# AN EXAMINATION OF IMPACT OF NEW BUILDINGS ON HISTORIC BUILT FABRIC: WITH SPECIAL REFERENCE TO COLOMBO & GALLE FORTS



LIBRARY

LIBRARY

MORATUWA, SMILLIA

MORATUWA

A DISSERTATION SUBMITTED TO THE FACULTY OF ARCHITECTURE UNIVERSITY OF MORATUWA

FINAL EXAMINATION IN M.Sc.(ARCHITECTURE) 2002

FOR THE

72"02" Tres ( (148.4)

W.A.D.S. KUMARI
DEPARTMENT OF ARCHITECTURE
UNIVERSITY OF MORATUWA
SRI LANKA
MARCH 2002

78177

University of Moratuwa



78177

### **ACKNOWLEDGEMENT**

This study, with many complexities, and difficulties, completed due to the assistance, guidance and encouragement given by all of the following persons, to whom I wish to extend my heartfelt gratitude.

- Prof. Nimal de Silva, Head of the Department, Faculty of Architecture,
   University of Moratuwa, for the encouragement from the beginning,
- My tutor Dr. M S Manawadu, Dr. Emmanuel, Arch. Madura Premathilake and Gamini Weerasinghe, Senior Lectures of Department of Architecture, University of Moratuwa, for their guidance, valuable comments and unreserved help given to me,
- Archt. Ravin Gunarathne, Archt. Neluka Senanayake, Lecturers of Department of Architecture, University of Moratuwa, for valuable ideas and comments.
- My colleagues and friends for their valuable support in numerous ways
- All the staff of the UDA for their valuable help
- Chanaka for his never-ending encouragement and patience throughout the work.
- Finally for my dear parents, brothers and sisters for their unlimited support and for always being there to carry the burden of my troubles and irritations in the most loving way.

# **CONTENTS**

	Page
Acknowledgement	- 1
List of illustrations	- 11
Abstract	- 1v
CHAPTER ONE	
INTRODUCTION	
1.1 - Topic Explanation	- 1
1.2 - Issue/ problem area	- 3
1.3 - Need of the study	- 4
1.4 - Objectives/ Intention of the study	- 5
1.5 - Methodology	- 6
1.6 - Scope and Limitations	- 7
CHAPTER TWO  University of Moratuwa, Sri Lanka. Electronic Theses & Dissertations www.lib.mrt.ac.lk	
THE CITY AND ITS HISTORIC BUILT FABRIC	
2.1 - The City	- 8
2.2 - Structure of the City	- 9
2.3 - Attributes of the City	-10
2.3.1 - Physical Attributes	- 10
2.3.1.1 - Fabric and Object	- 10
2.3.1.2 - Space	- 13
2.3.2 - Qualitative attributes	- 15
2.4. Characters of a city and its built fabric	- 15
2.4.1 - Sacred character	- 16
2.4.2 - Dynamic Character	- 16
2.4.3 - Organic Character	- 17
2.4.4 - Historic urban context	- 17

2.5 - Historic urban context	- 19
2.6 - Historic built fabric	- 21
2.7 - Components of character of a historic built fabric	- 22
2.7.1 - Composition	- 22
2.7.2 - Texture	- 24
2.7.3 - Stance	- 25
CHAPTER THREE	
NEW BUILDINGS IN THE HISTORIC BUILT FABRIC.	
3.1 - Modernization of the historic built fabric	- 26
3.1.1 - New development in historic built fabric	- 27
3.1.2 - Necessity of preservation of the historic built fabric	- 30
3.2 - Typology of new buildings in historic built fabric	- 32
3.2.1 - Re-use (Restored) buildings	- 34
3.2.2 - Re-create (Assimilated) buildings	- 37
3.2.3 - Modernist (Newly achieved) buildings	- 42
3.3 - Impacts on the historic built fabric and its generating factors	- 43
3.3.1 - Visual Impacts	- 44
3.3.2 - Generating factors of the visual impact	- 45
3.4 - New development in the historic built fabrics of Sri Lanka	- 50
3.4.1 - Back ground of the city development	- 50
3.4.2 - Determinant Factors of the historic built fabric	- 53
3.5 - New Developments in historic cities of Sri Lanka	- 54

## **CHAPTER FOUR**

AN EXAMINATION OF THE IMPACT OF THE NEW BUILDINGS ON HISTORIC BUILT FABRIC IN COLOMBO AND GALLE

4.1 - Introduction - 56

4.2 - Colombo Fort Case study	- 57
4.2.1 - Historic Background of Colombo Fort	- 57
4.2.2 - Determinant factors of Colombo Fort	- 61
4.3 - Study of new buildings in historic built fabric of Colombo Fort	- 64
4.3.1 - York Street- Introduction	- 66
4.3.1.1 - architectural characteristics of the historic built	
fabric in York street	- 71
4.3.2.1 - Analysis of the visual impacts of new buildings	
in York street	- 75
4.3.2 - Janadhipathi Mawatha	- 79
4.3.2.1 - Architectural Characteristics of historic built fabric	
in Janadhipathy mawatha	- 80
4.3.2.2 - Analysis of visual impacts of new buildings in	
Janadhipathy mawatha	- 82
4.3.3 Echelon square as a buffer Zone/ Front segment of the	
Janadhipathy mawatha	- 86
4.3.3.1 – Architectural characteristics	- 86
4.3.3.2 - Analysis of visual impacts of new buildings	- 87
4.4 - Analysis of visual impacts of new buildings in Colombo Fort	- 87
4.5 - Galle Fort case study 2	- 89
4.5.1 - Historic Background of Galle Fort	- 89
4.5.2 - Determinant factors of Galle fort	- 92
4.6 - Study of new buildings in historic built fabric of Galle Fort	- 95
4.7 - Analysis of visual impacts of new buildings	-103
CONCLUSION	- 106
BIBLIOGRAPHY	- 109

## LIST OF ILLUSTRATIONS

2.1 – City of Florence	- 11
2.2 - Campanile in Florence	- 12
2.3 - Pantheon in Rome	- 14
2.4 – City of Rome	- 18
2.5 - City of Rome	- 20
2.6 - Topography as a determinant factor	- 21
2.7 - City in Paris	- 23
2.8 - A street in Rome	- 24
2.9 - Street in Rome	- 25
3.1 - A city of Singapore	- 27
3.2 – The Hass Haus Shopping center in Vienna	- 32
3.3 - Cartton Hotel – Philadelphia	- 36
3.4 - Coper Union building in New York	- 38
3.5 - Working Drawings of Coper Union Building	- 39
3.6 - The corper Union Building	- 40
3.7 - The corper Union Building	- 40
3.8 — The Harperly Hall	- 41
3.9 - The Harperly Hall	- 41
3.10-A city in Malashia	- 43
3.11-Ancient Sri Lankan Cities	- 51
	50
I.1 - Map of Colombo in colonial period	- 58
J.2 - CMRSP- Colombo	- 60
1.3 - Arial view of Colombo	- 60
I.4 - Beira Lake – Colombo	- 62
4.5 - Dutch house in Pettah	- 63
4.6 - Main street in Pettah	- 63
7.7 - Map of Colombo fort	- 65
8.8 - Map of the York Street	- 67

4.9 - Cargills / Millars building	- 68
4.10 - Eastern side of the York street	- 68
4.11 - York Street	- 69
4.12 - Layout of streets	- 70
4.13 - Section of York Street	- 72
4.14 - GOH building	- 73
4.15 - Grand arcade of GOH	- 73
4.16 - York Building	- 74
4.17 - Grindlays Building	- 76
4.18 - Comer Building –in Baron Jayathilake Mawatha	- 77
4.19 - Buildings of Janadhipathy Mawatha	- 78
4.20 - Janadhipathy Mawatha	- 79
4.21 - National Mutual Building	- 81
4.22 - Buildings in Janadhipathy Mawatha	- 83
4.23 - Façade treatement	- 84
4.24 - Hotel Intercontinal building Moratuwa Sri Lanka	- 85
4.25 - Dutch Hospital in Colombo	- 86
4.26 - Arial view of Galle Fort	- 89
4.27 - Area map of Galle Fort	- 91
4.28 - Outer city of Galle	- 92
4.29 - Map of the Galle Fort	- 94
4.30 - New buildings in Galle Fort	- 96
4.31 - Old buildings Galle Fort	- 97
4.32 - Church in Galle Fort	- 98
4.33 - Character of old building	- 99
4.34 - Ware house in Galle Fort	- 99
4.35 - Buildings in church street	- 100
4.36 - Built fabric in streets	- 102
4.37 - Colour use in street facades	- 103
4.38 - building Line	- 104
4 39 - Court Yard in a house	- 104



#### **ABSTRACT**

Development of a city is a unique historical process, which has grown up over centuries, and derived its shape and appearance. The physical structure of a city is considered as the order of the built form, which is a creation of man for living. Within this physical structure, built fabric becomes the most important component, as it is the container of people that creates the image of the city.

The largest part of the city structure and its visual quality is mainly dominated by the built fabric. The built fabric which is present today is the product of the unified whole of buildings, built according to the different architectural styles of different periods. Though each type has a character and identity of its own, the unified environment was harmonious and had a distinctive architectural character and townscape value. But the most of the buildings, which came up in the recent past were designed and built regardless to its context or the urban setting resulting the fragmentation to the said harmonious built fabric. (historic/ existing)

The design of new buildings should respect the norm or the context, for that to be harmonized with the surrounding. And this dissertation is based on existing towns, their intrinsic visual qualities and suggests some ways and means of maintaining it by suggesting that qualities that inherited from the past can become a discipline for the change today, it's main theme, is that city's past, its present and its future (in terms of the visual qualities and the context) must combine to create a recognizable unit, so that the growth can be seen and felt to be continuous.