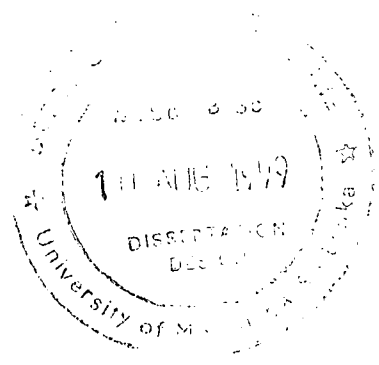


1999/29/00

# LANGUAGE OF ARCHITECTURE: AN EXAMINATION OF THE PRINCIPLE OF CONTRAST

A Dissertation Submitted to the University of Moratuwa  
As a Part Fulfillment of the Requirements for the Degree of  
Master of Science in Architecture

පුස්තකාලය  
මොරටුව විශ්ව විද්‍යාලය, ශ්‍රී ලංකාව  
මොරටුව.



71702  
72 "99"  
72.01

Shamila Perera  
Department of Architecture  
University of Moratuwa  
August 1999

71702

TH

## ABSTRACT

Human beings are a kind of sensitive 'living beings'. It is an obvious fact that monotony weakens sensitivity. Hence contrast can be regarded as a stimulant of sensitivity which is inductive to the well-being of the society.

Less attention has been paid to form contrast in most of the person day buildings, to make use of the architectural language in order to communicate the appropriate message. Therefore an attempt has been made in this study to promote awareness about it in architects and designers.

One of the most effective principles of the language of architecture to convey these messages in a life-like manner is the principle of contrast. And here the principle of contrast is explained with the aid of other principles which are taken as sub-principles.

The creations which have been done previously in a satisfactory manner have proved a great help in strengthening the study to an extent.



## ACKNOWLEDGEMENTS

At the very outset, I would like to extend my whole hearted gratitude to Architect Vidura Sri Nammuni, Senior lecturer, Department of Architecture, University of Moratuwa for the worthy guidance and valuable advice, comments and encouragement throughout this work.

My sincere thanks are due to Archt. Damith Fernando and Archt. Prasanna Kulathilake for helping me to get into the path to go ahead.

I am deeply thankful to Surangi, and Bimba who helped me in numerous ways to make this effort a success.

I express my special thanks to Mr. Alahakoon and Ruwan for copying photographs.

And I am grateful to my mother for her untiring devotion and support extended to me for this dissertation. I am deeply thankful to my brother Suhith for his timely advice and assistance through out this work.

And finally to all others who helped me in various ways to make this effort a reality.

**CONTENTS**

|  | page<br>no |
|--|------------|
| <b>LIST OF ILLUSRATIONS</b>  | vi         |
| <b>INTRODUCTION</b>  | ix         |
| 0.1 Background to the study  |            |
| 0.2 Need for the study   |            |
| 0.3 Intention of the study   |            |
| 0.4 Method and limitation of the study   |            |
| <br>   |            |
| <b>CHAPTER ONE: LANGUAGE AND MESSAGE IN ARCHITECTURE</b>   |            |
| <b>1.1 A Language and a Message</b>  | 03         |
| <b>1.2 Communication through Architectural Language</b>  | 03         |
| 1.2.1 Effect of Architecture in built form as a language and its tendency<br>to deliver message.               | 05         |
| 1.2.2 Architectural Expression : and elements contributing to Arhitectural<br>Expression.                      | 08         |
| 1.2.2.1 Architectural Expression   | 08         |
| a) Compulsory Expression   |            |
| b) Primary Expression  |            |
| c) Secondary Expression  |            |
| 1.2.2.2 Elements contributing to Architectural Expression  | 10         |
| i)Building elements  |            |
| ii)Architectural elements  |            |
| 1.2.3 Expressive qualities   | 16         |
| <b>1.3 Expression and Meaning</b>  | 17         |
| 1.3.1 Expression   |            |
| 1.3.2 Meaning  |            |
| <b>1.4 Manipulation of Language of Architecture in order to convey the<br/>            appropriate message</b> | 18         |
| 1.4.1 Appropriatness   | 18         |
| 1.4.2 Appropriate and inappropriate manipulation in Architecture   | 20         |

**CHAPTER TWO : THE LANGUAGE OF ARCHITECTURE AND ITS PRINCIPLES.**

|   |    |
|---|----|
| <b>2.1 Constituents of Architectural Language.</b>          | 22 |
| <b>2.2 Vocabulary and Grammar in Architectural Language</b> | 23 |
| 2.2.1 The vocabulary of Architectural Language              | 24 |
| 2.2.2 Grammar in Architectural Language                     | 24 |
| <b>2.3 Principles identified in Architectural Language</b>  | 25 |
| 2.3.1 The Principle of Number                               | 27 |
| 2.3.2 The Principle of Punctuation                          | 29 |
| 2.3.3 The Principle of Inflection                           | 31 |
| 2.3.4 The Principle of Contrast                             | 32 |
| 2.3.5 The Principle of Scale and Proportion                 | 33 |
| 2.3.6 The Principle of Mass                                 | 35 |

**CHAPTER THREE : THE PRINCIPLE OF CONTRAST**

|  |    |
|--|----|
| <b>3.0 Introduction</b>  | 37 |
| <b>3.1 Constituents / Components of the Principle of Contrast</b>        | 38 |
| <b>3.1.1 Sub principles of the Principle of Contrast</b>                 | 39 |
| i) Number as a sub principle of the Principle of Contrast                |    |
| ii) Punctuation as a sub principle of the Principle of Contrast          |    |
| iii) Inflection as a sub principle of the Principle of Contrast          |    |
| iv) Scale and Proportion as sub principles of the Principle of Contrast  |    |
| v) Mass as a sub principle of the Principle of the Principle of Contrast |    |
| <b>3.1.2 Enhancers of the Principle of Contrast</b>                      | 60 |
| i) Colour  |    |
| ii) Texture  |    |

|  |             |
|--|-------------|
| <b>3.2 Aims and significance of the Principle of Contrast in built environment</b> | <b>67</b>   |
| <b>CONCLUSION</b>  | <b>xi</b>   |
| <b>BIBLIOGRAPHY</b>  | <b>xiii</b> |





University of Moratuwa, Sri Lanka.  
Electronic Theses & Dissertations  
[www.lib.mrt.ac.lk](http://www.lib.mrt.ac.lk)

# **LIST OF ILLUSTRATIONS**

## LIST OF ILLUSTRATIONS

| Fig. No. |  | Page No. |
|----------|--|----------|
| 01       | Communication Breakdown  | 06       |
| 02       | Replacement of the Modern Symbols  | 07       |
| 03       | Temple of the tooth relic  | 09       |
| 04       | Dominance - Establishment in Power   | 10       |
| 05       | Dominating roof of Taige Dian of Peaking   | 11       |
| 06       | Different building elements of Reim Cathedral  | 11       |
| 07       | Entrance to a temple   | 12       |
| 08       | A Hindu temple Madras  | 13       |
| 09       | A window of the Pretura Capua  | 14       |
| 10       | Daisy House - Indiana  | 14       |
| 11       | The regular pattern of ribs - Canterbury Cathedral   | 15       |
| 12       | Legibility of forms  | 19       |
| 13       | Legibility of Use  | 20       |
| 14       | Small scale robustness of Moratuwa, Sri Lanka  | 20       |
| 15       | Elphinstan theatre at Maradana   | 20       |
| 16       | Dasa building at Borella   | 21       |
| 17       | Turtles making Love  | 22       |
| 18       | Sydney Opera House   | 22       |
| 19       | Ronchamp Chapel  | 22       |
| 20       | Ronchamp Chapel  | 22       |
| 21       | Metaphors of Ronchamp Chapel   | 22       |
| 22       | Design is to put together the elements to generate new work                                  | 26       |
| 23       | Perter White House - Mauritius   | 28       |
| 24       | Creating identity by resolving duality   | 28       |
| 25       | St. Mary Iffley, England   | 29       |
| 26       | Punctuate by stone patterns on the floor   | 30       |
| 27       | 'Inflection' - view of St. Marks   | 32       |
| 28       | Generic scale - The size of building element relative to other forms<br>in its context       | 33       |
| 29       | Human scale - the size of a building element or relative to the<br>dimensions and proportion | 34       |
| 30       | A building having two scales - in and out  | 34       |



|     |   |    |
|-----|---|----|
| 31  | Geometry used to make proportions of buildings              | 35 |
| 32  | The church and convent of San Francisco - Assisi            | 35 |
| 33  | Skyscraper of the future - simple geometrical shapes        | 36 |
| 34a | A composition of geometrical forms, shapes and simple tones | 36 |
| 34b | Masses are clustered to give 'group form'                   | 36 |
| 35  | Church of the Miracoli - Venice                             | 38 |
| 36  | The Chiesa del Santo, Padua                                 | 38 |
| 37  | Baptist Church - Cinnamon Gardens                           | 45 |
| 38  | Roman Architecture as a living language                     | 45 |
| 39  | Moroccass - Style doorways                                  | 45 |
| 40  | Church plan by Leonardo da Vinci                            | 46 |
| 41  | Corner punctuation  | 47 |
| 42  | Modern corner treatment                                     | 47 |
| 43  | Government Technical College                                | 47 |
| 44  | Chicago Tribune Column                                      | 49 |
| 45  | City of Manhattan   | 49 |
| 46a | Turban domes and lofty pinnacles                            | 50 |
| 46b | Moravan Town - Chechoslovakia                               | 50 |
| 47  | The Mosque at Kharjite Community                            | 50 |
| 48  | Ruhunu University - Faculty of Arts                         | 50 |
| 49  | Ruhunu University - View from the Chemistry building        | 51 |
| 50  | Ruhunu University - Physics building columns                | 51 |
| 51  | Ruhunu University - Lay out Plan                            | 52 |
| 52  | Ruhunu University - Elevation                               | 53 |
| 53a | New Parliamentary Complex                                   | 54 |
| 53b | New Parliamentary Complex                                   | 54 |
| 54a | Seema malaka - Colombo                                      | 54 |
| 54b | Seema malaka - Colombo                                      | 55 |
| 55a | St. Bridgets Montessori School                              | 56 |
| 55b | St. Bridgets Montessori School - Elevation                  | 56 |
| 56  | Remis Cathedral - Entrance pacade                           | 57 |
| 57  | Museum - Square - Paris                                     | 57 |
| 58  | Brant House - Greenwich                                     | 58 |
| 59a | Fukuoka seaside Memochi                                     | 58 |
| 59b | Fukuoka seaside Memochi                                     | 58 |
| 60  | Chapel - Trinity College, Dublin                            | 58 |

|    |  |    |
|----|--|----|
| 61 | Church of the Miracoli, Venice                       | 59 |
| 62 | Church in Stockholm                                  | 59 |
| 63 | Guggenheim Museum - New York                         | 59 |
| 64 | The Colour Wheel                                     | 60 |
| 65 | Francisco Csilardi house - Maxico City               | 62 |
| 66 | San Cristobal Stables Folke Egerstram house - Maxico | 63 |
| 67 | San Cristobal Stables Folke Egerstram house - Maxico | 63 |
| 68 | San Cristobal Stables Folke Egerstram house - Maxico | 63 |
| 69 | Contrast between the sky and the Earth               | 63 |
| 70 | Difference between in and out                        | 64 |
| 71 | Colours enhances the dominance                       | 64 |
| 72 | The Floating theatre - at Venice Biennak             | 64 |
| 73 | 'Punctuation' by the enhanced 'Contrast'             | 65 |
| 74 | A building in Paris                                  | 65 |
| 75 | Head Quarters Building for Disney                    | 65 |
| 76 | Wooden country church - Scandinavia                  | 67 |
| 77 | Facade of the church of San Francisco                | 67 |

