

LB/2004/104/06

397

DDR 04/395

115

**AN EXAMINATION OF THE CONCEPT OF
"SPIRIT OF THE PLACE"**

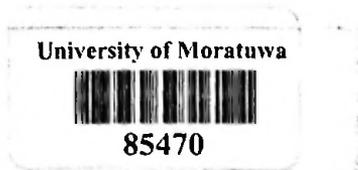
Case Study: Urban Spaces in Colombo Fort.

**LIBRARY
UNIVERSITY OF MORATUWA, SRI LANKA
MORATUWA**

A dissertation

**Submitted for the degree of
Master of Science (Architecture) at
The University of Moratuwa in
(March) (2005)**

72 05
72(043)



KALYANI A. M.

DEPARTMENT OF ARCHITECTURE



85470

85470

***This dissertation
Is dedicated to
All my teachers
Since my childhood...***



DECLARATION

I declare that this dissertation represent 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.

Signed *UOM Verified Signature*

Kalyani A. M. 22/03/2005



ACKNOWLEDGEMENT

I am deeply indebted and profoundly grateful to the many who assisted and guided in making this study a success and I also take this opportunity to express my sincere thanks to:

- Architect Vidura Sri Nammuni, Head of the Department, University of Moratuwa.
- Professor Nimal De Silva, Dean, Faculty of Architecture, University of Moratuwa.
- Architect Dr. Upendra Rajapakshe, Lecturer (Dissertation Co-coordinator), University of Moratuwa &
- Architect Prasanna Kulathilake, Lecturer, University of Moratuwa.

Let me specially thanks to

- Architect Dr. Harsha Munasinghe, (Individual Supervisor) &
- Architect Dr. Jagath Munasinghe, Lecturer, University of Moratuwa

For their invaluable guidance and co-operation extended me through out this study.

I also greatly appreciate the co-operation of Miss Ayeshani De Silva, Lecturer, University of Moratuwa.

And also to Nimeesha, Nalika, Aravinda, priyanga, Anjala and all the others who immensely helped me.

Finally I offer my whole hearted gratitude to Mrs. Neeta Fernando and to my mother and father with all the other family members who was always with me in my difficult times with whose support I was able to successfully complete this study.



ABSTRACT

Place is the basic psychological need of the man and the structure of the place facilitates orientation and identity of man which are the two basic needs of dwelling. If not, he gets alienated. Dwelling is of vital importance to the human existence.

The important attribute of the place which is the structure of the place creates the spirit of the place which expresses through the character which is unique and distinctive spatial quality peculiar to that place differ from that of all other places. Therefore the creation, preservation and maintaining the distinctive character in human environment is very important.

Chaotic urban spaces have become a crucial problem today. The urban environments seem to be lost their place identity and character becoming disordered and placeless due to chaotic new developments. They are not meaningfully integrated with the existing structure. Changing needs and functions of the society affects for that. The reason for this is the lack of proper understanding of the concept of the spirit of place in the urban space and the factors that determine and generate them.

In this situation, most essential is the identification of the concept of spirit of place and the attributes of place making. Identification of these aspects in an urban space facilitates the community living.

The complex correlation is analyzed and identified through a theoretical approach. First it will search the notion of space and the concepts of place and place making. Secondly it will search about the concept of the spirit of place identify, the principles of it with the attributes by which these principles of place can be created. Finally this theoretically established correlation illustrates with an actual example in Sri Lanka-Colombo fort- which has a genuine character due to the foreign invasions of the Portuguese, Dutch & British. Now it seems as losing its character as the new developments. The analysis proves the existence of the spirit of the place and the relationship of it with architecture in urban spaces and in conclusion it will compare the development guidelines proposed for the Colombo Fort area by the Urban Development Authority (UDA).

TABLE OF CONTENTS

ACKNOWLEDGEMENT

ABSTRACT

LIST OF ILLUSTRATIONS

LIST OF ABBREVIATIONS

INTRODUCTION

i

CHAPTER ONE: CONCEPT OF SPACE, PLACE MAKING & SPIRIT OF PLACE.

1.1 Notion of "space"	1
1.2 Levels of experiencing the space	2
1.2.1 Pragmatic / Primitive space	3
1.2.2 Perceptual space	4
1.2.3 Existential space	5
1.3 Elements of existential space	6
1.3.1 Center of the existential Space	7
1.3.2 Enclosure of the existential space	7
1.3.3 Continuity of the existential space	8
1.4 Architectural space	8
1.5 Concept of "Place"	10
1.6 Concept of Place Making	12
1.7 Significance of Place to Man	15
1.8 Concept of "Spirit of Place": A definition	17
1.9 Structure of the place	20
1.9.1 Enclosure	22
1.9.2 Center	27
1.9.3 Continuity	27
1.10 Character	29
Concluding remarks	

CHAPTER TWO: PLACE MAKING IN URBAN CONTEXT

2.1 Urban space- a definition	33
2.2 Urban space and the spirit of place.	34

2.3 Essential elements of an urban space.	35
2.3.1 Boundary	38
2.3.2 Square	39
2.3.3 Streets	42
2.4 Architectural attributes of urban place making.	45
2.4.1 Urban Enclosure	46
2.4.2 Urban Center	51
2.4.3 Urban Continuity	54
concluding remarks	
CHAPTER THREE: CASE STUDY: Colombo Fort	
3.1 Historical Development	61
3.2 Architectural space in development	68
3.3 Place making in different types of spaces.	76
3.3.1 Streets	76
Bank of Ceylon Mawatha	76
York Street	79
Chatham Street	91
Janadhipathy Mawatha	97
3.3.2 Squares at road intersections	102
3.3.3 Arcades	103
Concluding remarks	
Concluding Analysis	104
CONCLUSION	106
BIBLIOGRAPHY	114
APPENDICES	115

LIST OF ILLUSTRATIONS

Fig No	Description	Page No
1	finding a place in the space	03
2	Baby in the womb	04
3	Perceiving space within limits	04
4	Clearly demarcated center by using buildings	07
5	A basic example of making an enclosure around a settlement.	08
6	Creating space through the tombs Of the Ming Emperor's floor plan	09
7	Space defined through cultural lenses	11
8	Finding a place	12
9	Development of the enclosure	14
10	space defined, Space comprehensible & space articulate	14
11	Place created by the users in a narrow street in Florence.	15
12	A Kwakiutl totem pole going to decay evokes strong meanings.	16
13	Creating the spirit of the place	19
14	Structure of the man made environment	20
15	Settlement forms	22
16	Open air theatre with the streets which gives the direct orientation.	22
17	Zaltbommel city in Culebborg- with 3 principle spheres	23
18	Making a boundary/introducing openings Enclosed spaces	23
19	By openings create the inside outside relationship.	24
20	Japanese use texture to make a boundary.	24
21	Salisbury (England) Stonehenge -aerial view	25
22	Planar elements	25
23	line elements create	25
24	Transitions from public roadway to private property	25
25	Enclosures can also be purely recreational and aesthetic	25
26	Skyline of Ottawa in North America	26
27	Natural water body has become a boundary.	26
28	River-Moscow	26
29	River-Rome	26
30	Siena- hills	26
31	Venice	26
32		27
33	Roman Forum	27
34	Acropolis, Athens	27
35	Chartres (France) Cathedral, 1194 (view in urban setting)	28
36	Plan	28
37	Bring the user through the path	28
38	The boundary	30
39	Boundary defined by a natural element	30
40	Concretize standing	30
41	Rising to the sky	30
42	Details add a character to the place	31
43	Columns	31
44	A precise character determines the every part of building.	31
45	Urban Exterior Space	36
46	Urban Interior Space	36
47	Basic shapes of towns	37
48	Grid Iron organization	37
49	Grid iron organization	37
50	Centralized organization	37

3	Linear Organization	38
4	Silhouette (skyline) adds a character to the place.	38
5	Hills and the water body acting as a natural boundary	39
6	Piazza in Rome	39
7	center occupied by a statue	40
8	Plan/3D Form	40
9	18 th & 19 th C European city	40
0	Medieval city: interlocking squares (Aerial View & section)	40
1	Making the gate to the square	41
2		41
3	Directed Square-Place imposing order St Peter's Square	42
4	Nuclear Square: Giving a more relax feeling	42
5	streets as an experience	43
6	Corner treated by buildings	44
7	An element emphasizing the intersection	44
8		44
9		44
0	Street as a spatial experience.	45
1	Vertical & horizontal continuity	45
2	Dimension of scale & proportion	47
3		47
4	Full enclosure	48
5	Less than full enclosure	48
6	Minimum enclosure	48
7	Loss of enclosure	49
8	Piazza de Mario: Venice	49
9	Square in Giron, Columbia	50
0	Large formal space	51
1	Villa Friesino: Meledo	52
2	Piazza in Italy	52
3	Piazza of St. Peter, Rome	52
4	West facade of the Venerable Saint Peter's Basilica.	53
5	Saint Peter's Piazza	53
6	leading to the square through the order of the element	53
7	Making livable streets	56
8	Unity	58
9	Colour can be used to motivate people	58
0	Rising towards sky	59
1	clearly defined boundary by Portuguese	61
2	Map of the bay	61
3	Map in the Portuguese period	63
4	Map in the Dutch Period	63
5	Map in the British period	64
6	Dutch fortification around the fort with 4 sided corner projections.	62
7	Delft gate was the most important entrance to the fort in Dutch times.	62
9	Streets	62
00	Looking west 1717	66
01	Overpowering appearance	66
02	Chatham Street (1890)	66
03	General Post Office makes the boundary	66
04	York Street with a strong	67
05	Chatham Street making a livable street with defined enclosure.	67
06	Reclamation Road	67
07	York Street (1900)	67

108		67
109	Colombo Harbor 1920	67
110	Changing face of Colombo	68
111		
112	Location Map	68
113	Colombo fort as a center to the whole city	68
114	Map of the Colombo fort	71
114(A)	Aerial view of fort	71(A)
115	Map of Colombo (present)	72
116	Southern boundary	69
117	3D Form of the Fort area	69
118	Aerial views of the Boundaries of the area	70
119	Strict geometrical grid pattern	73
120	From horizontality, going to the vertical movement of buildings.	70
121	Janadhipathy Mw & York Street	74
122	Existing Zoning Plan	75
123	Building heights	75
124	Clock tower	75
125	Plan & the aerial view	76
126	Map of Bank of Ceylon Mw	77
127	Echelon Square	78
128	Skyline	78
129	Palm trees giving continuity	78
130	Map of York Street	80
131	Elevations of the York Streets	81
132	Beginning of the York Street	82
133	Strong building edge defining the boundary (York building)	82
134	World trade center	82
135	Eastern side of the York Street	82
136	Open space reduces the	83
137	View towards world trade Centre	83
138	Mudalige Mawatha giving corridor effect	83
139	Gaffoor Building	83
140	National Mutual Building	83
141	Facia covering the roof of Bank of Ceylon building, York Street.	84
142	Fine detailing	84
143	Fine detailing of the	84
144	Longitudinal section of the York Street	85
145	Buildings in the Western façade of the York Street	85
146	West façade of the York Street	86
145	East façade of the York Street	86
146		87
147		87
148	Cargills Building with the new building	87
149	Eastern side of the York Street	88
150	Gridlays Building	88
151	Arcade of the Gridlays Building	88
152	Far view of the Port Authority Building	89
153	Corner treatments of the buildings	89
154	YMBA Building in Sir Baron Jayathilaka Mawatha	90
155	View towards the high risers from the Port Authority Building	90
156	Node in front of the Port Authority Building	90
157	Open Parking in the Eastern side of the	90
158	Node where York Street	91

159	Node	91
160	Location of the Chatham Street	91
161	Cross sections through streets	94
162	Elevations of Middle Chatham Street	93
163	Cross Section	92
164	Views towards the Lower	92
165	Corridor effect of the Street	92
166	Skyline of the walls of the two streets.	95
167	Façade treatment of the street	95
168	National Mutual Building	95
169	Corner enhances the continuity.	96
170	First segment of the Janadhipathy Mawatha	97
171	informally define strong sense of enclosure as the sea.	97
172	Plan of Janadhipathy Mw	98
173	Elevation of Janadhipathy Mw	99
174	Location of the Janadhipathy Mawatha	97
175	Section along Janadhipathy Mawatha	97
176	Echelon square with historical buildings.	100
177	Sense of enclosure created with natural elements.	100
178	National Mutual Building	101
179	Arcade of the Bank of Ceylon Building-texture, color, details	103
180	inside out side relationship	103
181	Arcade of the Cargills Building	103
182	Horizontal continuity	103
183	Changes of the Historical façade make a chaotic environment.	103
184	Boundaries give a corridor effect.	103
185	Analyzing the character of the streets	104(A)
186	DGP s Guidelines for Colombo Fort	107
187		109
188	Proposed high risers cores	109
189	3d form of high risers	109
190		110
191		111
191(A)		111(A)
191(B)		111(B)
192		112
193		112
194		112
195		112
196		113
197		113

Appendices

01	116
02	117
03	118
04	119

LIST OF ABBREVIATIONS

Co.	-	Company
CMRSP	-	Colombo Metropolitan Regional Plan
DGP	-	Development guide plan
E. g.	-	Example
Fig	-	Figure
H/Q	-	Head Quarters
No.	-	Number
UDA	-	Urban Development Authority
Vol.	-	Volume

INTRODUCTION

Background of the study

People are always attached to their built environment. The built environment affects for the physical and psychological condition of the human. What they get from the place is the "sense of place"/"spirit of place", the attachments to the older places, the character, image, the spirit and identity of their places, which are so much apart of people and their lives.

"The city is a collection of spaces, centers of meaning, par excellence."

(Tuan, 1977)

A meaningful relationship between the man and the given environment makes his "dwelling". To dwell the orientation and identification which are the two psychological functions must be fulfilled. Here, man creates the place defining the space. The visually perceivable physical spatial structure and activities (human factor) determines the spirit of the place (Genius Loci, Sense of the place) which is expressed through the character of the place, which is a spatial quality peculiar to that place which differs from all other places. Norbert Schulz (sited by Garnham, 1985, p7) also says

"Since remote times man has man has recognized that different places have a different character. This character is often so strong that it, in fact, determines the basic properties of the environmental images of most people present, making them feel that they experience and belong to the same place."

Observations leading to the Study:

- Massive and aesthetically unattractive urban center development
- Isolated pockets of historic buildings

Cities have been developing with time and the character of it has been changing continuously.

Even most historical cities we see today have lost their identity and the spirit of the place. That is because the city development according to the changing needs if the people, society. Today's professionals responsible for today's city developments seem to not give priority to the image of a city or the spirit of the place They seem to consider the



built environment of the city and its buildings, placing them as individual objects which eventually create spaces in the city which become placeless.

"All men in their native powers are craftsmen, whose destiny is to create... a fit abiding place, a sense and beautiful world."

(Louis Henry Sullivan, 1924)

Need of the Study

This has become a need due to the misconceptions and the lack of caring for the spirit of the place. Many architects and urban designers consider the spirit of the place as a natural spirituality, as a result of the actions occurred over a period of time, and thus, as something that cannot be deliberately created. So they tend not to pay much attention to maintaining it. Although some attempts has been made to harmonize it with the existing character, the approaches which were made are merely superficial, resulting in the chaotic environment which is seen today in most cities. This can be seen as being due to the lack of proper understanding of the notion of the spirit of the place and the principles that generate them and the attributes which create these principles. In this context the identification of the above said aspects are very important. Identifying of them will result in the "places" facilitating the dwelling as the result of the creation of meaningful and livable urban spaces for human existence.

In the built environment, urban space is most important. It is here that community gathering as a group which allows for enjoyment happens with the harmonious relationship making interaction between the community members. So It becomes a critical need for today.

This is a worldwide problem which is more prevalent in Colombo especially in Fort area (which has a distinct character) due to the open economy. This area is the most important place in the country as the economical, cultural, social, aesthetic and historical value. Now it is accessible to a limited number of users, but it is the most important urban commercial area with high economical value and commercial value. Urgent need arises to make use of place accommodating the economical value and commercial value with facilitating the maximum enjoy ability to the maximum users maintaining the spirit of the place, as meaningful places are very important to the man to dwell.

Although the UDA has certain controls over the construction of the buildings, there are no regulations to control the usage of materials and haphazard construction without the meaningful integration with the existing character. This has resulted in the chaotic urban space, destroying the existing unique character. The only unique character exists in the historical building facades and buildings. This is the result of the lack of the understanding of the spirit of the place, its attributes and the lack of the study of the existing situation of the place.

All too few architects appear to have a real awareness of the importance of the spirit of the place.

The most important fact is that the importance of place making and the critical connection it has to the urban space development is not understood and sufficiently highlighted. It is therefore clear that there is an urgent need of a study, which would observe, study and highlight the importance of the maintaining the spirit of the place with the process of urban place making.

To date there are many writings on this important aspect of urban and architectural place making. They all have written about the spirit of the place but doesn't give a clear idea about the constituent principles of it. Somehow, analyzing the existing townscape in order to identify these principles considered useful in creating new or replacement environments. So in this study it will also consider about the previous existed townscapes also.

Intention of the study

The intention of the study is to establish that most of the urban place making have not always been successful to enhance the spirit of the place and to identify the problems of the past and present, to examine the basic principles of the spirit of the place and the place making, and thereby to highlight the critical connection between these two. To also observe, study and to highlight what "the spirit of the place" entails for the present situation, and the significance it has in assisting the designer in restoring identity and ensuring continuity of character and spirit of place in urban conservation in a destroyed physical environment.

Essentially this concern is not primarily about the conservation, important though this is maintaining the spirit of the place in an urban situation.

Aims and objectives

Aim of this study will be to identify what is seen as the "Spirit of the place" and how it can be retained in developing urban cities.

Scope & Limitations of the study

The main idea of the study is to establish the importance of the "Spirit of the Place" and its essential application in the present urban space development. Hence the study will not go into depth, in studying the impacts of city formation, city planning, urban conservation etc.

For the purpose of this academic study, restrict the scope to only the urban spaces and not incorporate settlements and housing etc. to this study. But in some instances, if there are better examples in settlements it will analyze them only as e.g. for better understanding of the reader.

It should be mentioned that the subject matter was extracted from only available resources. Although there are limited resources the essence of the produced ideas were derived with the input of many individual viewpoints, and guidance, including the academic support. Subsequent knowledge was gathered from information from published literature.

In obtaining photographs for the case studies, there are limitations due to the fact that the place of study is in a security restricted area in Colombo. Hence even though site visits were made to document, certain photographs in this compilation have been obtained from external sources.

Method of study

The concept of "spirit of place" is a qualitative experiential study and can not be quantify. But for the analytical purposes it will be quantified and will study in detail which is beyond all physical aspects of a space.

Thought the analysis of various view points and information gathered from many resources, an hypothesis is created to identify the intangible idea of the spirit of the place which is being analyzed and studied there after to see how is can be achieved in developing cities to create more orderly, meaningful architecture in even problematic areas urban cities.

There are very few studies done by intellectuals and professionals on the subject of "Spirit of Place" even though there are many arguments and concepts behind this very idea. Hence information for this study will be based on the most relevant material which can support and enhance the hypothetical argument followed in this study.

The study will be backed with case studies to illustrate the concept brought forward through this study.

CHAPTER ONE: CONCEPT OF SPACE, PLACE & SPIRIT OF PLACE

It is convenient to search about the space and the place making as they make the base to the spirit of the place. First we have to search what is the spirit in the space and how it affects to the place making.

Therefore this chapter initially intends to bring the concepts and the organizing principles regarding space and place on a generalized basis, and through that identify a commonly accepted basis to the organizing principles of place making.

Further it will then go on to search the concepts on the spirit of the place and through them will evaluate a definition for the term. Then will analyze its structural principles and the character from which it is created and perceived.

1.1 Notion of space

Space is a very vague term which can not directly describe or analyze as it is always associated with the sense or the concept of the space. Thus the Oxford English dictionary gives no fewer than 19 meanings for the term "space" as

"Continuous expanse in which things exist and move"

"An amount of this taken by a particular thing or available for particular purpose."

"An interval between points or objects."

Space is intangible, but it has a three dimensional geometry giving concrete qualitative terms. It can only be perceived.

"Space constantly encompasses our being. Through the volume of space, we move, see forms and objects, hear sounds, feel breezes, and smell the fragrances of a flower garden in bloom" (Ching, 1979)

As the man perceive through his five senses it becomes an experience which is the "spatial experience".

Norberg-Schulz (1971.09) says the space as

*"most of man's actions comprise **spatial** aspect, in the sense that the objects of orientation are distributed according to such relations as inside and outside; far away and close by; separate and united; and continuous and discontinuous. Space, therefore, is not a particular category of orientation, but an aspect of any orientation."*

Any environment is a collection of spaces. These spaces have quantitative dimension which are the length, breath and height and which communicated, understood and visualized. Quantitative dimensions are immediately grasped by its physical dimension and it renders one's mind to a superficial judgment of that space. It is the first step of the space grasping by a man and his first experience. Still the awareness of the physical dimensions of space alone never completes the experience since the space contains not only what is physically there but more than that.

1.2 Levels of experiencing the space

Space supports a quality of experience. Those qualities can be neutral or positive. Actually the physical dimensions are the sources of generating many qualitative attributes of a space. Any space has certain attributes evoked out of the arrangements of its physical elements (Graham, 1961).

The process of human experiencing of a space with overall respect to those qualitative aspects is well described by Lynch (1965) through the concept of "image". As he says man experience the environment as the "environmental images". It is a product of a two way process, and also the environment suggests distinctions and relations. Then the observer gets them, organize and make them with meanings according to the purpose of him.

That is also convinced by Smith, 1974,p18 as

"The communication between the physical environment and the human mind happens as a reaction to the spaces the man structured in his mind, which are not seen, but inferred."



A complete experience according to the above image concept of Lynch is an exchange or a communication of human mind with the physical aspects of a space.

This is a process of putting a space into a person's own existence. A space experiences through such existence is not simply a space but a "spatial experience." An experience of a space through the existence is well understood through an examination of the different levels of human experiencing of space described by Norberg Schulz (1971).he brings in different levels of experiencing a space in the following order.

- Pragmatic / Primitive space
- Perceptual space
- Existential space
- Architectural space

There are other levels of experiencing the space as the cognitive and abstract space. But here they will not be evaluated as then the study gets more complicated.



(Fig 01) Finding a place in the space

Source: *Design of Cities*

These experiences can be conscious or unself-conscious. Primitive space is an unself-conscious experience while the others (perceptual, existential and architectural space) are self-conscious experiences.

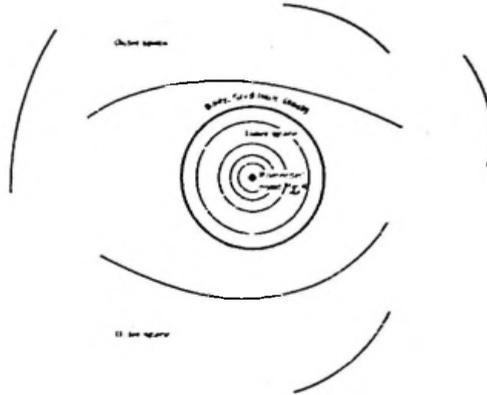
1.2.1 Pragmatic / Primitive space

It is where the humans behave unselfconsciously or instinctively. When man is in his growing in fetus they experience his surrounding where he breaths, grows and move.

And that coziness within the womb, its warmth and protective enclosure is registered unconsciously in the lifestyle. So this becomes a very basic and an individual experience.



(Fig 02) Baby in the womb



(Fig 03) Perceiving space within limits

Source: *Design of Cities*

Their behavior or the environment is not controlled. It is also difficult to identify separately the space or place in the primitive level as the human attachment and identification of the places are biological rather than the human characters in this level. From the beginning of the infancy, primitive space is structured as the body movement of the man with the senses. These are individual experiences, which provides the fundamental dimensions of the left right, above bellow, front behind etc. (see fig 03)

However primitive or basic it may be such an experience becomes a part of one's collective interactions with the spaces around him in a pragmatic manner. When a person experiencing a space this recorded experiences are taken as tools or measures by their mind.

1.2.2 Perceptual space

Man's sensing ability is active only to a limited range. So when a man experiences a space physically, he only gathers a limited quantity of information. But his ability to use his intellect and sharp senses, along with his curiosity evokes many and abstract conscious sensitiveness. Therefore the perception is the act of construction in which the

brain uses sensory data to build a meaningful hypothesis about the existence of objects and events.

Man interacts with the environment and from that he perceives certain parts of that. Act of perception of experiencing a space may differ from person to person as perceptual experience of a space centralizes man and evokes his individual emotional tendencies.

Relph says (1976) that the perceptual space is realm of direct emotional encounters with the spaces of the earth, sea and sky or with built or created space.

But according to Matore (sited in Relph, 1976,p78), the space they live not only grasp by the human beings with their senses, they project their personality into it and they are tied to it by emotional bonds. Therefore the space is not just perceived, but it is lived.

This shows the intimate relationship with the physical world and the activated emotions towards an in-tangible intense reaction. Therefore perceptual space becomes directly related to man's inner intellect and deeper senses than primitive space does. It provides the ability to use his intellectual form of mind in a wider capacity. And to receive not only human sense of experience of the immediate space in front of him and he becomes aware that similar multiple experiences create the whole universe.

1.2.3 Existential space

Here the man experiences the space in a certain cultural framework as the space is perceived as a group. But as individuals they tend to experience certain elements in a common and shared manner. Hence the spaces are a part of their birth, life and death or in their day to day experiences and of their sustained cultural values.

Man interprets his environment directly through the senses psychologically and through his own culture. So the space experienced at this level is what the Lynch (1965, p 60) describes as the "environmental Image" as he mentions that the man's orientation presupposes an environmental image as a generalized mental picture of the exterior physical world. He (1965, p4) also asserts that a good environmental image gives its possessor an important sense of emotional security. This implies that a particular culture in which the members created a generalized environmental image prevents the alienation giving the security. So Norberg-Schulz (1979, p19) says

"All cultures have developed "systems of orientation", that is, "spatial structures which facilitate the good environmental image".

So as a summary, the pragmatic space integrates man with his nature, organic environment, perceptual space is essential to his identity as a person while the existential space makes him belongs to a social and cultural totality (Relph, 1976).

It is clear that the existential is the most important to man and so; further study of it will be done.

1.3 Elements of the existential Space

Norberg-Schulz (1971) defines the existential space as a relatively stable system of perceptual schemata or image of the environment. Further he says that this image evokes in the human mind ensures its presence, orientation in a space. Therefore, it is important to study how this image structures in human mind. This environmental image consists of few stable elements.

"Here the poet did not look far for his dream instrument. And yet with what art he nuclei zed the landscape! With what fantasy the conferred multiple curvature on space! This is really a fantasy on Riemann's curved space, a dynamited center. And this center is powerful, because it is an imagined center. One step further into the world of images offered us by Pieyre de Mandiargues, and we see the center that imagines; then we can read the landscape in the glass nucleus. We no longer look at it while looking through it." (Bachelard, 1969; p132)

Karl Jasper (Sited by Schulz in 1971) says in itself every existence is appeared round. Therefore, the round form is consisted of two elements which are the center and the surrounding ring. Hence Schulz suggests notions of continuity, centralization and enclosure work together to form concrete existential concept. Therefore the perceptual schema or the existential space or the image is organized in relation to three major principles.

- Center
- Enclosure

- Continuity

1.3.1 Center of the Existential Space

Since the remote times man has thought of the whole world has been centered. So it is clear that this is a strong need of the man. He identifies him and orientate relative to that (see fig 04). Kevin Lynch has analyzed this identification and orientation with the basic concepts of node, path, edge and districts.



(Fig 04) Clearly demarcated center by using buildings

Source: *History of Architecture*

Norberg-Schulz (1971) says that for the terms of spontaneous perception man's space is subjectively centered. And he gives a conclusion that any man's personal world has its center.

So man perceives space with an element as a center. Each person may consider preferable centers at their own space but as earlier discussed as he is a member of a particular cultural group, each persons of that cultural group may consider the same element as a center when they are experiencing the same place as a cultural group.

A center may be a landmark, a place, a city or an enclosure where man acquires his position.

For example cultures also have their sacred centres. The ancient Greeks placed the naval of the world in Delphi. For Islam the Ka'aba in Mecca is still the centre of the world. The Capitol is the centre for the Romans

1.3.2 Enclosure of the Existential Space

As discussed earlier according to the Jaspers explanation, every existence appear round, hence that surround term consists a center and a surrounding ring. Also in general to get a complete image there should be a limit which is the boundary (Norberg-Schulz, 1971, p19).

So the size of the image is decided by the enclosure. This can be understood clearly as Rudolf Schwarz says that a domain can only become a home if it is small. It is clearly depicted that the man is always associated with the boundary (Norberg-Schulz, 1971, p20). But these boundaries always need not to be a physical demarcation and may be an abstract conception.



(Fig 05) A basic example of making an enclosure around a settlement.

The British village of Avebury, a medieval foundation, carries on its activity within the circular earth-work and awesome stone of prehistory. In the middle distance is Silbury Hill, another Neolithic work.

1.3.3 Continuity of the Existential Space

The directional relationship of the other elements between the center and the enclosure establishes through the continuity.

Lynch (1965) states that the path with clear and well known origins and destinations had stronger identities that helped to tie a space together. Here he has tried to explain the fact that continuity of space makes it easier in human mind to perceive as one unit.

This analysis of the ways of experiencing the space clearly shows how the space is physically experienced by the man. The components of the existential structure are important both in the making and experiencing the space.

1.4 Architectural space

Norberg-Schulz, (1971, p3) explains the concept of the architectural space as the concretization of the existential space. There he also says that man tries to integrate his personal schemata into the existing schemata and on the other hand translate his schemata into concrete architectural structure. So that architectural space becomes a deliberately created space with the new interpreted meanings or the enhancement of the existed meanings. Therefore Norberg-Schulz (1979) says that the architectural spaces are more than mere aesthetic or structural elements but they are containers of expressions and meanings.

Man's existential space is determined by the environment. Man interacts with it. He has the connection with it in two ways which are the physical aspects and the psychological aspects.

Architecture primarily fulfills its physical aspects (Schulz, 1972,p32).

The center, enclosure and continuity are the principles those have organized the existential space and therefore become the principles of the composing the place as well as by defining the space creates a place. These principles in this context have a relationship with the perceiving of the place by a person in a particular environment.

It further proves by Schulz (1980,12) saying, to make a place (with identity) there should be an inside outside relationship: which means the relationship between the man-made (interior) and the natural (exterior) environment. So the centralization, direction which can be vertical or horizontal and the rhythm becomes the properties of that place. He further says to make a unique space it should have a center which has a focus, continuity into different directions (vertical or horizontal) of earth and sky. All must have in an enclosed space. If not the place is losing its identity and becomes placeless.

Built-environment itself is a place where actions take place. So the place is an integral part of existence.

E.g.: Peking



*Creating space through the tombs
Of the Ming Emperors*



floor plan

(Fig 06) Source: Design of Cities



North of Peking in China: the tombs of the Ming Emperors are a magnificent example which shows the principles of place making in the simple sense. There the semi-circular mountain range gives the sense of enclosure making a centre where the climax: groin-vaulted pavilion is positioned. Thirteen mounds act as the man made boundary containing the tombs of emperors.

Man's psychological needs are also with in the architectural space. This has been stressed by the Suzane Langer and she states (sited by Oakley, D. 1923, p51) that a building fabric serves man's physical needs, architecture serves social needs; it is thus the intention that architecture to be differentiated from building.

Meiss (1985,p101) also confirms this saying that the architectural space is born from the relationship between the objects or boundaries and from planes which do not themselves have the character of objects, but which define limits which are more or less explicitly, constitute continuous surfaces forming an uninterrupted boundary and with the elements converge towards one point.

Therefore it can be stated that, what makes a work of architecture is a strong center, a well demarcated enclosure and a perceivable continuity.

1.5 Concept of "Place"

Twenty years ago, landscape architect Grady Clay (1983) argued that place was nothing more than a passing fad within academic circles. More than a decade later, the term was still around, infuriating thinkers such as environment-behavior researcher Amos Rapoport (1994, p. 32), who bitterly reported that "place is never clearly defined and hence vague; when definitions are found, they are illogical." Despite the controversy and skepticism regarding the longevity and significance of the term, papers and books on the phenomenon of place continue to be published.

Place is never clearly defined and hence vague. Place in association with space also has an integrated meaning and they have more common properties. Context for the place is given by the space, but derives meaning from particular space. Space is an experience thus the place becomes a pause.

The interplay of space and mind creates place (Macnaghten, 1998). Space implies a neutral and empty area. But in practice no space is neutral to a human being as we

invest every space with many meanings. There is a physical reality which we could call nature however we cannot help but interpret this nature through our cultural lenses, town and country, climber and paddler (Norberg-Schulz, 1979). So, Place becomes a cultural landscape. We do this in two ways, by construction and by projection.

In this case it is a personal process. The meanings we project onto a place are an expression of our frame of mind and our needs at any one time. For example a fear of the dark or the forest may be an expression of our inner fear of the hidden parts of us.



(Fig 07) Space defined through cultural lenses

Source: *Design of Cities*

Some people may attempt to circumscribe the notion of place in terms of objective limits (a material container of activities) or of subjective foundations (the experience of bioregional belonging.) Attempts to delimit place in either of these dualistic notions, however, fall short of elucidating the ontological significance of place—a fact that, in some measure, Malpas recognizes in his philosophical deliberations on *Place and Experience* (Malpas 1999).

The overriding message Malpas wishes to argue for is succinctly summarized when he notes that place "cannot be reduced to any one of the elements situated within its compass, but must instead be understood as a structure comprising spatiality and temporality, subjectivity and objectivity, self and other. Indeed, these elements are themselves only established in relation to each other and so only within the topographical structure of place" (p. 163).

Meiss (1990, p 135) has analyzed the concept of "place" through the ideas of

"The void exists as long as you don't throw yourself into it".

O. Elytis

".....space seized by imagination cannot remain indifferent space to the measuring and thought of the surveyor. It is to be experienced. And it is to be experienced, not in its positiveness, but with all the bias of imagination...."

G. Bachelard

".....whatever space and time mean , place and occasion mean more....space has no room, time not a moment for man.....Make of each door a welcoming and give a face to each window. Make of each a place, a bunch of places of each house and each city...."

A. van Erick

Through them he has arrived that the space becomes a place when the human factor adds to it where he makes an enclosure around him giving an identity. He (1990, 135-136) further says a place has its roots and its history; it is anchored in time and in a precise spot on the earth. A place has its dome, sky and perhaps even its 'star'. By building humans fix special relationships between earth, sky and time.

1.6 Concept of Place Making

Architecture satisfies a basic need for shelter - but also – and equally importantly - an existential need to define our place on the apparently limitless space of the earth. (E.g. On the personal level - how children take possession of space)



(Fig 08) Finding a place

The twentieth century Dutch Benedictine architect Van der Laan – who was influenced by the ideas of Laugier - respects the sheltering role of architecture. He writes:

"Our initial objective in building a house is to provide the necessary protection for our frail body."

But at the same time he has recognized the architecture's equally important role in defining space. He writes:

"the essence of architecture consists in the bringing together of limited solid elements so that limited living-spaces can arise between them."

Place is not a static thing and has a range of subtleties and significance. They may get a geographical or a sacred significance. So the places have names. If not the environment becomes chaotic, lacking in orientation and it loses the identity of the man. Then the place becomes a fearful experience. Places in existential spaces can therefore be understood as centers of meanings or forces of intentional purpose.

Architecture is making places meaningfully. Places are the individual buildings or a collection of the buildings (settlement) which can be a rural setting or an urban space (Which are the parts of the environmental levels).

So Norberg-Schulz (1979, p 169,170) says

"Through building man gives meanings concrete presence and he gathers buildings to visualize and symbolize his form of life as a totality. Thus his every day life world becomes a meaningful home where he can dwell."

As Norberg-Schulz (1979) explains, man responds to the environment in three basic ways which are visualization, complementation and symbolization.

Where man needs to make the natural environment more precisely, he builds what he has seen and understood. E.g. for a delimited space a boundary, center: square and for the nature's direction: a path. If the man understood as the nature shows a limited space to settle they made a boundary while for gathering: the square and to indicate direction: the paths. He also gathered number of meanings with them. Then the environment is meaningful and man gets the homely feeling (Norberg-Schulz, 1979, p3) as he could orientate and identify with the particular environment.

These are interdependent, but each can act in certain individuality within the totality.

In the first figure (Fig 11) although the space is defined by the walls, space is characterless while the other figure shows how the rhythm, texture and spirit is composed through the language of architecture.

Architectural forms, textures, materials modulation of light and shade, colour, all combine to inject a quality or spirit that articulates space. The quality of the architecture will be determined by the skill of the designer in using and relating these elements, both in the interior spaces and in the spaces around his buildings. Also the designing does not emerge from a vacuum; it arises out of a deepening of perception, through looking, feeling and reflecting on architectural experience. In this way experience becomes a resource.



(Fig 12) Place created by the users in a narrow street in Florence.

Source: *What time is this place?*

Sometimes according to a particular landscape or environmental setting we move & attach to those places. There is an essence of these special and often sacred places. So we have to identify what are the universal themes that repeatedly show up in the "literature of place" that connect people across time, space, and cultural differences.

1.7 Significance of Place to Man

There is a physical and psychological relationship between man and his environment. Man is always attached to his environment and he can't separate from it. He is part of his environment.

As Norberg- Schulz cited (1979,p168) Marxism

"Man as a biological being is part of nature, and that nature is an "objective reality", which is given independently of man's consciousness. Man faces this reality in his work, and thus realizes his purposes "in nature". Thus implies that he may "master" nature, without however isolating himself from it. Rather he ought to arrive at an ever deeper

understanding of its "laws". Man's consciousness is both in its content and form a "reflection" of nature, although it possesses a certain independence and power of feedback."

Man's fundamental need is the shelter as he is exposed to certain environmental forces like wind; rain etc. so he make shelters and select natural place to settle. As discussed earlier, there to gain existential foothold and make it a place two psychological functions also should be fulfilled (Norberg-Schulz, 1979). Which are

Orientation: orientate him in the particular space. &

Identification: Identify him with the environment.

This is the place making which is called "dwelling". If not, people get alienation. He can't identify him with the natural and man made environment. This prevents the gathering of meanings and makes the loss of place. Then the things become only the objects and the natural environment becomes a "resource".

"Man can not create meanings that are entirely his own. Man is part of a "living" world, and does not conceive meanings in a vacuum. Meanings necessarily form part of a totality, which comprises natural components."
(Norberg-Schulz, 1979, p169)



Places have structural properties and meanings. Man attract with these meanings. Though the above five categories of meanings man gets his understanding about his surrounding environment and nature. From the man's childhood he responds to the natural forces consciously or unconsciously through his psyche. Then he is in identification (Schulz refer this as a "friendship" with the nature, p169) with his environment and then he experiences it meaningfully.



Here gathering means, man collect the meanings in the natural context and using his language (architecture) present them in a new way by interpreting them according to their purpose. So the man's inventions have the formal properties of the natural environment. As an example to present the space they use direction and the boundary. Up and down are the general aspects of the direction.

(Fig 13) A Kwakiutl totem pole going to decay evokes strong meanings.

Source: *what Time Is This Place*

"The man made forms which concretize characters obviously do not imitate the analogous natural forms, but we have again to ask for common structural properties." (Schulz N., 1979,p169)

Gathering means the collection of things brought from several places together. Moving takes place from place to another. As Schulz interprets this is "symbolization". They get things from another culture and make their own. As an example, *genius loci* of Rome have arisen due to the function of gathering. There the meanings of natural places are translated into buildings to visualize the qualities of the natural landscape through the city. This is done by gathering several landscapes symbolically in one as the general interest of the Romans. (Norberg-Schulz, 1979,p169, 170)

Culture in a particular society is a collection of such gatherings (Norberg-Schulz,1979). There will be several meanings through the symbolization. There Schulz argues that the culture and the city is totally a result of the locality. Social, political and economic conditions are dependent on that. But there are physical common properties as all are in the same species as the Homo Sapiens Sapiens. They will be identified as the principles of the place later of this chapter or a thing depend on the function of gathering. Gathering means setting into work. So the making of a place is setting in to work which means the "architecture".

We bring interpretations to places such that the same place can be a completely different experience for different people. But if place exists in a hermeneutical circle, then place itself is already interpreted.

1.8 Concept of Spirit of Place: A definition

Same as the space, this is a very vague term which is difficult to define. In general, spirit means in the French translation is "Eau de vie" or "Water of life". A spirit is dry liquor strong in alcohol (www.happyhour.ca/dictionary.html). So in chemistry it means about a principle matter exists in every alcohol.

There are many definitions on it. Some of them are

- The vital principle or animating force within living things
(www.cogsci.princeton.edu/cgi-bin/webwn)



- The general atmosphere of a place or situation and the effect that it has on people; "the feel of the city excited him"; "a clergyman improved the tone of the meeting"; "it had the smell of treason"
(www.cogsci.princeton.edu/cgi-bin/webwn)
- A fundamental emotional and activating principle determining one's character
(www.cogsci.princeton.edu/cgi-bin/webwn)
- The subtle energy which animates otherwise inanimate matter. 2 A conscious, multifaceted entity which exists simultaneously in all times and places, both within and outside the confines of our local space time continuum.
(users.lycaeum.org/~lux/meta/gloss.htm)

So it is clear that spirit of place refers to a spatial quality which achieves through principles. People perceive this quality consciously or unconsciously in a place. If the said principles of place making are not present it becomes placeless.

Jackson J. B. (1978, p151) says he sense of place (where he refers to genius Loci) as something that we ourselves create in the course of time and it as the result of habit or custom. He further says the other people disagree with this and they believe that it comes from the responses to features which are already there—either a beautiful natural setting or well designed architecture and comes from being in an unusual composition of spaces and forms—natural and manmade.

Alexander C. (1979,p224) says the spirits which buildings have, their power, their life, comes from the pattern language, their builders use as well where the "language" allows them to generate exactly the balance of uniformity and variety which brings a place to life. It depicts that if the language is not there the place is dead. He further mentions that every person is creating his own place according to their needs, dreams but as a whole there is constancy, a harmony created by the repetition of the underlined patterns.

So it can interpret that both of them are agreed with that 'the spirit of place is the result of the said principles and it visualizes through the character'.

Many people misuse this as the place. Basically it is the uniqueness or the essence of a place. But the concept of uniqueness is also very difficult to define or express. There are some places which has categorized as unique places like Rome, Greece etc. Each of these has a very unique expression or a quality. People have given values to these

places and mention of them can bring a mental image of the place (Garnham, H. L., 1985, p1).

Spirit of place is derived from the **Genius Loci** which is a Roman concept. Romans believed that the every independent being has its *genius*: the guardian spirit that gives life to people and places which accompanies them from birth to death and determines their character or essence. It is a living reality.

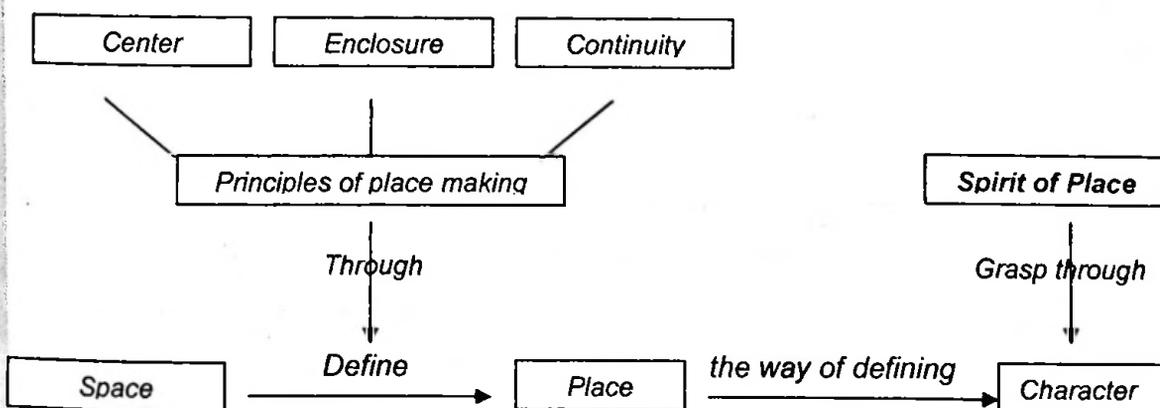
Norberg-Schulz (1979, p63-65) refers this uniqueness as a particular identity or as a distinct character.

*“ when a town pleases us because of its distinct character, it is usually because a majority of its buildings are related to the earth and the sky in the same way; they seem to express a common form of life, a common way of being on the earth. Thus they constitute **genius loci** which allows for human identification.”*

According to the local circumstances a place has a particular identity. People grasp this identity as the “spirit” of that place which is a spatial quality. But this can’t be measured. As we discussed earlier this is the result of the physical aspects (principles) of the place.

So it is clear that the presence of these essential three principles (center, enclosure & continuity) of a place are the principles of making the “spirit” of the place creating a character and a uniqueness to the place which people grasp as a spatial quality”.

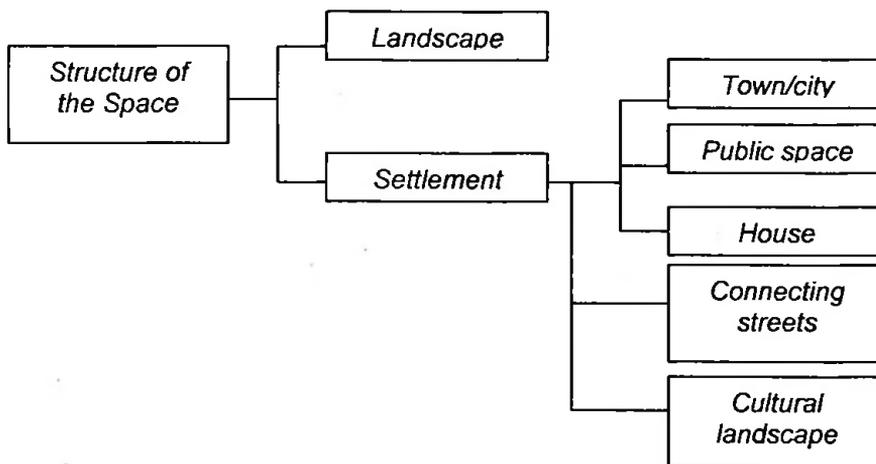
Through them man creates a meaningful inside which is a place for dwelling.



(Fig 14) Creating the spirit of the place

1.9 Structure of the place

Norberg-Schulz, (1979,p11) explains a method to analyze the structure of the place in terms which are the space and the character. Space is the three dimensional organization of elements which make up a place while the "character" denotes the general "atmosphere" which is the most comprehensive property of any place. There space implies the place where space is defined by man through man.



(Fig 15) Structure of the man made environment

Space is structured by the landscape and the settlement while they are giving the spatial character, which is the uniqueness or the spirit of the place. These different characters are achieved the way they are treated when the space is defining by man. The structure of the place is clearly visible as environmental totalities when the aspects of character and space are present. (Norberg-Schulz, 1979, p10, 11)

But there are other attributes like human factor (activities), natural elements which contribute to the character of place. But in this study it will only consider about the physical aspects theoretically.

Man made environment has three components (Norberg-Schulz, 1979) which are

- The settlements of different scales from house to towns
(House/public place/town)
- Streets which connects these settlements
- Various elements which transform the nature into the man-made which is called the "cultural landscape".

There man creates the inside outside relationship by the orientation and identification in the environment with the horizontal and vertical relationship which depicts the earth-sky relationship. Through this man gets the existential foothold which Heidegger (sited by Norberg-Schulz, 1979, p10) refers making a place which is called "dwelling" as discussed earlier.

"The single houses, the villages, the towns are marks of buildings which within and around themselves gather the multifarious in-between. The buildings bring the earth as the inhabited landscape close to man, and at the same time place the closeness of neighbourly dwelling under the expanse of the sky. "

Kevin Lynch (1960,p9) has identified basic spatial structure for the man's orientation through the concepts of "node", "path" and "district" which makes a strong environmental image and it implies the three principles of place making. So it can interpret as

Node-center

Path-continuity

District-enclosure

He (1960, p9) also says

"That shape, color or arrangement which facilitates the making of vividly identified, powerfully structured, highly useful mental images of the environment"

It is evident that the principles of place effects to the environmental image as Norberg-Schulz (1985, p66) says that the proximity, continuity and enclosure are topographical properties as the presupposition for the formation of a satisfactory image.

These 3 elements can be clearly viewed through the form of the settlement. Forms can be (Norberg-Schulz, 1985)

- Centralized (Round/radial)
- Longitudinal (linear)
- Clustered (cluster)



The buildings are organized by means of simple proximity without making any geometrical order or symmetry.

Buildings placed along a continuous line

Enclosed figure around a surface

(Fig 16) Settlement forms

Source: *The Concept of Dwelling*

So the main elements become the center, path and domain which may form complex totalities of the man's need for orientation. These are general and abstract concepts.

Squares function as the centers while the streets act as paths. A district implies the boundary. These may vary according to the type of the settlement.

So to investigate the term genius loci and to grasp the spirit of place we have to search for the structure of the place and the spatial quality which is the character in a particular environment. E.g.-Well defined spirit of the place.



(Fig 17) Open air theatre with the streets which gives the direct orientation.

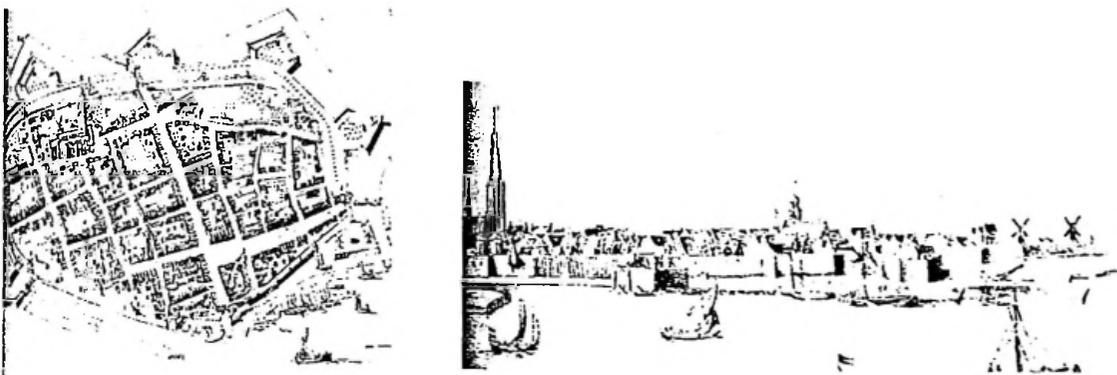
Source: *Minimalism*

1.9.1 Enclosure (Boundary)

Man's purpose is to set the world's meaning into work. Settlement is the result of that to make a boundary around him. It is the meeting point of the inside and the outside. So

Norberg-Schulz (1979,p170) says the architecture as the result of the dialectic of departure and return and also the incarnation of the meeting.

Spatial point of view, man needs an enclosure. It also fulfils the man's basic psychological need the "security". If the nature is present with the natural enclosure which can be a defined space he tends to locate their settlement there. Those natural places may with the trees, rocks and water which are meaningful things. But some places may not have these natural boundaries. Then man visualizes the natural boundaries in another place and symbolizes them where he wants. E.g. The walls around the settlements.



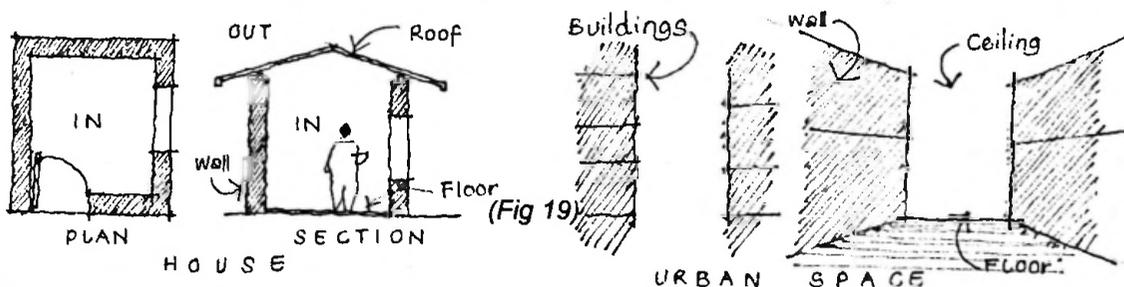
Plan

far view of the city

(Fig 18) Zaltbommel city in Culebborg- with 3 principle spheres

Source: Design of Cities

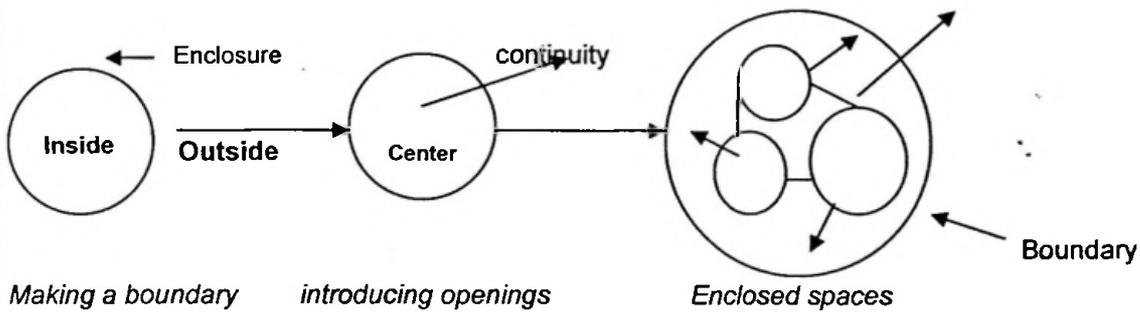
Enclosure is defined by the boundary. In a house it can be the walls, floor and the roof. In the landscape it is the sky ground and horizon. Also the man made and natural environments has relationships through the openings of the boundary as the examples here are the windows, doors and thresholds.



All the places are visualized their presence (being in the world) by the boundary. In principle it implies the particular relationship to the ground and the sky (Norberg-Schulz, p58) as early mentioned.

"The distinctive quality of any man-made place is enclosure, and its character and spatial properties are determined by how it is enclosed. Enclosure, thus, may be present, and the capacity of the place varies accordingly." (Schulz, 1979, p 58)

Enclosure separates a particular area from the others by a boundary.



(Fig 20)

By openings create the inside outside relationship.



(Fig 21) Japanese use texture to make a boundary.

Source: *Minimalism*

The boundary can be strictly or loosely enclosed and can be have a relationship with other areas through the openings. It can even create by a mere change in the texture of the ground. (Norberg-Schulz, 1979, p58) E.g. Japan

Boundary determines the degree of the "openness". So enclosure depends on the properties of the boundary. When an opening is introduced to a boundary it is at the same time creating a spatial direction which is an "axis". E.g. Stonehenge. There the centre and the path are determined by the boundary.

Historical sites have these qualities (centralization and longitudinality). But the ways these are created has locally determined. They vary from place to place. These can be emphasized by an upper boundary almost which is the sky. If the upper boundary was a man-made one, it becomes an interior space and if not it becomes an exterior space. (Norberg-Schulz, p58, 59)





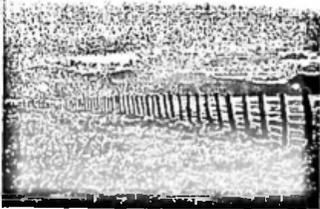
(Fig 22) Salisbury (England) Stonehenge –aerial view
Source: History of Architecture

*"....., their spatial identity infact depends upon the presence of relatively continuous lateral boundaries.....and again we find that the presence of a boundary is of decisive important"
(Norberg-Schulz, 1979, p59)*

Boundary can be created in different ways. Linear, planar elements etc can be used for that.



(Fig 23) Planar elements may be arranged to define an enclosure which is not necessarily continuous.



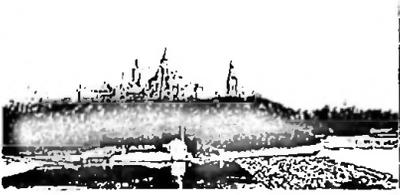
(Fig 24) Fences comprised of line elements create planes which enclose property and define domain.



(Fig 25) Transitions from public roadway to private property expressed in the language of grass, hedges and a line of trees are as effective as they are pleasing.



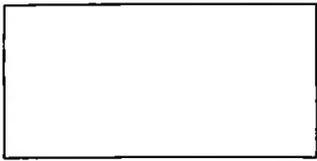
(Fig 25) Enclosures can also be purely recreational and aesthetic, as in the case of this maze created from well manicured hedges.



Spaces such as plains, valleys and bays have given a natural boundary with a characteristic type of settlements mostly a water body, river, sea etc.

(Fig 27) Skyline of Ottawa in North America before 1916: one of the finest expressions of Victorian exuberance with in setting in the world.

(Source: Design of Cities)



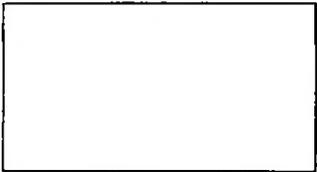
(Fig 28)

Natural water body has become a boundary.

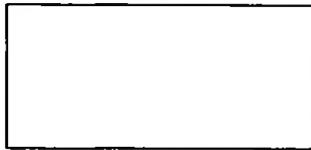


(Fig 29)

Italy - Hills creating a natural boundary.



(Fig 30) River-Moscow



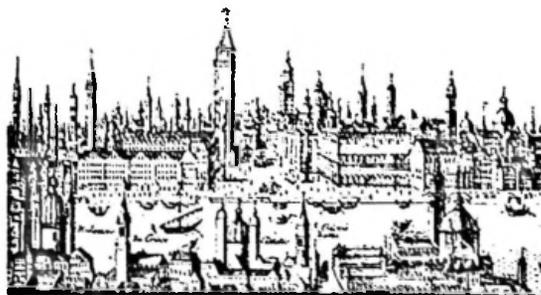
(Fig 31) River-Rome



(Fig 32) Siena- hills



Plan

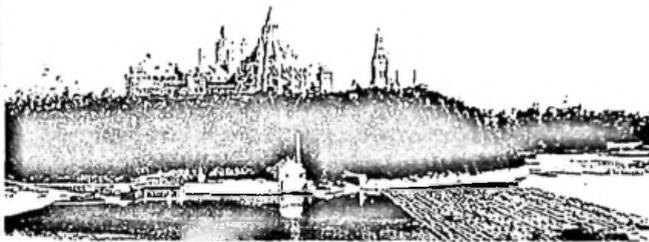


3d form

(Fig 33) Venice- large piazza forms a meaningful transition between the dense labyrinth of the city and the glittering expanse of the sea. City is with a dominant center.

1.9.2 Center

Center of a settlement can be an open space, a city, an enclosure, demarcated by an element or an important building. E.g. In European countries church square act as a center. In historic cities tower of a church, a town hall, a castle, a city wall, a dome etc acted as a center. E.g. Medieval Market, Cathedral Square



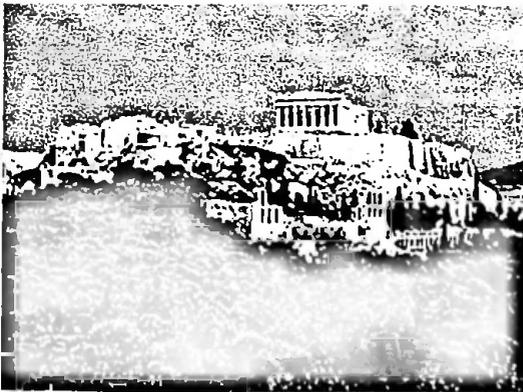
(Fig 34)

Source: *Making townscape*



(Fig 35) Roman Forum

Source: *Design of cities*



(Fig 36) Acropolis, Athens

People tend to their settlement on the top of the hill rather than in a valley. It is used as the top is a natural center of the surrounding landscape.

1.9.3 Continuity

Continuity is mainly on the vertical or horizontal direction relating to the earth or sky phenomena. In most occasions continuity represents through the paths.

Path acts as an element which makes a whole. While determining the form it makes the inside outside relationship.

"In the European towns the path is usually centered on the foci, making thus the whole settlement appear as a meaningful organism, where the

meanings present at the center determine the form, in interaction with the external situation. The paths so to speak illustrate how the meanings were brought inside from the "threshold" of the city gate." (Norberg-Schulz, 1979, p176)

The paths have a beginning, continuation and an end. End can be a goal or a square. So the continuation makes the path as a spatial experience. So Norberg-Schulz (1979, p56) explains

"Primarily life is "movement", and as such it possesses "direction" and "rhythm". The path is therefore a fundamental existential symbol which concretizes the dimension of time. Sometimes the path leads to a meaningful goal, where the movement is arrested and time becomes permanence."

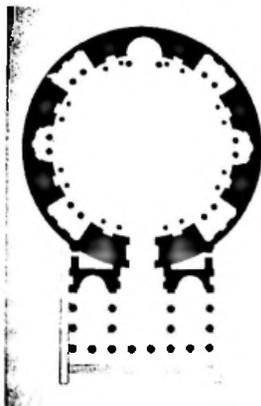
Man tends to locate their settlements according to the direction of the sun. They consider a slope exposed to the south as more favorable than a northern side.



*(Fig 37) Chartres (france) Cathedral, 1194
(view in urban setting)*

Source: History of Architecture

In buildings also paths act as an element of continuation. E.g.: Christians has used the dynamic character of man highly.



(Fig 38) Plan



(Fig 39) Bring the user through the path

Source: Minimalism

They oriented the entire building according to his path, constructing and enclosing space in the direction he was to walk through it.

This clearly shows that the man made environment has a meaningful correspondent between natural conditions and settlement morphology.

1.10 Character

Character is intangible and it is a spatial quality which can be experienced. Different places with different activities have different characters. Any place has a character. This character can be changed with and according to the time.

Norberg-Schulz (1979, p20) says that the character of a particular place as the "spirit" of that place(which makes evident that the spirit of place is perceived through the character), in which the Genius Loci is first of all determined by a mode of embodiment which is present in most things and works.

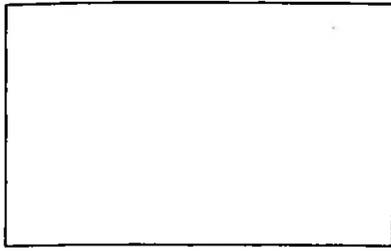
Functions of standing, rising and opening give patterns (Norberg-Schulz, 1979) which (Alexander, C., 1979) refers also the same as the pattern language.

"Character' is at the same time a more general and a more concrete concept than the "space". On the one hand it denotes a general comprehensive atmosphere, and on the other the concrete form and substance of the space-defining elements. Any real presence is intimately linked with a character." (Norberg-Schulz, 1979, p14)

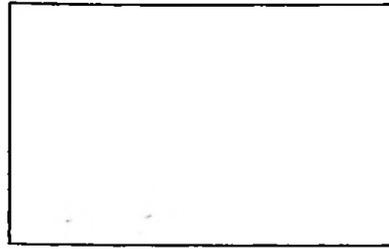
It implies that the way of treating to the principles (center, enclosure and continuity) makes the character of a place.

Norberg-Schulz convinces that the character of a place determines by the materials in a formal constitution with lateral boundaries or works in an urban space. He explains (1979, p 63) 3 possible reasons where places get their characters.

- Character of a place is highly determined by its boundary. The solidity or transparency of the boundary makes that place unique. There it makes the inside outside relationship. E.g.: Baroque double shell structure.



(Fig 40) The boundary can be a wall with openings (Solid boundary)



(Fig 41) Boundary defined by a natural element
Transparent boundary

- Character is also determined by the way the buildings stand and rising (Skyline) is concretized.

Stand: Base

Rise: skyline, details and proportions of elements



Enhance standing through the horizontal continuity. Concretize standing as the base
(Fig 42) Concretize standing

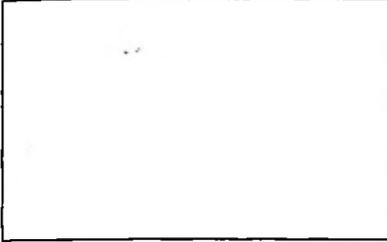


(Fig 43) Rising to the sky: Charters Cathedral -External appearance also Greatly enhance the (vertical)continuity.

On the ground under the sky

- Openings (doors & windows) : size, shape & distribution
Materials & colors

Alexander, C. (1979, p 231) also describes the unique character as the result of the adaptation which is detailed and profound.



(Fig 44) Details add a character to the place

Places also have a structural identity which makes a place's identity.

"The man made genius loci depends on how these places are in terms of space and character, that is, in terms of organization and articulation."

(Schulz N., 1979, p69)

Man use "style" to concretize the character through the language of symbolic forms. Such a language may have basic elements which can be varied and combined in different ways. It means the language is the systematic formal articulation (Norberg-Schulz, 1979, p54) E.g. Greeks used Doric, Ionic and Corinthian columns for articulation. And also

Form of Gerasa-Doric-demonstrate the proportions of human body, strength and beauty.

Second Hera temple, Paestum-Ionic-Feminine slenderness

Corinthian-slight figure of maiden

Greek

Ionic

cori

(Fig 45)



(Fig 46)

A precise character determines the every part of building.

"The articulation of Greek architecture therefore, cannot be understood in merely visual or aesthetic terms. Articulation meant making precise a



particular character, and this character, simple or complex, determined every part of the building." (Norberg-Schulz, 1979, p54)

Concluding Remarks

Space supports the quality of experience. Man experiences the space in primitive, perceptual, existential and as architectural space. There the existential space is the most important to him as through that he gets the existential foothold on the earth.

Center, enclosure and continuity are the principles of existential space and hence they become the principles of architectural space as the concretization of the existential space makes the architectural space.

So they constitute the "spirit" of the place in the "places".

The way these three principles are treated adds a 'character' to the place where people perceive as the "spirit of place" which is a spatial quality.

So In the next chapter it will search how these principles can be created through the architectural attributes.



CHAPTER TWO: PLACE MAKING IN URBAN CONTEXT.

This chapter intends to examine the contribution of the center, enclosure and continuity to create the spirit of the place in an urban context. It therefore will analyze the spirit of the place under the said principles in the urban spaces and will look into the measures by which man intended to achieve it through the architectural attributes.

However, it should be understood that these principles or elements which represents their presence, never exists as individuals and they can not be isolated from each other. They are individually discussed in this chapter as isolated components in order to make it convenient for a proper way.

2.1 Urban Space- a definition

In the man-made environment, there are environmental levels which are the village, towns (urban space) and the house. There man visualizes, complements and symbolize his understanding of the surrounding environment and gather number of meanings as discuss in the previous chapters. Then it is called a "true settlement". (Norberg-Schulz., 1979, p56) Urban dwelling is a part of the settlement while other part is the village. Village has direct relationship with the environment as it is catered to the forces of the natural environment and so it has become a part of it.

But this study only refers to the urban place as the relationship between the environment and the places in an urban context, seems to be weak or almost lost.

Urban space is referred as the space which between the buildings in towns and other localities. Hence Norber-Schulz (1985, p53) says that a city, where the parts are scattered around, is no city. Rather the city has to surround us, tightly and firmly. This means that the buildings which constitute the urban space have to form "interiors" which are perceived as such. The experience does not consist in an adding up of buildings, but in the spontaneous awareness of a superior form which is called 'urban space'.

Urban space is derived from the 'town' and 'tun' from Scadinavian languages 'tun' means the courtyard of a fam where the original meaning of 'tun' becomes the fence or boundary. So it depicts that the urban space is determined by the enclosing built form

(Norberg Schulz, 1985, p61). Also he says that the wall, floor and ceiling define the character of urban space and inviting man to identify and dwell.

But urban space can be categorized in to 3 major components as the public, semi public and private spaces. Whether any part of these spaces they are very important parts in an urban fabric. They can be varied from the main public square which expresses the city's dignity and the status to the humblest quiet corner. In between these spaces there are corner spaces, streets, nodes, squares, parks, public places etc (Tugnutt A., 1987, p29).

These urban spaces are very important as the relationship between the buildings and the out door spaces are very important for the quality of the space and how people are experiencing them.

All the spaces in an urban situation must be "places", if not the people get alienated and abandon the areas without enjoying and utilizing the important urban space of a country.

So to evaluate the spirit of the place in an urban context, it is important to search about the spaces in a city.

2.2 Urban Space and the Spirit of the Place.

Through the process of building man made places are created their own individual *genius loci*. It is determined by what his visualization complemented and symbolized to gather meanings. In the vernacular architecture, man responds to the *genius loci* of natural place. But in an urban architecture the situation is more comprehensive as there gathers the general interest of the inhabitants. Most situations they are coming from various localities and so they have a variety of gatherings. But some of these meanings are so general that they apply to all places (Norberg-Schulz, 1985).

He further interprets (1985, p 63) the urban space as a function of meeting and choice in an essential basis as manifestation of collective dwelling.

So, urban spaces give many possibilities of identification, as the reason discussed above. That's why it is giving a more "homely" feeling when in a foreign urban space than in a foreign landscape. Also the urban spaces differ from one another as this. The forces which caused for gathering of meanings highlighted in them can be different.

Some may have the earth dominant while in another the sky is dominant. Some may have a humanized atmosphere while another having a marvelous lighting. But to make a place dwelling all urban places must have one or more of the above elements present. So Norberg-Schulz says (1979, p77, 78)

"Urban dwelling consists in the assuring experience of being simultaneously located and open to the world, that is: located in the natural genius loci and open to the world through the gathering of the man-made genius loci."

Usually an urban space gets its uniqueness due to the skylines of the buildings in it. (See fig 90).

Norberg-Schulz further explains it (1979, p63, 65),

"When a town is pleases us because of its distinct character, it is usually because a majority of its buildings are related to the earth and the sky in the same way; they seem to express a common form of life, a common way of being on the earth. Thus they constitute a genius loci which allows for human identification."

2.3 Essential elements of an urban space.

As discussed earlier urban space is the space between the buildings. So the main urban elements are the wall, floor and ceiling in the exterior and interior space like in any built space. So Norberg-Schulz (1985, p59) says the wall is the primary boundary of urban space, because it records the contents of the meetings take place. The floor serves as a "neutral" ground which plays a unifying and characterizing role as its general extension. He further says floor pattern should coordinate with the articulation of urban wall. Generally the sky is the urban ceiling (See fig 47). But in a place like shopping mall (interior space) it may have a built ceiling like roof (fig 48). But its appearance can be conditioned by the upper termination of the buildings.



(Fig: 47) Urban Exterior Space



(Fig: 48) Urban Interior Space

Source: *Making Townscape*

Three basic elements in an urban space are the

- 2.3.1 Path: Streets
- 2.3.2 Center: Squares, nodes etc.
- 2.3.3 Enclosure: Boundary

Norberg-Schulz (1979 & 1985) explains the elements of urban space as, the main urban elements are center and paths where square functions as a center, while streets act as the paths. Also they may have boundaries which are giving an identity to the place. In urban space the boundary is important. Urban district is such a boundary. It can be either defined by building edges or any other or by a change of urban texture .

When it considers the urban space as a whole these 3 elements (boundary, square & the paths) become the elements which represent the 3 principles. But when we take them individually they can be also "places" which are having the said principles. So as appropriate they will be discussed in this study.

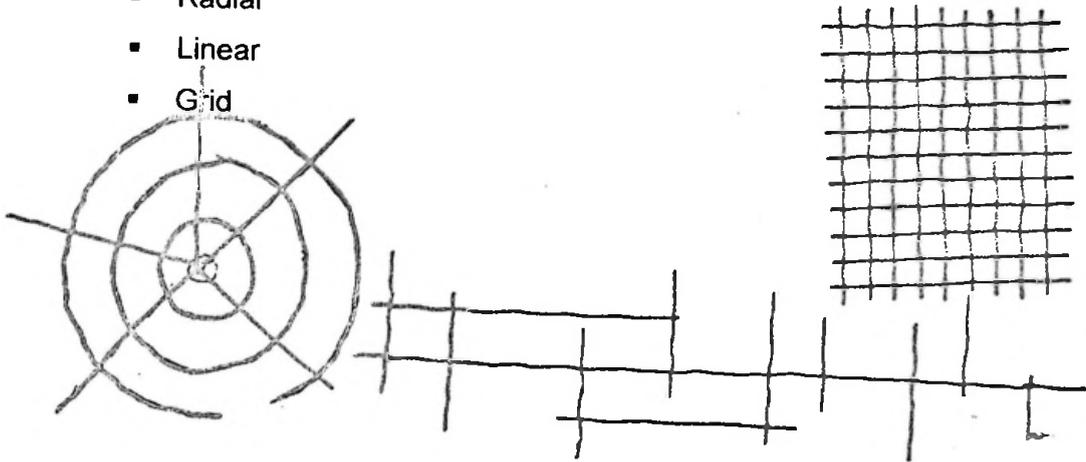
It is not easy to visualize these principles clearly in an urban space as they are created indirectly through complex elements. But in a city or a town, it can clearly visible as its layout.

As we discussed earlier, the way they are treated through the architectural principles, they get their special character (see fig 40-43).

These three elements can be visualized through the form of the urban space same as the settlements. There can identify three types of forms.

Garnham (1985, p38-39) explains 3 basic shapes of towns which are more relative to the urban forms.

- Radial
- Linear
- Grid



Radial

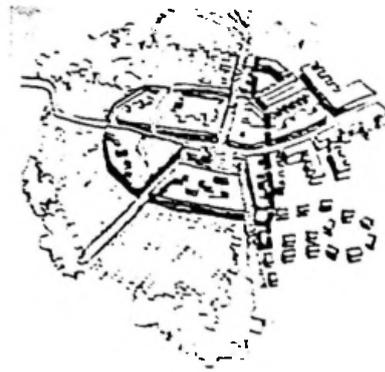
Linear

Grid

(Fig 49) Source: *Maintaining the Spirit of Place*

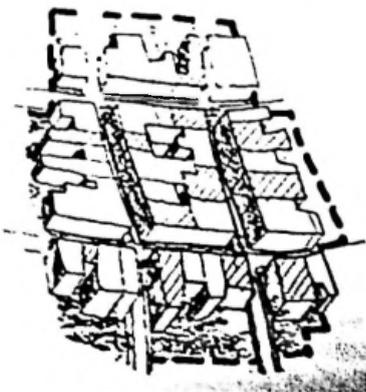


Radial spatial organization employed
 in a city- Palma Nouva-Italy



radial organization
 Source: *Town and Square*, 1970

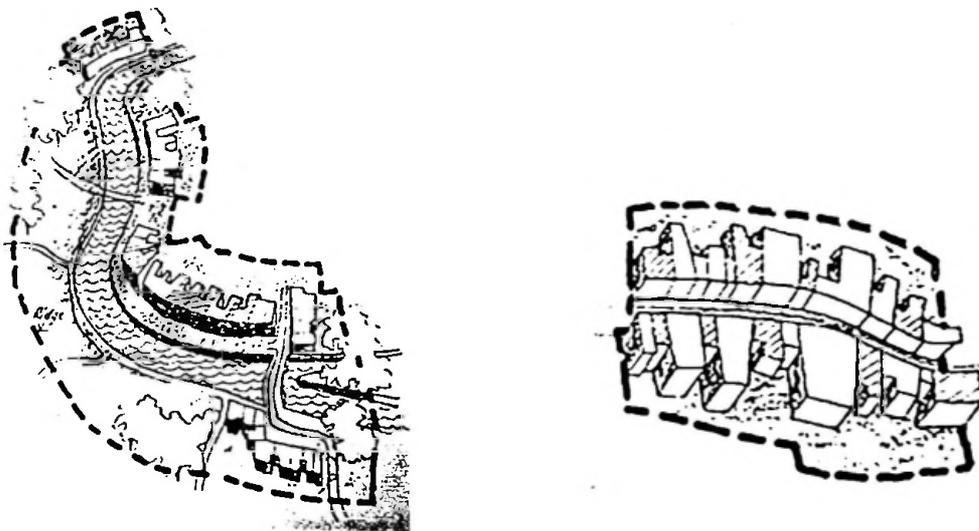
(Fig 50) Source: *The character of towns*, 1969



(Fig 51) Grid iron organization



(fig 52) Centralized organization



(Fig 53) Linear Organization

Source: *The character of towns*, 1969

But when consider the individual places in an urban space they can have vivid shapes like squares, rectangles, circles, 'L' shapes, triangles, channel like or some other or combination of these (Garnham, 1985, p 48).

2.3.1 Boundary (Enclosure)

Urban spaces like other places are conditioned by the built form of boundaries (Norberg-Schulz, 1985, p 56). In most cases the surrounding buildings make the boundary of the urban space. Sometimes a natural component also affect for that. When they have a natural boundary they get a special character.

(Fig 54) Silhouette (skyline) adds a character to the place.

Source: *Making Townscape*



If the town is situated below the hills give the strong sense of place as the natural boundary giving the sense of enclosure. E.g. Kandy



(Fig 55) Hills and the water body acting as a natural boundary

The urban space as a whole has a boundary. People get the first impression and an "environmental image" by seeing it from far away. This can be also a perceivable boundary like the sea. Spatial experience begins from there. Sometimes this boundary can say about a hidden thing inside the city.

2.3.2 Square

Square is the main gathering point in an urban space. Also as in the boundary, the approach and the arrival to the square are important. Boundary to the square can be natural or man made component. Man made component consists of the surrounding buildings. Depending on the way they are treated architecturally, these buildings give a character to the place. Center of the square can mark by an element or it can also be a perceivable center. Also an important building can become a center. E.g.: Church.

In the European continent the inside outside relationship is made through the Church in the Cathedral square Norberg-schulz (1979, 176). E.g. St. Marks Square in Venice large piazza forms a meaningful transition between the dense labyrinth of the city and the glittering expanse of the sea. E.g. Campo in Siena-meaningful equilibrium between freedom and order



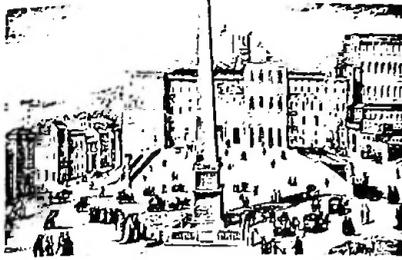
(Fig 56) Piazza in Rome

These don't express freedom. Impose order.

Source: *Design of Cities*

Paul Zucker cited by Norberg Schulz (1985, p 60) square as a "psychological parking place within n the landscape and moreover says that it 'makes a community and not merely an aggregate of individuals'.





In the history, squares had a symbolic value as a holy place. (E.g. Agora, Forum, Cloister, and Mosque courtyard) See Fig 57. There the streets act as an aid to orientation.

(Fig 57) center occupied by a statue the piazza del Ampidoglio in Rome preplanned by Michelangelo in the 16th c.

(Source: Design of Cities)

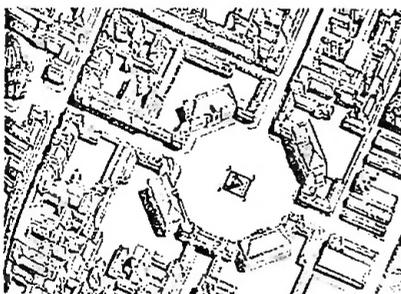


Plan



3D Form

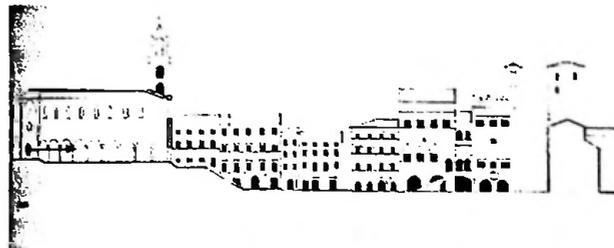
(Fig 58)



Like other places a square also must be a place without giving alienation to the urban dwellers and visitors. So it also has to have a boundary, center and enclosure. As discussing below, these 3 principles should be achieved through the said architectural principles.

(Fig 59) 18th & 19th C European city

Source: Design of cities



(Fig 60)

Medieval city: interlocking squares (Aerial View & section)

A Here the political square and the church square are connected together with simple elements. There the citizen never loses his feeling of relationship with the city while

participating for the religious functions and as a political member. The entrances to both squares are raised above the plane of the public square onto a level of their own. Accessibility is given by the large flight of steps.

This example shows the interplay of the many necessary elements of design like recession planes, penetration in-depth, connecting the sky and the ground by descending and ascending.

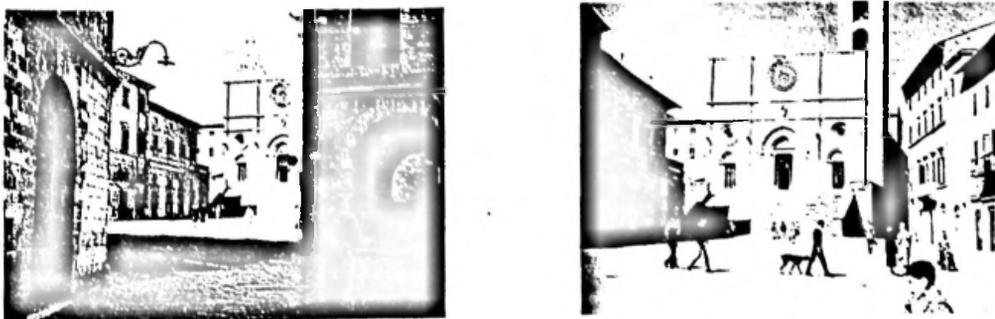
The Approach to the square



(Fig 61) Making the gate to the square- Focused to the cathedral or to an element
Source: Design of Cities & Making Townscape

There should be a great clarity to the form of the total urban space which gives the user easy view of the sequence of space as the spatial experience. Series of views, bent streets, and narrow shaft spaces focused to an important element or to the center.

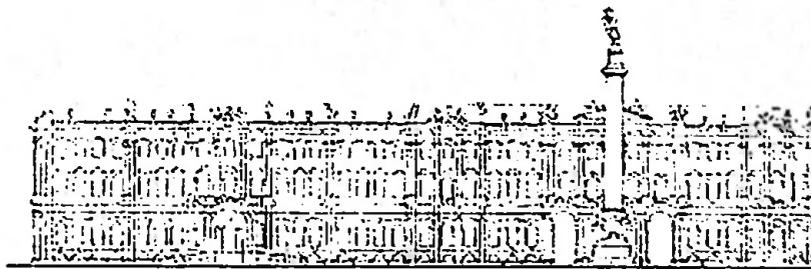
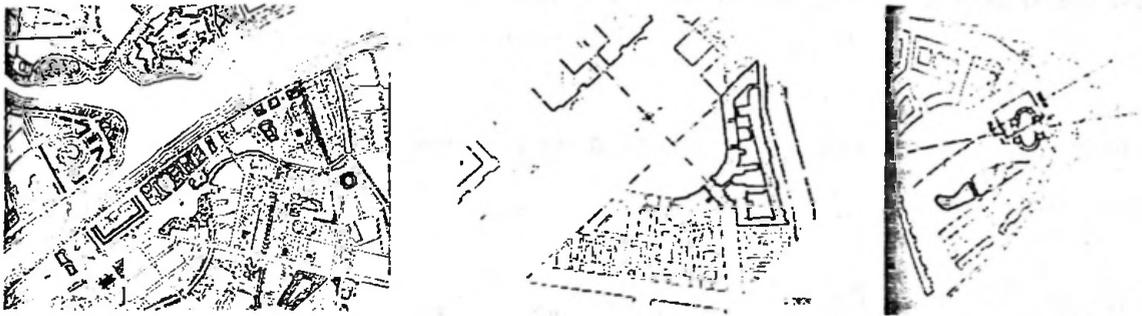
The arrival to the square



(Fig 62)
Source: Design of Cities

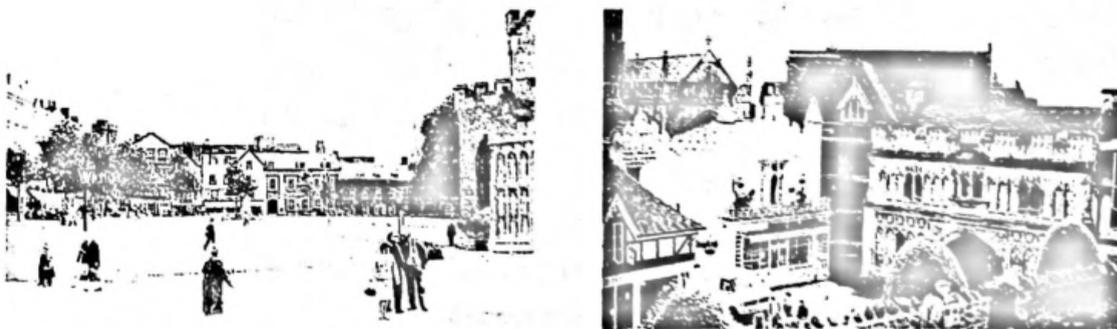
Paul Zucker (sited by Norberg-Schulz, 1985, p 69) describes about 2 types of squares as "directed" (axial layout-e.g. Roman forum) and "nuclear" (centrally located-e.g. French place Royale of 17 c).

Regular symmetry of a square may impose the order to the square which is not necessary (e.g. 18th and 19th C square, see fig 82, 83).



(Fig 63) Directed Square-Place imposing order St Peter's Square

Source: Design of Cities



(Fig 64) Nuclear Square: Giving a more relax feeling

Source: Making Townscape

2.3.3 Streets

Paths make the urban space as a lively, dynamic experience giving the continuity. Hence, Norberg-Schulz (1985, p56) says the street as a manifestation of the process of discovery. So Bacon (1978, p164) explains the process as

"The familiar phenomenon is set into full play in which the nearest points seems to move most quickly across the objects in the middle distance, and those farthest away seem to accompany the traveler along his route."

But the streets do not necessarily lead to a particular goal (Norberg-Schulz, 1985, p59). Kevin Lynch also shows that the streets start and end without precise definition and are characterized by what happens along them.

It may also end with a goal. Goal may be a square or one or more dominant public buildings. E.g. church



Exposed position makes a town feature Terminate view Church as a focal point (landmark)



Unity & Variety of facades give continuity with an experience.

(Fig 65) street as an experience

Source: Making Townscape

The intersections of streets or crossing are also important in an urban space. It implies a possible change of direction and gives a pause to the continuous movement of the street. So it can be considered as "quasi-square" ((Norberg-Schulz, 1985, p60) which Lynch (1979) refers as a 'node'.



(Fig: 66)

Corner treated by buildings



(Fig 67)

An element emphasizing the intersection

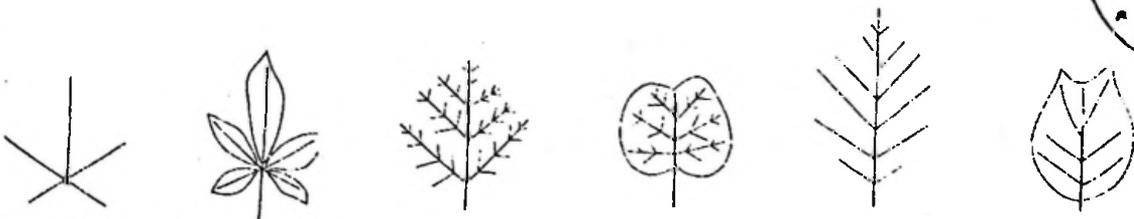
Source: Making Townscape

The paths and nodes form the urban web. Urban space - cannot be decided on the basis of a regular plan, because paths follow their own rules. By an overall symmetry can organize all the elements in a cohesive way. If imposing a rational ordering then it will destroy the urban space. E.g. Grid pattern in Paris



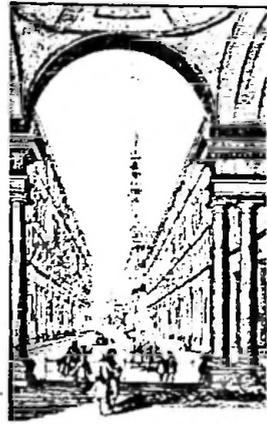
(Fig: 68)

Source: Design of Cities



(Fig 69) Source: Design of Cities

When treating them as an indivisible whole that will help to establish the appropriate continuity. Paths do not end suddenly; they crisscross open spaces, and cut through built areas.



(Fig 70) Street as a spatial experience. (Fig 71) Vertical & horizontal continuity

Source: *Design of Cities*

They have the vertical and horizontal continuity relating to the earth and sky as discussed in the previous chapter.

2.4 Architectural attributes & the spirit of urban place.

Squares, streets and boundary are the 3 basic elements which represents the spirit of place in an urban space. To achieve them through architecture we've to search for the architectural principles through which they can create.

Experientially architecture is capable of engaging all our senses – the whole sensory. It can be experienced through the sight, touch, hearing, smell and bodily movement through space. So the factors of experience are the Solid and Void, Rhythm, Color, Scale, Texture and Hearing.

According to Norberg-Schulz (1975 & 1985), Garnham (1985), Tugnutt (1987) and Meiss (1990) the following attributes can be considered as the principles through which the above said principles of place making and elements can be achieved (They are the language of Architecture).

- Composition of the masses (form)

- Scale & Proportion
- Hierarchy (order)
- Rhythm & Repetition
- Punctuation and inflection
- Detailing
- Facades
- Materials and colors

So it will be searched that how these are been used in the creating of meaningful urban spaces with the center, enclosure and continuity. They will be identified them in the main urban spaces like squares, streets, corners, corridors, nodes, small formal informal spaces etc.

Principle (More intangible)	Architectural Element (Intangible)	Attributes (Tangible)
Center	Balance (symmetry) Axis	building façade, object, street, facade
Enclosure	unity Scale & proportion	Color, texture Building façade Building heights Natural elements
Continuity	order rhythm & repetition Hierarchy	Arcades (building edge) materials, Element Streets Height, color, scale, Materials, texture Visual (focal points through views, vistas)



2.4.1 Urban Enclosure (Boundary)

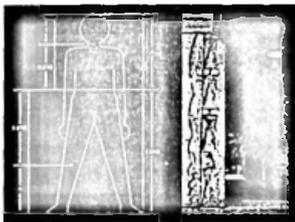
To dwell man need to be inside. So man creates an enclosure around him (Norberg-Schulz, 1985). In an urban space the enclosure can be natural or man made. But in the most situations, it is naturally defined by the other surrounding buildings. The best urban spaces can be achieved when these two are in mutual reinforcement. The buildings can be public or commercial buildings.

Any man made space, its character and the spatial properties are determined how it is enclosed (Norberg-Schulz, 1979). So

- The dimension such as scale and proportion
- Surface (facade) and edge of the enclosing element
- The shape and the configuration of the enclosure and
- The openings in the enclosing elements

determine the character and the spatial properties. The degree of enclosure does not only depend on the quality and the size of the openings. (Norberg-Schulz, 1979, P111)

In an urban space it is given more sense of enclosure when they are really closed. Then the people perceive the space clearly. Ill defined spaces fail to connect the city in a coherent way and form anti spaces giving the sense of outside ness.



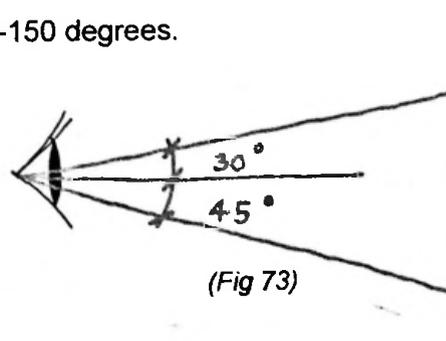
(The 20th Century architect Le Corbusier (1887-1965) developed a scale of proportions which he called Le Modular, based on a human body whose height is divided in golden section commencing at the navel.)

(Fig: 72) Dimension of scale & proportion

The Greeks had achieved their human scale through a static proportion between the column and the height of the man. But in the organic conception of architecture human scale is using as the fundamental law.

Garnham (1985, p 47-49) has pointed out important points to measure the sense of enclosure.

Human vision provides some clues about the enclosure in the outdoor spaces and the streets. A person sees 60-70 degrees to the left and right of the center for a cone of vision approximately 120-150 degrees.

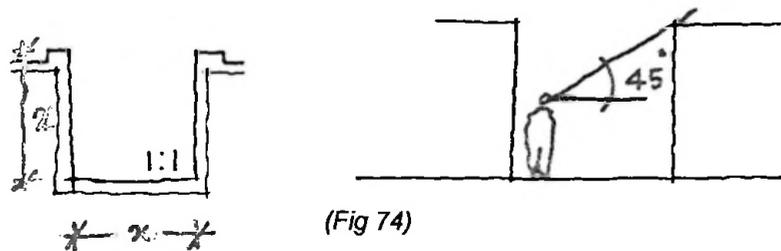


(Fig 73)

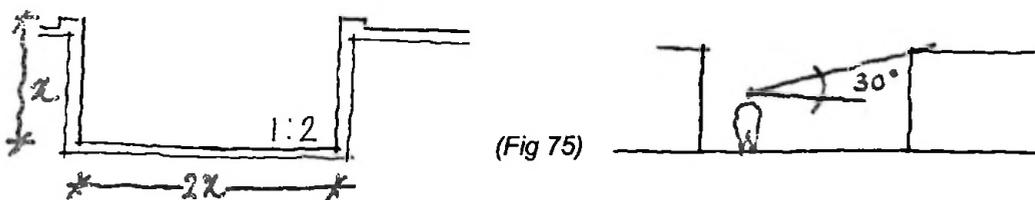
At eye level-vision a person sees 30 above eye level and 45 degrees below eye level.

Graham (1985) says 4 approximate levels of enclosure as

1. **full enclosure:** when a façade height equals the distance we stand from a building (a 1:1 or greater proportion) in which case the cornice (or upper line of the form) is at an angle of 45 or more degrees from the line of horizontal sight. As this is more than 30 degree maximum of upper level forward vision a person get the enclosed feeling. Enclosure of less than 1:1 is less comfortable to the user.

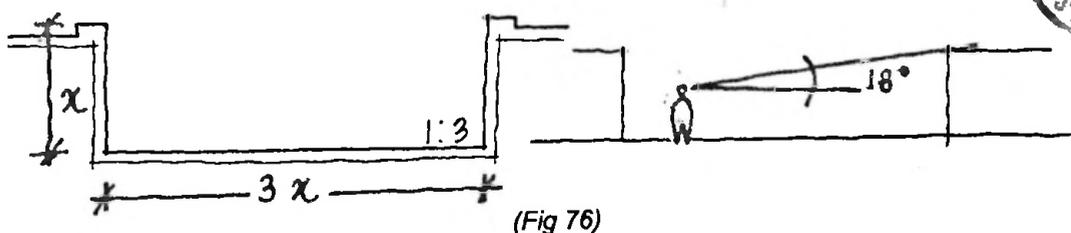


2. **Less than full enclosure:** occurs when a façade height equals one half of the distance we stand from a building, a proportion of 1:2 this is a 30 degree angle of vision and provides enclosure at the threshold of perceived enclosure and distraction.

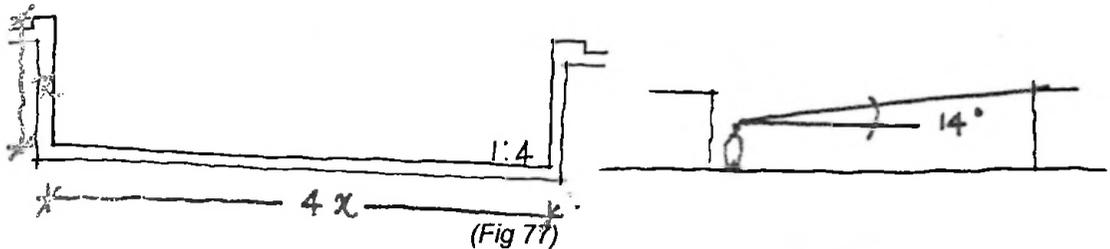


Spaces which do not enclose the viewer giving the placeless ness

3. **Minimum enclosure:** happens when the proportion equals 1:3, the enclosing elements are seen at an angle of 18 degrees and objects beyond the facades are a part of the scene.



4. **Loss of enclosure:** happens when the façade height is one-fourth the distance from the façade, a 1:4 proportion, making an angle of 14 degrees to the viewer when more than half of the view is of beyond the space.



Norberg-Schulz (1985, p63) also agrees with this saying that a space which is very large will lose its identity although it has precisely defined boundaries. Continuous boundaries are very important in an urban space. That implies freestanding buildings with a large distance didn't constitute an urban space. Also the demolishing of a single building in a square or a street may result that.

Scale & Proportion

Enclosure in an urban space is greatly achieved through the scale and proportion of the surrounding buildings (Norberg-Schulz, 1985). It is measured through the human figure. Norberg-Schulz (1985, p63) says that it is not necessarily related to man's body but to the actions in which it takes part, facilitating him. So he says that streets should be relatively narrow with a defined direction where as a square as a matter of principle ought to be round. But that doesn't imply the square should be round.



(Fig 78) Piazza de Mario: Venice
Source: *Space, Form & Order*

How it relates to the elements means the proportion.

"The character of any architectural work is determined both in its internal space and in its external volume by the fundamental factor of Scale, the relation between the dimension of a building and the dimension of man. Every building is qualified by its scale." (Zevi B., Architecture as space, 1957, P57.)

Scale is principally determined by the height and the plot size (Tugnutt, 1987, p130). But scale in an urban space is determined by the size of the surrounding buildings. Their height, plot size and the average storey heights affect for that.

The height of one building relative to another building is important in an urban space as the scale is primarily determined by the height and the plot size of the buildings. This means about the relationship of the vertical and horizontal elements as we discussed in the previous chapter.

Buildings which are proportionately high in relation to the enclosed space are more urban in character as they are not giving the residential character.

New high rises should integrate with the existing buildings in relation to the scale. There is a definable point the new buildings can go of scale (Tugnutt, 1987).

Relationship between the street and the space can be achieved through the staircases at each end while giving glimpse view of the shops inviting them to visit them.

Sense of enclosure can be achieved through the formal spaces or by the small spaces which are symmetrical and uniform. Informal spaces are also important in an urban space as they give a more relaxed feeling. Intersections acts as informal spaces.



(Fig 79) Square in Giron, Columbia
Source: Space, Form & Order





(Fig 80) Large formal space

Source: *Making Townscape*

In the squares when there are low heights of buildings in conjunctions with proportionately large areas of floor space produce a more relaxed environment.

If tall office blocks are coming around the square, it'll weaken the sense of enclosure.

Scale is not only about the size, the architectural details as well (Tugnutt, 1987, p40).

Plot size

Large plots can achieve unity through the elements and the details. Then they also give the continuity. Also there must be a variety. If not, the space gets monotonous.

Consistency of scale should be there although they seem diverse. If the diversity is powerful it makes the place chaotic or the repetition is powerful that gives the monotony. Some variations can be achieved through the justifications. But too much of change in scale brings the disastrous.

2.4.2 Center

In an urban situation normally the center is the place where the important activities take place making the social gathering and interaction. So it becomes the goal of the urban space which is the climax of one's experience. So the center may be a landmark, an important building, square or an open space.

In an urban space center can demarcate through the order or symmetrical (fig 81) or asymmetric positioning of the elements.



(Fig 81) Villa Friesino: Meledo



(Fig 82) Piazza In Italy

Center created through symmetry

through asymmetry

Source: Space, Form & Order

The balance between the elements makes a center.

(Fig 83) Piazza of St. Peter, Rome

Center demarcated by landmark

Balance of the oval colonnades also gives a definition to a place

A center can be created by texture, pavement patterns etc.

The harmony and unity of the total work are the more remarkable in its parts which can be created such widely spread periods of time. Each can have its mode of architectural expression.

Oval colonnades around the Piazza (See fig 83), is the best example for the order which is used to define a square with great centre and continuity. These figures illustrate how the urban space achieves its spirit through the order of the built environment. Here later, the obelisk has become the organising centre, which becomes a life force.

Also a definition to the space is achieved by the balance of the objects (see fig 83 - fountain & the columns). Space is highly defined. But the only mass is the tiny part of the whole: in terms of the idea it dominates.

Through the order it can give more discipline to the space. Here the columns give the discipline to the square.



Order



The confused & chaotic Appearance of the square

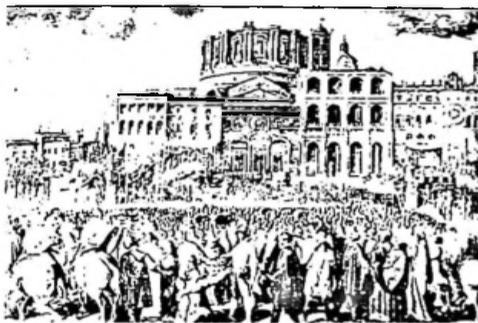
finally with the obelisk in Center.

A point in space as an organizing figure

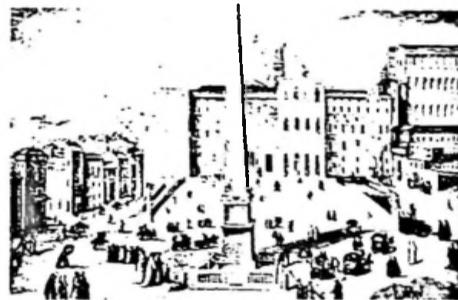
(Fig 84) West facade of the Venerable Saint Peter's Basilica.

Source: Design of Cities

Single point in space can become a powerful design force, bringing order out of the chaos (Bacon, 1978, p131). The figures below in the city of Rome, the idea of order has implanted by creating an object (an obelisk) in the centre.



(Before)



(After)

(Fig 85) Saint Peter's Piazza

Source: Design of Cities

A powerful impression to a square can achieve to the square by implanting the order with the interplay of points in space defined by the sculptures with the formal façade. E.g. renaissance ordering in medieval squares (Fig 86).



(Fig 86) Leading to the square through the order of the elements

Source: Design of cities

Hierarchy

Pierre Von Meiss (1990, p43) explains the hierarchy as a more complex order because of the combination of elements in relation to scale of importance which is not necessarily an affinity between the elements and also through the disposition and singularity of form in relation to a context.

Establishing the hierarchy achieves the continuity.

2.4.3 Continuity

Specific positioning or hint of design inter-relationships can give the sense of continuity (Bacon, 1978).

Nodal images which are precisely positioned and related to every other image by the design system of straight connecting streets make the continuity.

"The establishment of points in space may be for emotional or spiritual associations with pre-existing monuments or structure..." (Bacon, 1978, p139)

Articulation of the spaces also makes spatial continuity. Von Meiss (1990, p80) defines the articulation as the recognition of the limits of the meeting of two elements, which can create various and can come into play simultaneously with the materials, architectural elements, functions or with meanings.

"The theme of spatial continuity evokes a dynamic principal, of passages and stops with planes which guide and leads us to wonder what to follow by the use of ambiguity between the hidden and visible, the present and the future."(Meiss, 1990, p111)

Inside out side relationship achieve through the continuity physically or psychologically.

Through

- Architectural details
 - Colour
 - Texture

Architectural elements

Form

Materials

Construction methods

- Views
- Paths (streets)
- Positioning of elements

▪ Visual elements

Continuity can be greatly achieved through the views. They improve the richness of the urban space. There can be grand vistas over long distances; broad panoramas should be complementary with the smallest framed views and informal glimpses.

Visual elements from the urban spaces make the continuity and can use to direct the user to experience the place by the visual cues. The same view can use to give various experiences to the viewer in different points. As an example the goal of the path or the centre of the urban space can give the far views in different points.

The views in an urban space can be panorama points, vistas, glimpse views, focal points, etc. the views can be focused to the major points, open space, water, special street, or to a symbol. These can be more effective in the pedestrian streets. They make the place cheerful. Views to visual landmarks make a legible place (Gamham, 1985, p 43, 81).

- Panorama – unlimited view over a wide area
- Vista – view of visual objective or focal point and beyond, directed by partially enclosing or framing elements
- Closed vista – view stops at focal point
- Unpleasant view – visual clutter, trash, wires, poor maintenance, broken paved areas, large signs make the place chaotic.
- Potential views
- Glimpse – brief, hasty, partial view of a landmark, focal point or some visual object.
- Views to water – views or glimpses of the creek or other bodies of water.

- Open space – views to open space or undeveloped land, especially where these views reinforce the concept of the "country-in-city"
 - Landmarks – points of orientation, generally unique and memorable
 - Focal point – object upon which a view converges.
- **Paths (Streets)**

Continuity can be created through the paths which can be visually or physically.

In a path there is a beginning, a direction and a destination.

"Town character and spirit are often perceived from its streets and ways. This street offers pedestrian scale, handsome materials, and a sense of order and social concern for town quality." (Rye cited by Gamham, p32)

The path can be a livable when it treated as follows.



Introducing statues



closing the ends



Pedestrian's streets



New paving patterns

(Fig 87) Making livable streets

Source: Making Townscape

Even narrow shopping arcades can be an important place where the corners at the end are shaped as then they are related to a specific corner.

When the streets are covered by a vaulted roof, give a strong sense of place as that acts as an upper boundary. Whole streets can effectively act as a group having similar characteristics giving the sense of unity. Also it can be achieved by the vertical and horizontal elements like windows, proportions, cornices, the faceted turrets, string courses etc.

Rather than giving the endless perspective of the streets by the grid pattern the urban views can be terminated by accidentally giving the whole street its significance. This makes the street as a new experience.

The buildings can be set back from the street with out giving them the prominence while making a street space.

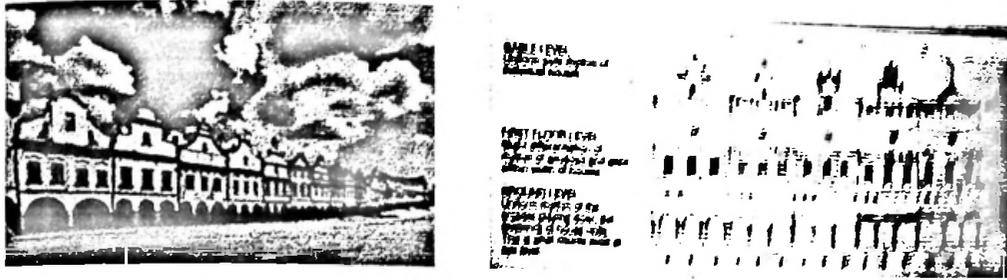
▪ Architectural details

Details serve as an important unifying role as most important, they set up a tension between the various elements, binding mass and space together, and provide a rhythmically recurring sensation as one progress down the main axis (Bacon, 1978, p175)

Continuations of the same architectural details convey the sense of unity and the continuation of the spaces. Lighting details, doorways, cornice lines, grill works, personalized signs and miscellaneous street hardware affect for that. When the plan materials are in the continuous row in the by the side of the pedestrian access they add a special character to the place as their seasonal change (Garnham, 1985).

Color, form, texture, materials and construction methods of objects that bind the urban spaces together should give the special attention (Garnham, 1985, p 29)

Architectural details are important to the scale and proportion of the surrounding buildings in an urban space as the giant order of pilasters and windows increase the scale of the building which gives the sense of enclosure. But too much of details and their sizes make the space chaotic.



(Fig 88) There is no need to all be based on an identical rhythm but may be a unity through.

Source: *Elements of architecture*

Through the architectural details has achieved the unity of the facades. Horizontal (horizontal bands) and vertical elements (roofs, windows and arches) are maintained. Inside out side relationship is confronted through the corridors. In the past vertically proportioned fenestrations were counterbalanced by strong elements such as band courses and cornices achieving the balance (Tugnutt, 1987).

Richness of the high quality details can create through the order, proportion, balance, hierarchy, homogeneity and the solidity. They make the continuity of the place or a façade. Interest in the details of the environment motivates a person to be there.

▪ Progress through color

Continuity can make an enjoyable experience when associated with the color giving a cheerful environment (Bacon, 1978).

"The experience of progression through the space was powerfully modulated by the dimension of the color. ... the experience of colored space was transmitted directly by the architecture." (Bacon, 1978, p242)



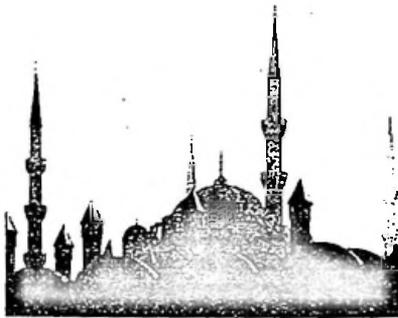
(Fig 89) Colour can be used to motivate people with an aesthetically pleasing environment.

Source: *Design of Cities*

In the contemporary western culture it has not considered the colour as a major dimension of architecture but in Europe colour is represented by the flowers. But mix of colours doesn't give any movement.

Skyline

Skyline is the most important element which evokes the sense of place and provide an image. So the urban skylines become the most important attribute to evoke the sense of place which is necessarily composed of a series of individual elements. (Tugnutt, 1987, p 50)



(Fig 90) Rising towards sky. domed building expresses individuality within the whole.

Source: concept of place

The skyline can be dominated by individual building elements but they must be composed by individual elements with a valid reason.

Edge (Corner Treatment)

In the past the turning corners have been specially treated. The vertical impacts were introduced by extending the built façade to make a strong feature. This method was very successful in the past. This emphasis must not continue through the facade but can add above the main cornice level and give an impressive effect with the sense of the continuity.

Concluding Remarks

The space, between the buildings makes the urban space in an urban context. There the Squares/Nodes, boundary & paths become the element of an urban space.

The principles of place making can be achieved through the architectural attributes which are

- Composition of the masses (form)
- Scale & Proportion
- Hierarchy (order)
- Rhythm & Repetition
- Punctuation and inflection
- Detailing
- Facades
- Materials and colors

So in the next chapter, it will examine how these attributes are used to create the urban space in Colombo Fort. It will analyze the streets, nodes, square, and the enclosure of the places there.

In the conclusion, it will identify whether the spirit of the place is present in the Fort and about the character. Then how it can create, enhance, maintain or preserve.

CHAPTER THREE: CASE STUDY: URBAN SPACES IN COLOMBO FORT.

The case study will search on how the place making has been done through the attributes in Colombo Fort. So the following streets and places will be analyzed.

There, the following street will be evaluated.

- Bank of Ceylon Mawatha
- York Street
- Chatham Street
- Janadipathy Mawatha



There York Street possesses a unique character. So it will be further studied.

Janadhipathy Mawatha will be evaluated with the available photographs and details as the inaccessible due to the security.

3.1 Historical Development

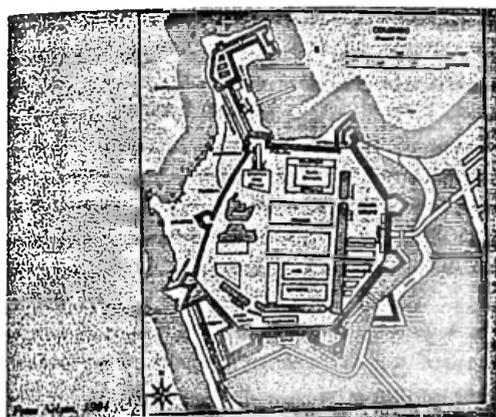
As it was first colonized by the Portuguese in the early 16th C, the spatial organization of fort represent the medieval order and a boundary out of reinforced granite. First they built the boundary out of mud at the base of the south break water. This was later extended and rebuilt with "kabook". It was 3 mile long new rampart fortified with moat and brick.



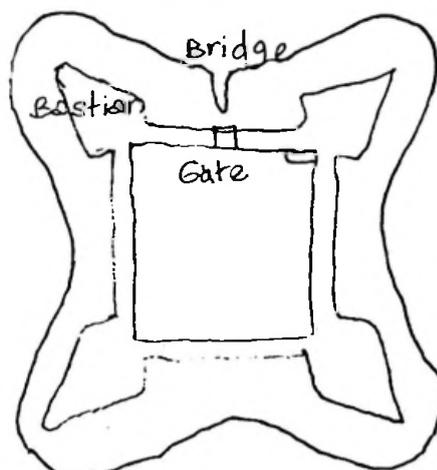
(Fig 91) clearly defined boundary by Portuguese (Fig 92) Map of the bay, city and fortifications of Colombo 17th Century

(See fig 93 for further clarifications)

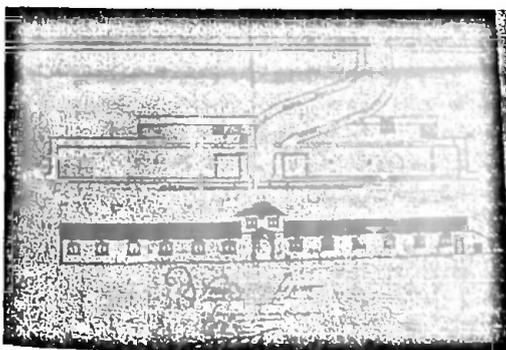
Later in 1796, Dutch raised the fortification and laid out the Galle Face Green. They did that mainly for their security from the invasions. Colombo's citadel erected by the Dutch came to be about one third the size of the Portuguese fortress. It was confined more or less to the area now zoned as the Fort of the Colombo. (Fig 94)



(Fig 95)



(Fig 96) Dutch fortification around the fort with 4 sided corner projections.

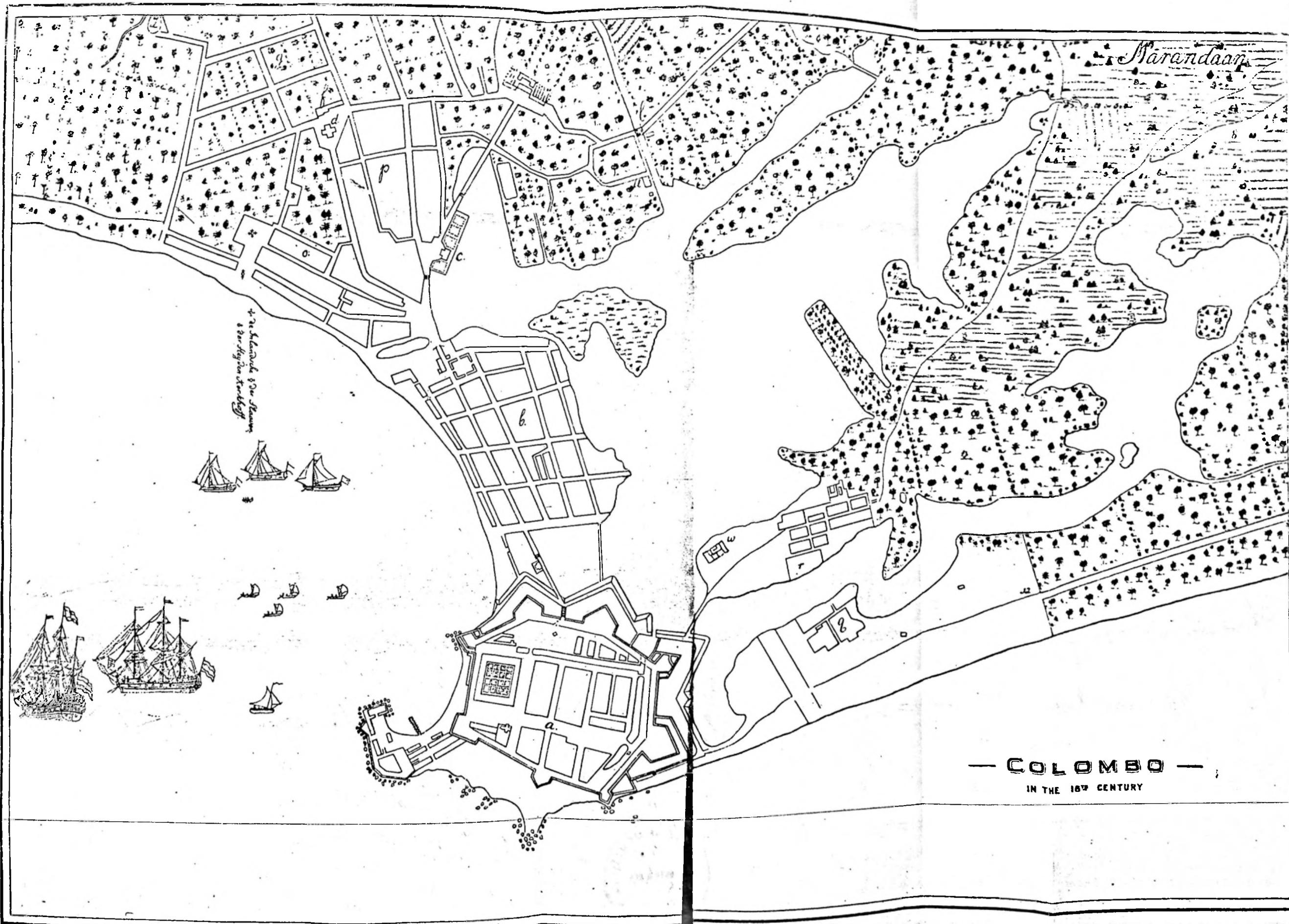


(Fig 97) Delft gate was the most important entrance to the fort in Dutch times.

But after 1815, the wall was demolished by the British resting the natural boundary and the surrounding buildings. They replaced the Dutch buildings by their buildings, but left the same street layout (fig 98).



(Fig 99) They divided the fort roughly into 4 quarters by 2 principle streets. A broad street which went round the ramparts served both the bastions and the soldier barracks.

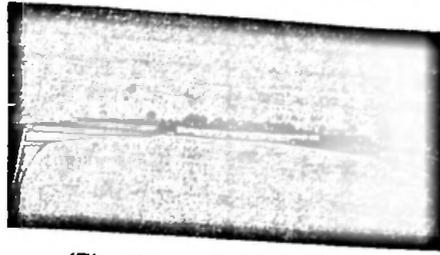


Marandaan

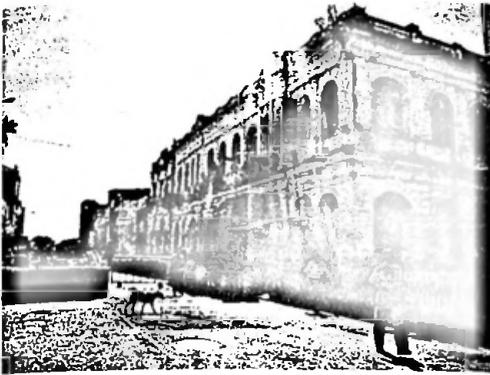
De Schandale 8 20e Steenen
8 van Hogen Stankelg

— COLOMBO —
IN THE 17th CENTURY

Fig 94) Dutch in Ceylon 1796-1815



(Fig 100) Looking west 1717



(Fig 101) Overpowering appearance

It was confined more or less to the area now zoned as the Fort of Colombo. Buildings they built gave an overpowering and dominating appearance rather than adapting something which is familiar to the local inhabitants. It reflected a typical British crown colony environment. York Street is the best example which had the colonial influenced built fabric.

But now there is no actual fortifications around the fort, as the British pulled down it. So it was bounded by the open sea on the west & north, ringed by nine bastions connected by strong ramparts, & further protected by broad & deep moats Proudou citadel which was a monument to Dutch colonialism.



(Fig 102) Chatham Street (1890)
Streets defined by strong building edges.



(Fig 103) General Post Office makes the boundary
Clock tower acting as a landmark demarcating the
center. (1910)



(Fig 104) York Street with a strong defined enclosure. Node acting as a center in the corner. (1900)



(Fig 105) Chatham Street making a livable street with a defined strong boundary, continuity & a focused center. (1890)



(Fig 106) Reclamation Road Colombo (1920): Open spaces create lack of sense of enclosure.



(Fig 107) York Street (1900): Trees enhancing the sense of enclosure & continuity making an informal square.



(Fig 108)



(Fig 109) Colombo Harbor 1920
Large scale building reduce the sense of continuity.

After independence, its physical structure was not altered. But after the introduction of open economy in 1977, new materials and the high rises came to the country.



West boundary after coming the new highrisers

North boundary

(Fig 110) Changing face of Colombo

E.g. Echelon square and the front segment of the Janadhipathy Mawatha. New types of buildings introduced as the commercial dominance. In 1982, city planning authorities began to introduce parks, streets, junctions and roundabouts which were result to the unpleasant built fabric.

3.2 Architectural space in development.



(Fig 112) Location Map

Due to the strategic position and the presence of a natural boundary which acts as a harbor, Fort has become a major center of attraction to trade and so as an important commercial center.



(Fig 112) Echelon square as a center

(Fig 113) Colombo fort as a center to the whole city



Fort is the core area of Colombo, grew around the harbor and the surrounding waterways which are acting as the strong well defined physical boundaries on these areas having four entrances from other parts of Colombo.



(Fig 114) Map of the Colombo fort illustrating the natural well defined boundary; street pattern (fig 113) and the building blocks with greenery. See for the detailed map fig 115



(Fig 116) Southern boundary



(Fig 117) 3D Form of the Fort area



North Boundary

North-west boundary

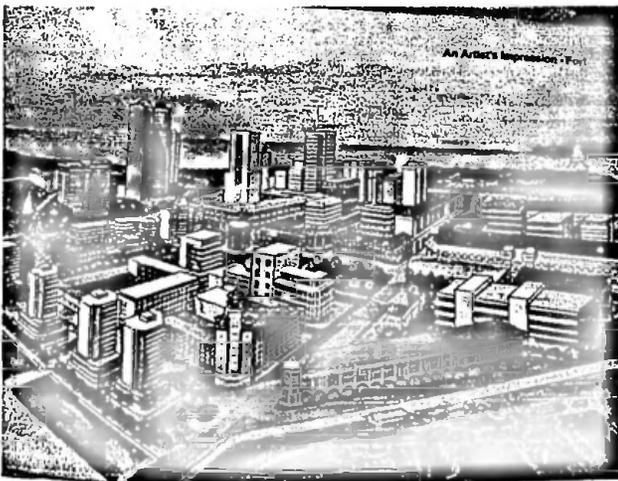
South boundary

(Fig 118) Aerial views of the Boundaries of the area

Three sides of the Colombo fort area is demarcated by the sea (Natural boundary).

In the contemporary situation the early buildings and facades conserved while maintaining the historical facade. But the new high-rises are dominating. As the security problems the functions has been differed and some roads are inaccessible. Only a limited number of users are using the area.

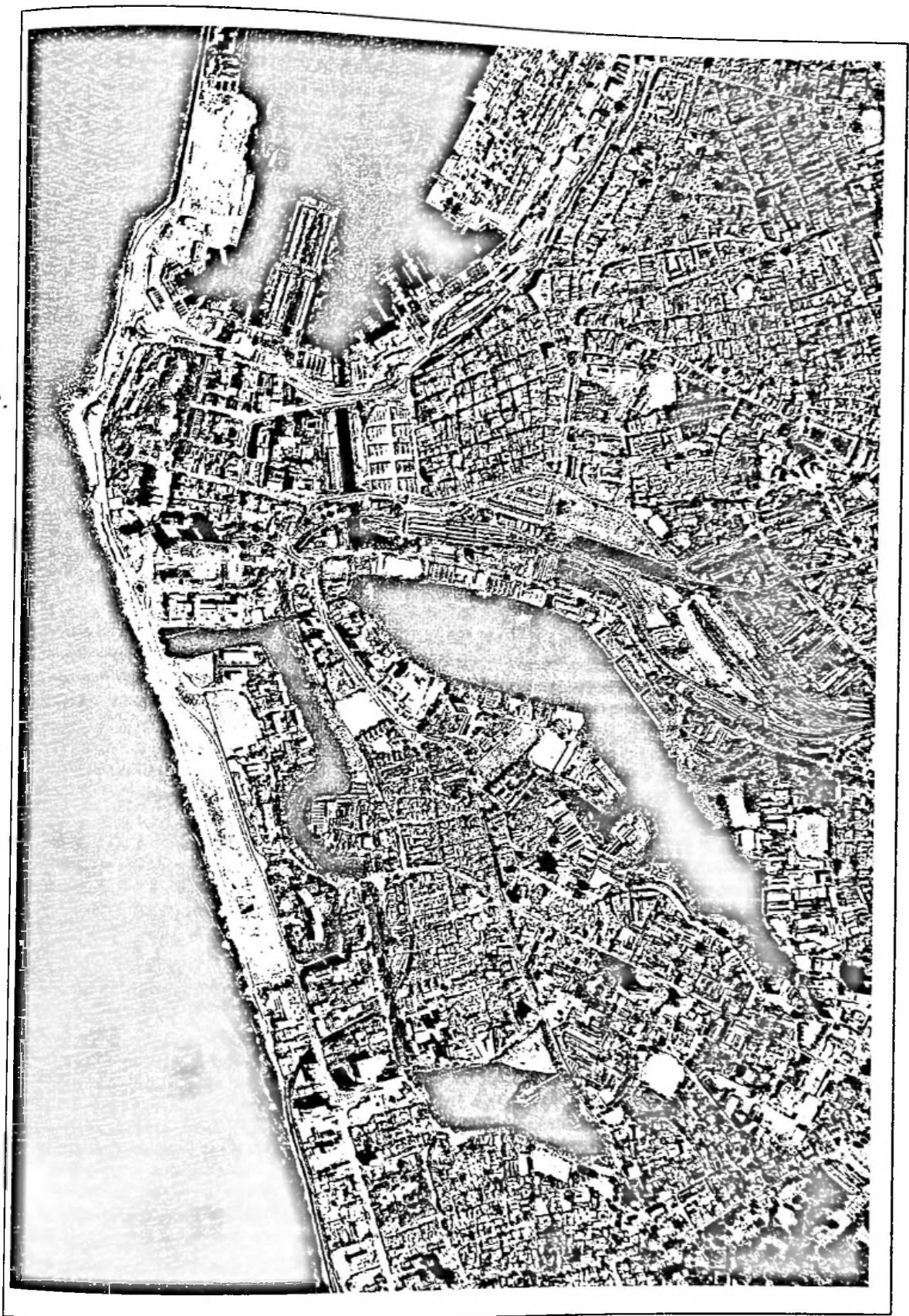
It has strict geometrical grid pattern with a wider spacious grid and massive built fabric (Fig 119). So, most of the places are characterized by the solid boundaries. Spaces in the fort are linear as the streets and there are concentric spaces like nodes.



(Fig 120) From horizontality, going to the vertical movement of buildings.

There the two major linear spaces which are the Janadhipathy Mawatha (earlier Queen's Street) and the York street run parallel to each other giving strong sense of continuity. (See fig 121).

The size and the shape of the building blocks, internal organization of the open spaces, their distribution and nature of the street grid determine the layout of the city. So by examining the layout of fort we can identify the boundaries of the urban spaces in there.



(Fig 114) Aerial View of Colombo



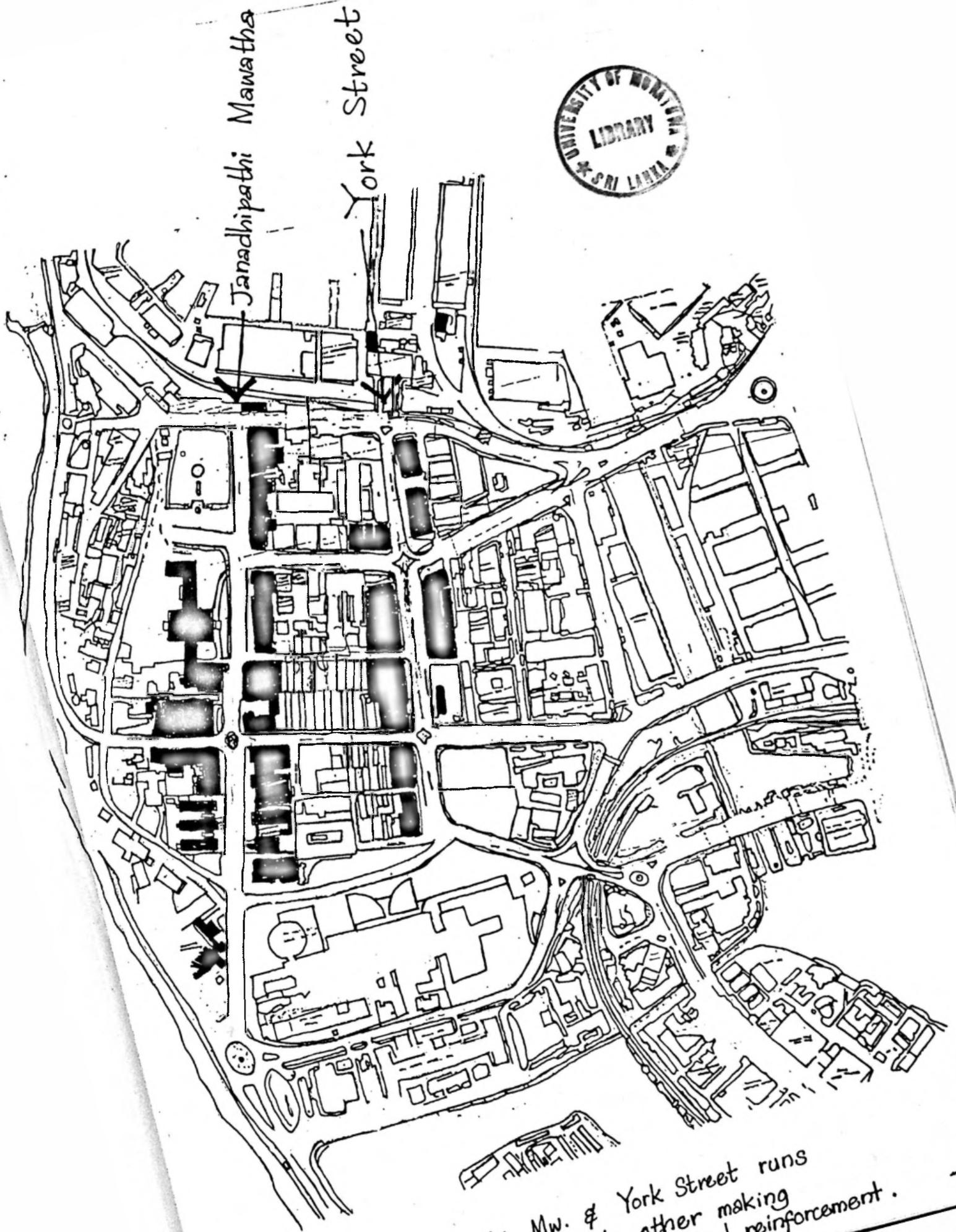
(Fig 14) Aerial View of Colombo Fort Area



(Fig 115) Map of Colombo Present



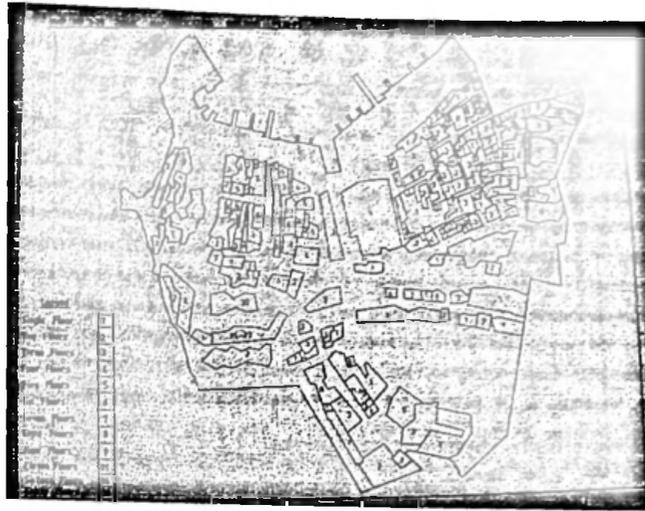
(Fig 10) (Fig 115) Map of Colombo



(Fig 121) Janadhipathi Mw. & York Street runs parallel to each other making different characters ^{with} & mutual reinforcement.



(Fig 122) Existing Zoning Plan



(Fig 123) Building heights

Continuity is greatly achieved through the details, columns, colors, roofs etc and also with the functional & land use pattern. but the most of the new buildings are competing with the existing buildings. Spaces are more tight links which are very rigid. But the colonnades sometimes reduce that feeling and inside outside relationship is achieved. Tiles and paving give the continuity in some places.

Continuous arcades in most of the buildings ass a special character to the place. Rhythm of columns and arches are accompanying the user giving the feeling that everything is designed for the itinerary which he is following. It makes that as in an organic part of space which is created for him and has meaning thanks only for his presence.

Along the Prince Street, Queen's street and the York Street, the spacious buildings with huge proportions with arcades give a strong enclosed space. E.g.: Cargill's Millers while the Colombo fort acts as a center to the whole city itself.



(Fig 124) Clock tower

But the Clock tower acts as a center for the fort area.

Where Janadhipathi Mawatha and the Chatham Street meet is the Lighthouse turned in to a Clock Tower which

acts as a land marke. Probably the best known landmark of the fort, the tower built in 1857 is the only lighthouse in the world which also tells the time in the middle of the busy road.



(Fig 125) Plan & the aerial view- Earlier Dutch governor's house, Now presidency residence

Beside the tower the Queen's house was built on the land where the house of the last Dutch governor was in. now it uses as the Presidency house. So it acts as a major administrative center (square) of the area.

Center marked by the clock tower making a direct axis and so that the Dutch governor's house (later queen's house now president's house) acts as the most important place in this fortified area in the history as it acted as a small colonial kingdom.

3.3 Place making in different types of spaces.

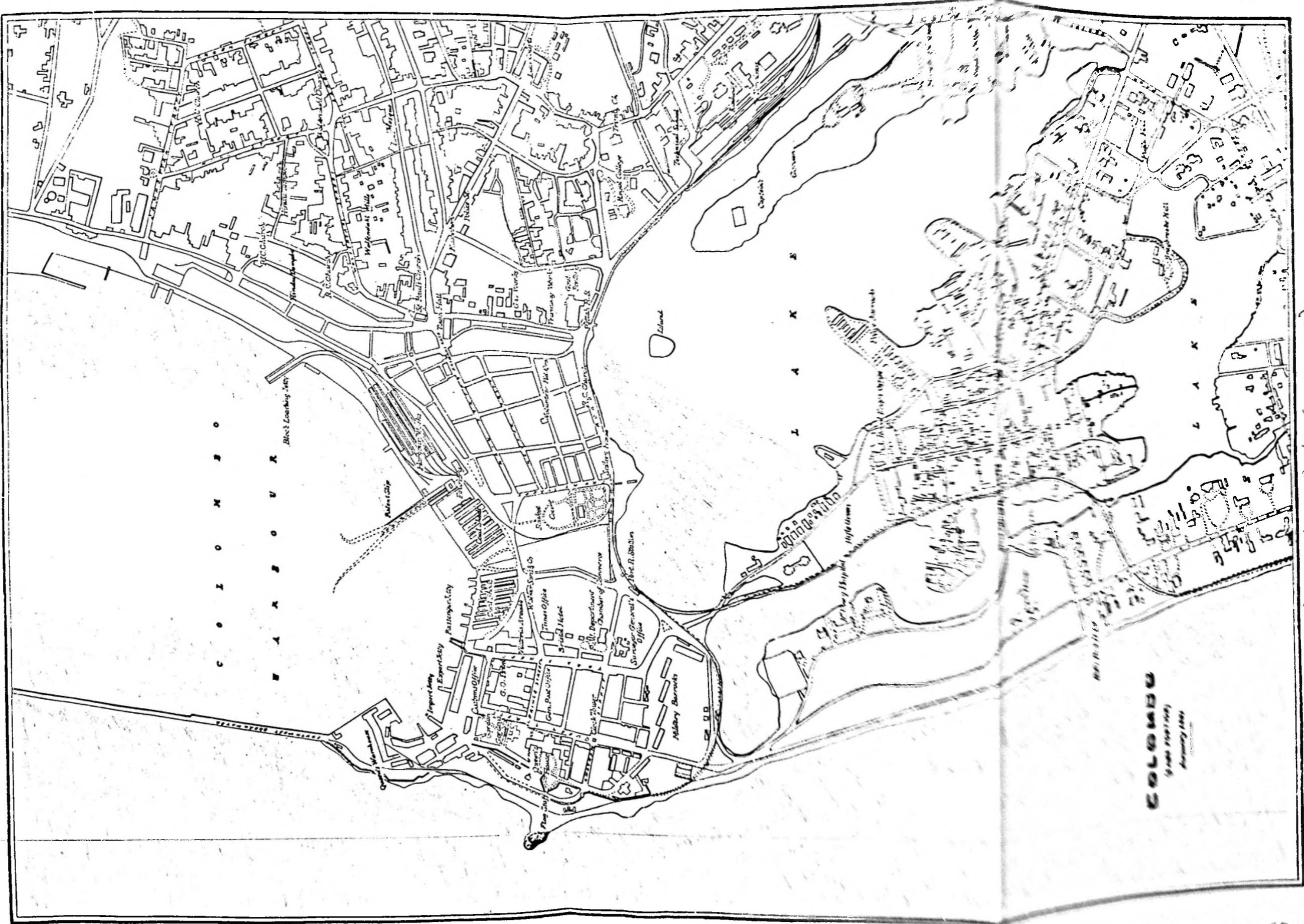
3.3.1 Streets

- Bank of Ceylon Mawatha

Enclosure

(Refer plan 126)

COLOMBO IN 1901



(Fig 98) British in Ceylon (1815-1948)



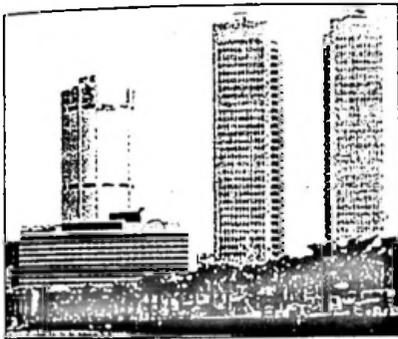
Plan
(Fig 127) Echelon Square



Elevation



View towards the Janadhipathy Mawatha



(Fig 128) Skyline seen from the
beginning of the Janadhipathy Mawatha

Space defined by the high rises and low profiled buildings & trees. Front façade is set back from the building edge giving the prominence to the building.

Freestanding buildings don't enclose the surrounding area. They destroy the sense of enclosure. They disorientate the people in the space.

Newly coming towers are gathered in a one place as a unit. If not the sprawling happens. As they are grouped they give an identity to that place. E.g.: Echelon square.

If not due to their height they make contrast with the domestic scale buildings and when the both are seeing together at close it is uncomfortable as the competition of the scale.



(Fig 129) Palm trees giving continuity

Space is defined by the palm trees and the high rises. But the scale of the building is reduced by the connecting entrance building.

New simpler buildings seem as alien as their details and materials.

In urban situation, there are variety of building uses and has to respond for their individual special requirements. They can be prepared together as a group with a friendly, rather domestic appearance but with many thematic variations. It creates a visually pleasing street while with the variations in a homogeneous whole. E.g. World Trade-Centre where, the Kaffirs were summoned on roll-call.

Twin towers give contrast with the older buildings which are more domestic in scale. When the two are seen together at close the clash of scale is uncomfortable.

Center

Twin towers acts as a landmark in the area. So the square in front of it becomes the center itself. Continuity achieves through the great vista to the sea of landscaping which are the palm trees and the lighting post.

Continuity

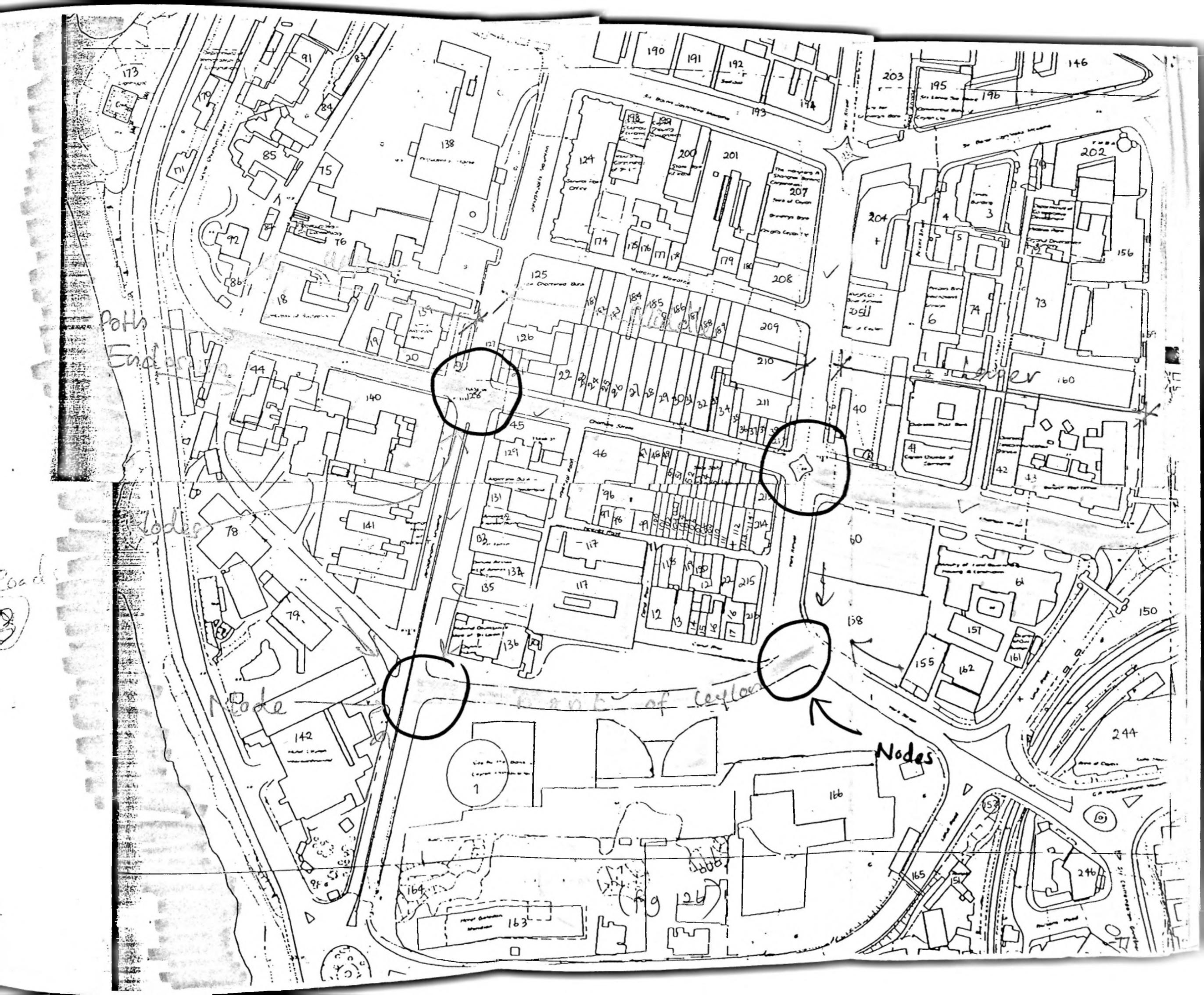
Continuity is greatly achieved through the details, palm trees and with far views.

- **York Street**

(Refer p 69, fig 130 for the Location map of York Street)

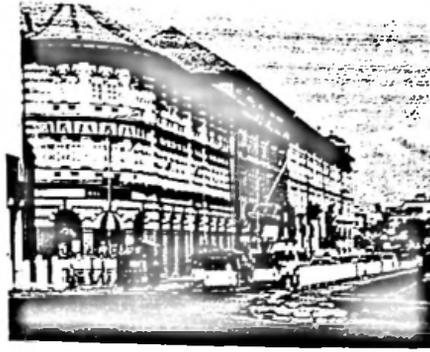
York Street is the one of the most important and prominent street located in the heart of the fort and its northern boundary is, the node at the Church Street and Leiden Bastian Road and the Southern boundary is the Lotus road node.

It has a very strong character maintained by the street elevations (see fig 131) with a series of vertical and horizontal rhythms, rich detailing etc. almost all the buildings of the street occupy lengthy built plots along the street and bounded together as a unit creating the sense of two walls on either side of the street.





(Fig 132) Beginning of the York Street



(Fig 133) Strong building edge defining the boundary (York building)

Linear buildings along the street make strong edge defining a boundary.



(Fig 134) World trade center acting as a background



(Fig 135) Eastern side of the York street

Enclosure

Form

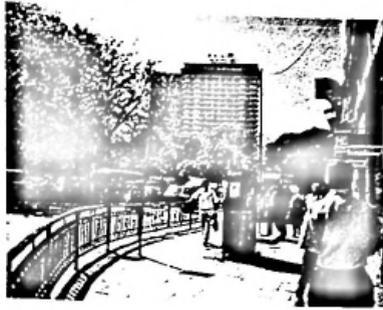
Continuous row of buildings which are massive in scale and with larger plot sizes along the street make the boundary to the street.

But in the beginning of the York Street from the Bank of Ceylon Mawatha, buildings and trees make the boundary for the street.

Open space in the eastern side where the lower Chatham Street meets York Street is using as a parking area giving lack of enclosure.



(Fig 136) Open space reduces the sense of enclosure



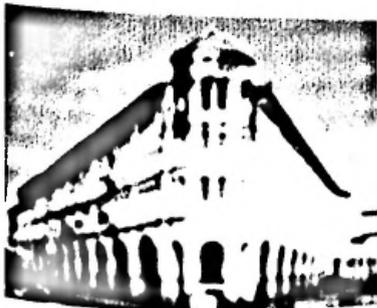
(fig 137) View towards world trade



(Fig 138) Mudalige Mawatha
Giving corridor effect

Scale & proportion

British used the scale and proportion to express their power more than the Dutch. So most of British period buildings in Fort, are comparatively large in scale and imposing the power over the human scale. e.g.



(Fig139) Gaffoor Building



(Fig 140) National Mutual Building

They used certain elements to give an overpowering feeling (fig 140). Great heights were used to express dominance over others, but as a result of that they gave the sense of enclosure.

So the fascia covering the roof of their buildings strikes as an overriding element in most cases.



(Fig 141) Facia covering the roof of Bank of Ceylon building, York Street.

In Dutch period the arch and pillar were the most important structural elements but British gave them an ornamental look since load bearing walls were introduced in-between pillars (fig 142).



Navy H/Q-Flagstaff Street



Entrance to the Bank Of Ceylon Building

(Fig 142) Fine detailing



■ Fig 143) Fine detailing of the Cargills & Millers Building

The arcade was an envelope to the building where as the Dutch verandah was. The highly decorated nature of the exteriors of the nineteenth century architecture, increase the scale of the buildings. E.g. Cargills & Millers

E.g. Ceylon State Trading Corporation Ltd. In York Street, the columns have intricate detailing which also give continuity. Column heads also has elaborate details. Also the

fine engravings and plaster moldings through out the buildings enhance that quality (fig 143).

High plinth used in the Dutch buildings and most of the British buildings enhance the presence on the earth.

Two to four storied large scale buildings give a sense of enclosure making a proportionately appropriate proportion with the width of the street which is 18 m including the pavement.

See fig 131

(Fig 144) Longitudinal section of the York Street



Cargills & Millers building



Australia building



Police Head Quarters

(Fig 145 Buildings in the Western façade of the York Street)

Height breadth of buildings responds sympathetically to each other except the Hemas building in the second segment of the street.

Height of the buildings and the elements like windows, columns, arcades, cornices are having a similar scale and proportion adds a unity (similarity) to the façade due to the scale & proportion while allowing a sense of strong continuity. Scale of the buildings reduces through them as they minimize the bulkiness. But the window to wall ratio is minimum to give the sense of enclosure while in the ground floor level due to the arcades more openness achieved masking the balance between the sense of enclosure and the continuity.

Continuity

In general the street gives a strong sense of continuity with spatial punctuation.

It begins from the Echelon square and runs to the church street continuously meeting with the Canal Road, Hospital Street, Chatham street and Mudalige Mawatha making the lateral continuity maintaining the direct continuation of the street facade through the continuous raw of buildings which are massive in scale and with larger plot sizes.

At the western side the continuity is maintained with the limited voids which are the streets stretching towards the sea side, but in Eastern side the continuity is disturbed by some urban voids.

see fig 81

(Fig 146) West façade of the York Street

see fig 81

(Fig 145) East façade of the York Street

Sky line & Building Line

Straight building line and the street edge is more dominant feature in this area giving the strong sense of continuity. It adds richness to the built fabric. Although the new buildings maintain the street line, they add unpleasant view of the skyline.

Roofs are covered by the decorative cornices except in few buildings which make a variety of the street facades and enhance the sense of enclosure (fig 143). But most of

the new buildings are not compatible with the existing buildings. E.g. Gridlays Bank Building.

Change of skyline (fig 146) can use to dominate the special buildings mainly the religious buildings like mosques, churches etc.



(Fig 146)



(Fig 147)

Change of building line creates some point of interest and Overhanging upper floor make an anti space while ground floor is in the same building line (Fig 147). But unreasonable change of it can make the incompatibility.

So it depicts that a building with a contrast height (skyline) with a set back (building line) adds a hierarchy to the street facade.

Façade Treatment

Similar floor heights, window lines & cornices maintain the horizontal rhythm giving the unity & continuity while the vertical divisions like columns, windows, arcades etc add a variety to the façade with their colors & detailing (fig 145). The slight variation of the building heights, corner treatments and some details like cornices break the monotony. E.g. fine details and color enhance the quality of the Cargills & Millers building as a landmark.



(Fig 148) Cargills Building with the new building

They render mere cheerfulness to the existing prestigious character of the street as a place. Built forms with arcades, rhythmic details of arcades generate the continuity. Long arcaded buildings with the continuous

fenestration of the indoor and outdoor create the balance between the vertical and horizontal rhythm with continuity.



(Fig 149) Eastern side of the York Street

But in the first segment, the change of story heights cause for the disharmony of the built fabric (fig 134).

Interestingly, in the Eastern side of the York Street, it has been used the heights and the elements specially the arcade familiar to the human scale, but they have failed to give the original sense of continuity and the enclosure (fig 149).



(Fig 150) Gridlays Building



(Fig 151) Arcade of the Gridlays Building

Although the arcade in the ground floor maintains the horizontal continuity, vertical windows exploit the vertical continuity in the Gridlays bank building.

It is mainly due to the absence of the secondary detailing which reduce the spatial continuity of the built façade with out considering the floor levels and the wall to opening ratio resulting the monotony. Continuous and excessive use of vertical elements also affects for that. (Also in the Hemas Building) they make contrast with the historical fabric breaking the harmony.

Since the buildings have no windows, it prevents the inside outside relationship.

High quality building facades and their proper restoration makes a street livable place.

Special places created in an urban space provide places for various activities to experience the nature in a spontaneous and relaxed setting.

Proportions of the parts and the fine craftsmanship of the brick walls and the window heads make a cheerful façade with continuity.

The directional quality of the street is terminated by the low scale Sri Lankan Ports Authority building at the end and it doesn't give a strong identity as a focal point. Although cutting an edge of a street with a building can make a street livable place here the building doesn't create a focus enough as its scale & proportion.



(Fig 152) Far view of the Port Authority Building at the extreme end of the York Street

But the new building facades haven't considered about the façade details like ornamented roofs with cornices, skyline etc of the historical fabric.

Corner Treatment

Almost all corners had responded to that particular junction maintaining the solidity and the continuity making a strong enclosure around the node.



Bristol Building



Grand Oriental Hotel



Nations Trust building

(Fig 153) Corner treatments of the buildings

Although the new building has responded to the corner, it is not compatible with the historical façade as its less openness (minimum ratio of the wall to window openings)

they have not given the required specialty to the corner seen in the historical built fabric (fig 153).



(Fig 154) YMBA Building in Sir Baron Jayathilaka Mawatha

Also they had got some special elements on the skyline of the corner buildings giving variety to the buildings. It contributes to strengthen the character of the Fort area.

Center



(Fig 155) View towards the high risers from the Port Authority Building

Beginning of the street the high raises act as a center.

The twin towers of the World Trade Center can be seen in the background, with the foreground being occupied by three buildings dating from the 19th Century.

But street itself becomes a center where the arcades and other streets focusing. There are other important places which acts as centers in the York Street.



(Fig 156) Node in front of the Port Authority Building
(Building it self is a center/focal point)



(Fig 157) Open Parking in the Eastern side of the York Street as an important open space near the node.



(Fig 158) Node where York Street meets Sir Baron Jayathilake Mawatha



(Fig 159) Node where chatham Street meets York Street

Conclusion

A strong historic character & identity has achieved in the western side of the York Street as its strong sense of continuity & the enclosure. But as the new buildings like Gridlays Bank developed in the Eastern side of the York Street has destroyed that character very sympathetically. In the historical fabric when it considers the individual buildings, they have their own character.

▪ Chatham Street



Although Chatham Street has two segments named lower Chatham and Upper Chatham at present due to many reasons like security, road blocks, road intersections etc it seems as a very chaotic place. Also there can be seen 3 segments as upper, middle and lower Chatham as they posses different individual characters although the street as a whole has very strong physical character which is remarkable among other streets in fort area.

(Fig 160) Location of the Chatham Street

The upper Chatham Street begins at the intersection of Flag Staff Street and the Galle Buck road and it ends at the historical Chatham Street clock tower at the node intersecting the Janadhipathy Mawatha. The Middle Chatham Street begins at this node

and ends at the York Street node of Chatham Street. The Lower Chatham Street begins from here and ends at the Lotus road intersection (See fig 126).

- **Middle Chatham Street**

Built form

This area gets its unique character as the small scale closely packed building plots especially in the northern side of the street, in the Southern side it varies as the large scale plot sizes near the clock tower. So the buildings have become tall and narrow which are bounded together creates two continuous walls on either sides. Street width is less comparative to the height of the buildings. It conveys a sense of enclosure creating a corridor effect (See fig 162) .

See fig 162

(Fig 163) Cross Section

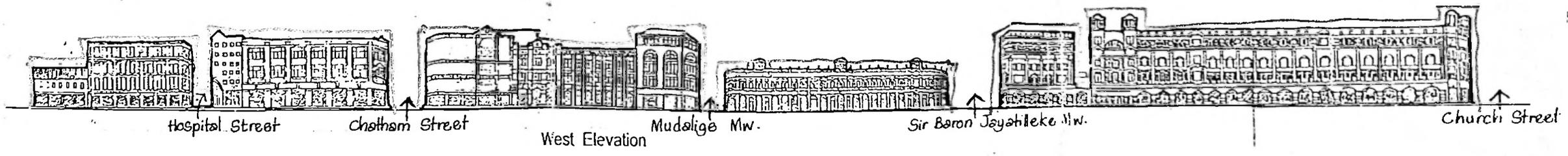
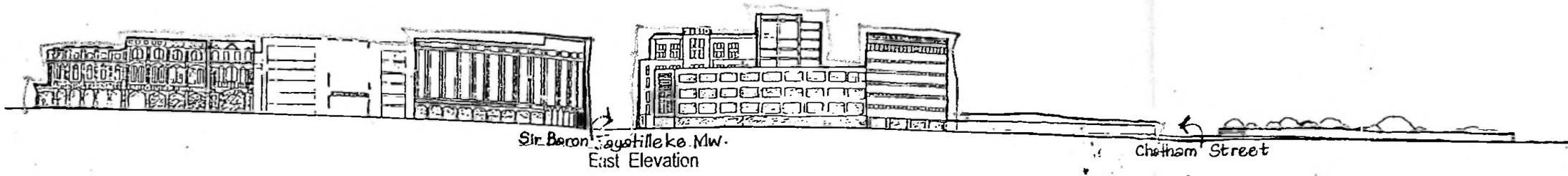
Government institutions like Transwork House and the Central Telegraph Office along with the Telecom offices and the Colombo Commercial Company buildings give the sense of enclosure. But the amount of the sense of enclosure is reduced to a certain extent as the open lands on both sides up to the York Street.



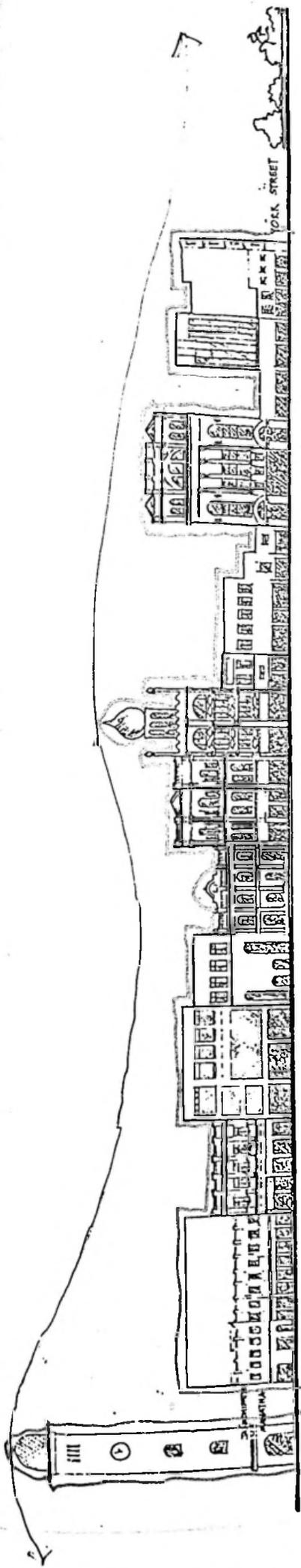
(Fig 164) View towards the Lower Chatham from the clock tower.



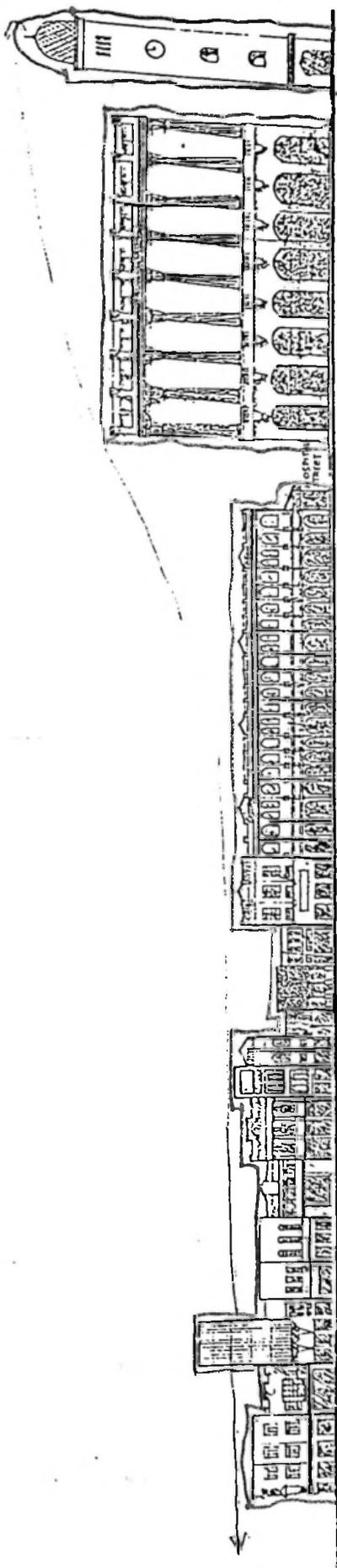
(Fig 165) Corridor effect of the Street Focusing the clock tower as a land mark.



(Fig 131) York Street



North Elevation



South Elevation

(fig 162) Middle Chatham Street
 Source : M. Sc. Diss 1000 (05)





(Fig 166) Skyline of the walls of the two streets.



(Fig 167) Façade treatment of the street
Skyline with the mosque as an object

Up to the York Street intersection buildings are with long plots. E.g. Chamber of Commerce building.

After the clock tower, towards the Upper Chatham Street, the width of the street begins to increase slightly (see map and the fig 166).

Continuity

Horizontal and vertical continuity enhance by the vertical and horizontal rhythm. Building heights maintain the continuity except in some cases. It gives order to the street focusing towards the clock tower. (See the elevation of the Middle Chatham Street.)

Building Line & Skyline

Building lines are strictly maintained contributing to achieve the continuity and unity (see plan and the fig 166).

Facades



Details of facades enhance the continuity (fig 168) . Arcades (E.g. Marketing Department Building) and the details and division of shop fronts contribute for it. As most of the commercial activities happening in the Middle Chatham Street they have tried to express their individuality through the built form and the facades (fig 166).

(Fig 168) National Mutual Building



As the corridor effect and the directional quality with the direct view to the clock tower gives the sense of the continuity, characteristic to a path.

Since the Upper Chatham is not accessible to the general public as the security problems it will not consider this area for the study. But to get clear idea about the street as a whole author has reviewed this area in general through the literature survey of the unpublished data.

Generally it has a residential character.

Corner treatments



(Fig 169) Corner enhances the continuity.
Nations Trust Building

Center

Historical Clock tower acts as the center of this street also. In the beginning of the Lower Chatham Street the clock tower is visible but walking along the street it is not so prominent. When approaches towards the Middle Chatham Street it becomes the main focal point, as the street becomes narrow giving the feeling of the building lines as getting closer.

Views are also directly focused to the clock tower from the Janadhipathy Mawatha and the Chatham Street as an important and prominent landmark.

▪ Janadhipathy Mawatha



(Fig 170) First segment of the Janadhipathy Mawatha



(Fig 171) informally defines strong sense of enclosure as the sea.

Janadhipathy Mawatha extends from the nodal point in the Northern end of the Galle Face drive up to the Church Street neighboring the port. Lying along the north south axis directly, it makes an important entrance to the fort (See fig 172 & 173).



The clock tower divide the street in to two parts which there are number of new buildings along the first segment of the Janadhipathy Mawatha and the historical buildings in the second segment mainly the queen's house (before Dutch governor's house now presidents house), General post office, old parliament building, National Mutual building of the harbor side(north side).

(Fig 174) Location of the Janadhipathy Mawatha

For this study this street was taken although there are practical problems like inaccessibility as this street gets a different character from the York Street due to the new buildings which are developed in the first segment.

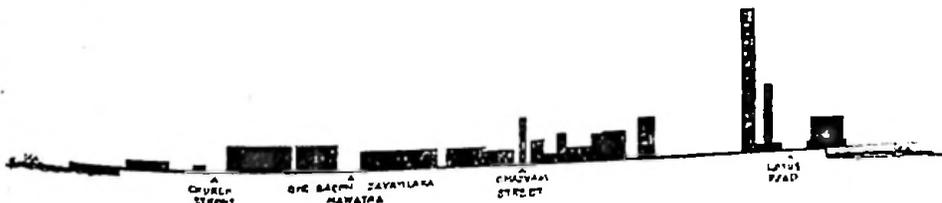


FIG. 113.
 Colombo Fort. Section along the Janadhipathy Mawatha

(Fig 175) Section along Janadhipathy Mawatha
 Source : M. Sc. Diss (93/19)

rd5

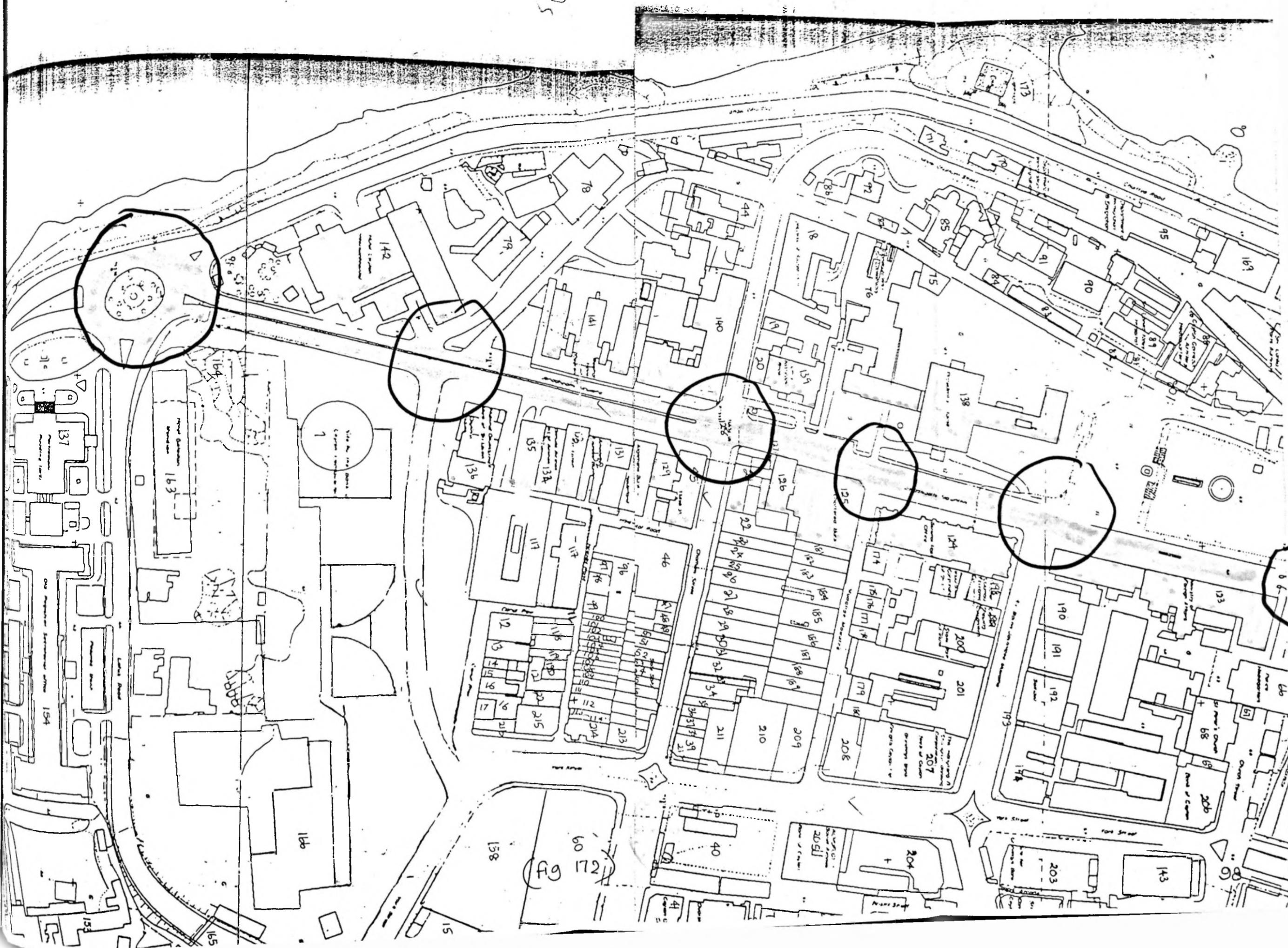
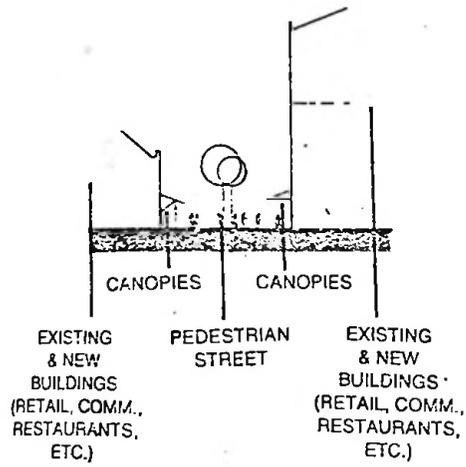
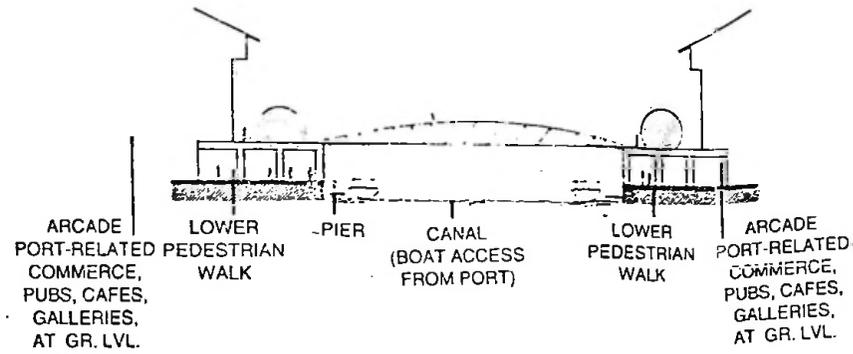


Fig 172

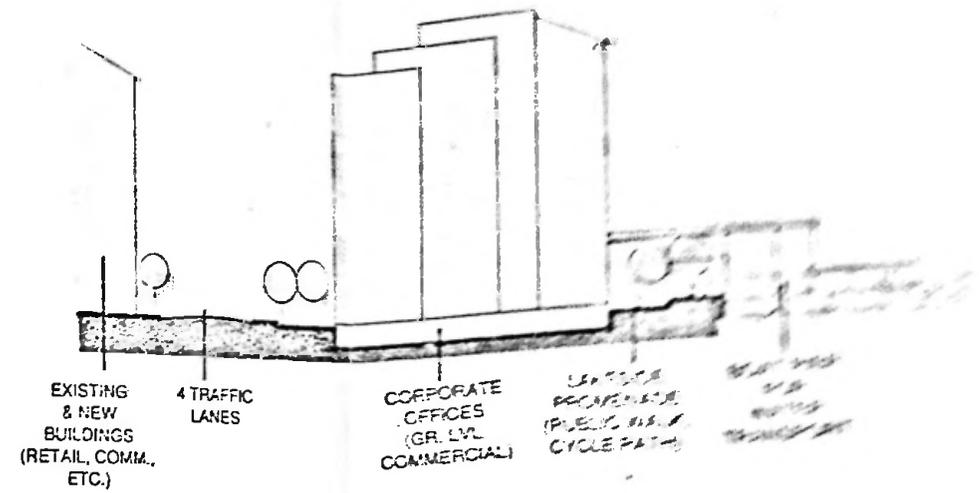
TPOLOGY OF STREETS



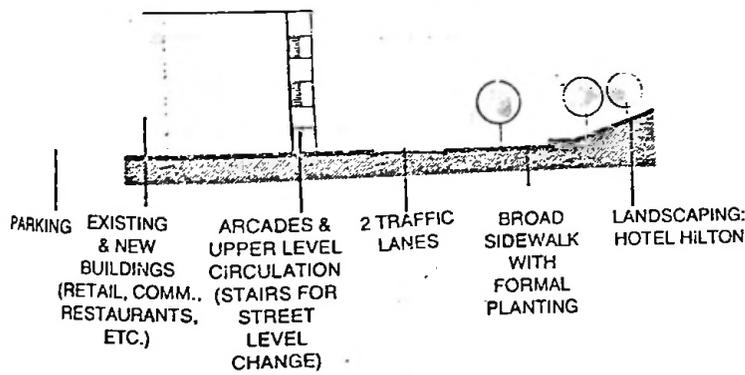
(D) CHATHAM STREET



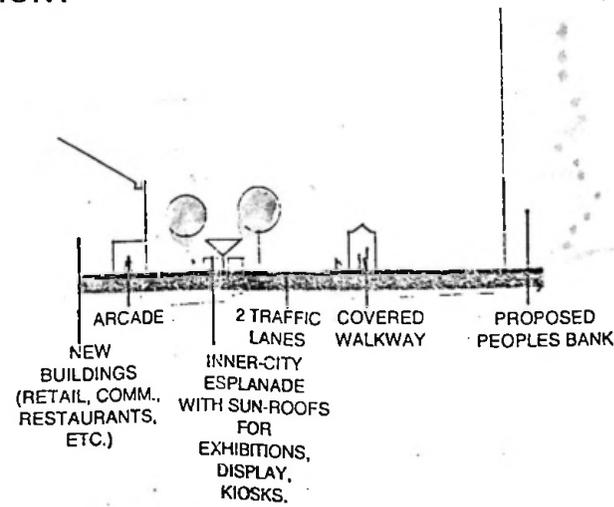
(E) LOTUS CENTRE - CANAL FRONT



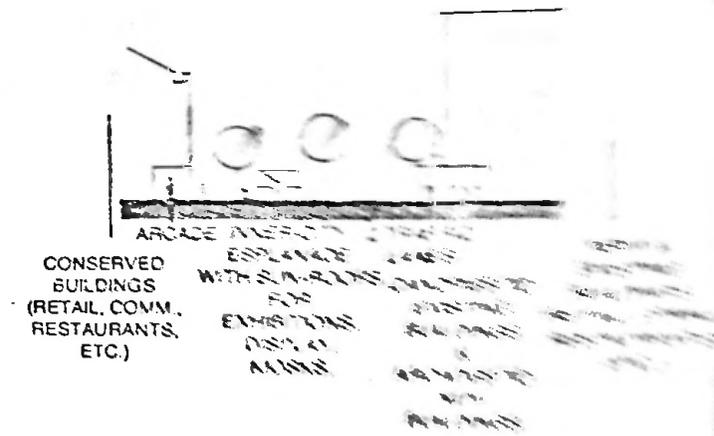
(F) D.R. WIJEWARDENE MAVATA



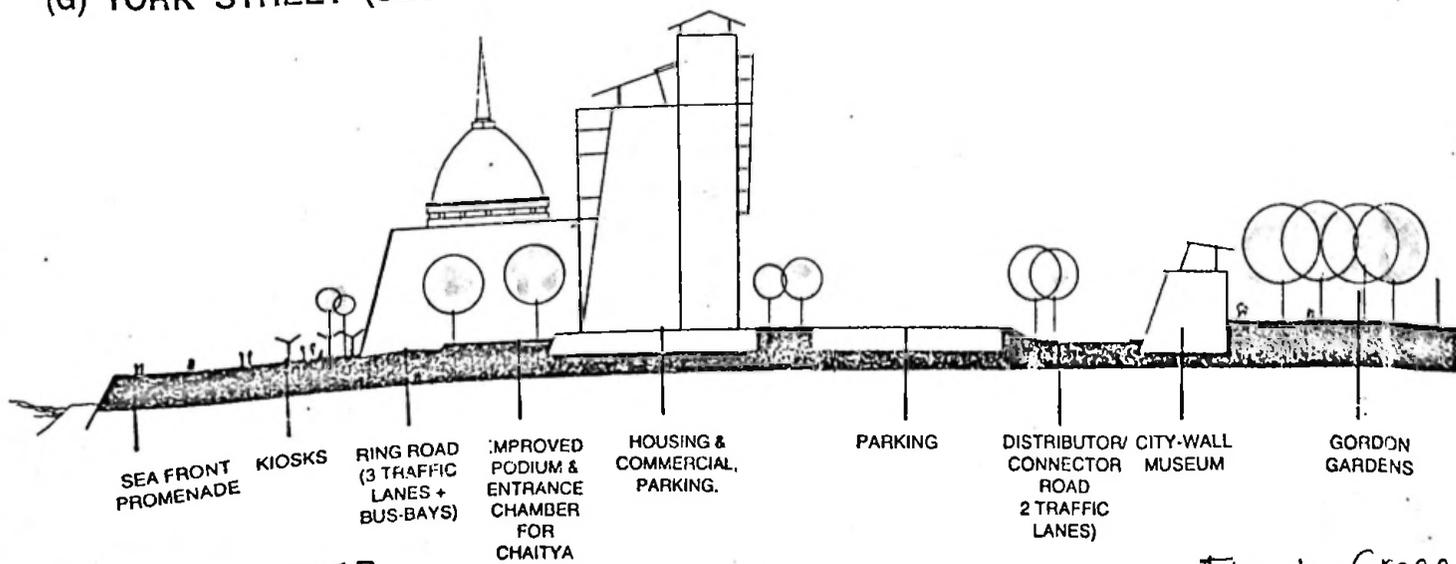
(G) YORK STREET (SEGMENT 1)



(H) YORK STREET (SEGMENT 2)

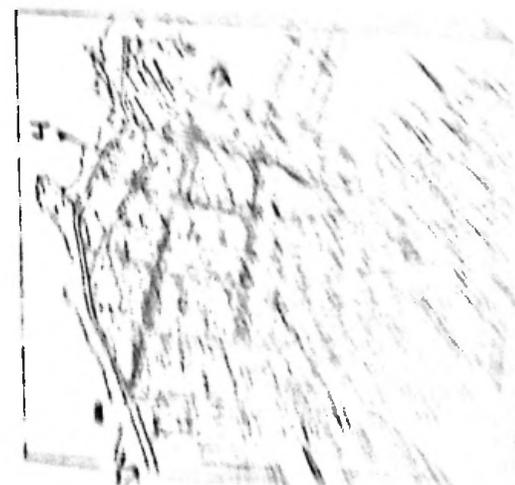


(I) YORK STREET (SEGMENT 3)



(J) CHAITYA ROAD

Fig : Cross Sections through streets
Source :



Enclosure

Built Form

In the first segment of the Janadhipathy Mawatha there are less compacted buildings although the historical built fabric is compacted. President's house is the most important building which has enhanced by the axial location of the clock tower.

Built Scale & Proportion

Height and breadth of the buildings sympathetically respond to each other which are almost similar. Bulkiness and the huge scale provide the sense of enclosure to the pedestrian.

Although the proportions of the buildings are similar double height arcade of the National Mutual building and the Bank of Ceylon building violate that proportions.

Sky line & building line

There are vacant lands on some places breaking the continuity of the building line and the skyline. Horizontal and vertical continuity is maintained in the historical buildings while the new buildings enhance the vertical continuity strongly. They have also neglected the traditional roofscape. This leads to decrease the sense of enclosure.

There is no coherence (continuity) of the built façade.



(Fig 176) Echelon square with historical buildings.
The skyline dominates by the new high risers.



(Fig 177) Sense of enclosure created
with natural elements.

New buildings almost have flat roofs.

Façade treatment

Similar floor heights maintain the horizontal continuity.



(Fig 178) National Mutual Building

Very rich facades with details enhance the continuity. In the Eastern side the details of cornices, decorative columns, arcades and window detailing enrich that quality.

But the buildings like Central Bank, Hotel Intercontinental and other buildings violate the continuity of the façade as the diverse vertical and horizontal elements. Two storied high podium attempt to continue the horizontality although it is unsuccessful as the vertical continuity.

Corner treatment

They have responded to the corner of the street maintaining the continuity. Their solidity gives the sense of enclosure.

But the new buildings have neglected that. But the boundary wall of the hotel intercontinental responds to the corner.

Detailing

Variety of colors, materials and detailing visualize in the both sides of the street.

E.g. Echelon barracks near the Southern entrance. But there's no smooth connection with other places. Colors and textures in the historical buildings (E.g. Cargill's Millers building) make a conversation with the user giving the continuity. But reflective glasses give an unfriendly environment. Also the dark tinted glasses doesn't define a spatial boundary as they are too absorptive reflective or transparent.

Conclusion

The new buildings in the Janadhipathy Mawatha violate the sense of enclosure and the continuity destroying the historical character of the place.

When a new building designs in a historical area, its detailed spatial structure in and out appearance should relate to the surrounding context. It should maintain or enhance the character of the place. But in this street it has destroyed the character where through the new buildings may enhance the historical character utilizing the valuable land economically as a strong place.

3.3.2 Squares at road intersections

Traditionally entrance to the urban space is given the prominence as we can see it clearly in the Bastian door. Now it is using as a security entrance. It was a well defined entry due to the existence of the boundary wall. But today entry points to most towns are less defined.

If the roads which are connecting important points are meeting in a junction naturally becomes a main focal point. But due to the heavy traffic at these points, these entrances are widening which reduce the sense of enclosure.

When the square becomes large in size the surrounding buildings fail to make their scale and proportion according to that. So the sense of enclosure is diminishing. Also the steps, furniture, fountains, sculptures and monuments should be placed with these considerations.

Eg: Rome

Although the spaces are static it has undergone through many of the changes through out the history.

3.3.3 Arcades



(Fig 179) Arcade of the Bank of Ceylon Building-texture, colour, details

Continuous grand arcades give strong sense of continuity with their paving patterns, colors, textures & the detailing. Simple new additions give contrast of the inner entrance façade.



(Fig 180) inside out side relationship

Pedestrians make an interest of the road through the Grand arches making the lateral continuity giving the inside outside relationship. Uninterrupted, covered walkways convey them a more relax and live urban experience.

(Arcade of the Cargill's Millers Building)

Width to breadth ratio achieves the sense of enclosure. Arches reduce the bulkiness.



(Fig 181) Arcade of the Cargills Building

Inside out side relationship achieved.

Strong sense of continuity maintaining in the historical facade of the Cargill's Building



(Fig 182) Horizontal continuity emphasized.



(Fig 183) Changes of the Historical façade make a chaotic environment.



(Fig 184) Boundaries give a corridor effect. Bastion door-main entrance to the fort.

Enclosure

Enclosure achieved through the rigid columns, roof and architectural features. Pedestrians make an interest of the road through the Grand arches making the lateral continuity giving the inside outside relationship. Uninterrupted, covered walkways convey them a more relax and live urban experience.

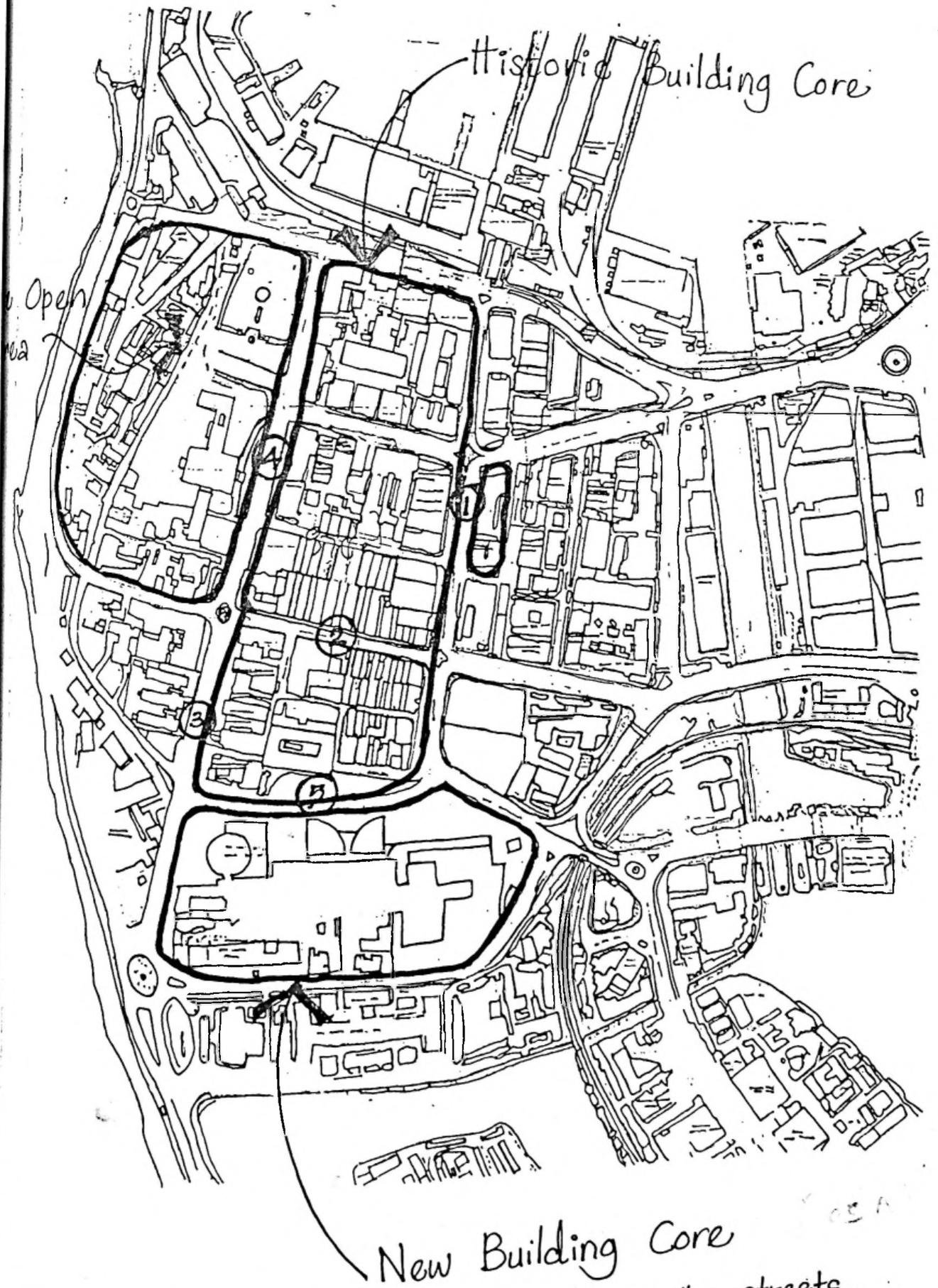
Concluding remarks

As the Colombo Fort area is previously used mainly as a commercial and administrative center, the foreign nations have designed the urban space according to that, making the urban space very geometrical and with the overpowering character. They had created remarkable boundary around the area with the highly visible continuity. Continuity gives a distinct character to the place. Administrative center acts as the center of the whole urban space. Urban space gives many possibilities to the user with the maximum enjoyability. Mainly it is as the street, which gives the pathway experience through the design elements as discussed. There seems the urban space as a dynamic field of movement.

But in the present situation, according to the changing situation, function of the space has been changed. Attempt has been got to harmonize the new development with the existing character. There is a clear contradiction in the present and the past place making of this area resulting a chaotic environment as they have not identified the basic principles of doing that. Now also the historical character is there with slight changes which can enhance by maintaining the spirit of the place according to the changing needs of the nation.

Concluding Analysis

Strong sense of vertical & horizontal continuity of sense of enclosure of the historical built façade of the York Street adds a unique character to the fort making a strong place. Compared to the York streets others are having less sense of enclosure of continuity making their own characters while contributing to the whole character of the fort.



(Fig) Analyzing the character of the streets.

Compared to other streets, Middle Chatham Street gives a corridor effect leading to the clock tower of the square where the president's residence located making the street as a livable experience adding a character to the street.

High rises in Janadhipathi Mawatha makes a center to the area acting as a landmark. Beginning of Janadhipathy Mw. High rises & middle rises gave the sense of enclosure to the user making a more urban character to the city while directing the street to more historical character. This street gets its uniqueness due to the presence of nearly developed buildings & the historical buildings which are in mutual reinforcement between the new character & the existing character.

Bank of Ceylon Mawatha has got its uniqueness due to the informal figure which is in front of the world trade center. This guides the street to differ from other streets making, an informal gathering place(square) though the high rises adding a character to the place.

So through the analysis of the case study the following results has been obtained.

- *There is a unique character of the fort area expressed as a spatial quality due to the new building and the existing building as the result of place making (intangible spatial quality).*
- *This character has been achieved through the architectural attributes which are tangible. These attributes are governed to make the principle of place making which are the center, enclosure & continuity.*
- *So it is evident that there's a spatial quality which refers as the spirit of place in Colombo fort which can create, maintain, & enhance which is expressed through the character.*

CONCLUSION

To search on the term of the "Spirit of the Place", as a base it was searched on the concepts of space, place and the place making.

Through them, the following analytical results were obtained.

- Defining the "space" makes a "place" which is called "place making".
- Center, enclosure and continuity are the principles of which makes a "place"
- So the Center, enclosure and continuity are the "spirit" of the place which can create through the architectural attributes.
- "Spirit of the Place" is perceived through the character of the place.

Finally, these are examined in the urban context in Colombo Fort and the case study makes it evident that the spatial quality referred as the spirit of the place is present and can be created through the architectural attributes. This spirit of the place is expressed through the character of the area.

So it is appropriate to search about the guideline proposals to maintain the spirit of the place for the Colombo Fort to make this study more comprehensive.

The UDA, which is the main planning authority in the country, has proposed the Development Guide Plans (DGP s) in 1999 which has specific guidelines of the zoning plans and building regulations, introduced under section 39 of the planning and building regulations for the city of Colombo. There the zoning plans and building regulations describe the general requirements and conditioned designed for the area and such regulations has modified to suit local conditions in terms of environmental characteristics, architectural design and urban form but it is simply a statement of planner's objective and vision for the particular areas.

Volume one describes the Colombo city Development plan-1999 in full, and volume two describes the planning and building regulations of the same. Part 111 of the volume one describes the Development guide Plan (specimen) for Colombo Fort.

Although it covers planning and design policies, guidelines on land use, transport, environmental improvement, pedestrian and open space system, building height, intensity of development, conservation and redevelopment of areas and buildings, it doesn't clearly express about the architectural guidelines like specific building heights, set back distances, color, materials, details etc which should be specific to the area. Although they have mentioned that the new buildings must compatible with the existing buildings, they haven't further explained how it should be done.
(See the over leaves for the details)

Guide Lines for Development

Zone	Urban Focus	Historic Core	Middle Rise Zone	High Rise Zone
Guidelines	(A)	(B)	(C)	(D)
Land Use	Recreational & Cultural	Commercial, Tourism, Banking & Finance	Banking and Finance, Commercial, Institutional, Residential	Banking and Finance Institutional Residential Recreational
Building Density & Form of Development	Ground + Two (11.25m maximum height) scattered in large green areas	1) Arcades to suit the existing Architecture 2) Ground + Four Floors (18.75m maximum height) permitted	6-15 storeys with open areas suitably landscaped	Unlimited height permitted, surrounded by green areas
Plot Coverage	30%	80%	60%	Ground Level up to podium - 80% above Podium Level - 40%
Access				
a. Vehicular	Chaitya Road Part of Janadhipathi Mw, Church St. Bank of Ceylon Mw	York St. Church St. , Sir Baron Jayathilake Mw., Part of Janadipathi Mw., Bank of Ceylon Mw. , Lotus Rd. Part of Chattam St. & Bristol St.	Lotus Road Main street Olcott Mw.	Pat of Janadhipathi Mw. Bank of Ceylon Mw, Olcott Mw. Main St.
b. Pedestrian	Part of Janadhipathi Mw, Galle Buck Rd. & Flag staff St.	Chattham St. Mudalige Mw. and its extension, Part of Janadhipathi Mw. , Canal Row. Hospital St. Duke St.	Mudalige Mw. Extension, linking York St. and Lotus Rd.	Part of Janadhipathi Mw. Bank of Ceylon Mw. Olcott Mw. Main St.

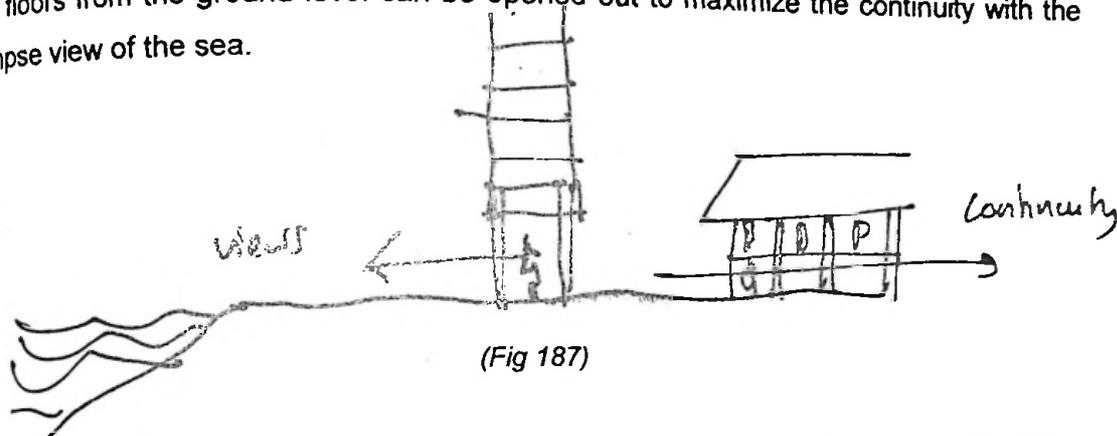
An Examination of the Concept of "Spirit of the Place"
Case Study: Urban Spaces in Colombo Fort.

Conclusion

General Guidelines				Conclusion
	<ol style="list-style-type: none"> 1. New developments, extensions, or alterations should not disturb the existing architectural character. 2. Identified historically important buildings should be preserved. The buildings which are not compatible with these buildings should be modified in order to achieve the same character 3. Masonry boundary walls not permitted 	<ol style="list-style-type: none"> 1. Extend the existing Arcades along all vehicular and pedestrianized roads, within the property boundaries for public use. 2. Arcades along York Street should maintain the character of existing arcades of Cargills and Millers Buildings 3. Identified historically & Archaeologically buildings should be preserved. The buildings which do not match with these buildings should be modified in order to achieve an Architectural quality. 4. No set backs at ground level permitted in street facades, unless mentioned in the layout. 5. Colours of the external walls should blend with the existing colonial buildings. 	<ol style="list-style-type: none"> 1. A Green belt should be maintained along the canal as a recreational area 2. This green belt should link with the proposed urban focus through the proposed Mudalige Mawatha 	<ol style="list-style-type: none"> 1. Modern building material and Architectural elements are encouraged.

(Fig 186) DGP s Guidelines for Colombo Fort

According to the zoning plan, the Fort is classified as a concentrated development zone. In the general zoning plan the concentrated development zone can have unlimited number of floors. But as discussed earlier although it is necessary to concentrate the high risers in a one place, if it becomes a solid core, people may get alienated and fear loosing the sense of continuity although they get the sense of the enclosure. So, one or two floors from the ground level can be opened out to maximize the continuity with the glimpse view of the sea.

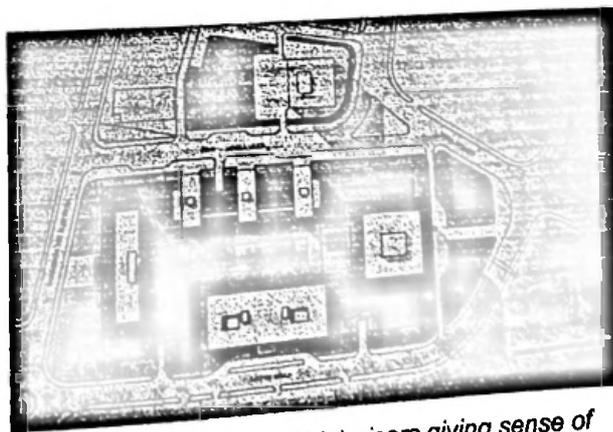


(Fig 187)

Also the concentrated zone will act as a center (a land mark) to the commercial center as the newly coming high risers are concentrated on to two places where charmers' granary and the Echelon Square are located. Everyday users will find an interesting experience from the place through their busy urban lifestyle.



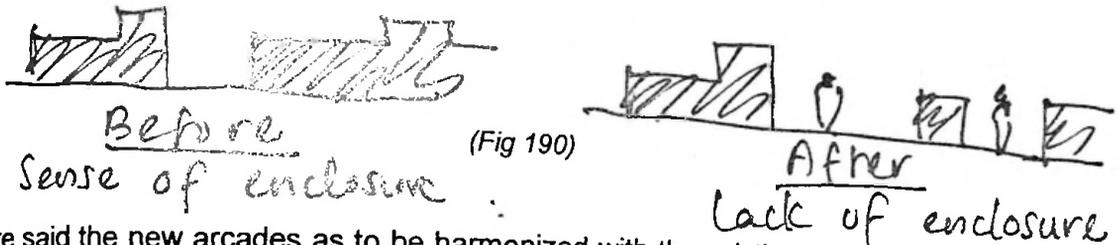
(Fig 188) Proposed highrisers cores making a boundary around the area. (Echelon Square & Charmers Granary area)



(Fig 189) 3d form of high risers giving sense of Enclosure (Echelon Square)

Special attention has given to the historical core, where the Cargills & Millers, Gafoor building, General post office building, etc. At present this area has buildings with less than three floors. The GDP emphasizes the need to maintain this character. It also encourages the vicinity in order to maintain the historic core area.

But the guidelines have not limited the minimum number of floors for a building and about the guidelines when demolishing of the public owner buildings etc. These are very important as the building height is the one of the most important attribute affects to the sense of enclosure.



There said the new arcades as to be harmonized with the existing arcades. But the new buildings don't seem to consider it. So they must be acknowledged that the horizontal & vertical continuity as an important requirement when treating to the building façade. E.g Gridlays Building.

Also the principles are said to maintain the character in the streets, but doesn't say much about what are the aspects as to be treated. As an example the details of the buildings must be proportionate to the scale and proportion of the building which enhance the continuity and the sense of enclosure. Simple detailing can be used to enhance the existing character.

In the past as the foreigners are more considered about the security and so they laid the city walls and grid patterned streets. . But in present situation, natural boundary acts as a strong boundary. Although the streets greatly emphasize the sense of continuity, at present as the many additions, closing the ends of the streets has lead to minimize the place experience. Important views are covered. So replacing the streets with views, cues etc are essential. Also there can provide seating areas for the pedestrians in the places like squares, in the upper Chatham Street, Lower Chatham street etc.

Nodal points are getting wider and losing their sense of enclosure. So the pedestrians loose their place in the urban context as the pedestrian's spaces along the roads are reducing. So the existing road widths should be maintained by introducing new methods to reduce the traffic flow. And the positioning of the nodal images in the nodal points will make the continuity making the city's image and the integration between the points.

As the grid pattern of the streets and the security, the earlier centre of the historic area doesn't seem to be function. So allowing it as administrative center, a new urban center can enhance the urban space as a strong place which concretizes the existential foothold of the local inhabitants and also foreigners.

As a summary, although it seems that the UDA has identified some important attributes of place making, they have not much stressed on them. These guide lines can interpret in different ways. So giving mere specific guidelines with the existing ones will enhance the quality of the "place" preventing the chaotic urban center development.

Development Guide plan (Specimen) for Colombo Fort which is described in the part three of volume one of the gazetted city of Colombo Development plan -1999 of the CMRSP has identified 4 zones of development in the area (see overleaf)as



- A Residential Zone
- B the Historical Core
- C Middle Rise Zone
- D High Rise Zone

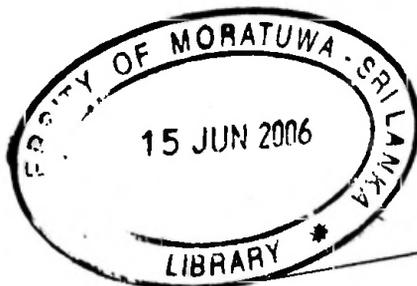
There the new proposals are on the A, C and on D zones.

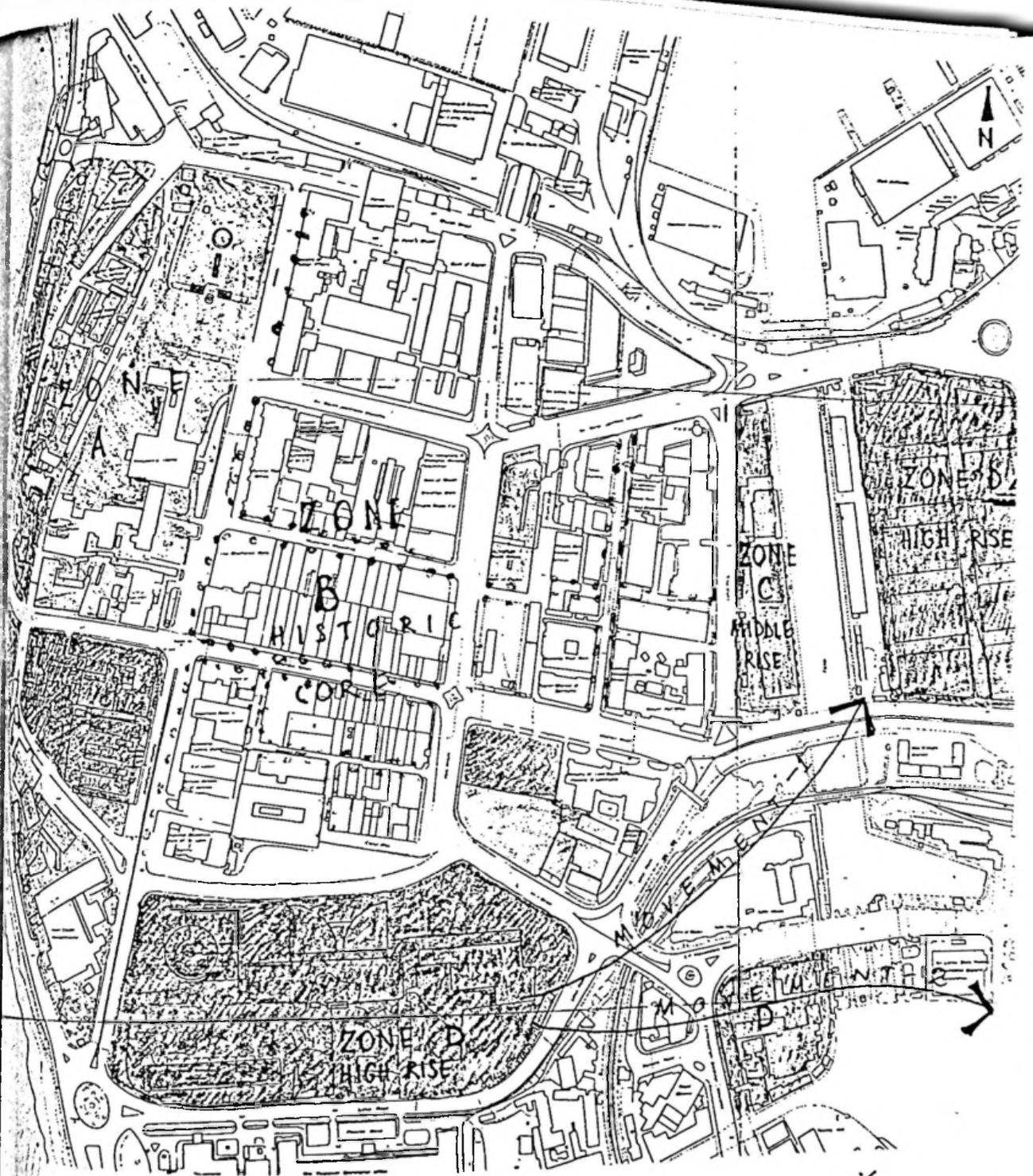
(Fig 191)



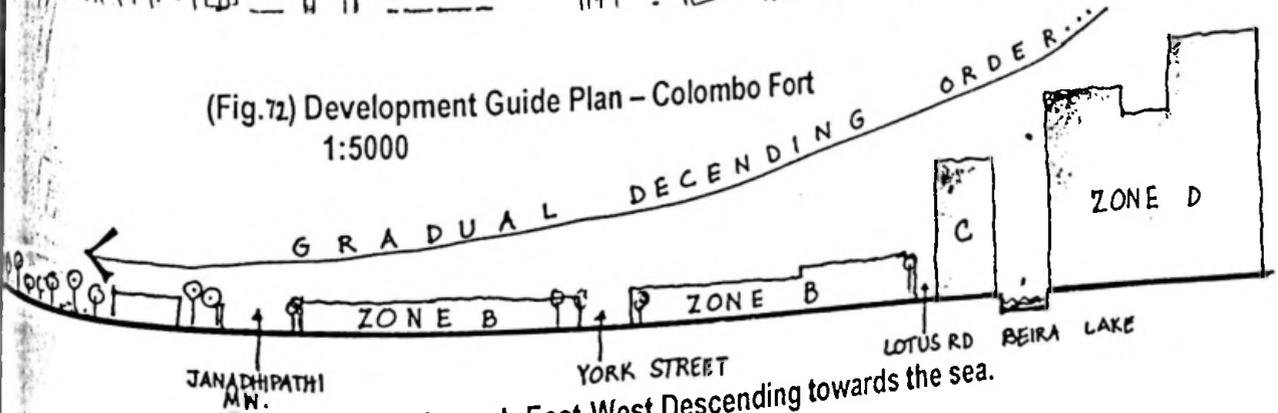
(Fig 191)

In the historic core, there's a proposal to introduce a new street which can improve the sense of the continuity, but the way it is doing may affect for the sense of enclosure.





(Fig.72) Development Guide Plan - Colombo Fort
1:5000



JANADHIPATHI M.N.

YORK STREET

LOTUS RD BEIRA LAKE

Section through East-West Descending towards the sea.
1:5000

(Fig A/B) Source: M.Sc. Diss. 2000(5)

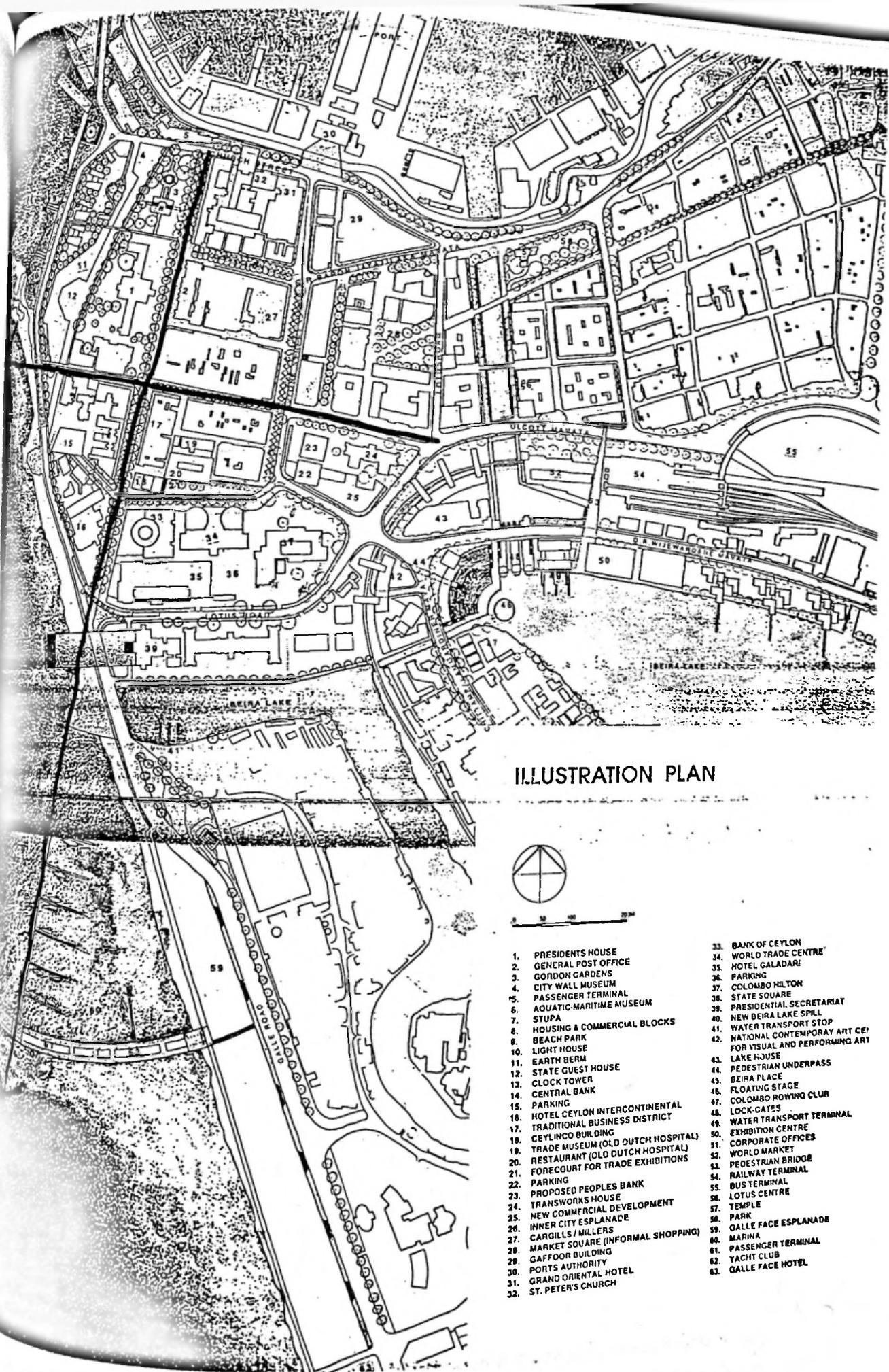


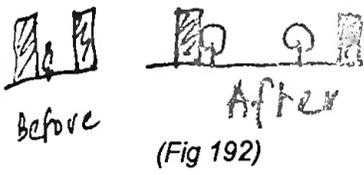
ILLUSTRATION PLAN



- | | |
|---------------------------------------|---|
| 1. PRESIDENTS HOUSE | 33. BANK OF CEYLON |
| 2. GENERAL POST OFFICE | 34. WORLD TRADE CENTRE |
| 3. GORDON GARDENS | 35. HOTEL GALADARI |
| 4. CITY WALL MUSEUM | 36. PARKING |
| 5. PASSENGER TERMINAL | 37. COLOMBO HILTON |
| 6. AQUATIC-MARITIME MUSEUM | 38. STATE SQUARE |
| 7. STUPA | 39. PRESIDENTIAL SECRETARIAT |
| 8. HOUSING & COMMERCIAL BLOCKS | 40. NEW BEIRA LAKE SPILL |
| 9. BEACH PARK | 41. WATER TRANSPORT STOP |
| 10. LIGHT HOUSE | 42. NATIONAL CONTEMPORARY ART CE/ FOR VISUAL AND PERFORMING ART |
| 11. EARTH BERM | 43. LAKE HOUSE |
| 12. STATE GUEST HOUSE | 44. PEDESTRIAN UNDERPASS |
| 13. CLOCK TOWER | 45. BEIRA PLACE |
| 14. CENTRAL BANK | 46. FLOATING STAGE |
| 15. PARKING | 47. COLOMBO ROWING CLUB |
| 16. HOTEL CEYLON INTERCONTINENTAL | 48. LOCK-GATES |
| 17. TRADITIONAL BUSINESS DISTRICT | 49. WATER TRANSPORT TERMINAL |
| 18. CEYLINCO BUILDING | 50. CORPORATE OFFICES |
| 19. TRADE MUSEUM (OLD DUTCH HOSPITAL) | 51. WORLD MARKET |
| 20. RESTAURANT (OLD DUTCH HOSPITAL) | 52. PEDESTRIAN BRIDGE |
| 21. FORECOURT FOR TRADE EXHIBITIONS | 53. RAILWAY TERMINAL |
| 22. PARKING | 54. BUS TERMINAL |
| 23. PROPOSED PEOPLES BANK | 55. LOTUS CENTRE |
| 24. TRANSWORKS HOUSE | 56. TEMPLE |
| 25. NEW COMMERCIAL DEVELOPMENT | 57. PARK |
| 26. INNER CITY ESPLANADE | 58. GALLE FACE ESPLANADE |
| 27. CARGILLS / MILLERS | 59. MARINA |
| 28. MARKET SQUARE (INFORMAL SHOPPING) | 60. PASSENGER TERMINAL |
| 29. GAFFOOR BUILDING | 61. YACHT CLUB |
| 30. PORTS AUTHORITY | 62. GALLE FACE HOTEL |
| 31. GRAND ORIENTAL HOTEL | |
| 32. ST. PETER'S CHURCH | |

fig 191 (c)

III (B)



And the introducing open green space will may affect to minimize the corridor effect of the street. This may also be a good effect.

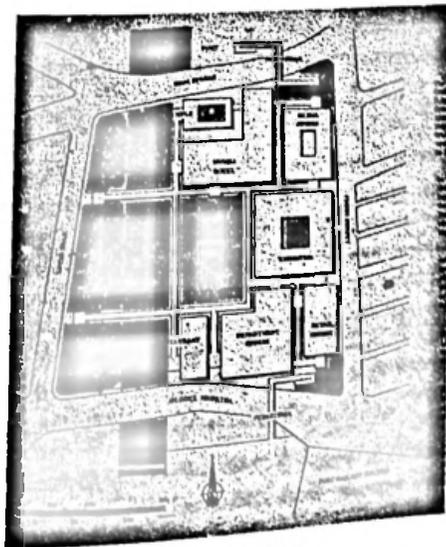
Echelon Square (zoned) and the charmers Granary areas will be incorporated with the high risers allowing the mass scale development. This will increase the sense of the enclosure in the urban space.



(Fig 193)



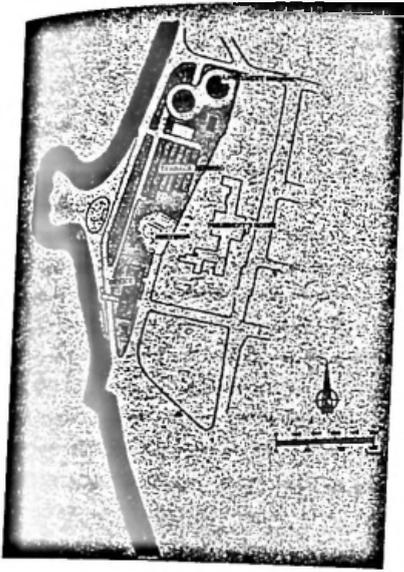
(Fig 194)



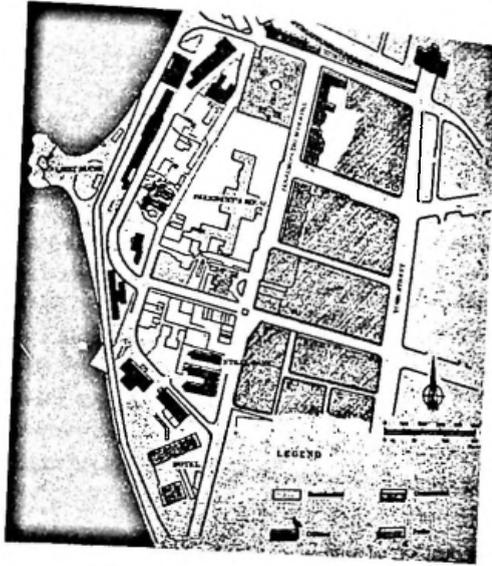
(Fig 195)

The area towards the western boundary will be kept as a green web which (zone A) will extend along the sea to the south of the Fort making the continuity towards the sea and

the built environment enhancing the relationship (inside & outside) between the man made and the natural environment.



((Fig 196))



(Fig 197)

The guide plan has attempted to enhance the "spirit of the Place" in the Fort area. It's proposals are leading to create and enhance the principles of place making which are the center, enclosure and continuity.

There are other proposals done by the architects on the development and vitalization of the area. But as in this study it is mainly contributed to search on the concept of the "spirit of the Place" making this concept as the "spirit" of the study, it will not go into a depth study on the proposals and guidelines. But it has derived the attributes of creating the above said principles. So further studies can be done on the ways of enhancing and preservation of the spirit of the place in the fort area and also the concept in association with the human aspect.

BIBLIOGRAPHY

- Alexander Christopher (1979), Timeless way of Building, New York: Oxford University Press.
- Bachelard, G. (1969), Poetics of space, Translated by the Orient Press, Inc.
- Bacon, N. E. (1967), Design of Cities, London: Thames & Hudson Ltd.
- Bentley L. (1985), Responsive Environment, London: The Architectural Press.
- Brohier, R. L. (1984), Changing face of Colombo, Colombo: Lake House Investments Ltd.
- Canter, D. V. (1977), Psychology of Place, London: Architectural press
- Ching, F. (1979), Architecture, Form, Space & Order, New York: Van Nostrand Reinhold Company.
- Cullen, G. (1975), The concise Townscape London: The Architectural Press.
- Edmund, N (1978), Design of cities, London: Thames & Hudson Ltd.
- Garnham, H. L. (1941), Maintaining the spirit of the place, Arizona: PDA Publishers Corporation.
- Hanson, J. & Hillier B. (1987), The Architecture of Community. Architecture and Behavior
- Hayden, D. (1995), Power of Place: urban Landscape as Public history, Massachusetts: the MIT Press, Cambridge.
- Hayward R. & McGlynn S. (1993), Making Better places: urban Design Now, Great Britain :Butterworth-Heinemann Ltd.
- Krier, R. (1979), Urban Space, London: Academy Editions.
- Le Corbusier (1970), Towards a new architecture, London: The Architectural Press.
- Lynch, K. (1982), The image of the city, England: The M.I.T Press.
- Lynch, K. (1982), The Theory of Good city Form, England: The M.I.T Press.
- Lynch, K. (1972), what time is this place, Cambridge, London: The MIT Press.
- Macnaghten, P. & John (1998), Contested Natures, London: Sage.
- Madanipour, A. (1996), Design of urban space: an inquiry into a socio-spatial process, England: John Wiley & Sons.
- Meiss, Pierre Von (1990), Elements of architecture, From form to place, London: E & FN Spon.
- Oakley, D. (1923), Phenomenon in Architecture in Cultural Change, New York: Pergamon Press.

- Rasmussen Steen Eiler (1959), Experiencing architecture, London: Chapman & Hall.
- Ravertz, A. (1976), Remarking Cities, London: Croom Helm Limited.
- Relph, E. (1976), Place & Placeless ness, London: Pion Limited.
- Norber-Schulz, C. (1972), Existence Space & Architecture, London: Studio Vista.
- Norber-Schulz, C. (1979), Genius Loci, New York: Rizzoli International Publication Inc.
- Norber-Schulz, C. (1985), The Concept of Dwelling, New York: Architectural Press.
- Norber-Schulz, C. (1988), New World Architecture, New York: Architectural Press.
- Silva, R. K. de (1985), Early Prints of Ceylon, London: Serendib Publication.
- Strike, j. (1994), Architecture in conservation, London: Routledge.
- Tugnutt, A. & Robertson, M. (1987), Making Townscape, London: The Mitchell Publishing Company Ltd.
- Zevi, B. (1957), Architecture as space, New York: Horizon Press.