

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

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

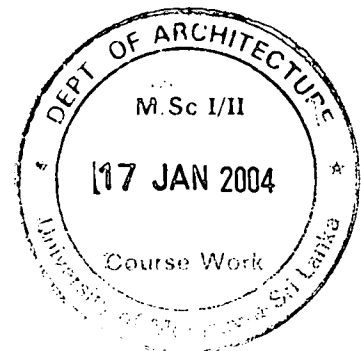
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DECLARATION

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.



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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
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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.



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CHAPTER ONE

INTRODUCTION



Chapter one

1.0 Introduction

1.1 Theme

Creation is a process, let it be. Painting, dancing or writing martial art or architecture, all the art forms share a common aesthetic basis. Artists are ultra sensitive who live in a stream of thoughts. Stimuli would spark, all of a sudden and a process may start.

Martial arts always engage in an intuitive response towards opponent. This intuitive is well trained and disciplined. It is this strict discipline of the artists which governs his intuitive violent response leading a combat to the level of an art. It is a response from one's inner soul; which is well trained and disciplined.

In the context of this dissertation, an interesting avenue has been observed to further understand the intangible aspects of architectural creation through martial art. It is observed that, no matter however different the end product is, martial art and architecture has very curious interesting similarities in their approach. Therefore this effort is to form a theoretical basis for better understanding of architecture through the discipline of martial art. Also it is further understand that understanding one form of art through cross reference of a some other form of a art is very effective and efficient.



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1.2 Justification

Art is universal. It shares common origins. Among all arts, architecture and martial art seems to be expressing parallelism in the approach, rhythm, handling and play of the art rather than dancing or music, which are also very close to us.

Martial arts, is to be used as a metaphor to understand architecture. Martial art has shared wider principles than the other arts like dance, music, poetry or Painting. Since it doesn't only have the rhythm, as well as influence, imitations, balance etc. It is a technique used in understanding, clarifying the parallel art forms. This is considered a simple approach to understand one art form through another, rather than trying to understand it through itself. It helps to see architecture in a new angle. Therefore martial art, considering similarities to architecture in its handling and approach architectural space making, rhythm, and progression might be understood in a clearer manner.

1.3 Method of study

The way of achieving harmony is unique to the two forms of art. Architectural harmony and harmony in martial art are apparently different, but harmonizing process is created through many principals which are unique to each other. The discipline of handling a principal could be lead to understand better through understanding it through some other art form. In this dissertation it is studied how Martial art is used to understand architecture.

The study is focused on four main parts.

Stage one - Introduction, an overview of martial art and architecture, closeness of martial arts and architecture, its base, which is going to looked at.

Stage two-general overview of arts, history of martial arts, philosophy of martial art and architecture

Stage three- runs through common base shared by martial art and architecture associated to generators of architecture and martial arts. The study emphasis on the design potentials of different martial arts in contributing to each aspects and constant problems faced by architects in the design process. Further the study will extend to different styles of martial arts for their use as a metaphor to explain architecture. Hence it will be done so by analyzing such projects though a “martial arts” interpretation.



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Stage four- Illustrations through case study.

- Ella Adventure Park and its context and user handling overview through martial art.
- Lighthouse Hotel Gall, its purpose and function handling overview through martial art.

1.4 Hypothesis

In architecture and martial art creative process is unique. Martial arts can be adopted as a metaphor in understanding and explaining the design process in architecture with reference to the designer's bias.

1.5 Scope and limitations

Architecture being a spatial art and martial art being a practical art, experiencing of them is subjective and difficult to find a direct parallelism between them. So the illustration is going to be based on case studies.

Not like architecture, in martial art the user and the designer are same. To take them into a common base, the study sticks to the designer's bias.

Martial arts and architecture spreads into a vast area, though having common roots, these art forms have slight differences due to the cultural and climatic aspects. In this it considers Japanese and Chinese styles are being adopted in the study due to their popularity and accessibility. But take examples from the others wherever necessary. So in this case, study the relevant principles and there applications are taken into consideration to prow the parallelism with architecture.

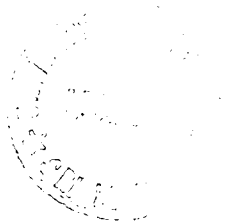




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CHAPTER TWO

ARCHITECTURE AS AN ART



Chapter two – Architecture as an art

2.1 Nature of aesthetic creation

Aesthetics is the divine foundation of any art. It takes human in to a divine level through meditation. It covers all philosophical discussion of beauty giving timeless message. This is a creation, which comes from an artist's soul.

In a simple expression art is considered to be nothing but an overflow of energy. This energy can be taken as a tangible thing, in the final product, synchronizing with the grasper's energy, which is called the "chi" power. Every person is a creative man. But the creative ability varies from one to another and skills spread in different areas. Creative ability is varying one to another. And it comes form

- Innate
- Gotten
- Learned

Finley one of these methods or all of them will help in the creation.

Art develop with the day today requirements, like pottery develop with the cooking necessities. The clay the pot maker use to make his pot could be molded in to a sculpture, which depicts a life experience. The nature of art is such; it springs up from the common place and achieves the ultimate sublime.



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Figure 1

Cave paintings, primitive expressions
Source- Benedikt Taschen Verlag, (2000)

2.2 Classifications of art

There are many classifications about art due to its usage. Basically we can divide it in to two categories, which are called *useful arts* or *applied arts* and *fine arts*. But applied arts can be a fine arts as well as the fine art could also be applied arts have generated to satisfy a human requirement known as psychological fulfillment.

Applied arts are the ones, which use to full fill over basic human necessities, like architecture, pottery, jewelry etc. Applied art can be divided in to two categories, which is known as special arts and practical art.

Spatial arts give difference meanings when it is experience, like architecture. The product is visible for long time.

Practical art or Temporal arts, like music, drama, martial arts, could be seen and enjoy the effects which would last in the memory.

But some times they go beyond the basic human requirement level and come closer to fine art level, like jewelry.

Fine arts are the arts, which go beyond the realm of use. But they help human in to a divine level, or immobilize them, like music, painting, sculpture, drama, etc

These could be “applied” in day-to-day life situations, such as a use to change the meaning of a space.

Not only above mentioned but there are other classifications on art. There are some arts, which can mold. They can see every time. They are known as **Plastic arts**, like paintings, sculpture, architecture, etc


Concrete arts, which are representational, envisage and individual whole, like poetry, drama, painting, etc

Some arts represented regard to the background. They grasp the relation between individual entities. It has to live according to the rhythm of life and its feelings, that kind of arts known as **abstract arts**, such as architecture, music etc. captures the rhythm of life and feeling, as well as the relationship between individual entities and has regard for the background.

2.3 An overview of martial arts

2.3.1 A Historical background to martial arts

Martial art history linked with the beginning of human. When early Homo erectus after leaving the forest, he was at a risk for his life. He couldn't walk on his feet properly but he had to look for food in the big savanna ground of African Plains. He was a hunter at the same time being an easy pray, for big cats that ruled the grasslands. Therefore he had to fight with the fierce predators as well as clans of the same specie, who suffered hunger and starvation. Not only for food, there were fights among the same species for females and to protect their territories and power. So man had to develop his fighting skills to survive and hunt since he didn't had developed natural tools like jaws and claws to hunt. Therefore he also had to invent tools and weapons as well.

In the farming societies this hunting skills is not essential for every body. But few strong people continue practicing the combat skills. Ultimately they become the rulers of the clan and they protect from the invaders, these powerful men did not participated in farming; yet they had authority over the farmers and lead comfortable living. Though development, these agricultural societies stroked changing life patterns, which full-
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titled the basic human needs, change in to a complicated life styles and maintaining social hierarchy. This system effected to architecture as well as martial art. The elite built to show off their wealth and status, and their power was symbolized in the military troops. Power and wealth become a prominent status symbol in society.

With all of this, religious activities took place in those societies. And they have enriched almost all art forms. In the eastern world, Zen Buddhism in Japan, Buddhism and Taoism in China, Hinduism and Buddhism in India account for this.

Although this underlines a general history of martial arts; there exist subtle variations among martial arts, art forms due to cultural and social facts. Boxing, *Savate* (French boxing), *Capeira* (Brazilian martial art), *Mu-thai* (Thai boxing). Develop as a combat art, concern of which is victory over the opponent.

Mean time some eastern martial arts blend with the rich cultural and religious background. Producing philosophical martial arts; it is not victory over the other, but of self-realization, and harmonization with nature, which is the ultimate goal. *Wushu*, *Thai Ji Qan*, *Ikido*, practices this sublime form of art.

2.3.2 Harmony with the nature

Philosophy of martial art has come from the religious background of the east. Buddhism, Zen, Taoism, Hinduism ...etc help to develop this philosophical base. Zen culture directly helps to develop *Kendo* in Japan; likewise Buddhism and Taoism help to develop *Wushu* in China. These philosophical religions invade every art in the society. Martial art discipline developed hand in hand with the Chinese culture.

Martial art philosophy is not only based on the victory over the other, but harmony with the others. Victory over the other holds nothing but loosing as the final goal. Therefore, there should be a fighting which gives victory at the end.

Because of the close relation with the nature, the philosophical and practical base of martial arts inspired and influenced for rhythm, moral fiber and finally ended up understanding the truth of nature.

"From the crane we learn grace and self control. The snake teaches us suppleness and rhythmic endurance. The preying mantis teaches us speed and patience and from the tiger tenacity. And from the dragon we learn to ride the wind.

All creatures, the low and the high, are one with nature. If we have the wisdom to learn, all may teach us their virtues, between the fragile beauty of the praying mantis and the fire and passion of the winged dragon, there is no discord between the supple silent of the snake and the eagle's claws, and there is only harmony. As no two elements of nature are in conflict, so when we perceive the way of nature, we remove conflict within ourselves and discover a harmony of body and mind in accord with the flow of the universe" -master Kan

Warner Brothers, "Kun-Fu, TV. series episode guide", [http://www. Kunfu guide.com](http://www.Kunfu guide.com).

Every person has instinctive reaction, to the threats come from the surrounding environment. What martial art does is giving a discipline to an instinctive reaction. Martial art is not base on victory over the others, but on harmony with the universe. So one's own "*Chi*" setting harmonize with the opponent's "*Chi*" it achieves the ultimate goal of martial art.

This celebration comes to architecture in a different manner. Japanese traditional architecture tries to capture the relationship with nature by symbolization. The city garden landscape symbolizes the great mountains and oceans, *Mahameru prwathaya*, *kirimuhuda* etc

But this interpreted elements were totally harmonize with the surrounding nature. It is this way the Eastern philosophers had understood the nature of harmonizing.

There is no element in nature in a conflict. They are in perfect harmony. When we



Figure 2
Dry garden, Japan
interpretation of mythical
beliefs
 Source- Benedikt Tachen (2000)

understand this nature we can create ultimate products, which in harmony with the context. According to Chinese "Taoist" thoughts cosmic energy known as "Chi" moves in the universe all the time. Every thing has its own "Chi" power. A place has its own "Chi" power. When the "Chi" of the building gets harmonizes, with the users "Chi", and the "chi" of the context it is in a perfect balance. That's the time it creates good architecture. Harmonize place creates a good living place. That is the same process teaches in Indian "Vasthu" as well as Chinese "Feng-Shi"

Taoist explains this phenomena through Yin - Yang theory. Because this theory can be apply to every thing in the universe.



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"Every thing in the universe is shaped by two cosmic forces, known as Ying and Yang. These forces are in constant opposition but when combined, they constitute a balanced whole, the perfect harmony of the Tao or the way. According to the Taoists, every thing can be regarded as containing various degrees of Ying and Yang-but there is always a flow between the two, always a small part of something, which is the other and ready to grow or transform in to the opposite. This is why, in a Ying/ Yang symbol there is always a tiny dot of the opposite in each part.

Taoists believe that that these two opposite forces are what generate the "Chi" and that "Chi" is constantly flowing between Ying and Yang. There has to be a balance between them and Chi is seeking that balance constantly. Where balance is achieved, good fortune will flow. If one or other force dominates then an imbalance will be created and problems will inevitably result"-

Richard Craze, "Feng Shui, P 12-1

2.3.3 A common aesthetic basis

The aesthetic basis of martial art is an inspiration taken from the nature and from animal movements; animals such as praying mantis, crane, monkey etc. and putting them to work in human body. Exploit animal movement identified for the special abilities, which has created versions of martial art, such as,



Tiger style - based on a movement of a tiger and its aggressiveness.

Mantis style-based on the movement of a small insect called preying mantis

Eagle style- based on the movement of eagle. Use many jumps and flying.

In some cases it was a study of human movements using them as fighting styles as well as combine it with movements of other animals;

Drunken style- use drunkard mans movements. Those movements use as tactics to violate the enemy. The fighter hasn't drunk but he imitates a drunken mans movements to surprise the opponent.

In the early stages of learning martial art, there was practice of traditional forms and



Figure 03
Eagle style, inspiration from the nature

katas that trained for rhythm and movements, which include attacks and blokes. Continues practices take the form in to the marrows. When it becomes one with the soul and the body, ultimately starts to react without thinking. This time it has self-identity to the emotions and reactions. This is the time where craft of fighting becomes an art, where creating a new identical fighting art. It's come from the soul!, it s the true interpretation of one's own emotions.

When applying it to a given situation, the martial art and personalized to the context, akin to the reaction of an architect to a given context.

When you have built up achievement in cultivation of learning and practice, even as your hands, feet and body act, this doesn't act doesn't hang on your mind. You are detached from your learning yet do not divert from your learning. What ever you do, your action in free.

At this time, you do not even know where your own mind is; neither the celestial devil nor outsider can spy in to your hart. The learning is for the purpose of reaching this state. Once you have learned this successfully, learning disappears.

- Yagaru Menenori, The Book of Family Traditions on the Art of War, P69



Figure 04
Mantis style, creative eyes capture the essence of a small insect

Considering the tangible physical form the built up achievements in civilizations of architecture, man is in an attempt to conquer the nature to ensure well being of him. Architecture has transformed the landscape through out human history and ultimately has become the tool of determinism for nature.

Man is the centre of architecture: man is a part of nature and is therefore embedded in nature's universal laws. The architect's mission is to harmonize, built form with nature, such that built form serves as a rational and lyrical mediator between man and the environment.

–Richard J.M; Hassan Fathy, P 47

Architecture has created to full fill a basic human need, a shelter for security and insulation like in many other useful arts. In the primitive society man was capable of building his own dwelling. He began to understand his primitive needs and requirements perfectly with pass of time. But by the time full filing the basic human requirement of a shelter, add home making become to have extended aesthetic and symbolic meaning. This is the first sense of architecture becoming an art.

With the evaluation of civilizations, human needs increased. Instead of own dwelling common gathering which shows the power of the culture, spaces started to inspired with in a plan cities. These common spaces did a major role to show the hierarchy of the societies. To cater these increased requirements craft base approach has given away to the self consist professional's process. In this social context building articulation was essential part in social hierarchy. When it comes in to this period man was with attitude to overcome the nature. Basic structures were able to prevent from the climate, but the building is articulated enough to have an individuality on to them. I heretore with the advent of civilizations, Architecture becomes perfect protection and close to man, was almost a fine art of building.

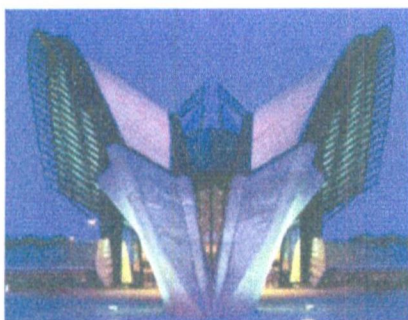


Figure 05
A Building with wings...

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CHAPTER THREE

ARCHITECTURAL APPROACH IN THE CONTEXT OF MARTIAL ART

Chapters three - Architectural approach in the context of martial art

3.1 Common biases

When having common ultimate goal and sharing common principles the creative process must be closer enough to discuss about parallelism between their common biases. But when discussing them in this study it is focused only on the designer's bias.

Architectural design process is an analytical one. Their intuitive process overcomes by the analyzing of other forces. But in martial art design process is more intuitive and fast.

3.2 Generators of architecture and martial art

What determined architecture explained by scholars in many ways, through out the age. Different schools of thoughts were brought up from time to time and the phenomenon is today accepted as a result of four major generators of architecture generally accepted.

- Function of architecture
- Sociological approach in architectural determinism
- Contextual or context generated architecture
- Architecture which attains for higher purpose or philosophical approach

These four aspects are having diversity of effects on the each and every built environment. Architecture is more a result of a holistic symphony of all the generators. While under different circumstances a primary generator energy resulting others to act as moderates. In the design process generators of architecture discussed above have many occurrences as follows.

3.2.1 Design process

Design process comes in to action with the introduction of the project. With the past experience of the designer, abstract imagery comes to the mind. Then brief interpretation carries up with the relevant researches. By the time, according to the designer's bias/ design imagery starts to develop. But some times project bias become more prominent then the designer's bias like when function becomes a big issue to tackle function generates the form of the building. Some times site problems become

the major issues there by emerging context bias. Therefore these generators come in to action in various points and various amounts. It isn't a fixed major issue, it can be changed in any time in the process, and also there could be other issues effecting the design.

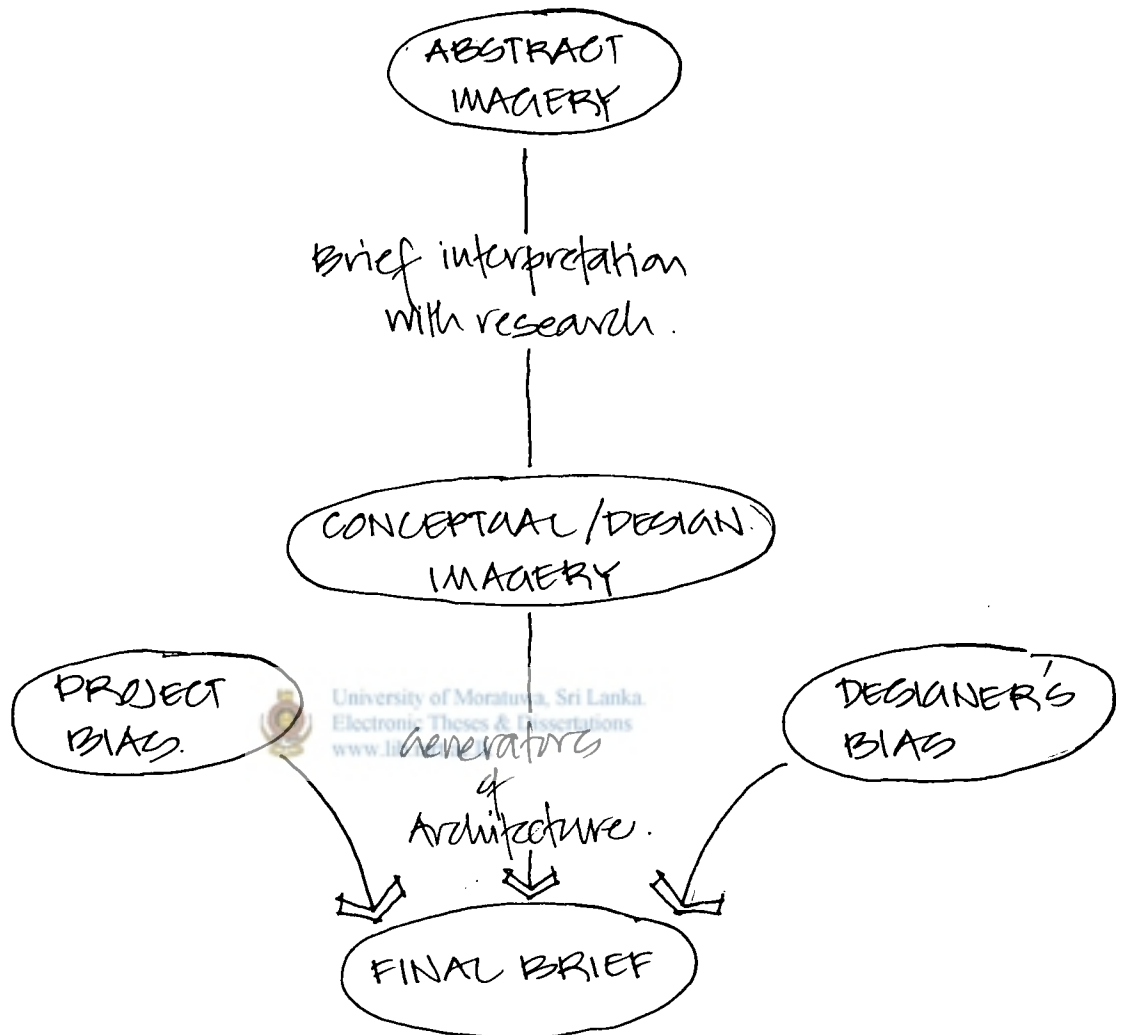


Figure 06
Design process

However important the generators are, to architecture, the intangible nature of above mentioned attributes keep them beyond our awareness. The multi dimensions of architecture in design posses, experience, and expression orients it as an art of complicity. Therefore the understanding of generators is of utmost difficulty.

Bachlared, Gastan introduces "Poetics of Space" describing human awareness in relation with the poetic image, which is result of reverberation of soul, and generation

of image. This aspect is applicable in understanding the generators of architecture through the instinctive ability of human. When comes to trusting the instinct and manipulation of instinct martial arts become the counter of all arts.

Like almost all arts martial art is inspired by nature and developed through interpretation of it. Unlike architecture or other arts martial arts looks in to the primal being of elements of nature and follow the pattern combined to it like elements of nature such as animals etc, which reach and understands through instincts rather than rational and will power. So that it will become one, which comes to the practitioner's instinct. Hence Katas and fighting styles are pure and their movements and patterns are pure manifestation of instinctual understanding rather than rational human movements. Even though the design posses incorporate the rational and instinctive understanding of a primal being of generator can be ensured by overlay of martial arts katas/ forms on top of the generators and moderators.

3.3 physical context as generator and metaphors s from martial art

Every place has its own identity and a character, it is due to natural environment or a man made environment. This is called the surrounding context of a place.

Context is divided in to two major categories. They are social context and physical context. Social context is a manifestation of human behavior, demographic features, ethics and cultural norms. If we take this in to a nutshell, social context is surrounding human movements and activities.

Physical context is the surrounding environment that can be seen. It may be topography, surface relief, water bodies, vegetation etc that we can easily identify. But there are other features as well like composition, scale, rhythm, texture, stance, which are intangible. Every body can feel this deterence, but all of them can't analyze it.

When we study architecture the context is a very important factor, since world is subjective and nothing remains in isolation. Every plot of land that an architect get to build has many other plots of lands or plots attached to it. All this is the context that we have to build on. Probably architecture is all monuments. A product of architecture lasts a long time, a time, which can stretch from days, weeks, and to generations' centuries. Thus the quality of architectural intervention does have a good major role in determining quality of post-built context.

Character of the site governs the architecture. Some sites have very powerful contexts, which could over power the building. In some case there is no strong character exists. In this kind of situations the building can overpower the site context. I therefore context effects to the building's height, size, rhythm, language, pattern, etc, almost every thing. Because of non-isolation of the building, it has an effect on the surrounding context.

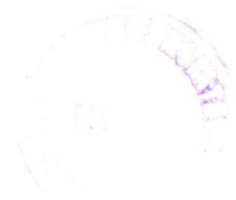
Contextual patterns can vary from rhythmic vibrant dominantly to minimalist. Just as rock music to a distance cuckoo in a meadow. Therefore the different approaches are being advised by architects to answer the problems of context. "Villa Savoya" and "falling water" can be taken as examples of two extremes.

Martial art is an art, which totally blend with the context, which we can use to understand the context-generated architecture. Based on ancient manuscripts of "Art of War" by Sun Sui describe six kinds of terrains.

- Accessible
- Obstructed
- Restricted
- Constructed
- Perceptions
- Distance



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Different environments conditions have resulted in producing a variation of styles in martial arts adapt to particular context. These incorporate the instinctive understanding to be one with the context. Therefore those styles can be used as a metaphor to understand the context.



Figure 07
**Villa Savoya, the building
creates the context**

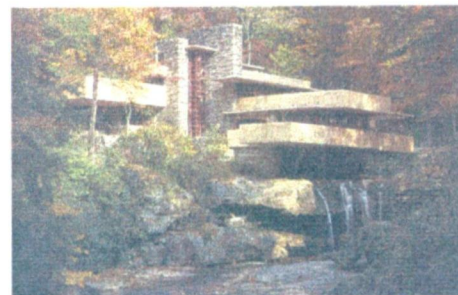


Figure 08
Falling water, enhance the natural context
Source- Green architecture

3.3.1 A metaphor for instance context

Ninja fighter moves with a falling leaf from a tree, or a moving wind in the forest, without making any sound without disturbing the environment. The building should be able to capture this quality, the spirit of the place, colour, texture, rhythm, etc. building should be hided totally in the surrounding context without any clue of existence.

Ninja fighter hides in the jungle until he gets the best chance to attack. He use tack ticks to misguide the enemy use to an attack by drown. He waits for the best time and attacks in a lighting fast giving a surprise. Enemy doesn't have chance even to think of. After that he merges again in to the jungle with silence of or the forest.

The building, in reference to *Ninjitsu*, could flow in silence and conceal until a feature of the site is suddenly exposed and then again reducing in to calm flow. The architectural language could be that of merging with site, Camouflaged similar to *Ninjitsu* figures weapons, and the kit. Like the *Ninjitsu* figure, the whole building could flow in to the rhythm of the site with extreme climaxes at high points of the site, which goes parallel to the sudden attacks.



Figure 19
Ninja, away from his context

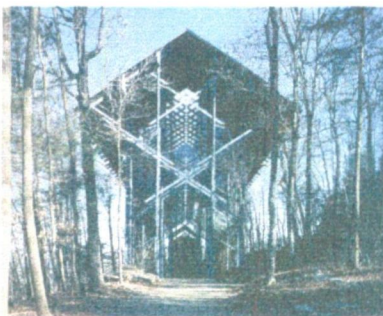


Figure 10
Camouflaged to the jungle
Source- Benedikt Tachen (2000)

A ninja never fights in an inappropriate context to take a risk from the enemy. The ninja leaves tactfully, if the enemy is sensed to be more powerful. This principle of *Ninjitsu* could be taken parallel in context-generated architecture to tackle and manipulate architecture in relation to the context as well, when the context is more powerful to leave off with out trying to "attack" it.

The building must capture the essence of attacking point. It should able to capture the attention to it, like the effect of deadly attack in *Ninjitsu*. But have to wait until the perfect timing comes. May be it has to create, with miss leadings to achieve effective attack with no blemish.

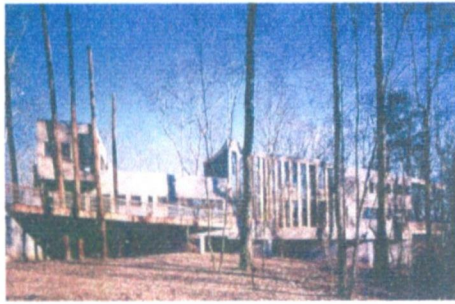


Figure 11
Chamar house,
Captures the movements of the trees



Figure 12
Chamar house, merge with the
rhythm of the site

Chamar house appears to be a *Ninjitsu* approach in responding to the context. Rhythm of the woods is acknowledged by emphasized elements the vertical movement of the tree trunks. In some places it runs between trees and elements jump out from it like the roof structure. Interior and the timber decks give camouflaged quality to the house, like a *Ninjitsu* attack. Proper site selection gives maximum harmony with the surrounding context. Elements of this building like doors and windows also capture the rhythm of the forest. Thin linear windows and doorframes looks like part of the tree trunks. Elevated levels keep the transparent quality of the jungle. The building slightly touches the ground by using columns and jump out from the ground to give maximum harmony with the surrounding context.

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5.3.2 A metaphor for a rugged context



Figure 13
Monkey style, capturing the
rythem of a monky

A monkey style is based on movements, and behaviors of a monkey, usually exhibited in a rugged context, with boulders, trees or unequal landscape. Because being a primate monkey is cunning, and intelligent enough, it can take maximum advantage from the context. So, understanding application of this style helps to understand architecture in a rugged context. Generally monkey style is full of rhythmic jumps, rolls moves in a rhythm is continuously



Figure 14
**Falling water, maximum used
 the context**

moderated in accordance to the elements in the context. The enclosure demarcated by monkey's movements restricting the opponent, within the advantageous land. Architecture also understands the perimeters where the stretching of space is limited in site planning, further more the melody within the rhythm varies providing a sequence in the monkey movements specifying the locations for specific demands depending on volume of space. In such case layout of architectural spaces can be of real meaning.

In Falling Water, the building flow with the contours; capture the boulders in the site, to get the maximum benefit from the site, like the way monkey keep hold of the fight. Some times go over the boulders and some times stop coming closer to the boulders. Decks run over the waterfall to get a good view and relaxation. Rhythm and the plan shape generated to get maximum benefit from it. Important spaces located in the most advantages please like monkey taking benefits from the site. It has exaggerated by the volume and shape of the space. Sometimes create enclosure to give good contrast between the natural and built environment. This building has been able to capture the whole essence of the site and the waterfall.

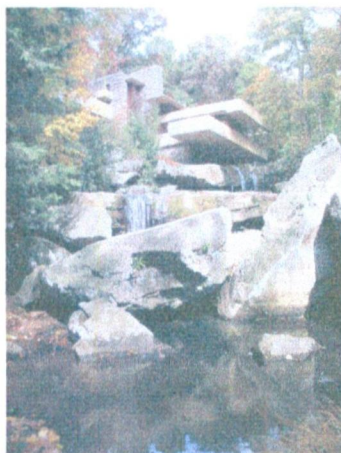


Figure 15
**Falling Water , merge with
 boulders**
 Source- Benedikt Tachen (2000)

Change of rhythm, brake of flow, and keep the user in various places, which gives various vistas and expressions in special progression. Monkey style fighter some times take a brake during the fight, perfect timing and place is selected in order to better out come, like after a effective attack or inaccessible higher point for a brief interval.

In relation to this, the architectural approach of the Cliff Hanger, USA, could be discussed. The building touches the ground when there is a hard base to foot on. Same time this goes to become an extraction out of ground and stand on the rocks using thin steel supports. Cliffhanger keeps a vigilant existence on the slope, keeping a close



Figure 16
Monkey in a rest

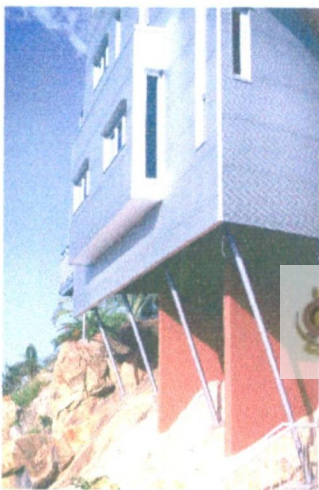


Figure 17
Cliff Hanger



Figure 18
Cliff Hanger: jumping out from the context

look at the surrounding vistas like brief intervals of monkey movements.

Some parts of this building have very strong solid parts and some elements jumped out from it, while celebrating of geometrical shapes, to emphasize the exiting appearance of the building, like the diversified busy nature of the monkey technique.

Monkey being an intelligent animal is capable of performing pseudo manure to mislead the opponent. Misleading always follow up with a surprise. The interest of the opponent around and false perceptions is created to strengthen the effects of surprise like the architectural approach to *Kandalama* hotel.

Approaching to the *Kandalama* is totally a misleading process to give maximum satisfaction. It is situated near a cultural city. Road way to the hotel is through a gravel path which runs along a rural village, ending in this luxury hotel. Along the path through the tea plantation gives glimpses of the hotel. Subsequently path is directed to the *Kandalama* tank bunt and appears to be the climax. However 90° turn directs to hotel entrance, which is wide and merging with the natural rock. After the reception lobby path yet again runs along a narrow corridor, which have the natural bolder on a side.

Then suddenly it opens up to a wide space, which is the climax of the progression. The swimming pool and the *Kandalama* tank in a single line while having *Sigiriya* rock as a back drop. The whole process of misleading finally takes to the ultimate satisfaction.



Figure 19
Kandalama Hotel
Source: David R. (2002)





Figure 20
Kandalama Hotel, taking natural setting as a part of the building
 Source- David R. (2002)



Figure 19
Corridor to the satisfaction
 Source- David R. (2002)

3.3.3 A metaphor for a congested site

As a result of urbanization, people started to migrate in to urban areas, resulted a reduction of plot size. With the complexity of modern life increase of human requirements have to be full filled through provision of space. Hence working in congested sites is an unavoidable in architects work. And further more the mammoth spatial demands has resulted the architectural intervention to be a brief yet effective solution. Nevertheless, it's not always a simple task to come out with such architecture due to complexities possessed by urban issues and regulations that restricts the buildable area even more. However the hardship of handling restriction can be overcome through other metaphoric use of martial art in responding to the site. A study on *Wing- Chun*, which is a stile of martial art dedicated to restriction of movements and strength, can be of a vital infirmiry in such situations.

Wing- Chun is a style, which use in a compact situations and was initially inspired on

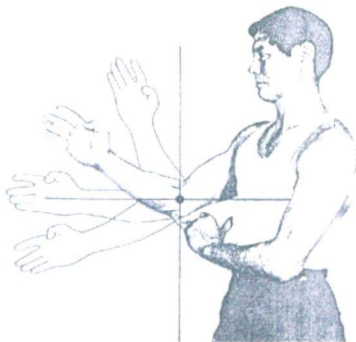


Figure 22
immovable hand

an observation of fight between a snake and a white crane. Imitating immobility of those animals engaged in a struggle, has taken down the fighting range. But all of the basic fighting principles were also included in this style and is just as effective as any other and lethal in situations of restriction. This enables the *Wing- Chun* to be the perfect metaphor to be adapted in responding restrictions. over other forms.

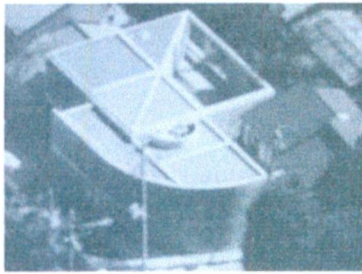


Figure 23
Building done by Thadao Ando

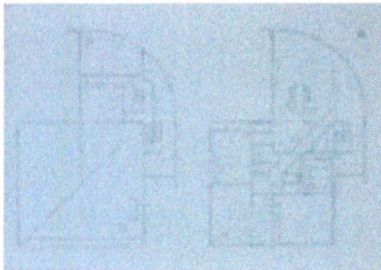


Figure 24
Plan

Compactness has reduced the moving ability. By the time one point being rigid, other areas move to overcome the disadvantage of rigid point like immovable elbow in *Win-Chun*. It covers the all-effective areas in over body. Likewise in architecture surrounding context fixes ridged the boundaries pressurizing to play within the perimeter, with all basic requirements.

In *Win-Chun* all offensive and defensive movements use to cover the centerline (the most sensitive areas in over body). In architecture necessary to practice a language of efficiency in congested sites.

In the mean time the essential spaces such as a main space of the building has to be established trough minimum interventions like in simple but efficient movements of *Win-Chun*. The emphasis on main space most often demands the application of “immovable hand” approach purely due to the spatial limitations. The application of this style depicts a lateral methodology, which is acceptable in practice of architect. Because of this space limitations lead to take maximum advantage from the movements. Power is generated in small period of time and goes to an attack in lighting fast. To maximize the speed, defensive movements in only required amount to the next attack. Normally uses the same hand to defensive and attack, in a single movement. The modern urban architecture in adaptation to change of social values and speed of the society, demands a such idioms in its expressions, brief yet powerful. There for it can be brought forward that *Win-Chun* is well suited for a metaphor to understand the way of multifunctional use of space in urbanism and congestion in architecture.

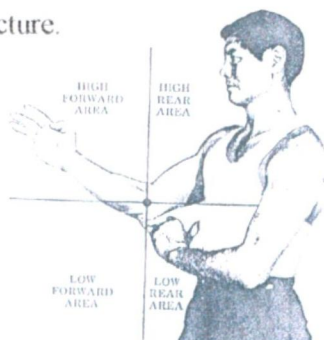


Figure 26
Defense areas

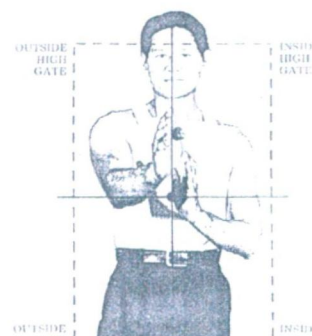


Figure 25
Centre line of the body

3.4 User as a generator and metaphors from martial art

Final goal of art is to comfort the human, therefore the very existence of arts demand a user. User is the person who experiences or the practitioner of the art. User satisfaction has two parameters, Users physical and psychological satisfaction.

Most of the art forms give psychological satisfaction rather than the physical comfort. Music, drama, films, paintings communicate to the users psyche. But in case of architecture, facilitation is for physical psychological and spiritual well being of user. Like wise martial arts also connected to users psychological and physical comfort and through that tries to elevate to supreme spirituality.

Physical comfort has a strong link to the human's physical body. Physical comfort can be achieved by providing anthropometrics, proper circulation, proper lighting and ventilation level. Architecturally this is a manifestation of human activities in spatial form.

To create psychological comfort, it's necessary to incorporate the attributes of space with psychological and spiritual demands, through provision of sense of personal space. The sense of place includes sense of belonging, personal affects, self- esteem... etc .In order to achieve above its vital to understand the user's social and cultural background very well.

In brieftly that means user satisfaction comes through his social and cultural background. Activities and spaces come under it. This means user responsive architecture means again, responding to his social context.

"...In it self, the user will be vary divers. They will rang in age and there specific aspirations or objectives within the building. Besides the people who use the building, and people within it, for various lengths of time with deferent of frequency. "

David Cater, Philosophy of architecture, 1947, p: 2

Because of this broaden parameters create many difficulties to achieving the user comfort. In martial art user and the designer is same. But he should able to select the prefect style to his ability.



Figure 27
Activity variation

The style should stick to his physical body. In response fighting styles evolved in adaptation to the cultural and social background. *Nanchuan* and *Chanchuan* can be considered as examples for above phenomenon.

Nanchuan- Use in southern China, because of “Yansi” river and continues floods made them good in rowing, which have strong arms and they wear soft cotton cloths, so they ability to move their hands and use upper body in fighting

Chanchuan- use in Northern China, where have mountains and equal landscape. Because of climbing they have strong legs and because of the cold climate. they have to wear heavy cloths. It reduces their hand mobility. So they use the lower body.

Some have strong and hard bodies and adopted to use styles such Tiger style, but some use strength like Sumo etc. while once with weak and flexible bodies can use more economic styles such as Snake style, *Ikido* etc.

If we consider the user requirements in a fight between architecture and client, we can speak about it in relevance to martial art. The practice of martial art instinctive reactions are being disciplined and controlled and therefore the reactions are rationalized. Yet there are few basic methods use to understand or control the other.

- Pseudo expressionism.
- Total calmness.

Sun Sui's speaks in “*Art of War*” about the pseudo actions explain methods to win without fight. Because of the pseudo actions opponent over estimate the power and flee because of psychological impact.



Figure 28
Building like a sculpture

In the postmodern architecture period, buildings started to emerge like elements, which were more contrasting among the other buildings. Due to the introduction of new materials and technology helped architects to achieve this. Therefore they were able to capture the attention to those buildings.

In Architecture this scenario applies in handling an adamant client and changing his ideas to suit to the project. Further more application extent to articulation of built form within chaotic contexts.

Second method is come in to the total calmness, without any expressions, the fighter is as tranquil as deep still water, while he is as fierce as fire. So that opponent can't give any chance to understand him or his power. Then react with is first move of the opponent.

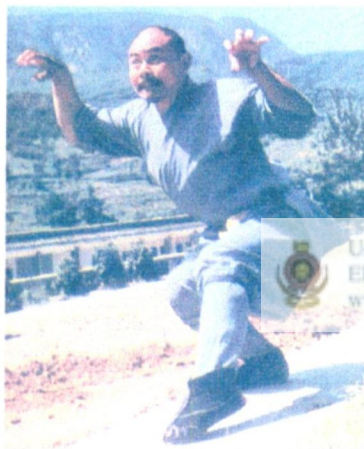


Figure 29
Tiger style fighter
With frightening impressions

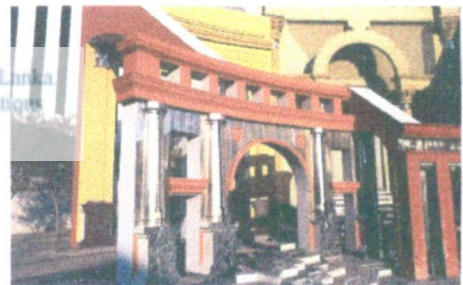


Figure 30
Pseudo entrance

3.5 Activity pattern or function as a generator

In the universe everything has particular function of an activity to do. It may be supports to others or supported by others. No activity exists without help of other and specific activities creates specific forms. This universal phenomenon is applicable to architecture as well. *Chals Davin's* explanation on the "evolution life on earth" has played its role in the architecture. Buildings started to be more functional and adopted the forms, which are best suited like humming birds of Hawaii.

"Form follows function"-

Le Corbostier

Particular activities perform by particular kind of buildings, like schools, hospitals, trace port terminals etc... basic form of these buildings define by the function, others which are more robust, shaped up to allow the function. Some buildings perform only one major activity. Therefore those kinds of buildings are difficult to transform to other function. Some buildings perform various functions, which can easily transform to another. But in generally small functions support to generate the major function.

"Learn more way to preserve rather than destroy. Avoid rather than check. Check rather than heart. Heart rather than maim. Maim rather than kill. For all life is precise nor can any is replaced"

-Master Kan

Warner Brothers-"Kun-Fu, TV. series episode guide", <http://www.kunfu-guide.com>.

This is the ultimate teaching of martial art. Violence is not an accepted act. But some times it's necessary to perform an act of violence for self-defense or to defend others. This is subjective to the enemy's will. Some times he may attack because of his tear or sudden anger. In that kind of a situation it's practiced to tolerate and to give a little time calm down him, without hurting. Even in a violent act the craft of it uses the opponents force, let the force to flow without disturbing it. There are many developed martial art, which understood the flow of energy. Like *Ikido, Judo*, in this judo form let the opponents force flow over the body. Then through him down over the shoulder and take his in to under control without letting the fight to continue, give a chance to think about the fight.



Figure 31
Judo fight

But in some cases enemy comes armed to kill or to do a big harm. In that kind of situations most important thing is over safety. So no time to play beat him as fast as possible. Therefore in that kind of situations use fast styles like *kendo*, *Jet-Kune-Do*,

which are very fast, accurate and do not take the fight very long. Finish the fight with one or two attacks.

According to James Stricks book "*Architecture in Conservation*", he explains in one place that conservation strategy known as "Connections by assimilation". When doing new link to a historical building by forming a referring to physical elements of the existing historical fabric. That is the design for the new architecture by assimilation of existing elements of the site, like in *Judo* or *Ikido* use the opponent power to beat him.

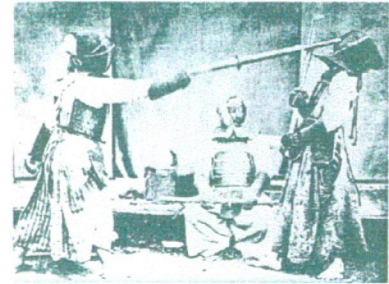


Figure 32
Kendo fighters

Let his power to flow freely, without disturbing adding a little power, to the same direction where the energy moves.

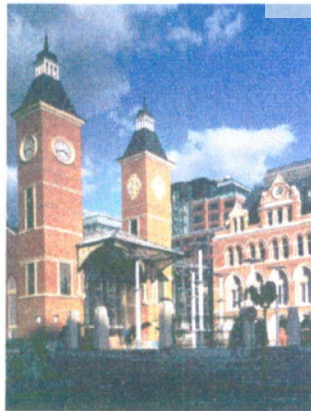


Figure 33
Liverpool Street station



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Through that get more advantage rather than going against to it. In another place he explains another method known as "Blender or Blatant". The new building is going to blender with the surrounding context or if necessary it blatant with the existing fabric to enhance the quality of the new building.

Like Liverpool street train station (UK), the adjoining tower captures all the features in the clock tower, not to compete with the existing building. But the interior has a totally different character, it has blatant the environment to crate contrast with in the more effective way. To fix in to the function in interior it has used modern high-tech elements.

Figure 34
Liverpool station interior, contrast with the old setting



5.6 Higher purpose or philosophy as a generator.

With the development of human been they try to understand things, which is beyond their limits. Some times they interpret them in a philosophical manner. These philosophical and hypothetical biases help to generate tremendous artistic products. These philosophies always blend with the religious and come out as good architectural products.

Muslims and Christians built massive buildings to house their gods. They are out of human scale and a big volume gives a grand appearance. These buildings show the god's divine power through architecture.



Figure 35
Sydney Opera House

Egyptian *Pero* Kings built massive pyramids to bury there deceased. The scale of the pyramid shows the power of the king, who represented the god in this world.

Massive *stupas* built to show the power of the kings by the time giving other messages like reminding the worshiper's that how small him, compare to the size of *stupa*, or Buddha or his teachings.

According to Chinese Taoists teaching, Tao is composed of two opposite polar but complimentary forces represented by Yin and Yang. Yin is characterized as the negative force of darkness, coldness and emptiness. Yang is the positive energy, which produces light, warmth and fullness. Yin and Yang, together they are called Tao. To the Taoist, the logical elements of all-universe be ingested the universe itself are combined into Tao. They existed before the universe was born. Tao has no limits. Its existence is eternal. Tao is not a supernatural force; instead it is the ultimate principle of the universe. Tao is the prime element from which everything is created in nature. According to that most of the above buildings have able to understand this nature, some are still we can't proof scientifically, like responding to the sun path, locating in cardinal directions. Not only the technology but also understand of the nature helped to achieve them, which have become the landmarks of the history. In the modern day world there are some buildings, which have achieved this quality like Sydney Opera House.



Figure 36
Yin - Yan

Concepts about forces come in to martial art at the beginning. Some martial arts develop with these concepts of power like *Thaigiquan*, *Ikido* etc.

. According to *Thaigiquan* literature,



Figure 37
Thaigiquan. powerful yet soft and calm rhythm of a movement of a silk cloth

Forces and energy should be generated from the spine and waist before reaching the arms and legs. The movements are executed slowly, continuously and softly, but hardness is implied in softness. Substantialness should be distinguished from insubstantialness. Practitioners are required to breathe regularly and smoothly. The inner strengths and energy should be exuded through external movements and actions. The bottom up, meaning the powerful muscles of the legs and hip serve as the seat of power. Using the strength of the relatively weaker arms and upper body is not emphasized. The entire body is held in a state of dynamic relaxation, which allows the power of the whole body to flow out of the hands and into the opponent without obstruction.

In architectural world some small-scale buildings also able to achieve high philosophical concepts like SOS children's village, *Piliyandata*.

SOS is a place to accommodate orphan and destitute children who have mental depression. Architect's objective is providing a feeling of a homely sensation that who doesn't have a house at all. Fancy colours and child scale buildings, which are closer to children's life help to forget there unpleasant past through this fantasy school.

It like built up internal mental power, which is known as "Chi" through *Thaigiquan*. In out it just likes combination of rhythmic movements but with meditation. His eyes hand and mind is in a one forces.

. *Thaigiquan* fighter moves like a silk cloth, with



Figure 38
Fixing to the children's environment



Figure 39

Fixing to the children's scale

power of a hard rock. It hides the important part inside, visible only the pretty part.

Study on SOS children's village the existence of deep rooted layers of social patterns in its architecture shows that when it's being filtered through the visions of martial art.



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CHAPTER FOUR.

CASE STUDIES



Case study one

Ella Adventure Park- *Kirindi Oya* resort

4.1 .1.1 heoretical base

Ella Adventure Park is a perfect place to discuss how a rugged context has been handled. In this case study, illustrates it with two main forces applicable in the design process, the user and context.

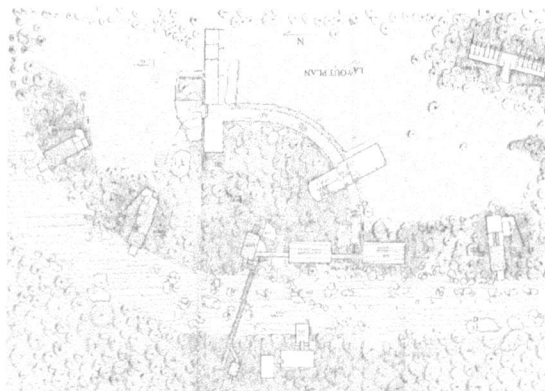
4.1.2 The site

Kirindi Oya resort or Ella Adventure Park has transformed the peaceful wilderness into a delightful experience of peace, being closer to the mother earth. This accommodates a restaurant, ten jungle-cabanas, ten camping sites, camper's toilets, and other ancillary facilities. This is situated in *Krandagoda*, 20 minutes walking distance from Ella-*Wellavaya* main road. The main objective of this project is to give a mental satisfaction for people, who are exhausted in the complicated urban life style.

Architects first imagery was to create a good relaxing place for the visitor, who is looking for a change in their monotonous life pattern. Few days being closer nature will generate a mental satisfaction. Manifestation of imagery on the site has been totally formed by the contextual forces. This product is a result of two main generators, one is the user and the other is the physical context. The site was an abandoned patch of land used for agricultural activities by the villagers and jungle adjoining to the *Kirindi Oya*.

4.1.3 User and the natural context

The lay out, runs over the context rather silently with few lusty blows demarcated by volumes and masses. An approach of *Ninjitsu* to a context can be explained through Ella-Layout. Silent and vigilant walk through site is highlighted with sudden and powerful strikes.



The main objective of this project is user satisfaction, mainly the user's mental satisfaction.

Figure 40
**Lay out plan, runs with the contours
Ella Adventure Park**

“Main objective of martial art is not to prepare for combat, but to mental forces, calmness and harmony” –Sensei Morihaei Ueshiba

KI IKIDO- “Ikido”, [http, KI pover.html](http://KI%20pover.html)

The Ella environment is to prepare the mindset of tourists to transform from Colombo’s worldly comfort, to adventures of the forest. There is no vehicular axis to the site, 20 minutes walk through the thick forest is the time to start the transformation of the mind, as it is like in a martial arts training process. Visitor’s way is on a narrow footpath with ravines on one side and the rock face on the other. This leaner step encloses itself, at times with a thick jungle and with open to distance view of mountains and water falls bringing in a sensational exiting experience of transformation to his next stop. Then it comes in to a suspended bridge across the *Kirindi Oya*, which acts like a main testing hurdle to identify himself. The bridge symbolizes changing point for next few days, in the different and new life style.

Once in the resort, the context comes into play with the forest, giving a physical experience to comfort the visitor. An ultimate satisfaction is intended to achieve through the experiences of bridges and elevated paths.



Figure 41
Bridge through Kirindi Oya



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The site is full of boulders, trees, water bodies, paddy fields and topographical differences. The entire project has an adventures journey to jungle. Therefore, this building had captured the wild experience without disturbing to it. Acknowledging to *Sun Sui's "Art of War"* identifying caring capacity of soldiers in a battleground is very important in performing out come. Identifying the caring capacity of this site would help to maintain the natural and cultural environment. Quantity selection of the architects brief of the project, such as number of cabanas and even sensitively include cabanas rather than large-scale structures are in accordance with *Sun Sui's* theory on caring capacity.



Figure 42
Building lay out, becomes a part of the forest



Figure 43
Camouflaged to the jungle

“Creation is resolution of contrary forces”

–Coomaraswamy A.

This is common belief of aesthetic creation. But finally it leads to harmony. This is the ultimate goal of martial art, like wise in this site there is no conflict between the natural and man-made environment. The harmony has been achieved through scattered small-scale structures, which camouflaged into the jungle

“There are no elements in nature in a conflict. There is only harmony in each other”.



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Warner Brothers-“Kun-Fu, TV, series episode guide”, <http://www.kunguide.com>.

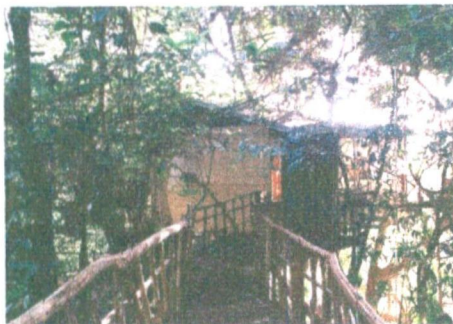


Figure 44
Timber Bridge to connect cabanas

The way of touching the ground and stances are things, which is carefully handled in martial art. Because of the boulders and topography architect has used elevated timber decks for his structure. This has minimized the impact to the forest and given maximum satisfaction to the user because of standing on top level of a tree. All these cabanas connected by timber bridges. Cabanas have steep *Illuk* thatched roofs, which looks like a watch hut on a tree, which is a part of agriculture, based settlements. Subsequently, the total project wins over the difficulties of the site by harmonizing with the local context, without trying to compete with it.

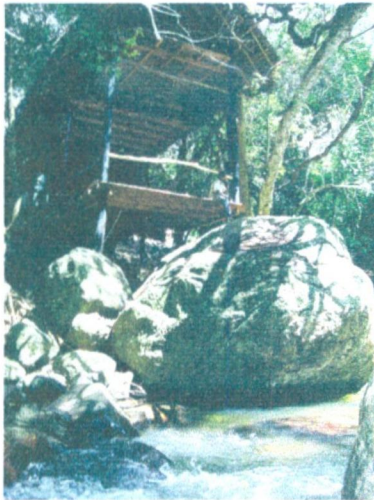


Figure 45
Timber deck comes over the boulders



Figure 46
Trees and boulders as part of the building

In martial arts, when trying to understand the rhythm of the opponent they can easily harmonize into his rhythm. In this project, this has achieved by locating buildings parallel to the context, and it has been able to capture the rhythm of the river and the trees. Building floors slightly touch the ground by using elevated timber decks on timber pillars. It keeps the transparency of the forest like the shadowy movements of a *Ninjitsu* artist. In some places touch the boulders hardly and jump out from it as timber decks, which are located in the perfect place to get maximum satisfaction like a perfectly timed attack. This rather pleases give ultimate satisfaction, because of the loneliness of the place, with bird songs and sound of the falling water.

Like monkey uses his context as a part of his armory, this building uses trees and boulders as parts of the buildings without cutting or disturbing its growth. Living on open decks at Ella gives an experience much closer to the nature, through the dematerialized built environment, enhanced through the materials of the nature. Therefore the adventure park at Ella can be categorized as an exemplary building, which depicts the manifestations of martial art in every aspect of built form.

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Case study two

Lighthouse hotel

4.2.1 Theoretical base

Lighthouse hotel is a product, which achieves a higher purposes or a philosophy. It's a depiction of "the story of impacts from the foreign invaders". Mostly influenced from Dutch, which affected the southern costal life style. Architectural language of the hotel can be categorized as a renaissance of the Dutch ruled period of base. But all of that aesthetical higher purpose works out to encourage the function of the building.

4.2.2 Yin-Yan, the higher purpose and the Function

"The southern costal fragments by the monsoon seasonal fury, has given rise to a series of rocky promontories that buttress its beaches from Ambalangoda to Tangalle. One could while the hours away and stare endlessly at the Indian Ocean crashing at one's feet from these point of vantage whittled by the sea. Architect Geoffrey Bawa has one of these promontories as a dais on which to locate his Lighthouse hotel"- Archi. Kavin Gunarathna (1998),p .24

"Yin- Yan" an icon of reality, as per ancient martial arts of china, depicts the co-existence



Figure 47
view from the sea side
Source-David R. (2002)

of good and evil. The good and evil exist only because of each other. Likewise the solid weathered wall and the orange colored walls symbolize the dark roots of colonialism and post independence transitional period of our culture. Then there is white light structure like a lotus coming out from mud. This handling of solids and colours show the contrast between the two time periods. But being a hotel, efficient-functionality has become typology of functionality to exceed towards a rather philosophical culturally significant experience. Therefore the philosophical theme runs functionality, which conveys a all over the building.

Building stands near the Galle road as a diplomatic person of mature stability to



Figure 48

Side view

Source-David R. (2002)

reinforce a majestic existence. Architecture of Light House hotel welcomes the visitor with warmth yet exposing to a mystifying environment just as a master of *Thaijiquan*. *Thaijiquan* practice enables a calm serenity to advantage over the opponent who is provoked to be puzzled due to a mysterious look. The resultant neither pressurizes the opponent to walk away in peace, no conflict.

Arrival to the building is parallel to its mass by viewing the whole façade of the building. The rubble paving directs to the low scale porch. It is shaded by heavy concrete beams which generate a gloomy volume; enclosure with a low perceptual height creates the cozy entrance porch, a total transformation from the façade's expression. It's a practice of martial arts, to mobilize the bodily endurance to its limits to evoke physical enlightenment. Likewise light beams penetrate through heavy beams of the roof to dilute the effects of even more dark entrance lobby. Main entrance door is far darker than the porch, which direct to the stair well. Dark reflecting pond and gloomy dim light emphasize the mysterious look for amplification of surprise just ahead.

Then come to the cylindrical shape stair well, a contrasting inclusion to the quadrangular planning to emphasize the contrast to give a surprise-impulse like in many martial art forms. This spiral staircase is one of the most effective elements in the hotel which carries many meanings with it as per critical explanations would spell out.

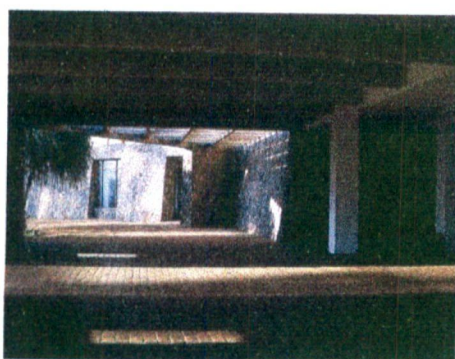


Figure 49

Entrance porch, gloomy volume, with the low perceptual height creates a cozy entrance porch

"...sculptural rock as frozen sacrificial fire. Puncture cupola paralleling the inner sky within the primitive hut and stairway spiraling upward symbolizing the perennial movement of mans aspiration towards the light-that the gut wrenches in an almost primitive response."

—Archi Ravin Gunarathna, (1998), P.26

The first experience of the interior is a staircase of sculptures depicting the story of the first invaders of the country and the war between them and the *Sinhalese* kings. The dark reflecting pool acts like, the sea and boulders continue up to the upper level. But in this dark space a reflection of the sun and the sunlight cuts through the darkness as if its in the symbol of yin yang.



Figure 50
The dark space reflection of the sun and the sun light cuts through the darkness



Figure 51
Seating, enhance the texture difference

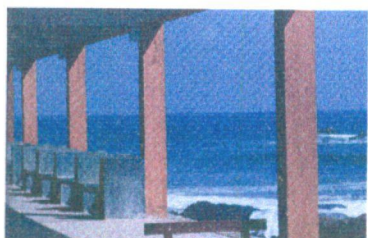


Figure 52
Inbuilt seats along the lobby, experiencing the drama of the waves

Gloomy environment in the stair well lead to the sun light in upper level. This is a movement of man's inspiration towards the sun light like a symbolic image of going out from the dark age of colonial ruling.

At the end a totally deferent environment reviles, which is the place of ultimate relocation. Dark gloomy and big volume of the staircase direct for relax. This is a highly contrasting point, like application of contrary forces in architecture as in the case in philosophy of *yin-yan*. The reality of quality explained by *yin-yan* acknowledges the application of such phenomenon even extending to the detailing dialogue between rough and smooth, hard and soft...etc. Main lobby gives a satisfaction of solitude, with the scenery of waves braking against the boulders. Linier colonnade accompanied by built in seats provide a good place to be part of the drama of waves while the spaces and textures adds to the user satisfaction.

Ex- built in seats adjoining to the column grid

Seating in rough rubble paved area

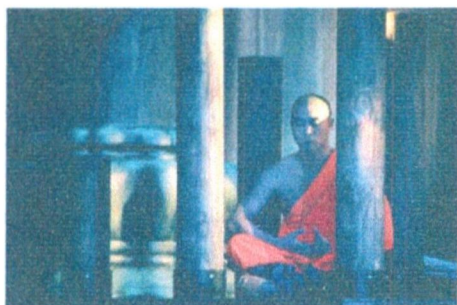


Figure 53
Self searching, show the way in to soul



Figure 54
Aerial photograph

An experience of lighthouse is of highly contemplative nature. Poetic existence of dark pool on the upper floor enables virtues as the sun goes down. The architecture of lighthouse has remarkably achieved "self searching introverted spaces" in a highly dramatic context just as the engagement of meditation in martial art, which is highly physical.

From these spaces, paths and the corridors extend towards interior private areas as if it's to show the way into soul. Greenish soft paving orange colour wall and the columns direct the path with in a calm and quiet environment. The interiors posses the pleasures of solitude the robustness of special expression some times are extremely romantic.

The architecture of lighthouse hotel shows evidences of universality of art through the appreciation of martial art in all its applications.



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CONCLUSION

Conclusion

Architecture and martial art are apparently different kind of art forms as discussed in the inception of the study. It was realized that both forms of arts have common roots. Architectural process intangible attributes and of the special needs of modern life style doubles such demands. There for it was hypothesized that martial arts could be used as a vehicle to venture in to understanding of the inner meaning of the architecture.

The event of combat in martial art, as it is explained in the study the terminology that considered with the terminology of an architectural venture the first part of the study explores the use of art forms. The universal basis of “art” as a whole, and it further explores the common basis of martial art and architecture. The design process of architecture is placed side by side with the approach and attack in martial art. The studies in parallelism of two different fields always enrich the understanding of one through the other. In architecture it is standard practice to approach a design through various generators bias. The biases depend on the personal architectural philosophy of the architect.

In areas like “context” this attempt is totally successful which can further more carry on deeper, analytical part of the context and different kind of applications in various situations. Specially the martial art was found to be a methodology to grasp the essence of site. In addition the architectural interventions generated art of context has been resonance with styles of martial arts, which has been discussed in the study. The case study on Ella was a clear indication of such parameters, it connect with other generators

as well. But when it comes to the social context it is difficult to show direct parallelism or a relationship between martial art and architecture. Because architecture respond to a social context and gives it a physical form. In martial the social context is not a visible outcome. It may help to shapeup the fighting style as discussed in *Nanchuan* and *Chanchuan*.

Still the functionality of architecture was found to be given a form of martial arts, enabling its acceptance. Yet it's advisable to put more energy on the subject. Although the metaphorical use of the approach in martial arts makes interesting linkages with the context-generated architecture, the other generators biases such as social, functional and philosophical do not seem making very strong relations with the same. What ever the linkages found are described in the body of the study. But appear so strongly as the link between context generated architecture and approach in martial art. Therefore the study could be concluded as the metaphorical use of martial art to understand architectural design process is very successful in relation to context generated architecture.

Further In the case of design process in architecture and in the context of martial arts, in acceptance for metaphorical use, one major limitation is in martial art user and the designer is same. In architecture one identified has to analyze and understand the user where as in martial art one understand over self and respond to it.

In higher purpose or philosophical aspect martial art can use as a metaphor to discuss architecture. Some times it may overlap with the function in martial art. Because the both cases try to achieve a pre designed goal. Further more the philosophy of martial art and described

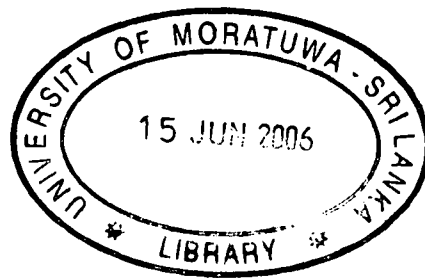
common applications such as *Yin-Yan*. As it was the out come of case study on lighthouse hotel. It resulted in producing applicability of martial art philosophy in explaining attributes such as layouts, detailing...etc.

An interesting subject area it will be, even it was not the main emphasis on this elementary study on the parallelism of marshal art and architecture. Finally it can be concluded that the hypothesis is found to in accordance with the out comes of the study. Further it can also be stated martial arts are of utmost importance to understand architecture, on their ability to produce metaphors which are holistically sensitive.

In this study it is limited in to the design process. It doesn't elaborate the application of it. Martial art being a rich art form it can use to discuss rhythm, inspirations, with solids, voids, texture ...etc and further elaborate within the base of very philosophical deep rooted martial art theories such as *Yin-Yan*



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