

**PARALLELISM BETWEEN MARTIAL ART AND
ARCHITECTURE IN DESIGN PROCESS
AN ANALYTICAL STUDY ON ACCEPTANCE FOR
METAPHORIC USE**

LIBRARY
UNIVERSITY OF MORATUWA, SRI LANKA
MORATUWA

**A DISSERTATION PRESENTED TO THE FACULTY OF
ARCHITECTURE, UNIVERSITY OF MORATUWA,
FOR THE FINAL EXAMINATION,
M.Sc. ARCHITECTURE**

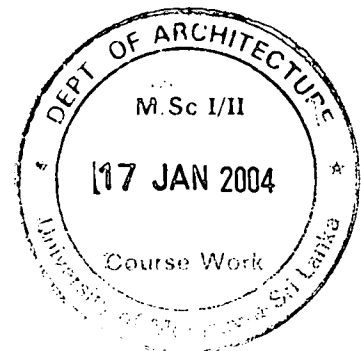
72"04"
72(043)

85461



University of Moratuwa

G.A.M.T.E. GUNARATHNA
DEPARTMENT OF ARCHITECTURE
UNIVERSITY OF MORATUWA
SRI-LANKA
JANUARY 2004



85461

85461

DECLARATION

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



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

UOM Verified Signature

Signed ..

(G.A.M.T.E. Gunarathna)

Acknowledgements

It is with deep sense of gratitude that I remember those who were help me the driving force in making this dissertation complete.

My sincere thanks to Archt. Prasanna Kulathilaka for his valuable guidance and advice in the initial stage of the study.

I am very grateful to Archt. Ravin Gunarathne, former year tutor, M.Sc. one, Department of Architecture, University of Moratuwa, for showing the path to a new kind of thinking and guidance.

I am very grateful to Archt. Sithumina Rathnamalala, Department of Architecture, University of Moratuwa for guidance as an individual tutor.

My warm thanks are extended to Archt. Sunil Gunawardane, who helps me with valuable information about Ella Adventure Park.

Lighthouse Hotel staff for their support in allowing me to visit and to take photographs.

My warm thanks to my martial art teachers Mr. Ajith De Silva and Mr. Gamini Ranaweera,

Mr. Wong, Cultural secretary, Chinese embassy, Colombo 7, for his valuable information gave me in completion of this task.

My friend, Nuwan for his valuable guidance and his generous cooperation in taking photographs

Ruwani for her help in Writing,

Kumudu, and Bawana Friends who always behind with me, and batch mates who helps me in many ways.

Upeka, who always encourage and comment on me in completing this task.

My parents remind with a feeling of profound gratitude for all the help encouragement and patient they have shown during the preparation of the study.

List of Illustrations	page
01. Cave paintings; primitive expressions	4
02. Dry garden, Japan; inspiration of mythical beliefs	8
03. Eagle style; inspirations from the nature	9
04. Mantis style; creative eyes capture the essence of a small insect	9
05. A building with wings	10
06. Design process	13
07. Villa Savoya; the building creates the context	15
08. Falling water; enhance the natural context	15
09. Ninja, away from his context	16
10. Camouflaged to the jungle (Thorn crown Chapel)	16
11. Capture the movements of trees (Chamar house)	17
12. Merge with the rhythm of the site (Chamar house)	17
13. Monkey style; capturing the rhythm of a monkey	17
14. Maximum use of the natural context (Falling Water)	18
15. Merged with the boulders (Falling Water)	18
16. Monkey in a rest	19
17. Touching the ground (Cliff Hanger USA)	19
18. Jumping out of the context to contrast (Cliff Hanger USA)	19
19. Kandalama Hotel	19
20. Taking natural setting as a part of the building (Entrance, Kandalama)	20
21. Corridor to the satisfaction (Kandalama)	20
22. Immovable hand	20
23. Building done by Thadao Ando; used the congested site effectively	21
24. Plans	21
25 Centre line of the body	21
26 Defense areas	21
27 Activity variations	22
28 Building like a sculpture	23
29 Tiger style fighter with frightening impressions	24
30 Pseudo entrance; to enhance the entrance	24
31 Judo form	26
32 Kendo fighters	26
33 Became a part of the heritage building (Liverpool Street station)	26
34 Contrasted with old context (Liverpool station interior)	26
35 As a symbol for the city (Sydney Opera House)	27



36 Yin- Yan	27
37 Powerful yet calm, rhythm of a movement of a silk cloth (<i>Thaijiquan</i>)	28
38 Fixing to the children's environment	28
39 Fixing to the children's scale	29
40 Runs with the contours (Lay out plan, Ella Adventure Park)	31
41 Bridge through Kirindi Oya; entry to a new experience	32
42 Building lay out became a part of the forest	33
43 Camouflaged to the Jungle	33
44 Timber Bridge to connect cabanas	33
45 Timber deck comes over the boulders; natural setting take as a part of the building	34
46 Trees and boulders as part of the building	34
47 View from the sea side	36
48 Side view	37
49 Entrance porch; gloomy volume, with the low perceptual height creates a cozy entrance porch	37
50 The dark space reflection of the sun and the sun light cuts through the darkness	37
51 Seating, enhance the texture difference	38
52 Inbuilt seats along the lobby, experiencing the drama of the waves	38
53 Self searching, show the way in to soul	39
54 Arial photograph	39



PARALLELISM BETWEEN MARTIAL ART AND ARCHITECTURE IN DESIGN PROCESS
AN ANALYTICAL STUDY ON ACCEPTANCE FOR METAPHORIC USE

	Page
Declaration	i
Acknowledgements	ii
List of illustrations	iii
Contents	v
Abstract	viii
Chapter one	
Introduction	
1.1 Theme	1
1.2 Justification	1
1.3 Method of study	2
1.4 Hypothesis	2
1.5 Scope and limitations	3
Chapter two	
Architecture as an art	
2.1 Nature of aesthetic creation of Moratuwa, Sri Lanka	4
2.2 Classifications of art <small>Electronic Theses & Dissertations www.lib.mrt.ac.lk</small>	5
2.3 An overview of martial arts	
2.3.1 A Historical background to martial arts	6
2.3.2 A Philosophical basis to martial arts	7
2.3.3 A common aesthetic basis	8
Chapter three	
Architectural approach in the context of martial art	
3.1 Common base	12
3.2 Generators of architecture and martial art	12
3.2.1 Design process	12
3.3 physical context as generator of architecture through metaphor as martial art	14
3.3.1 A metaphor for instance context	16
3.3.2 A metaphor for a rugged context	17
3.3.3 A metaphor for a congested site	20
3.4 User as a generator and metaphors from martial art	22
3.5 Function as a generator and metaphors from martial art	25
3.6 Philosophies as a generator and metaphors from martial art	27

Chapter four

4.1 Case study one, Ella Adventure Park- <i>Kirindi Oya</i> resort	
4.1.1 Theoretical base	31
4.1.2 The site	31
4.1.3 User and the Natural context	31
4.2 Case study two, Lighthouse hotel	
4.2.1 Theoretical base	36
4.2.2 Yin- Yan, the higher purpose and function	36
Conclusion	41
Bibliography	44



ABSTRACT

In the process of understanding architectural principles different metaphors could be utilized. Explaining Architecture by using another art form as a metaphor is much easier than understand it through itself.

Art is universal. Every art form share common aesthetic basis. In a simple expression art is considered nothing but an overflow of energy. This energy can be taken as a tangible thing in the final product, synchronizing with the graspers' energy. Though the end result is different Architecture and Martial art seems to express a parallelism in the approach. Martial art has shared wider principles than other art forms, since it doesn't only have rhythm as well as influence, imitations, balance etc...

Therefore in this dissertation an effort has been taken to form a theoretical basis for understanding Architecture using Martial art as a metaphor. Martial arts always engage in an intuitive response towards opponent in contrast to Architecture where a more analytical process is adopted. But still they share common roots.

In this study the four main generators of Architecture – Context, User, Function and Phylosophy is explained using different Principles and styles of Martial arts.

In this study the context is divided into three categories and they are explained using three different Martial art styles.

Instance context - Ninjitsu
Rugged context - Monkey style
Congested site - Wingchun
University of Sri Lanka
Electronic Theses
www.lib.mrt.ac.lk

When studying User as a generator, major limitations arise, since in Martial arts the designer and the user is the same. Therefore in the study a parallelism is of user is found using different styles of Martial arts that were shaped by the user group. And it further elaborates with the methods approaching into a fight. Similar to generic form in Architecture Functionality of Martial arts generates some Special styles that are fixed to that specific function.

Finally when explaining higher purpose using martial arts it is seen that Martial Arts has generated higher purposes which does not directly engage into fighting and they try to achieve a more philosophical attribute.

Ella Adventure Park is one of the best examples to discuss how the context and user have generated Architecture since it has a very strong natural context and to Use Martial art as a metaphor in explaining them. Light House Hotel – Galle is taken as another case study where to explain how function and Phylosophy come in to being.

In conclusion of the study it is seen that in areas like Context this attempt is totally successful and again it fails in the study of social context. In the case of User, Function and Higher purpose it is rather a gray area that cannot find a clear relationship.