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International Tour

TECHNICAL NEWSLETTER
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TRADITIONAL KNOWLEDGE CONSTRUCTION TECHNIQUES AND ARCHITECTURE

A case of eluthambi Dalawai's Palace (Valiyaveedu) Thalakulam

Ar.INDIRA KOLLI M.Arch
Principal

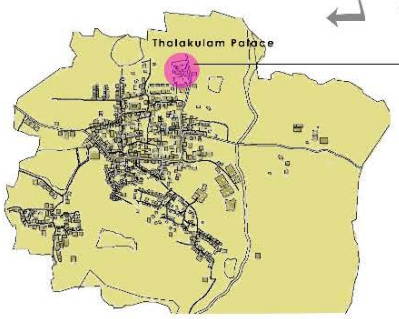
History of the Structure

A short distance from Eraniel palace was located the ancient Thalakulathu Valiya Veedu, the residence of Thalakulathu Mootha Kurup, traditional landlords of Eraniel region.

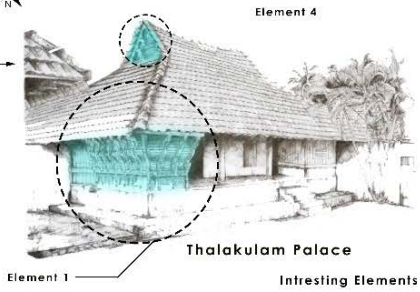
It was in the famed Valiya Veedu that Velu Thampi was born, in 1765, as the son of Vallamma Pillai Thankachi and Kunjimoyitti Pillai.

Those who investigate the life and times of Velu Thampi are sure to arrive at the gates of the ancient Valiya Veedu in Thalakulam, now a museum maintained by Chitrakalamandalam.

The unkempt surroundings around the statue of Thampi erected on a pedestal and a few architectural interventions with absolute disregard for the historic context are the only eyesores in the otherwise rustic setting.



Thalakulam Map



Thalakulam Palace

Element 4 : Cealing

Intresting Elements in the Palace

1.Charupadi

Reason for choosing

Intricate detailed carvings of the jalli work carved on wood under the step.

Function of the Element

The space for the premises in the palace to see the enemies and find a way to escape. (Like Zenana spaces)

2.Wooden Jalli

Reason for choosing

Intricate details in the roofing with large number of wooden joist arranged in a semicircular pattern to support the roofing terracotta structure.

Function of the Element

Decorative element

3. Roofing

Reason for choosing

Intricate carvings in the design of the roof with numerous floral patterns. The interesting aspect is the floral patterns will never get repeated in entire roof structure.

Function of the Element

Ceiling of the structure

4. Tympanum

Reason for choosing

Intricate detailed carvings on wood and also the width of the element. But in this palace the structure is provided with a **larger width for lying purpose with good air circulations.**

Function of the Element

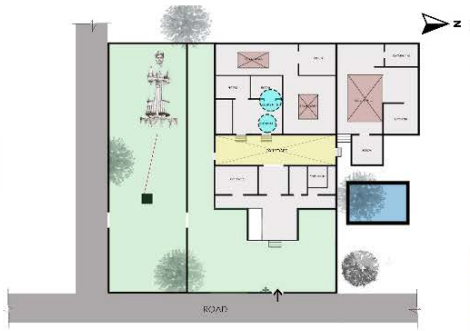
Main Functions are Siting, Relaxing, Chatting Etc..

Reason for choosing

Intricate details in the roofing with large number of wooden joist arranged in a semicircular pattern to support the roofing terracotta structure

Function of the Element

Intricate details in the roofing with large number of wooden joist arranged in a semicircular pattern to support the roofing terracotta structure.



Front View of Thalakulam Palace

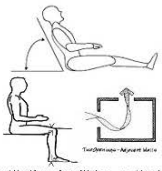
Plan of Palace

Detailed aspects of the elements

1.Charupadi

It is provided with proper facilities for sleeping, Relaxing and sitting.

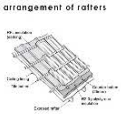
Commonly it is used as a place for the persons to talk with people



The space is provided with proper vetilation facilities so that the person sitting in this Charupadi will feel a good comfortabliy due to the ventilation.

3. Roofing

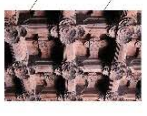
The structure is arranged in a different pattern of truss work. This type of truss work is adopted in the largest wodden Palace in the World "Padmanabha Puram Palace"



4. Tympanum

The tympanum is designed in such a way that it looks like a temple structure . It has intricate carvings and floral patterns which makes the structure more attractive.

5. Cealing



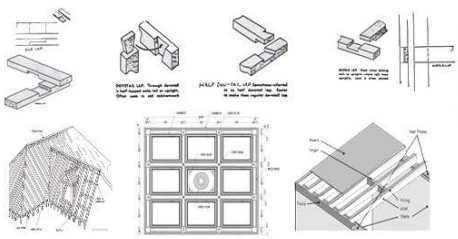
The floral patterns are provided with Rosewood and the intricate details are provided in it.

The important aspect of the cealing is the usage of the non repeated floral pattern.

Materials Used

The Place is provided with several materials such as the wood for the walls,roofing,doors and windows the mud masonary walls for the structures and the terracotta tiles for the roofing of the structures.

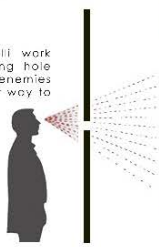
Construction Techniques



2.Wooden Jalli

The floral jalli work has a peeping hole to find their enemies and find their way to escape.

The space is provided below the steps so that the space cannot be visible by the person outside. But the people who is inside the building can find the person outside. If it is enemy they can find the way to escape.



SELF-RELIANT SUSTAINABLE COMMUNITIES

"Designed to live self-reliant"

Ar.Chinnadurai.
Head of the Department

The increasingly unavoidable facts about global warming, population growth, global food crisis and scarcity of resources lead us to consider how a holistic development could offset the dangerous consequences of human inhabitation. The existing model have environmental and financial benefits as main key but some add on is required to make it more sustainable model. The main add on will be social benefits like reconnecting people with the nature, community interaction, consumption with production.

The community should be designed to be self-reliant in various aspects. The energy consumption should be balanced with the production made in the same premises. The world countries are started to be self-reliant silently and want to enjoy the benefits of it. The architecture should be like that so that it will justify the context where it is situated and encourage local techniques and material and boom the economy of the local communities.

ARCHITECTURAL INTENTIONS IN DESIGN CONCEPT

Ar.R.REGHU M.Arch
Assistant Professor

Introduction

This chapter explains the Architectural intentions behind the design concept. The concept statement is a rationalization for the design decisions that have been made and is portrayed in following chapters. The theoretical examples inspiration the concept of a 'gallery in flux'. The design informants provide a summary of theoretical aspects addressed in previous chapters and clarify how the theory informs the design.

Architectural Intention

With the outline of a gallery into a structure with commercial and community office spaces, the experiment arises to create a link between the current commercial spaces and the new gallery spaces. The in-between spaces become significant, as these spaces are the relationship between the present public space and the gallery involvement. The nonstop significance of the gallery in ordinary life is boosted by the graphic or actual associations between the gallery and the present spaces.

The architectural purpose described in this proposition is the following:

To experiment and discover the inceptions of the gallery, initially by placing the gallery in a location external of the present gallery structure and Gallery Park and furthermore by reinforcing or disregarding boundaries between the new satellite museum and the Standard Bank Centre.

To discover the adaptive re-use of present atrium structure. The involvement should become an additional stratum in the Standard Bank Centre that improves the vestibule and gives a new public role to the space.

Concept Statement

The Architectural method to the project intervention is to generate a museum in flux. This means that the gallery involvement is frequently varying. This concept can be applied in the functioning of the gallery with changing displays.

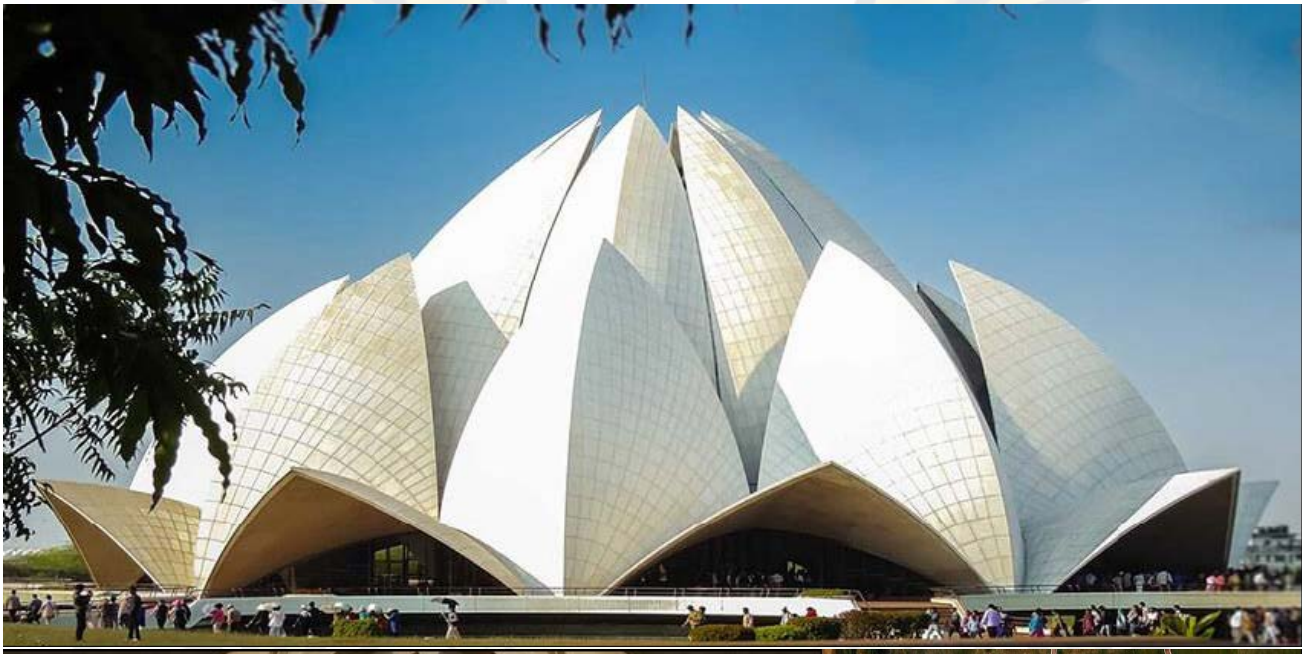
A modern gallery information opposes the knowledge of a gallery being built and describing the same communication for a hundred ages to come. A modern gallery should be continually mutable; increasing or decrease conferring to the requirements of the visitors or the types of presentations on display. A modern gallery should make the documentation among demonstrated matters and the structure that purposes as a 'breathing museum' potential.

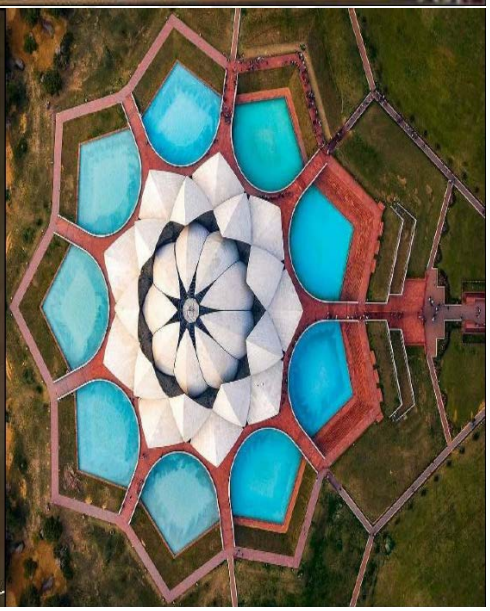
The planned gallery spaces should be able to accommodate fluctuating demonstrations as calculated by curators. The intervention should make provision for alteration and variations.

CONTEMPORARY ARCHITECTURE IN INDIA
Case of Bahai Temple

Ar.M.RAGHAVENDRAN M.Arch
Assistant Professor

The Lotus Temple designed by Iranian-American architect Fariborz Sahba is located in New Delhi and is a Bahá'í House of Worship that was completed in 1986. The building is notable for its flower-like shape and serves as the Mother Temple of the Indian subcontinent. The surface of the House of Worship is made of white marble. It features nine surrounding ponds and gardens. The building is composed of 27 free-standing marble-clad 'petals' arranged in clusters of three to form nine sides, with nine doors opening onto a central hall with height of slightly over 40 metre and a capacity of 2,500 people. The white marble cladding of the shells has made Lotus Temple the crown of the Indian architecture's contemporary spiritual design of the recent history. It's twenty-seven concrete petals make three rounds of the outer, middle, and inner circles where according to the guardians of the house, everybody, regardless of their religion and spiritual belonging, is welcome to visit and share sentiments. Lotus temple is among one of the most visited houses of worship around the world.





RETROFITTING ROOF OF AN EXISTING CLASSROOM TO IMPROVE ACOUSTIC PROPERTIES: ROBERT E. LAMBERTON PUBLIC SCHOOL

Ar.N.NISHYA M.Arch
Assistant Professor

In the sixth grade classroom of Robert .E. Lamberton acoustics treatment of roofs is done by Dr.Kenneth Roy, senior principal research scientist for Armstrong. He tested the reverberation time of classroom dimension 24' x 44' x 11' and the construction material used before the acoustics treatment are 1/2" fibre-on-plaster ceiling, concrete block walls, and a vinyl tile floor. The Noise Reduction Coefficient of the existing ceiling was estimated to be 0.25. The reverberation time in the existing room was 1.1 seconds.

Dr. Kenneth Roy installed Fine Fissured suspended ceiling with an NRC of 0.70 to have more uniform sound absorption and greater impact resistance. The objective changes observed after this acoustical treatment are the average reverberation time was now 0.56 seconds. Apart from the reverberation time few subjective changes were also observed. The teacher *indicated there now appeared to be less fidgeting and talking during her* lessons and students pay more attention to the lesson. From the student's side also there was a positive outcome as they said they can hear the lessons a lot better than before.

GLASS FIBRE REINFORCED GYPSUM (GFRG) BUILDING PANEL

Er.C.JENIL KUMAR M.E.
Assistant Professor

GLASS FIBRE

GRADE CLASSIFICATION

GFRG panel is supplied in three grade classifications:- 1). Class 1 - waterproof grade – panels which will be used for external walls, in wet areas and/or as floor and wall formwork for concrete filling; 2). Class 2 - General grade – GFRG panels which will be used structurally or nonstructurally in dry areas. These panels are generally unsuitable to be used as wall or floor formwork; and 3). Class 3 - Partition grade – GFRG panels which will only be used as nonstructural internal partition walls in dry only areas. 6 STANDARD DIMENSIONS the present nominal manufactured dimensions of every GFRG panel are: -

- Length 12,020 mm
- Height 3050 mm, and
- Thickness 124 mm

PERFORMANCE REQUIREMENTS

Appearance the two external faces of GFRG panels should be free from defects like corrugations, ripples, pockmarks, stains, loose corners, cracks or the other defects which might adversely affect a painted decorative surface finishes. it's a requirement that paint are often directly applied to the A-side of GFRG without the necessity for extensive rendering or plastering. the standard of finish on the B-side of the panel are often controlled by the operation of the ultimate screeding within the manufacturing process. The appearance requirements on the B -side are usually decided through negotiation between the manufacturer and its client. However, the minimum requirements for the B-side are that a 3.5mm texture coating or a trowelled-on coating will cover all the defects.

Water Content

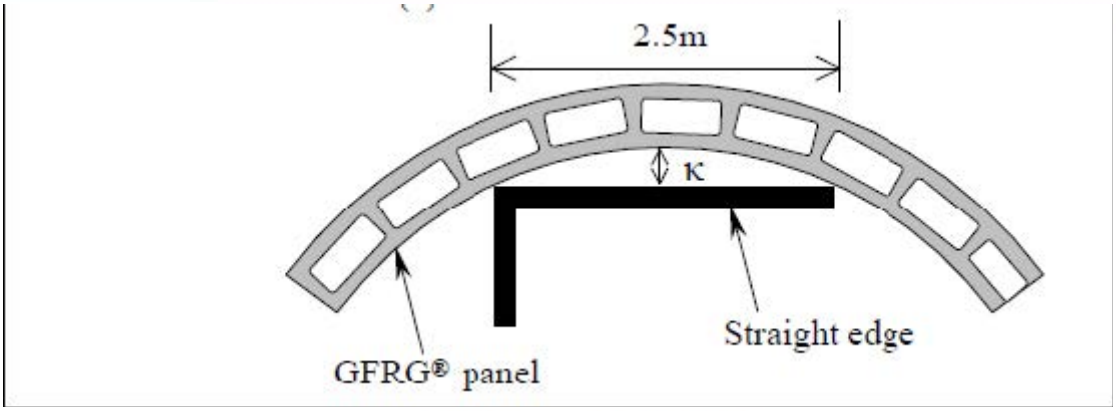
The water content of panels measured immediately after the drying process (without moisture intake after drying) shall be but 1%

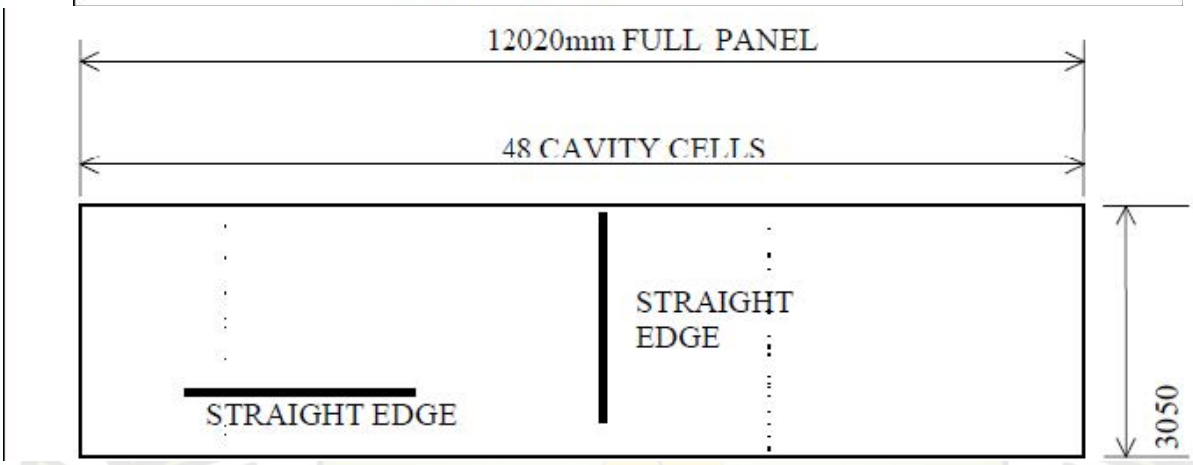
Water Absorption Rate

The water absorption rate for waterproof grade GFRG panels shall not be greater than 5% by weight after 24 hours of immersion in water when tested in accordance with Clause 10.4.5. No test is required for other grades of GFRG panels.

MARKING

Each manufactured GFRG panel shall be clearly marked with the subsequent particulars: • Product code in accordance with Clause 6.1;
- The manufacturer's name, address and trademark;
- Quality checked mark and identification of the checker; and
- Signs for packaging and transportation.

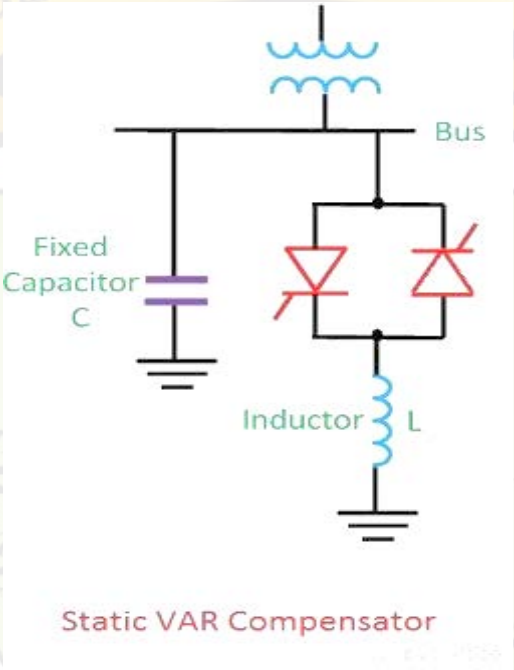

2.5m
K
Straight edge
GFRG® panel


12020mm FULL PANEL
48 CAVITY CELLS
STRAIGHT
EDGE
STRAIGHT EDGE
3050

FLEXIBLE AC TRANSMISSION SYSTEMS

Er. Jenner Z. ME
Assistant Professor

The growing wide variety of small, decentralized power plants which includes solar, wind, and biogas plant is one of the challenges for stable grid operation. Flexible AC Transmission Systems (FACTS) is the solution for increasing the reliability of AC grids, improving power quality, and boosting transmission efficiency. While every electricity grid has specific challenges in terms of power quality, reactive power compensation, and grid stability, FACTS systems provide custom-designed solutions to these challenges from a single source for commercial applications. FACTS devices are the specialized devices that provide either parallel or series compensation. While series compensation is typically used to increase the electricity transfer capability on transmission lines. Shunt Compensation is used for reactive power compensation. With these solutions installed in the power system, unacceptably high voltage fluctuations can be prevented and load-triggered disturbances can be mitigated.

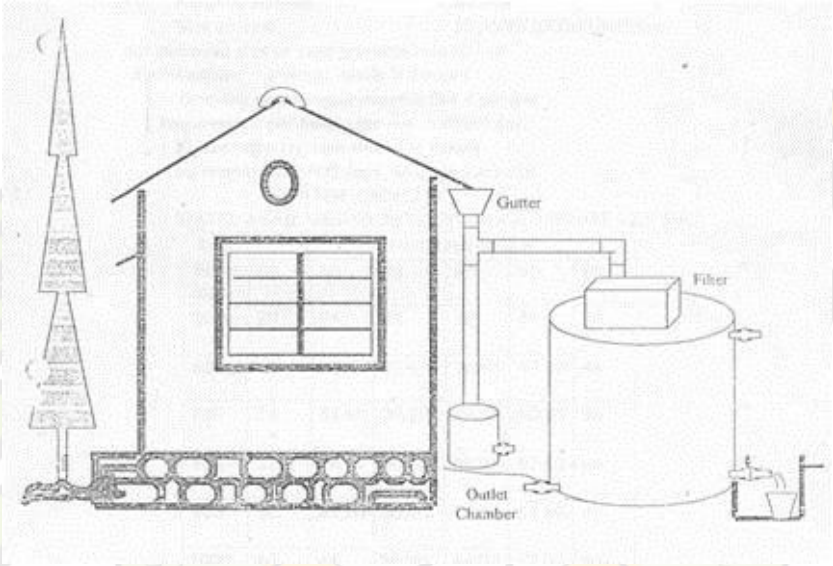


RAIN WATER HARVESTING SYSTEM

Ar.M.PRIYADARSHINI M.Arch
Assistant Professor

Rooftop Rainwater Harvesting System

Components of the Rooftop Rainwater Harvesting
The system mainly constitutes of following sub components:
· Catchments
· Transportation
· First flush
· Filter



Catchments
The surface that receives rainfall directly is called as the catchment of rainwater harvesting system. It may be a courtyard, terrace, or a paved or unpaved open ground. The terrace may be stone roof /flat RCC or sloping roof. Therefore, this catchment is the area, which actually contributes rainwater to the harvesting system**.**

Transportation
The rainwater from rooftop should be carried through down take water pipes or drains to storage rain-water harvesting system. Water pipes should be UV rays resistant of the required capacity. Water from sloping roofs could be caught through down take pipe and gutters. At terraces, the mouth of the each drain should have a wire mesh to restrict the floating material.

First Flush
The first flush is a device that is used to flush off the water received in the first shower. The first shower of rains needs to be flushed-off so as to avoid contaminating the storable or rechargeable water by the probable contaminants of the catchment roof and the atmosphere. It will also help in the cleaning of silt and other materials deposited on the roof during dry seasons

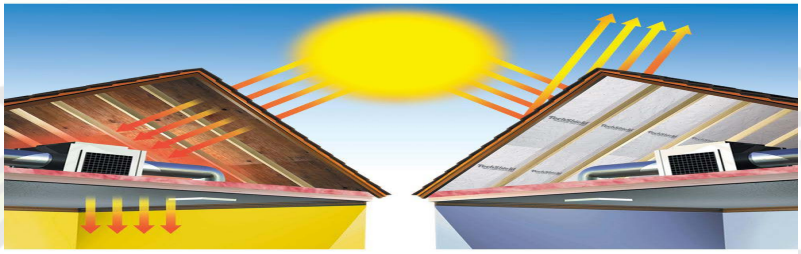
Filter
Filters are generally used for treatment of water to effectively remove turbidity, colour and micro-organisms. After the first flushing of rainfall, the water should pass through filters. A gravel, sand and 'netlon' mesh filter is designed and placed on top of the rainwater storage tank. This filter is largely important in keeping the rainwater in the storage tank clean and odour free. It removes dust, silt, leaves and other organic matter from entering the rainwater storage tank.

THERMAL INSULATION IN BUILDINGS-PART I

Er.E.M.JERIN SHIBU M.E.
Assistant Professor

Methods of Heat Insulation for roofs

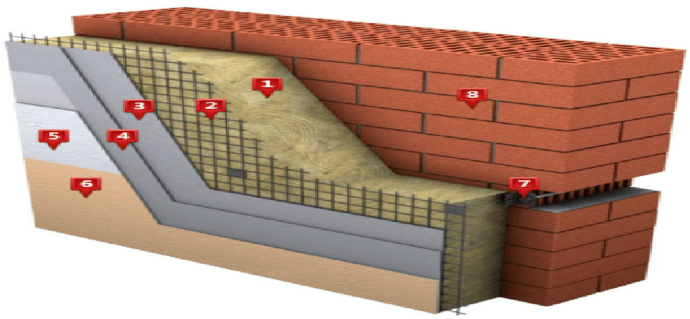
Heat insulation materials are applied internally to the roofs. In case of external application, heat insulation materials may be installed over the roof but below a waterproof course. In case of internal application heat insulation materials may be fixed by adhesives or otherwise, on the underside of roofs from within the rooms. Flat roofs may be kept cool by flooded water either by storing or by spraying regularly. White washing of the roof before onset of each summer also helps in heat insulation.



The false ceiling of insulating materials may be provided below the roof with air gaps in between. Shining and reflective insulation materials may be installed or laid on the top of the roof. An air space may be created on the top of the flat roofs by arranging sheets of asbestos cement or corrugated galvanized iron over the bricks. Suitable shading of roof on the exposed surfaces also reduces the surface temperature

Methods of Heat Insulation for walls

The thickness of the walls may be increased or decreased, depending upon the insulation used. The heat insulating materials of different types can be installed or fixed on the inside and outside of the exposed wall in order to reduce the thermal transmittance to the desired limits. In case of external application, overall water proofing should be done. Hollow wall or cavity wall construction may be adopted, for partition walls, an air space may be created by fixing the sheathing of hard boards or battens on either side of the walls. Light colored white-wash or distemper may be applied on the exposed surface of the wall to increase thermal insulation value.

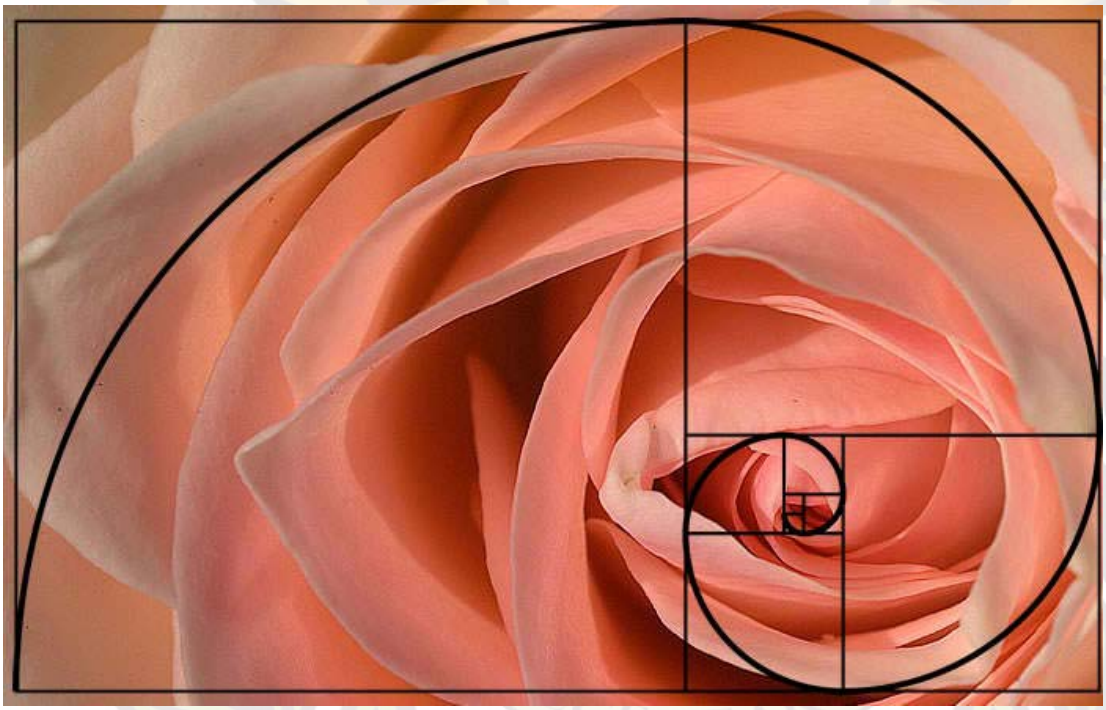


GOLDEN RATIO IN NATURE

Ms.R.MARIA ANUSHIYA M.Sc
Assistant Professor

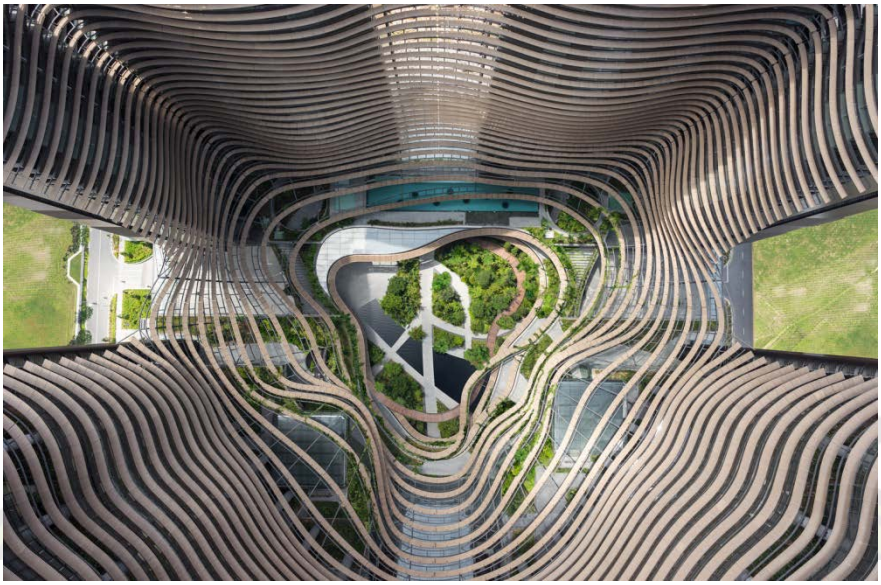
The Golden ratio is a special number found by dividing a line into two parts so that the longer part divided by the smaller part is also equal to the whole length divided by the longer part. Golden ratio also known as the golden section, golden mean or divine proportion, in mathematics , it is denoted by the greek letter = 1.618. It is also called the golden mean or golden section. It is used in nature, art and architecrure also. The golden ratio is sometimes called the divine proportion, because of its frequency in the natural world. This mathematical principle is an expression of the ratio of two sums whereby their rationis equal to the larger of the two quantities. The golden ratio has also been used to analyze the proportions of natural objects as well as man-made systems such as financial markets, in some cases based on dubious fits to data The golden ratio appears in some patterns in nature, including the spiral arrangement of leaves and other plant parts.

Example:



GREEN HEART | MARINA ONE SINGAPORE / INGENHOVEN ARCHITECTS

Ar.K.KEERTHANA B.Arch
Assistant Professor



As a world model for living and dealing , “Marina One” makes an innovative contribution to the discourse on mega-cities, especially in tropical regions, which, within the context of accelerating population and climate change, face enormous challenges. This three-dimensional green oasis reflects the range of tropical flora. Aedes presents diagrams and interviews with project participants, also as a documentary on the architecture.

The central element of the exhibition may be a spectacular five-meter high space sculpture which brings to life the unique shape of the “Marina One” buildings. Today, quite 50 percent of the world’s population lives in cities. This number will increase to 70 percent within the next three decades. By 2050, the world’s population will increase to nine or ten billion. In urban agglomerations, this growth can’t be accommodated without high-rise buildings.

The interaction between the geometry of the buildings and the garden facilitates natural ventilation and generates an agreeable microclimate.

The largest public landscaped area within the Marina Bay Central downtown of Singapore provides lebensraum on the brink of nature, the usable area of which is 125 percent of the original site surface area. “Marina One” comprises four high-rise buildings which accommodate office, residential and retail functions and are rated under the Green Mark Platinum and LEED Platinum schemes. The two office towers each have a usable floor area of 175,000 square meters; the 2 residential towers provide 1,042 city apartments and penthouses for about 3,000 residents.

The colour scheme of the interior and the building facade features calm and earthy bronze shades in order to support the harmonious atmosphere. A space-filling sculpture may be a central exhibit within the Aedes Architectural Forum; it models the deliberate design of the building shape in order that it are often fully appreciated. A documentary of the building by architectural photographer HG Esch, interviews with project participants, and explanatory diagrams of the project provide visitors with new ideas for architecture in mega-cities.

STOCHASTIC MODELLING FOR URBAN DESIGN (II)

Mr.P.S.STEM EDILBER M.Sc,M.Phil
Assistant Professor

Challenges in mathematics and statistics

Urban and regional systems are complex in nature:
Phase transitions; and Multimodality and rare events. An emergent behaviour arises from the actions of many interacting individuals. Seamless integration of mathematical models with data. Quality of model vs. quality of data? Uncertainty should be addressed in the modelling process Model uncertainty and system uctuations; Parameter uncertainty; and Observation error and bias.

Components
· Three key features:
· Activities at location;
· Flows between locations (spatial interaction); and
· Structures that facilitate ows.
· Broad range of applications:
· Retail: town centres, shopping centers, distribution centres;
· Health: surgeries, hospitals;
· Education: schools, colleges, universities;
· Transport: airports, car parks;
· Population: residence.

Spatial interaction of activities can be modelled with statistical averaging procedures (Boltzmann). Evolution of structures relating to the activities can be modelled using differential equations (Lotka-Volterra). New approach: Expand on BLV models with Overdamped Langevin dynamics.

Forward Problem

Urban structure:
N origin zones and M destination zones.
Origin quantities $\{Oi\}_i^N = 1$
Destination quantities $\{D_j\}_j^M = 1$

Spatial interaction
Flows of activities at location are denoted $\{Tij\}\, i, jN, M$, where Tij is the flow from zone i to j .

Model flows
Flow from the origin as $$O_i = \sum_{j=1}^{M} T_{ij}, i = 1, ..., N$$

Flow from the destination(Demand function) $$D_j = \sum_{i=1}^{N} T_{ij}, i = 1, ..., M$$

Fixed total benefit (or capacity): $$\sum_{i=1}^{N}\sum_{j=1}^{M} T_{ij} X_j = X$$
where xj is the attractiveness, of zone j .

$$\sum_{i=1}^{N}\sum_{j=1}^{M} T_{ij}C_{ij} = C$$

Fixed total transport cost:
where is the cost of transporting a unit from zone i to zone j .
A production-constrained spatial interaction model

The destination ows are obtained by maximizing an entropy function

$$D_j = \sum_{i=1}^{N} O_i \frac{\exp\left(\alpha X_j - \beta C_{ij}\right)}{\sum_{k=1}^{m} \exp\left(\alpha X_k - \beta C_{ik}\right)}$$

X_j is the attractiveness of j .
C_{ij} is the inconvenience of transporting from zone i to j .
α is the attractiveness scaling parameter.
β is the cost scaling parameter.
$\alpha X_j - \beta C_{ij}$ is the net utility from transporting from zone i to j .

BOHEMIAN STYLE

Ar.T.JOSEPHINE SABEENA B.Arch
Assistant Professor

This style stands on its own but is comparable to an eclectic style. It borrows and fuses elements from other styles in a successful manner. It's a style that borrows from the East, with large Mediterranean archways and sometimes ornate decorative metal work on cabinetry, doors, or mantles. It incorporates bold colors, patterns, and elegance with a touch of rustic flair. Bohemian is so freeing, because it allows homeowners to mix and match with playful variety. However, there is always a balance to be maintained. When it comes to this design style, a neutral base is key to adding in bolder elements. For instance, boldly colored and patterned tile flooring should be offset by neutrally painted walls. By following this rule, you'll avoid creating a chaotic and over decorated space.

Bohemian styles are defined by a lack of structure, opting instead for carefree layers of pattern, texture, and color. While there are some common practices with the bohemian look, there are no hard and fast rules like there are with modern or minimalist. The core of the bohemian aesthetic is that it's personal and relaxed. Boho styles are not styled for any other person's enjoyment but your own.

RONALD LU & PARTNERS SHOWCASES UPGRADED CONCEPT FOR A TRANSIT-ORIENTED DEVELOPMENT

Ar.T.DINESH PANDIAN M.Arch
Assistant Professor

Ronald Lu & Partners, the leading TOD expert with over 60 TOD projects across China, is currently developing flagship Shunde ICC Country Garden Sanlonghui. Showcasing an upgraded TOD4.0 design concept, the mixed-use project generates "a harmonious relationship between people and thus the environment".

Creating healthy and walkable neighborhoods, reducing holdup and promoting public transportation, while also minimizing pollution and energy consumption, Shunde ICC Country Garden Sanlonghui could also be an ideal representation of the design concept of TOD 4.0.

Located on the border of Guangzhou and Foshan in Sanlong Bay, the 518,320 square meters project are going to be equipped with a full range of urban functions, including 2 subway lines, 1 bus terminal , 8 residential towers, 2 serviced apartment towers, 1 international mall , 1 Grade A office building , 1 kindergarten, and other community facilities.

In Asia, where many countries are continuing to experience migration from rural to urban areas, urban planning still inappropriately adopts sort of North American design characteristics – especially vehicle-centric planning. If this continues, many tier 1 and tier 2 cities in China will likely swell to double or triple their current size, resulting in huge energy and carbon footprints.TOD promotes a symbiotic relationship between public transportation complexes and dense multi-functional urban spaces. TOD 4.0 adds a 'double layer effect' that designs a far better life for even more communities. -- Bryant Lu, Vice Chairman of RLP.

BELFAST WATERSIDE DEVELOPMENT

Ar.K.ASWIN PRAKESH M.Arch
Assistant Professor

The Henning Larsen-designed Belfast Waterside development was officially granted planning approval by the Belfast City Council, after a year in the planning approval process. Located on the site of the former Sirocco Works, the project is set to "*transform the 2.6-hectare area on the east bank of the River Lagan that has been disused for nearly two decades"*.

Placing the public at the heart of the development, removing existing boundary walls, and improving public access to a long-hidden corner of the city, the Belfast Waterside development takes on some signature Nordic concepts. In fact, Jacob Kurek, partner at Henning Larsen explains that their team saw an opportunity to bring a Scandinavian understanding of outdoor living to Belfast in this ambitious project.

Set to become the single largest development in Belfast's recent history, once completed, the project joins the current ongoing process across Europe of regenerating abandoned waterfront. Actually, the 2.6 hectares waterfront site "aims to fully activate the potential of the River Lagan creating a year-round vibrant community". Moreover, the scheme will include cultural venues, leisure, and retail facilities, 750 homes, hotels, and office spaces with a total built-up area of nearly 158,000 m2.

Developed by Swinford Sirocco Limited, owned by Vanguard Real Estate, the design seeks to expand the comfortable outdoor season on-site from a mere 9 weeks in the year to 25. Founding the design on a microclimate framework, Henning Larsen has drafted strategies "over the rooftops rather than through the streets". Finally, in the midst of the COVID-19 pandemic, as the lockdown eases, the project takes on more sense, extending the comfortable outdoor season and generating safe public spaces.

FUTURE OF ARCHITECTURE AFTER COVID 19

Ar.G.Gnana Shini B.Arch
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Unlock after the pandemic COVID 19, the world is now opened to the “new normal” which changing our perspectives and realities of the new world. Architecture as a discipline, somehow, tends to contribute the essentials in a new way. Architects are rethinking the conventional built forms and as well as the cities and providing innovative techniques to fight this global pandemic.

One question that arises is whether there is a need for large office spaces. As people during this lockdown measure working remotely and virtually, the large offices and skyscrapers are deserted which eventually makes us re-evaluate the need for those expensive and spacious built forms? Another major impact of this pandemic is the reduction of carbon emissions. According to the records of BBC Future, there will be a drop of 5.5 – 5.7% annual drop of carbon emissions due to burning fossil fuels. To add, many cities have also opened streets for cycling and walking. So, as architects, we have to rethink the city lanes.

Next, about the changes in the community spaces. We have to strengthen the fragile community bonds post-pandemic. It is important to think about how can these public spaces can contribute to the “new normal” lifestyle. Followed by new restaurant designs. This is probably going to be one important revolution in means of design. After the lift of a few lockdown restrictions in several cities around the world, many things were taken care of like temperature checks, alternative seating, spraying disinfectants to provide quarantine restaurant experience. There are few restaurants in Beijing, China uses robots to deliver foods. Thus it is evident that there is a lot of scope in design variations and rethinking the layouts in restaurants post-pandemic.

COVID 19, has made the need for the faster-built forms in emergencies. The building techniques have made to be faster, better in flexibility and strength than traditional buildings. One such example is Wuhan, the pandemic’s epicenter, which has been built in less than two weeks using these modular techniques and flexible.

Wuhan, Pandemic Epicenter

To sum up, the pandemic has made us create flexible spaces that can be reorganized, which should be used to work remotely and even more during emergencies. This can be done by open planning with the usage of screens or lightweight constructions. This planning goes for office spaces as well.

RIPPON BUILDING IN CHENNAI- NEO CLASSISM

The Ripon Building is the seat of the Greater Chennai Corporation in Chennai, Tamil Nadu. It is an example of neoclassical architecture, a combination of Ionic and Corinthian styles. The Ripon Building is an all-white structure and is located near the Puratchi Thalaivar Dr. M.G. Ramachandran Central Railway Station.

History

Commissioned in the year 1913, Ripon Building was designed by G.T.S. Harris. It was built by Loganatha Mudaliar, and took four years to build at a cost of 750,000, including a sum of 550,000 paid to Mudaliar.The Ripon building was named after Lord Ripon, Governor-General of British India and the Father of local self-government.

Building details- The building is rectangular, 85 metres (279 ft) long and 32 metres (105 ft) wide, with a 43 metres (141 ft) high central tower containing a clock 2.5 m (8.2 ft) in diameter.The first of its three floors has approximately 2,800 m2 (30,139 sq ft) of space.The walls were constructed with stock bricks, set and plastered with lime mortar and the roof is supported with teak wood joists. The original flooring of the ground floor was Cuddapah Slate that has been replaced with marble. One of the main attractions of the building is the Westminster Quarter chiming clock.

Restoration- In 2012, a massive renovation was initiated at a cost of □77 million under the Jawaharlal Nehru National Urban Renewal Mission (JNNURM), to preserve the building's original grandeur. Under this, an annexe building measuring 12,540 sq m will be constructed alongside the main structure to house all the departments of the Corporation and all structures in the premises that do not blend in with the main structure aesthetically will be demolished in June 2013 when the annexe building is completed. The annexe building, with an auditorium to seat 500 persons, will be built in a contemporary and post-modern style, highlighting with elements of regional architecture, to blend with the Indo-Saracenic style of the main building. The main building is also being renovated under the process with the use of lime mortar for plastering. It is the first heritage building in the country to have received funds from JNNURM for renovation.

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