



**FACILITATING SPACES FOR SOCIAL INTERACTION
THROUGH ARCHITECTURE AN EXAMINATION
WITH SPECIAL REFERENCE TO MIDDLE INCOME
CLASS HOUSING SCHEMES IN COLOMBO AND
SUBURBS**

A dissertation presented to the
Department of Architecture
University of Moratuwa, Sri Lanka
As a partial fulfillment of the requirements for the Degree of
Master of Science in Architecture

Jayawardhana K. V. G. K. S.
Faculty of Architecture
University of Moratuwa
Sri Lanka

2007

89501



Abstract

Social interaction is an important factor in any situation. In the journey of the life, people meet different people. Their backgrounds vary from one person to another. With reference to the residential neighborhood housing schemes, this factor is the most vital ingredient contributing to strengthen the harmony in the society. With the industrialization, urbanization and globalization the communal life in the modern society is very intricate and erratic. Due to that, the social bonds vanish from human beings. According to the lack of social values the neighbourhood will not exist for a long time. So the social spaces should be enlivened and to make more cheerful locations to the users to re - create the social bonds. Therefore the main objective of this examination is to identify the degree of social interaction in every space in the housing scheme and formulate the spatial organization to -make livelier the social interaction.

The chapter one of this examination is focused on architecture and social interaction. The attributes of architecture and the social function of architecture will be discussed in the next Then the social interaction will confer by covering the importance of the social interaction, and the modes of social interaction. And under that section, the most valuable parts will be discussed. One of them is the degree of social interaction and the other is the spatial organization for the social interaction.

The chapter two focuses on the middle income class people. Initially, converse the notion of house, home and dwelling. Then talk about the housing phenomena in extensive way. After that the categorization directly comes into the middle income class housing schemes. The determination of social class and the emergence of the middle income class are then mentioned the behavioral attitudes of the middle income class people are discussed. Finally it spotlights the instances for social interacting spaces in the housing schemes.



The chapter three thrashes out the case studies within the framework in chapter one. That gives you an idea about the social interaction space and the spatial organization of that space. In that way this examination has opened new panoramas to enliven the social interaction.

Declaration

I declare that this dissertation represents my own work, except where due acknowledgement is made, and that it has been previously includes in a thesis, dissertation or report submitted to this university or to another institution for a Degree, Diploma or other qualification.

Signature of student



Jayawardhana K. V. G. K. S.
Department of Architecture
Faculty of Architecture
University of Moratuwa
Sri Lanka

Signature of Principal Supervisor

Dr. Archt. Harsha Munasinghe
Senior Lecturer
Department of Architecture
Faculty of Architecture
University of Moratuwa
Sri Lanka

Acknowledgements

I consider it is my utmost duty to extend my sincere thanks with a deep sense of gratitude for the following for the assistance and encouragement extended to me to make this endeavor a success.

- Archt. Dr. Harsha Munasinghe, my tutor, for the invaluable contributions and the generous commitment of his limited time and the interest evinced by him up to the very end.
- Prof. Dr. M. S. Manawadu
- Archt. Vidura Sri Nammuni
- Archt. Prasanna Kulathilake
- Archt. Sudarshana Wijayagunawardhana
- Archt. Dr. Upendra Rajapakshe
- Landscape Architect Susira Udalamatte
- Lecturer Rangajeewa Rathnayake for the guidance and support extended throughout this study.
- Ministry of Defence, Public Security, Law & Order, for granting permission to carry out the studies at Summit flats.
- A special word of thanks goes to O. I. C. Cinnamon Garden Police Station, Mr. Keerthipala and his officers, O. I. C. Keppetipola Mawatha Police Post and his crew, Chief Officer Broody House at Colombo 07, where the survey was carried out for the valuable help extended to carry out the research in certain areas where high security is in force.
- Archt. Jayantha Domingo the Director General Manager of National Housing Development Authority and his staff,
- The occupants of respective housing schemes for extending their useful view points and contribution.
- My friends, Sajeevi, Sameera, Chathurangani, Pramodhika, Chathuri, Nadeesh for the help and guidance rendered by them during this study.
- Finally, I offer my humble gratitude to my mother, father, grandma and brother who showered me with the much needed power of confidence and guidance.

List of illustrations

Figure Number	Page No.
01. Maslow proposed natural ranked levels or priorities	15
02. Degree of social interaction	19
03. Courtyard	19
04. Doorstep	19
05. Water tap	19
06. Community space	19
07. Space as "Production"	22
08. Market on church ground	24
09. Linear scheme	25
10. Central scheme	26
11. Axial scheme	26
12. Dispersed scheme	27
13. Table 1 – Comparison of spatial organization	28
14. CHELTA – Layout plan	38
15. CHELTA – 3D form	38
16. CHELTA – Section	39
17. CHELTA – Layout of a cluster	39
18. Mahaweli settlement – Village and village centre	40
19. Mahaweli settlement – Section	40
20. Elevation of Aranya	42
21. Layout of Aranya	43
22. Interconnected spaces	44
23. Space as "Production"	44
24. Space as "Producer"	44
25. Space as "Production"	44
26. Peeping balcony	45
27. Interrelated activities	45
28. Cheerful environment	45
29. Plan – Intimate courtyard	46

30. 3D form - Intimate courtyard	46
31. Intimate courtyard	46
32. Incremental houses	46
33. Location map – Summit Flats	50
34. Ground and Second floor plan	51
35. First and Third floor plan	51
36. Ground and Second floor plan	53
37. Entrance court in ground	53
38. Entrance court in second floor	53
39. Connected balconies	54
40. Balcony	54
41. Interconnectedness	54
42. Flowing spaces	54
43. Connection with the ground	55
44. Connection with the ground	55
45. Common ground	56
46. Space among the columns	56
47. Spaciousness	57
48. Connectivity	57
49. Links between two levels	58
50. Layout – Summit Flats	59
51. Location map	60
52. Type B – Ground floor and First floor	61
53. Type D – Ground floor and First floor	61
54. Type F – Ground floor and First floor	61
55. Type B – Expansion in the Ground floor	62
56. Expansion in the Ground floor	64
57. Expansion in the Ground floor	66
58. Type B – Cul – de – sac	68
59. Cul – de – sac produces social cohesion	69
60. Plinth instead of the boundary wall	69
61. Trees and hedges instead of boundary wall	69
62. Steps formulate connection with the street	70

63. Type F – Garden area	71
64. Layout – Raddolugama housing scheme	73
65. Shopping area	74
66. Bus stand area	74
67. Play ground	74
68. Religious place	74
69. Children's park	74



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

Contents

	Page No.
Abstract	i
Acknowledgements	ii
List of illustrations	iii
Contents	vi
Introduction	1
Chapter One – Social function of Architecture	
1.1 Attributes of Architecture	7
1.2 Functions of Architecture	8
1.2.1 Physical Function	8
1.2.2 Psychological Function	8
1.2.3 Social Function	9
1.3 Social Interaction as a Social Function	9
1.3.1 Importance of Social Interaction	11
1.3.1.1 The development of trust in sharing nature	11
1.3.1.2 Development of Personality	12
1.3.1.3 Protection of the neighbourhood	13
1.3.1.4 Space diminution of ethnic and group discrimination	14
1.3.2 Modes of social interaction	15
1.3.2.1 Human – Human interaction	15
1.3.2.2 Human – Built environment interaction	17
1.3.3 Degree of social interaction	18
1.3.4 Spatial organization for social interaction	21
1.3.4.1 Adaptation to site and climatic variables (Location)	23
1.3.4.2 Layout pattern	25
1.3.4.3 Interrelatedness of activities	29
1.3.4.4 Flexibility of use	29
1.3.4.5 Expansion	29

Chapter Two – Social Interaction in Housing Schemes

2.1 Socio – spatial continuum in House, Home and Dwelling	31
2.2 Housing as a need	33
2.3 Middle income class housing schemes	
2.3.1 Determinants for social classes	34
2.3.2 Emergence of middle income class	35
2.3.3 Behaviour and attitudes of middle income class	37
2.4 Socially interactive housing configurations	38
2.4.1 Local housing configurations	
2.4.1.1 CHELTA neighbourhood	38
2.4.1.2 Mahaweli settlements	39
2.4.2 Foreign housing configurations	
2.4.2.1 Aranya housing project	41
2.4.2.2 Belapur housing scheme	45



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

Chapter Three – Spatial organization for social interaction

An examination of middle income class housing schemes

3.1 Methodology	48
3.2 Selection Criteria	49
3.3 Case study One – Summit Flats, Keppettipola Mawatha, Colombo 07	
3.3.1 Location	50
3.3.2 Socio – economic character	50
3.3.3 Built environment character	50
3.3.4 Spatial organization for social interaction	
3.3.4.1 With the family members	51
3.3.4.2 With the intimate neighbours	53
3.3.4.3 With the immediate community	56
3.3.4.4 With the whole community	59

3.4 Case study Two – Raddoluwa housing scheme – Raddolugama, Seeduwa	
3.4.1 Location	60
3.4.2 Socio – economic character	60
3.4.3 Built environment character	60
3.4.4 Spatial organization for social interaction	
3.4.4.1 With the family members	62
3.4.4.2 With the intimate neighbours	67
3.4.4.3 With the immediate community	68
3.4.4.4 With the whole community	71
Conclusion	75
Bibliography	78



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