simplicity.
- 35. A bedroom is dominated by a piece of mini- architecture.
- 36. A dining including less decoration.
- 37. John Pawson's own home, a Victorian terrace in London's Notting Hill.
- 38. Bed room at Mount Eagle, designed by John Pawson.
- 39. Kitchen counter top at John Pawson's own home, in London's Notting Hill.
- 40. Ray key's bowls epitomize the minimal approach to design.
- 41. Neuemdorf House, Mallorca 1989.
- 42. Living/dining room with minimal decorative elements.
- 43. A bedroom with minimal elements.
- 44. Sink, cut from stone-Pawson's house in London's Notting Hill.
- 45. Plans of Azuma House in Sumiyoshi, Japan 1975-76- Tadao Ando.
- 46. Degelo, Haus Muller, Switzerland 1988-99.
- 47. Tadao Ando Azuma House, Osaka 1975.
- 48. Composition of simple geometric forms.
- 49. Luis Barragin Master Plan for Los Clubes, Service Entrance, Mexico City 1968.
- 50. Simplicity closely associated with scale and proportion.
- 51. Shigeru Ban Miyake Design studio Gallery, Shiwuya Ku, Tokyo, Japan 1994.
- 52. PTT Telecom Switching Stations, Amsterdam, The Netherlands 1995-97.
- 53. Eurotwin Business center, Amsterdam, The Netherland 1992-93.
- 54. Repetition of simple, massive monolithic forms.
- 55. Living with Red.
- 56. Living with Orange.
- 57. Living with Pink.
- 58. Living with Green.
- 59. Living with Blue.

- 60. Living with yellow.
- 61. Living with Purple.
- 62. Living with Black.
- 63. Living with White.
- 64. Notting Hill home, London.
- 65. Art work within a living.
- 66. Dining few colours contrast to white.
- 67. Interior of Japanese house using earth colours.
- 68. Using earth colours in integrating the landscape into the architecture.
- 69. Effect of light on the coloured surface in creating Calmness.
- 70. Warm colours in minimal living.
- 71. Colour, texture and light creating aesthetic beauty.
- 72. Stairs in an apartment, situated in a Couruna, Spain.
- 73. Large pieces of marble in a kitchen counter top John Pawson's house.
- 74. Stools, table and floorboards constructed in same timber Douglas.
- 75. Sri Lankan house done with use of natural materials.

 Dissertations
- 76. Ramp connecting two blocks of a house- Hashin, Japan.
- 77. Bath room with, the checkered pattern of light- house-Nagasaki, Japan.
- 78. Using light with colour and texture to create a warm and relaxing atmosphere.
- 79. Staircase, with its cantilevered steps that apper to float in space- Apartment, Spain.
- 80. Kitchen fittings stand out for their complexity.
- 81. Selecting simply designed furniture, imbue the space.
- 82. Church on the Water, Hokkaido (1981).
- 83. Exterior view of Azuma House in Sumiyoshi, Japan.
- 84. Sketches of Azuma House in Sumiyoshi, Japan.
- 85. Azuma House in Sumiyoshi, Japan 1975-76, house plans and section.
- 86. Interior view of Azuma House in Sumiyoshi, Japan.
- 87. Sketch of Koshino House, Ashiya (1984).
- 88. Koshino House, Ashiya (1984).
- 89. Paper tubes as display structures, Miyake Design Gallery, Shiwuya Ku, Japan.
- 90. Interior view of Miyake Design Studio Gallery, Shiwuya Ku, Tokyo, Japan.

- 91. Curtain wall house, Itabashi Ku, Tokyo, Japan, 1995.
- 92. View after drawing the curtain- Curtain wall house, Itabashi.
- 93. Wall less house Shigeru ban.
- 94. Wall less house interior space flows into the natural surroundings.
- 95. Interior view of Naked House, Tokyo, Japan, 2000.
- 96. John Pawson, Pawson House, London -Interior view of the House.
- 97. Pawson House, London Kitchen counter stretching the length of the house.
- 98. Stair case set in a narrow vertical space Pawson house, London.
- 99. Stool, table, floor in same timber; simply and elegant.
- 100. Kitchen is a visual extension of the main space.
- 101. Kitchen counter top consists of a single piece of marble.
- Simple designs for furniture.
- Using pure geometric forms in detailing.
- 104. Exterior view of the house.
- Entrance to the building –Following pure geometrical forms.
- 106. Staircase in simple manner adding aesthetic.

 Liectronic Theses & Dissertations
- 107. Entrance to two housing units, v. lib. mrt. ac. lk
- 108. About to enter the house unit- first view of interior.
- 109. Vistas from the entrance of individual unit.
- View of multifunctional space living.
- 111. Closer view of multifunctional space living.
- View of the Pantry.
- View of living from the pantry.
- View of the entrance from living.
- Cement finish adding wholeness.
- Natural grains to the design in pantry cupboard.
- Simple detailing of staircase.
- 118. Simple detailing of door with few colours.
- 119. Pure geometric forms in detailing.
- Simple detailing of window and racks.
- 121. Façade to the road.

- 122. Simple detailed entrance door.
- 123. Plans of the house.
- 124. Huge open free volume creates sense of wholeness.
- 125. View of the living.
 - 126. View of dining and cooking.
 - 127. Living and adjacent rear garden.
 - 128. Open rise steel and timber staircase.
- 129. Simple detailing in stair case.

