

antarya

‘ The **art** of medicine consists of **amusing the patient** while nature cures the disease

VOLTAIRE

It is easy to get a **thousand prescriptions** but hard to get one single **remedy**

CHINESE PROVERB

People pay the **doctor** for his trouble ; for his **kindness** they still remain in his **debt**

SENECA

Never go to a **doctor** whose office **plants have died**.

ERMA BROMBECK

It's no **coincidence** that four of six letters in **Health** are **Heal**

ED NORTHSTRUM

Medicines are not meant to **live by**.

GERMAN PROVERB

Take care of your body it's the only place you have to live

JIM ROHN

The **doctor** of the future will **give no medicine** but will **interest** his patients in the **care** of the human frame, in **diet** and in the **cause** and **prevention** of **disease**

THOMAS EDISON

What a fascinating mix a hospital can be of people in a **huge** hurry and people too slow to get **out of their way**

JOSH BAZEL

The only **equipment** lack in the **modern hospital**? Somebody to meet you at the entrance with a **handshake!**

MARTIN H. FISCHER

A **hospital** should also have a **recovery room** adjoining the cashier's office. FRANCIS O'WALSH

The **hands that help** are more sacred than the **lips that pray**

MOTHER TERESA

Health is not **simply** the **absence of Sickness**

HANNAH GREEN

The **road** to health is paved with **good intestines!**

SHERRY A. ROGERS

exterior

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Chairperson's Foreword



Dear IIID Bangalore Chapter members,

As the Design Yatra of IIID moves to Southern India, Bengaluru is all excited and ready to welcome on the 12th of November the 4 Nanos doing the 13,000 km stretch across the country!

There are a number of interesting events lined up, with 'Design for Masses' being the central theme.

We hope that all members will attend these events with as much enthusiasm as we have in putting it together! Shyamala Prabhu, the convener of Design Yatra has left no stone unturned to make it memorable.

Finally, we expect all our members to Drive a Nano for at least one sector of the Yatra while the really adventurous can accompany us from Bangalore to Goa via Mangalore.

Looking forward to meeting all of you in November. IIID Design Excellence Awards have been announced with a different format, the finale happening overseas. Isn't that incentive enough to submit multiple entries?

All the very best!

GAYATHRI SHETTY

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FOSCARINI

Editor's Note



Design and health have a strong bond. A good design communicates with and helps keep all five senses in good health. Designed elements not only improve health, bring in cheer but can help avoid accidents, good specifications can avoid allergies, convert noise into sound and bring in the right lumens to improve eyesight.

World over, health architecture has taken a new dimension, with a total new thinking on every aspect of a hospital or a clinic. The buildings provide a healthy and comfortable ambience for patients and visitors, the interiors provide visual relief. Product designers too have contributed significantly by designing all hospital equipment – making them more user friendly for both doctors and patients.

Antarya takes the opportunity of bringing to focus these nuances and saluting the designers who have contributed towards this serious aspect of human survival.

Team Antarya has continuously endeavoured to share design knowledge and resources created with fellow architects and designers. To continue with this endeavour, we invite our readers to participate and contribute regularly.

We welcome on board RISE who will henceforth be partnering us in the publication of Antarya. We also welcome the support of MSJPR in furthering the interests of Antarya. Together we look forward to a mutually benefiting relationship that will take Antarya to greater heights in the coming years.

DINESH VERMA

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The art of medicine consists of amusing the patient while nature cures the disease.

It is easy to get a thousand prescriptions, but hard to get one single remedy.

People are the doctor for the doctor. The doctor is the doctor for the doctor.

Never get your hands dirty. If you have to, wash them.

Take care of your body. It is the only place you have to live.

The doctor's job is to give no medicine.

Health is the frame of the human frame, in diet and in the case of prevention of disease.

What a fascinating mix a hospital can be of people in a huge hall and people too close to get out of their way.

The only equipment left in the modern hospital: Some body to meet you at the entrance with a handshake.



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NANDHINI SUNDAR



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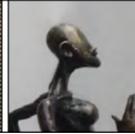
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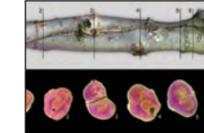
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HEALTHCARE

A SEA TRANSFORMATION

BY NANDHINI SUNDAR

Over a span of many centuries, healthcare has come a long way. From appalling hygiene and painfully performed amputations we now have in our bag, a plethora of developments in terms of design, environment, treatment and technology. This sea of healthcare's transformation has no brim.



It is a scene dating back to over 10 centuries, into the Middle Ages; a scene where healthcare related to European monasteries dispensing traditional Christian hospitality where medical care zeroed down mostly to providing rest, food and nursing care. The earliest documented institutions to provide cures were ancient Egyptian temples. The Indian subcontinent saw the prevalence of **Ayurveda, siddha** as cures for illness during this period.

While rapid growth in population in Europe during the 12th and 13th centuries prompted the creation of many hospital foundations, middle ages distinctly marked the prevalence of abominable standards of hygiene as well as lack of basic medical knowledge. Relating to a time that was replete with wars along with deplorable sanitary conditions, healthcare was offered in the most unhygienic environment, making cure and recovery one of chance.

A toothache would thus lead to teeth pulled without anaesthesia, inhumanly performed amputations, many times butchers and barbers doubled up as surgeons, bloodletting, considered as cure for many illnesses, was done using leeches. Ignorance and superstition abounded with the concept of clean healthcare as non-existent as knowledge of illnesses, right medicine and cures. **Black Death** that occurred in England during this period, killing almost one third of its population was the offshoot of this total lack of sanitation and ignorance.

Image Credits

A ward of the hospital at Scutari where Florence Nightingale worked and helped to restructure the modern hospital: Wikipedia.org



EMERGENCE OF MODERN HEALTHCARE

Modern hospitals emerged in the 18th century, evolving from basic centres of care for the sick to becoming centres of medical innovation and discovery besides serving as principal places for education and training of prospective practitioners. The mid-19th century saw hospitals and medical profession becoming more professionalised. Late 19th century saw the proliferation of a variety of public and private hospitals.

While the hospital scene had transformed along with the manner of address of healthcare, discrimination based on race, religion and gender prevailed in early 20th century, the race segregation continuing till the 1960's. Segregation by floors and segments prevailed in facilities offered while some hospitals treated patients belonging only to a particular race. This was also a period when patients were hospitalised longer as compared to current healthcare where some of these ailments receive treatments as outpatients or offer minimal hospitalisation. An interesting element is the approach of earlier hospitals to smoking where the patient as well as the caregiver was permitted to smoke. At present more than half the hospitals offer smoke free campuses. Likewise, transparency in terms of diagnosis, treatment and risks are more forthcoming in present hospitals as compared to the past.

Yet another development, especially in the 21st century is prevalence of mobile healthcare units offering both diagnostic facilities as well as treatment. Remote consultation and treatment has become common with use of satellite facilitated interactions with expert doctors for diagnosis and recommended treatments. These have enabled healthcare to reach hitherto inaccessible sections besides offering access to expert medical advice from any given location.

DESIGN MATTERS

Aesthetics set the mood for the way a building is experienced and this is true of hospitals too. It has an effect not only on patients, but on hospital staff as well as visitors, the positive effects relating directly with level of healing and speed of recovery. An environment

that encourages comfort facilitates psychological recovery. Given the ever evolving nature of healthcare technology, hospital design has to contend with accommodating and integrating new innovations. The objective would be to create healing environments that are emotionally as well as functionally supportive.

PHYSICAL ENVIRONMENT

Studies have shown that a physical environment reducing staff stress and fatigue resulted in more effective deliverance of care besides improving patient safety. A better physical environment was also found to reduce chances of healthcare employees contracting airborne and surface contamination from patients. For instance, good ventilation reduces viral load in a ward, reducing chances of contracting airborne respiratory illness.



Injury from medical equipment such as high intensity surgical-light source is at high risk amongst nursing staff. This includes retinal damage from the light source during surgery for the surgical staff. Similarly, noise levels, which can impact patient recovery, have an equal impact on healthcare staff too, leading to higher levels of stress translating as emotional exhaustion. A reduction in such stress and risk factors automatically translates into offer of better healthcare.

ERGONOMIC DESIGNS

Equally important are ergonomic designs of patient beds and nurse stations. A bad design leads to back stress and fatigue for nursing staff such as badly designed patient transferring devices, toilets and shower areas.

Nurses spend a lot of time walking. Placement of nursing stations and design of corridors, whether it is single, double corridor or radial, can effectively reduce the amount of time nurses spend walking. Time saved on walking translates as more time spent with patients. In a radial unit, nurses make fewer trips as they can visually supervise patients from the nursing station. Redesign of a pharmacy layout likewise improves work flow and reduces waiting time.

VENTILATION

Quality of air and ventilation has a strong bearing on the concentration of pathogens, impacting infection rates. The type of air filter, direction of airflow and air pressure, humidity levels, change of air per hour in a room, quality of ventilation

system, its cleaning and maintenance, together impact infection rates. Infection rates are also found to be lower in single bed rooms as compared to multiple beds. Multiple beds are more difficult to decontaminate thoroughly after discharge of a patient, worsening the problem of multiple surfaces acting as pathogen reservoirs.

NOISE LEVELS

Noise levels impact recovery. Noise is a major cause for poor sleep in patients, increasing stress levels. Multiple beds have the problem of noise, given the presence of other patients. Single bed rooms, sound absorbing ceiling tiles and flooring where possible, identifying and eliminating noise sources are ways to address noise levels.



Image Credits

Right to left: Throat Inspection: nyamcenterforhistory.org, Champalimaud centre for the unknown: Charles Correa Architects

ILLUMINATION

Illumination is another important component where studies have pointed bad lighting leading to errors in prescription and dispensing of medications. Higher work surface light levels have been noted to significantly reduce such errors. Appropriate lighting, both natural and artificial, also has other properties, of reducing depression, agitation, addressing dementia, sleep disorders. Studies have revealed that morning light is even more effective than evening light in reducing depression. Patients in brightly lit rooms are noted to have a shorter stay as compared to those in dimly lit ones.

**COLOUR SCHEMES**

Colour schemes, artworks, furniture, floor covering, curtains are other aspects positively impacting aesthetics and the environment created. This translates into improved mood, an altered psychological state that is receptive to treatment and aids faster recovery. While artworks relating to nature elicit positive response, chaotic abstract art can induce negative emotions, increasing stress at times worsening outcomes.

**EVIDENCE BASED DESIGN**

Evidence based design pertains to creating healthcare buildings based on best available evidence geared towards improving outcomes, where continuous monitoring of the success of designs permits subsequent informed decision making. Design here goes beyond top frills of being fancier than traditional hospitals to creating buildings that enable patients to recover faster and hospital staff to offer better healthcare services. It actively addresses the manner in which physical environment can interfere or support activities of families, hospital staff as well as patients, where the accent is providing an effective, safe, patient centred care and environment.

TECHNOLOGY

The last century saw hospitals move towards a patient empowered approach that prioritises prevention. The emergence of technology has complemented this, aiding treatment to reach even before physical contact between patient and doctor is established. Thus, a patient reaching in an ambulance can have the treating doctor



in attendance even before reaching the hospital, thus cutting down on critical treatment time. Likewise, emergence of palm sensors enables to determine the type of treatment that works for a patient, permitting special quick care especially in emergencies. Patients too have access to reaching a doctor or nurse with the touch of a button in modern hospitals, again an expert aid when addressing emergencies. Presence of language translators add further to the comfort of patients, enabling the doctor to communicate compassionately even in a language not familiar with.

Image Credits

Right to left: Illumination image: Pexels.com, Surya Mother & Child Care Clinic-Mumbai, Champalimaud centre for the unknown: Charles Correa Architects Healthcare Technology Image: Pexels.com

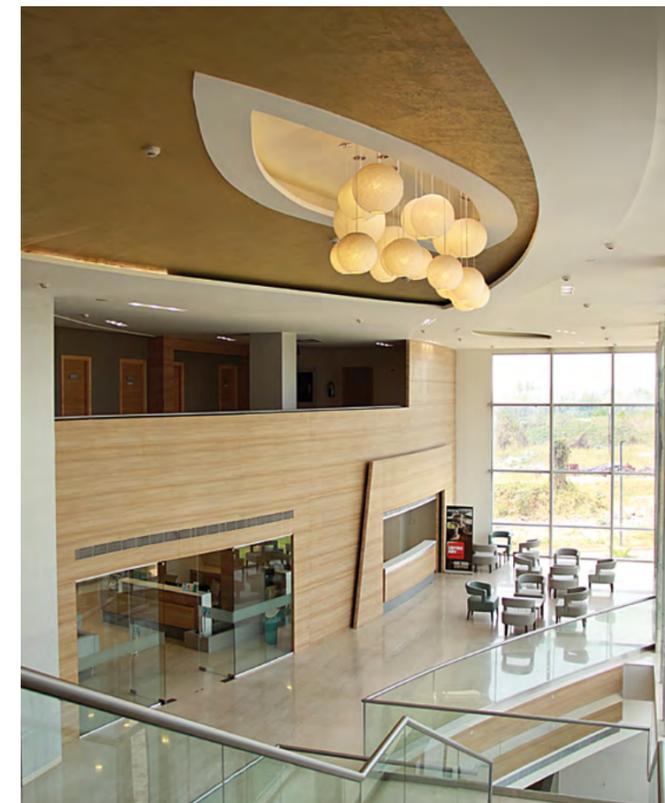


THE NEW AGE HEALTHCARE

BY NANDHINI SUNDAR

Healthcare and hospitals are journeying through a new path, one that is not only technology facilitated but also sensitively and sensibly designed to address environment and physical components of spaces, enhancing the quality of treatment and speeding up recovery. The design of hospitals is playing a major role in dictating quality of healthcare rendered, in terms of tackling the psychological and physiological quotient as well as in being supportive to new age technological developments. The functional spaces in these new age hospitals are handled by understanding the process, the functional

flows, requirement of various support rooms hosting diagnostic equipment, while offering an ambience that is cheerful, friendly, open as well as comforting. "Design of the spaces in each segment that evolves is essentially evidence based, such as the nature of illness, be it infectious and needing segregation, accessibility of nurses for the patients, fluid movement of both patients, doctors, caregivers, logistics of placement of diagnostic rooms and operation theatres, intensive care units, especially in emergency wards", says **Architect Pradeep Kulkarni of Vinyas Architects.**



Facing Page: Femiint hospital Lobby: SDeG Architects
Left: Aster Medcity Lobby: Arun Nalapat Architects

ACCENT ON FUNCTIONALITY AND AMBIENCE

The first space that greets both patient and the accompanying caregivers is the lobby. The design opted here is open cheerful, with opulence avoided, the ambience veering towards a clean warm institutional feel.

The new age hospitals lend much focus on the functionality aspect of the lobby, in terms of registrations, admissions, discharge sections, the waiting area that comes with a host of add on facilities such as the pharmacy, a gift shop, a coffee shop, accessible toilets. Crowding of the lobby can be a major concern, especially if the area houses both the patients coming in for admissions as well as the outpatients waiting for their turn to see the physician or enter the diagnostic room.

Segregation then becomes paramount based on requirements and nature of the visitor and patients. Modern hospitals are less crowded, with larger volume of spaces that offer such segregation, exuding an aura of competence as well as serenity. Openness and larger volumes are achieved by double height ceiling, presence of atrium, glass walls that overlook a lush green space and waterbody. "Courtyards are mood elevating as they come with natural light and ventilation", says Kulkarni.

The double height offers a sense of scale while greenery and water body visually connected through a glass wall, permissible since it overlooks a non-clinical area, offer a sense of calm and comfort. The presence of atrium and glass wall further brings in natural light into the interiors, enhancing quality of the ambience.

TACKLING EMERGENCIES

Emergency wards require different handling of spaces to address exigencies of the situation. Waiting period here is very small, the spaces needing to be vastly functional. The first point of attending to the incoming patient, the Triage, segregates the treatment into various levels of care as per requirement, be it surgery, intensive care or mere hospitalisation. Based on level of emergency, the levels of care are divided into various zones, the patient graded depending on severity of the condition. The emergency ward is strategically located, the design permitting unhindered movement to the diagnostic rooms as well as operation theatre or the intensive care unit as the situation may warrant.

Since movement of the patient needs to be unhindered, width of the corridor should be large to accommodate such transit. "Standard width of the path is 2.4m. Increasing this width may not be advisable as it would reduce space availability for other functional zones besides pushing up cost of the building and in turn healthcare", says **Architect Arun Nalapat of Arun Nalapat Architects.**

Adds Kulkarni, "In an emergency, movement has to be unrestricted. Besides opting for an 8 feet corridor, path for wheeling in the patient has to be straight to make vision clear. Diagnostic rooms supporting operation theatres should be within a 30m range so as to facilitate quick movement of patients."

"Emergency ward does not stop with merely diagnostic rooms, operation theatre and intensive care units. Counselling rooms are needed where families can be counselled. In case of an unexpected



development too, shifting of the patient needs to be done quietly from another exit where other incoming patients do not see trauma of the development while the concerned families too are able to grieve in private away from the main zone. To permit these, the design of the space has to be done in accordance, with the individual rooms having a second exit”, states Nalapat.

ADDRESSING SPECIFICS

Diagnostic rooms have their own specific requirements based on the equipment used and diagnosis done. Each equipment has special requirements, be it utilities such as plumbing, electrical connection, ventilation, patient safety in terms of radiation address. Some of these rooms also need to be more secluded, away from the normal patients, as compared to rest because of the nature of diagnosis carried. These elements, besides functional aspects of their positioning, require clever as well as appropriate designing. The new age hospitals show expert handling of such spaces without making it apparent.

“The diagnostic rooms are also accessed by outpatient departments and many patients visit with low spirits. Bright colours in OPD would lend cheer and uplift spirits”, states Kulkarni.

COMFORT AND CHEER IS THE KEY

Inpatient rooms are no more depressing spaces where the patient has to reconcile his stay for duration of his treatment. These are now cheerful spaces, the accent being on comfort and functionality, creating an ambience that addresses the psychological quotient to speed up recovery. Rooms are naturally well lit, with a large window. “A view from this window of greenery that also changes its

hues according to seasons, can be mood transforming, impacting mind positively”, says Kulkarni. The size of the room is fairly large to accommodate a caregiver. “The ideal size is 250 Sq ft to accommodate an extra bed for the caregiver, along with the patient’s cot, bedside table and other equipment that may be wheeled in. Doors are also 4 feet wide to permit beds to be moved”, says Nalapat.

Beds in the new age hospitals invariably are motorised to increase or decrease height while the wheels permit the patient to be shifted for diagnosis in the same bed. “Many time shifting of the patient on to a stretcher for diagnosis can be painful. Cots with wheels avoid this”, he adds.

Since colours and décor elements have an impact on mind, the hues used are essentially pastels, with red totally avoided as “it creates anxiety.” Cheer is brought in through floral prints, flower arrangements, artworks that depict nature. “The objective is to create comfort of a home to aid the patient to recover faster. But it is important to keep it subtle and not overdo”, warns Nalapat. Toilets are an integral part of inpatient rooms and their design is equally so. “Besides the specific requirements of installing toilets that address assistance needs, area of these spaces has to be comfortably large to accommodate a section for the caregiver to be present and assist”, avers Kulkarni. The rooms however are sans balconies as “patients do have a strong tendency for suicide.”

USHERING IN NEW LIFE

Birthing centres are totally different in their approach and requirements, as it does not deal with sickness but rather a natural process which brings joy. Décor of these spaces is tuned to reflect



this welcoming of a new life and the celebration it evokes. The environment is structured to instil this non-clinical feel, the design altered to suit the varied approach and requirement. Spaces are thus more cheerful, colourful, energetic.

CARE FOR MEDICAL STAFF

How many realise the duration of time nurses stand, attending to patients and assisting doctors? The exhaustion of such a physical exertion can only be imagined. Such exhaustion in turn impacts the quality of care given to patients, calling for efficient workstations to be designed to meet their needs with access to a rest room when required.

Doctors likewise need their own lounge where they can interact undisturbed with their colleagues and also relax after a tiring session with patients. Provision of comfortable retiring rooms for doctors is equally important to ensure rest and recuperation when required. This is especially so as some surgeries can be extremely lengthy, going beyond even 20 hours. “It is also important to lift the spirits of doctors and assisting staff at surgeries and this is done best if operation theatres have windows or vents that overlook a garden, offering the performing surgeon and staff a glimpse of greenery”, contends Kulkarni.

ISOLATION WARDS

Ailments such as cancer and burn injuries require special treatment and isolation from rest of the treating units. Some therapies in cancer require the patient to be in isolation for a specific period as they are radioactive after receiving treatment. Rooms provided for such patients are designed to be windowless.

Burns ward too is isolated given the high degree of the patients contracting infections because of the loss of epidermis. The skin loss also leads to loss of water, while the temperatures need to be controlled. Intensive care units in the burns ward are designed to be closed segregated units where the air too is filtered to avoid infections. “The rooms need to be designed larger than normal. It is also best not to have a burns ward hosting multiple patients but rather individual cubicles with individual thermostats for temperature control”, says Nalapat.

EASY MAINTENANCE

Whatever be the design opted, the accent in the clinical areas, besides functionality, is easy maintenance. The materials used are easy to clean, do not absorb water, with walls commonly sporting washable paint. “Use of stainless steel is a good option, especially in outpatient wards which is prone to dirt, as it is easy to clean”, says Kulkarni.

Facing Page: MOSH, hospital ward: Arun Nalapat Architects
Top: MOSH, lobby: Arun Nalapat Architects

THE NEW VOCABULARY IN HOSPITAL DESIGN



Dr Nitish Shetty, CEO,
Aster CMI Hospital

To check out the new age vocabulary in hospital design, we decided to walk through a couple of hospitals that had recently started functioning. To say the design was different would be an understatement. The spaces spoke of a new philosophy and sensitivity where healthcare is taken to a completely different dimension.

ASTER CMI

Aster CMI Hospital, Bangalore, designed by **Arun Nalapat Architects**, redesigned and renovated from an existing hospital building that had not quite reached up to expected standards, certainly stands apart in its design sensibilities. Housing a built up area of around 4,40,000 Sq feet, the over 500 bed multi-speciality hospital speaks of all the elements that mark the new age hospital design. An expansive lobby to the point of being referred to as sprawling, greets the visitor, the volume of the space as well as the tasteful décor and pastel hues speaking a language of fine aesthetics, offering the comforting aura of an excellent yet affordable healthcare service.

The thought process of service being the key that has gone into the design is amply evident in the functional structure of the spaces which is warm and welcoming without being intimidating. The placement of relevant counters are such that, the patient

need not walk much, yet there would be no overcrowding given the expert segregation of different categories. Thus the broad speciality sections are separated from the super speciality sections that are less crowded.

Separate sections are earmarked for international patients so as to afford special attention and less crowding. Interestingly, the visual connection between these sections is maintained with only partitions marking the demarcations of these large cubicles. Attractive coffee shops dot the various floors frequented by the general public and outpatients, the ambience and design akin to an airport lounge rather than a hospital lounge and connecting corridors.

Given the significance of natural light and ventilation, glass walls mark the lobby façade, overlooking a charming green space. The basement of the hospital too has a visual connect to a picturesque exterior, the glass wall opening on to a natural rock formation of the site, complete with flowing water.

While separate external access for emergencies, besides the internal access, permit faster treatment of emergency patients, the emerging sentiments of birthing centres being distinct from healthcare per se has been given due importance by segregating this section from the main hospital. Birthing is a celebration and



Exterior View
Aster CMI Hospital

the needs of mother and child are certainly different from patients who arrive to cure ailments and hence this section, besides having independent access, has a décor that complements this celebration.

A similar approach is offered to the cosmetology section which is taken as distinct from conventional healthcare and hence accorded separate section and access. All the non-invasive treatments are concentrated on the ground floor while the inpatient rooms are in a separate wing that goes up to 6 floors and houses large well-lit and ventilated rooms. A separate floor is dedicated to addressing obesity issues and likewise for senior citizens so as to cater to their differential requirements, be it the design of corridors, toilets, the material choice for floors to name a few. Says **Dr Nitish Shetty, CEO, Aster CMI Hospital**, "The objective was to remove the hospital ambience and create one that is warm and cheerful. The multiple eateries speak this language in abundance, placed as they are at the centre in many floors, more like an airport lounge. The accent is on comfort, convenience and functionality while offering expert healthcare with state of the art facilities." He further adds, "The

segregation of various segments of treatment where they either have a separate access or are placed exclusively on an individual floor, again marks our objective of offering a differential ambience that lends expert healthcare a different tone." He is however quick to add that all these designs do not come at an extra cost as the "treatment is very much affordable."

Adds Nalapat, the architect behind Aster CMI Bangalore, "The design sensibilities of Aster CMI will create a new benchmark for hospital design in the city as well as the way patients perceive hospitalisation and healthcare."



FEMIINT HEALTH

Femiint Health, designed by **Architect Sujit Nair, of SDeG**, is one of the several high end specialty clinics coming up in Bangalore. The women and childcare hospital brings with it a strong tone of vibrancy and celebration, in the manner of design of spaces, presence of strong cheerful colours that transform the interiors, combined with copious play of natural light that seep in through the glass walls that feature, bringing in varying degrees of visibility of the exteriors as the patients and visitors move from front portions of the structure towards the interior treatment zones. The floors enjoy maximum circulation of air, going up to three floors of treatment and consultation rooms, capped by a charming roof top cafeteria.

The expansive lobby speaks of vibrant greens, pinks, greys in the form of seating, combined strikingly with green accent walls, stone clad highlight zones, splashes of wood, amidst the overflowing white spaces that connect visually to the exteriors, blending in the greenery. The green accent walls serving as the backdrop for the colourful seating, work to remove the boredom of waiting while some of the seating are placed at vantage points of exterior visual connect.

Even the consultancy rooms and treatment rooms witness a dash of colour, the mild yellow coloured curtains breaking the monotony of a pristine white hospital space. Art features as light fixtures, the shades arresting in shape and style, yet subdued to keep in

perspective the language of healthcare. The glass façade extending over three levels, forms an expressive feature, like a graft, almost metaphorically revealing the structural exoskeleton. "The geometry of the façade was derived after carving out a profile from the façade and subtracting it from the surfaces that take up services and dense exoskeletal elements", says Sujit. Craftsmen cladding offers a textured backdrop, the rough, reassuring quality of the stone forming a canvas for an aggressive geometrically irregular glass element.

Adds Sujit, "Clinical facilities traditionally have been dull, drab spaces failing to energize and motivate. Several studies in recent past emphasise the relevance of well thought out design strategies for public spaces within hospitals and functional efficiencies. Its architecture must exude warmth and feelings of well-being through well thought out materials, palettes and textures. Several months of planning went into the making of Femiint Health. We worked on ideas that would lower stress levels, while simultaneously imagining a building that would be bold and striking in its outward expression."



Sujit Nair, SDeG

DESIGN PERSPECTIVE FROM THE DOCTOR'S DESK



Dr. Raghavendra Pai



Dr. Ravi Gopal Varma

“Half the job of healing is done when the ambience does not loudly proclaim it is a hospital, making actual treatment that much more effective”, says Dr Varma. He also insists that this ambience not only impacts patients but doctors too. “A warm ambience can leave the doctor feeling cheerful and this has a positive impact on treatment rendered as there is less stress.”

Design not only impacts receptivity of healthcare by patients and their recovery time but also the medical staff offering healthcare. An interaction with surgeons in hospitals housing this new age design affirmed this.

Pointing that a pleasant ambience has an immediate positive effect on the mood, be it the medical staff or patients receiving care, **Dr Ravi Gopal Varma, Lead Consultant Neurosurgery and Chief of Neuro Sciences, Aster CMI**, said, “The psychological component is modifiable by exogenous forces. Happiness, confidence, a positive sense of feeling, all these change treatment. For instance, 50 per cent of a headache can disappear in a conducive atmosphere. All diseases have Psychotic and Somatic components in variable proportion. Psychotic symptoms alter when you enter a happy environment. Half the job of healing is done when the ambience does not loudly proclaim it is a hospital, making actual treatment that much more effective.”

According to him, the manner in which a patient reveals their symptoms too is more accurate when they speak from a positive state of mind as triggered by a cheerful ambience. This is so even in case of patients wheeled in for surgery where a depressive corridor could dampen their psyche. “The accessibility of corridors, the lighting, colours, the level of noise, all this has an impact on the patient who is already stressed about the surgery.”

Dr Varma insists that this ambience not only impacts patients but doctors too. “A warm ambience can leave the doctor feeling cheerful and this has a positive impact on treatment rendered as there is less stress.” Design of support rooms needs equal sensitivity in address according to Dr Varma. “The seating, décor, the comfort in counselling rooms, little details like a box of tissues on the table, all add up to deliver an impact on mind.”

Similar views are voiced by **Dr Raghavendra Pai, Lead Consultant Neuro Anaesthetist, Aster CMI**, “Erstwhile hospitals were housed in stone buildings and their interiors carried a strong smell of ether where people identified it as ‘hospital smell’. However, these stone buildings, given the abundance of space in the past, invariably opened on to green courtyards, lending a different dimension to their design.”

Referring to critical areas such as operation theatres, ICU, where maximum sterility is mandatory, Dr Pai adds, “Most good hospitals place these where there is an exposure to outside world in terms of a garden or merely a view of the sky which permits sunlight to filter in. This reduces stress levels of the surgical team. Mood changes are sharp amongst nursing and technical staff when they



feel totally locked up with no vents, making their reaction to things less conducive.”

Dr Pai contends that openings to permit sunlight and a view of the exteriors is vital in ICU too as it impacts recovery as well as sleep cycles if the patient does not know if it is night or day. In situations where it is medically not permissible to provide openings and sunlight, he recommends simulating the sky and sunlight on the ceiling with clouds. “This would reduce stress for patients”, he adds.

Dr Pai insists that any good hospital design should go with the concept of garden, presence of courtyards where patients on the recovery route can be safely wheeled in. “A combination of sunlight, greenery and water has a tremendous impact on mind and speed of recovery. Presence of sunlight also has anti-bacterial effect, reducing hospital acquired infections. However, this needs handling according to specific cases as certain areas like the ICU cannot permit direct sunlight as some drugs will not be stable in its presence. Design matters here.”

Image Credits

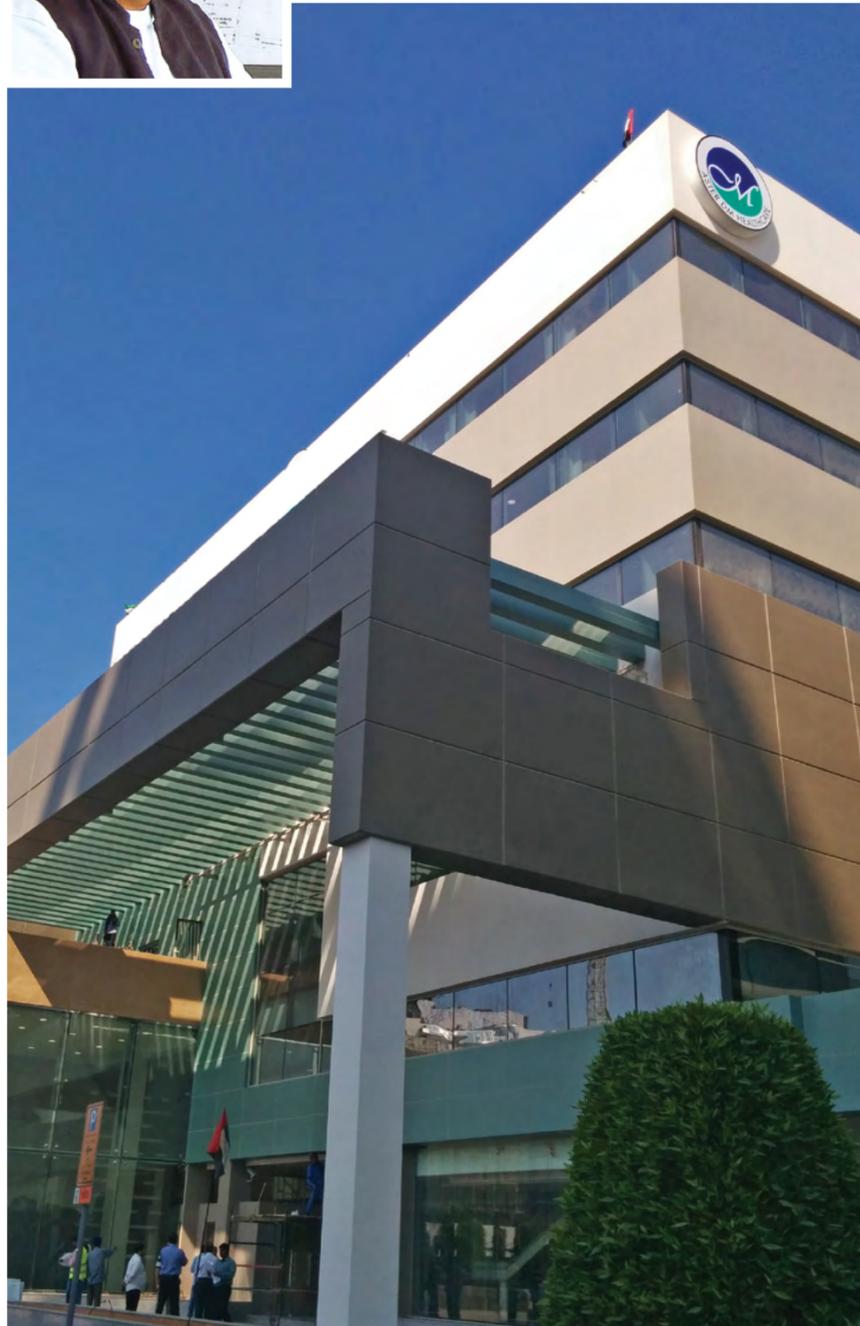
Facing Page: Champalimaud Centre for the unknown: Charles Correa Architects

Above: Stock Image: Pexels.com

ASTER MANKHOOL

DESIGN: ARCHITECT ARUN NALAPAT

FIRM: ARUN NALAPAT ARCHITECTS



This 100 bed multi-speciality hospital spanning 1,90,000 Sq ft, with the latest medical and diagnostic technologies, is the largest Aster hospital in the UAE. The hospital affords easy access to patients and is designed with no high plinth. Large open space with entry set back and a lobby café connected to the street are the first impressions that mark the design. The accent of the design is to create a caring warm ambience. The spaces are vertically connected with the double height, permitting copious infiltration of daylight, the design offering a feel of freshness, positivity, of healing and being stress free through the scale as well as the materials used.

The colour choices exude a sense of serenity, the dull golds close to nature, the surfaces catching the light and creating a warm glow. The textures used emulate the patterns of the desert, with earthy elements featuring in the form of natural landscaped spaces and water bodies. A sense of transparency and serenity runs through the entire theme and this tone is set right at the entrance by the presence of a water feature at the entrance of the hospital.

The built spaces are inspired by the colours and moods of the desert, reflecting honesty with transparency, a personalised care offered with competence delivered by experts.

The accent is on luxury and exclusivity, the design concept extending to the interiors too with the presence of rich wood, warm colours and intricate detailing. The ideology of absence of boundary walls gives the users a feel of friendliness, warmth and freshness.

Exterior View, Aster Mankhool Hospital

MEDCARE ORTHO SPECIALITY HOSPITAL

DESIGN: ARCHITECT ARUN NALAPAT

FIRM: ARUN NALAPAT ARCHITECTS



Located in a prime neighbourhood in Dubai, one of the fastest growing cities in the world, the design was to cater to a young premium private specialty medical facility that offered advanced medical care in orthopaedics. This function and exclusivity is explicitly brought out in the final design of the hospital, offering a space which is rich, luxurious, leaving the patients feeling pampered and cared for.

The fabric sports a mixed used character as the building was originally intended to be a commercial space. The prospect of transforming it of course turned out to be an interesting exercise for the design team. With specialisation increasingly being the vogue, hospitals are veering towards more boutique like facilities that serve as highly focused centres of excellence. Medcare Ortho falls into this exclusive category with its 25 odd beds, technical excellence and exclusive patient care for orthopaedic and spinal injuries.

The interior design reflects this exclusivity in plenty. The objective was to create a luxurious space without appearing opulent, the language one of exclusive care, the ambience overtly hotel like that detracts the visitor from the gravity and intent of a world class



hospital. The central sky lit court offers well-lit spaces that permit moving away from the standard blended pastel shades to darker tones, with more articulated palettes using darker wood options combined with visually textured surfaces, natural looking materials and plenty of greenery.

A laser cut antique silver screen with a wavy yet structured line pattern across the skylight, down into the court and along the tall windows, permit the taming and capturing of the desert sun with its varying moods and shadows across the landscaped area, belying the artificiality of the greenery incorporated. The expansive vertical space of the ground floor lobby and its surroundings allow some walls to be clad in stone like tiles. The consulting rooms too have been detailed as smaller rooms within a taller room, creating a sense of entering a special space.

Above Left: MOSH interior/cafe

Above Right: MOSH lobby

MS RAMAIAH HOSPITAL



DESIGN: ARCHITECT PRADEEP KULKARNI
FIRM: VINYAS ARCHITECTS



Left: MS Ramaiah Hospital, Exterior View
Middle: MS Ramaiah Hospital, entrance
Below: MS Ramaiah Hospital, Exterior View 2



With a built up area of over 6,50,000 Sq feet, with a capacity of 600 beds, MSRH is one of the first super specialty hospitals of that scale in Bangalore. The main hospital block has one treatment wing which is subdivided into 3 distinct zones. The emergency wing placed on the ground floor has an independent entrance, with the OPD coming with a separate entrance that also forms the main entrance to the hospital. The wards occupy the upper floors of the block.



The design is oriented to bring in plenty of natural light and ventilation through presence of internal courtyards and skylights throughout the building. The 7-storied block is North-South oriented with the shorter sides of the building facing East-West. The northern façade is covered fully with glazing that brings flooding natural light into the internal spaces. The

other orientations have lower window to wall ratios to ensure, while sufficient natural light penetrates, the heat is kept out. The basement too incorporates skylights to ensure natural light reaches the lower levels of the building.

The double height entrance lobby offers a sense of expanse, leading further to various OPDs. The operation theatres and ICUs along with birthing suites and blood banks are housed on the first and second levels. A charming terrace garden features over the roof of the entrance lobby, serving as an energizing relaxation zone for the hospital.

The inpatient rooms, with equal strong address to natural light and ventilation, feature from levels four to seven. Day care centres dot the corridors on these floors to aid patients to experience the outdoors.

SHRI SHANKARA CANCER HOSPITAL AND RESEARCH CENTRE

DESIGN: ARCHITECT PRADEEP KULKARNI
FIRM: VINYAS ARCHITECTS



Above: Shri Shankara Cancer Hospital & Research Centre, Exterior View

Located at the heart of the city in an expansive site amidst lush green environs, the 500,000 Sq ft building goes up to six levels besides the two levels in the basement. The 600 bed cancer hospital is designed to incorporate all the guidelines suggested by the Atomic Energy Research Board. The basement floors have LINAC bunkers where radiation therapy is given. These bunkers are designed with walls that have a thickness of 8 feet to keep the radiation contained. The OTs and ICUs are housed on the first floor of the building, with the second level dedicated to research in the field of oncology and its sub-specialities including clinical trials. The inpatient rooms, with spaces for caregivers, feature on the third level upwards. The paediatric oncology department incorporates an integrated play area along with the treatment centres so as to give a certain level of comfort and cheer for the child patients.



GOPAL SHANKAR

IT IS ALL ABOUT THE MINDSCAPE

BY NANDHINI SUNDAR

A recipient of the Padma Shri award for his environment sensitive work, Shankar's structures are totally tuned to earth, the mud blocks, the rammed earth walls, the filler slab roofs, salvaged materials speaking the language of low cost, environment responsive construction techniques, proclaiming loudly the social architect that he is.



KRNNIVSA Building

It is not about the landscape but it is the mindscape, he says, adding, every challenge can be overcome if you put your mind to it. Totally down to earth with intense sensitivity to not just his environs and mother earth but to all the beings the planet holds,

Architect Gopal Shankar of Habitat Technology Group is a man who believes in walking his talk. When it comes to buildings, he believes in getting his hands soiled, physically feeling the earth, discovering the versatility of various materials through personal experience.

Walk with Shankar down the road and you can rest assured there will be many interruptions, with the local people walking up to greet him. He is equally at ease interacting with a local vendor on the street as he is with his clients and fellow

architects. His designs reveal the same simplicity that he lives by yet exude an ingenious handling of spaces, the angles and volumes leaving no doubt about the master's creative, intuitive approach to lending his strokes.

A recipient of the Padma Shri award for his environment sensitive work, Shankar's structures are totally tuned to earth, the mud blocks, the rammed earth walls, the filler slab roofs, salvaged materials speaking the language of low cost, environment responsive construction techniques, proclaiming loudly the social architect that he is.

Born in East Africa, Shankar moved into his native state, Kerala in his very early years. "The initial years were not easy, having

to not only speak in Malayalam but also learn the script", he says, adding, "I was a philosopher with a strong leftist leaning that prevailed even as a young boy. This laid the path to my future convictions and inclinations and partly explains my choosing to be a social architect where I prefer to address the country's social fabric and integrate with it."

He was barely into his teens when many a fisherman's hamlet would see young Shankar enthusiastically interacting with the fisher folk, teaching them to read and write as well as fight against atrocities. The late teens saw Shankar enrolling into the Kerala Shastra Sahitya Parishat, where he worked with tribal people who seemed to have no future. "My first interface with acute poverty was during this time." His penchant



NISH: Academic Block Side

for predominantly low cost housing projects is an offshoot of these associations, experiences and resulting convictions.

“Nearly 80 per cent of Indian buildings are made of mud and biomass, which is a staggering figure. Besides, my experience with mud gave me an insight to its versatility, though there is no proper documentation of the technique of using it or about its inherent tensile strength. My tryst with mud began with these realisations.” He however adds, “Mud has its own challenges in terms of being attacked by termites, losing its strength when it is drenched; challenges that need to be worked around.”

Interestingly, the incident that catapulted him to architecture was a visit to his friend’s residence where “the structure was in total variance to the conventional rectangular buildings that marked the landscape at that time.” The architect behind this unconventional building was none other than the renowned Laurie Baker. There was no looking back for Shankar from architecture after that, with Baker continuing to be a major source of inspiration for all his future strokes.

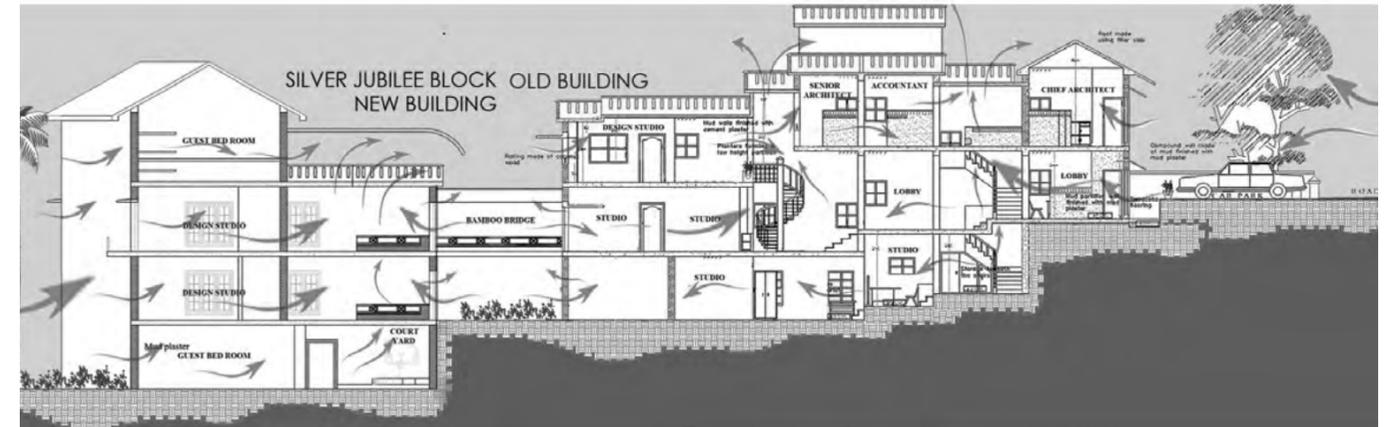
The fact that mud, besides being totally environment friendly also had its own fascinating features, appealed to Shankar, prompting him to use it in majority of his structures. “The vocabulary of the material is so sensuous, in terms of it being mouldable, even with

bare hands, the physical experience of it giving insight to its innate strength. The multiple colours and textures in which mud manifests again adds to its irresistible appeal”, contends Shankar.

His very first project interestingly was a single storied, studio house built at an unbelievable price of Rs 11,000 in year 1988 along the seashore. “That project is special as it is also the first structure using low cost construction techniques.”

The ingenious handling of a given space and designing a structure that craftily adapts to the contours of the site is most evident in the way he has constructed his office. Built on an extremely narrow strip of land that measured 28 feet by 60 feet with a gradient that was equally sharp in its differential levels, one end being 30 feet higher than the other, his office displays total mastery of strokes that are in an inseparable tune with nature.

“Given the narrow dimensions of the site and its steep gradient, the site was not saleable and was used as a dump yard. We chose it and structured our multiple spaces where the front end ground level is on the same level as the third floor of the rear end”, smiles Shankar. Multiple skylights and air vents mark the interiors deftly connected visually at all levels. Mud bricks and rammed earth form the walls, while mud plaster with a rich mud texture features in the first half of the building. The interiors are copiously naturally lit with a strong



Trivandrum office: Elevation



Trivandrum office



Trivandrum office



KRNNIVSA Building



NISH: Courtyard

play of wind that keeps the interiors cool even on extremely hot days. Incidentally the multiple level mud block and rammed earth structure is erected without the conventional columns. "That is the strength of mud which many are not aware" states Shankar.

His project National Institute for Speech and Hearing (NISH) evinces similar sensitivity in material use as well as design. "Having to meet the needs of differentially abled children, the spaces had to be cheerful, flowing, connected to nature while meeting their specific requirements", says Shankar.

The resulting structure is totally earthy with abundant internal courtyards opening out from the curved corridors, the jaalis in the exposed mud brick walls infusing a sense

of connectivity and openness while offering the required privacy to individual sections. The external courtyards display similar cheer, not only in manner of placement and design but in housing some of the stunning sculptures crafted by the children. Like his office building, this multi-level exposed brick structure is free of conventional columns.

The Asha Madhusudanan residence is a design that clearly shows limited space need not translate into cramped interiors. The uneven gradient and contours of the site were retained while giving the interiors an expansive feel by fusing in the living, kitchen, dining as well as the study and reading spaces. "Space being a constraint, the living area could not accommodate conventional sofas. The seating was

hence fused into walls, offering more seating spaces while cutting down on the consumption of free moving pathways", he says.

Since the natural gradient of the land was retained, the free flowing interior is multi-levelled, deftly demarcating functional spaces. The presence of a natural rock that prevailed in the site further brings in freshness of outdoors in the sky lit area while French windows placed at the highest level open on to a vertical garden, carrying the eye across to a charming green backdrop. Given the placement of strategic vents, the interiors enjoy copious natural light and ventilation.

"A point to be noticed here is, the structure of the residence adopts low cost building



Mahan Township: Hindalco, Singrauli



NISH: Classroom Door



A Housing Project in Kottayam



NISH: Main Block Front View



CCDB Building in Dhaka, Bangladesh

techniques, yet the ambience exuded by the space is one of high end. This only reiterates that association of low cost techniques with a dowdy ambience is a myth”, adds Shankar.

Similar low cost building techniques are displayed in the Colonel residence where exposed bricks bring in abundant charm. The three level contemporary themed structure, free of conventional columns, appears anything but low cost in its final evolution.

His Earth Building in Dhaka is incidentally the largest earth building in the world. The six storeyed load bearing mud structure housing 6 lakh Sq ft of space is built without columns. “The locally available mud was used in construction and since the clay here is pale yellow, the mud plaster gives a different colour to the building” says Shankar. Interestingly, the region invites 8 to 9 months of copious rains, “yet the mud structure is standing strong for the last decade.”

Shankar’s residence, currently in the finishing stages of construction, is certainly the icing on the cake in its fluid design and planning of the spaces, the mud blocks and rammed earth two levelled structure standing in its flowing magnificence, a silent testimony to the beauty

raw earth can lend to a building. The mud blocks are used without a binding material, by opting for the inter-locking system. Flowing mud vaulted roofs, mud fin walls, strategic vents in the form of sky lights and punctures on the walls mark the spaces, flooding in natural light and ventilation. “Since construction is still on, the final finish of the structure is still evolving”, smiles Shankar, indicating the way his designs continue to evolve through the construction process.

Recipient of multiple awards ranging from the Padma Shri, UNDP award for the Best post tsunami rehabilitation work in India to the recent National award for the Best Eco City design in 2015, Shankar has focused a significant part of his work on large scale housing that address social housing. Given his leaning towards social projects, it is not surprising that Habitat Technology, which functions as an NGO, is deemed as the largest NGO addressing design in the country and overseas.



KRNNIVSA Building

USABLE TIPS FROM THE MASTER

- Termite attack common in mud construction can be arrested with neem cakes. Crush neem seeds and soak in water for 24 hours before mixing in mud used for the structure. Neem oil or lime can likewise be mixed with mud.
- Water soaking into the mud walls can be prevented by infusing large overhangs, non-erodible mud plaster. Addition of bitumen to the mud mix is equally effective. Mixing kerosene has a double impact of keeping out pests as well as offering protection from water soaking.
- Mixing hay into the mud prevents shrinkage of walls, as well as development of cracks while offering a rich texture.
- The quality of the mud can be tested by colour, smell, even taste. Its bonding strength and malleability is evident when rolled into a strip. Sedimentation test indicates the extent of clay. Higher presence of clay can be altered by adding lime proportionately.



Hotel Mana



STRIKING STROKES OF A YOUNG MASTER

AKSHAT BHATT

BY NANDHINI SUNDAR

He is only 36, but the list of awards to his credit belies this age, the designs displaying a maturity far beyond the years of experience. **Architect Akshat Bhatt of Architecture Discipline** firmly believes that designs emerge when done to suit a specific requirement where the starting point is a given principle without a deliberate attempt to create something iconic.

To Akshat, design is rationalising each step where it offers a structure that is best tuned to meet the stated need. “But if the intention is to do something extraordinary, you are starting on a wrong platform”, he adds. “The principle on which the design is based receives validation by the awards it attracts.”

For Akshat, design inclination is finally a dialogue struck with the context and user. “Knowledge has to be refined to create this dialogue. Even if there is desire to make a statement, it should be one that can be understood.” He cautions against shirking responsibility over this dialogue as well as context and the relevant material used.

Speaking on technology, Akshat opines, “Technique is personal and is based on how you understand and use technology. The design comes where the technique of usage brings forth that personal expression. Unfortunately we undervalue this technique.” He insists that the structural part is most important as it forms an integral part of design.

“Each technique is simple yet has an inherent complexity. There should however be no complexity in the manner of engagement of the space nor should technology overpower the space. But technology should shape design.”

While designing, Akshat believes it should be a design that lasts. “The time factor is very important, especially a public space. Even in a residence it should accommodate future needs. Designs should be free, transparent, open and pristine but there is also a limit on how to use a space that is too large. The planning of our spaces is fluid, yet there is privacy with inclusive and exclusive spaces fused in.” He further adds, “In open plans



B23

modulation happens in layers, with the experience happening when the design is seen from different angles. When you open a space, your body tends to turn in a certain way. Getting that down intuitively is the incredible bit.”

Having graduated in 2002, Akshat started his own studio in 2007 with one strong conviction, that it is individual talent, commitment, hard work along with an inherent driving force to make a mark that brought in results followed by laurels. His decade old practice proves his convictions to be right to the last letter.

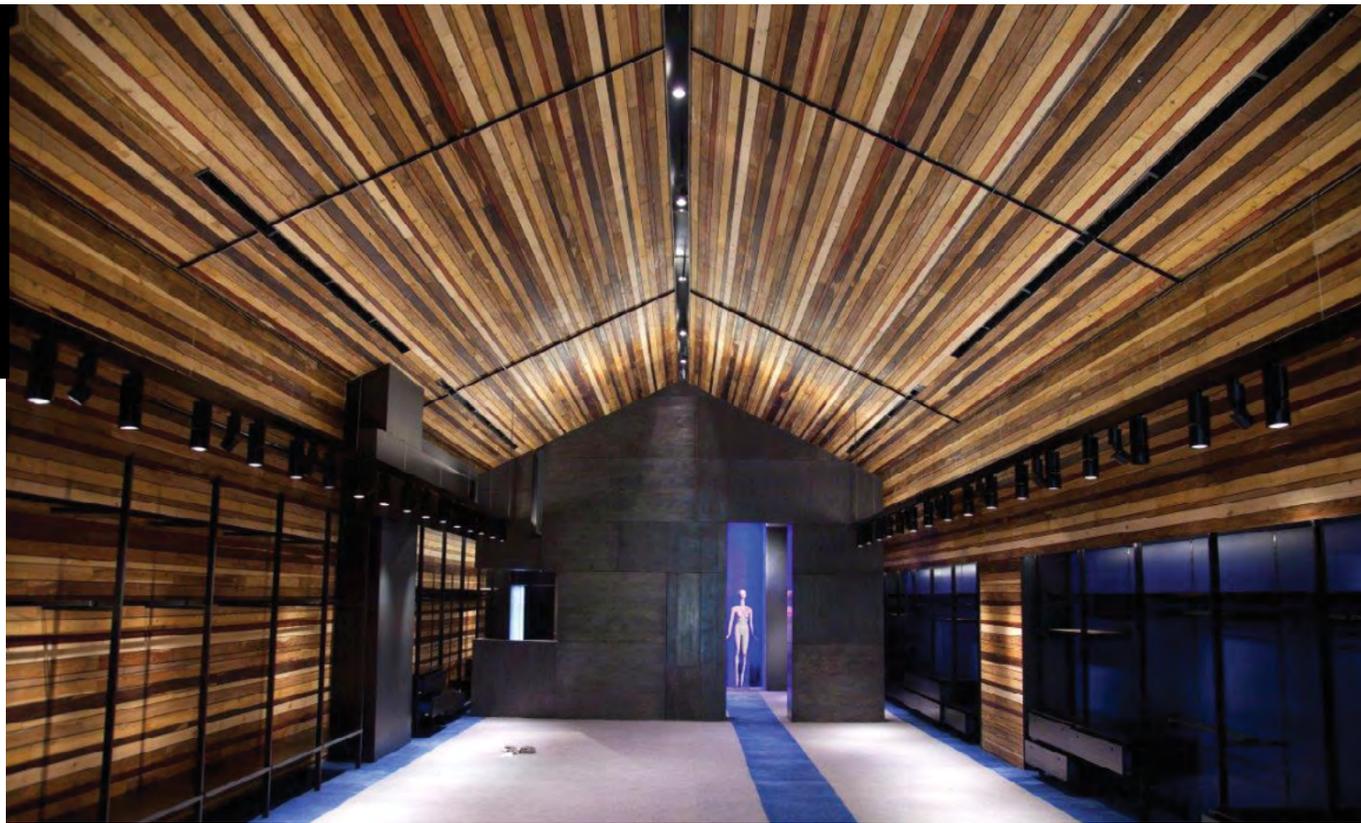
His project Mana Ranakpur is an attempt to bring in regional expression in a global context, where the intervention is not tasteless, construction techniques are not predictable, environment sentiments accorded high priority, the local and regional forms of expressions are explored as vital resources to create an architecture that engages with the future and is of a progressive disposition. Located in the scenic valley of Udaipur, the boutique hotel offers a design that exudes a slow paced time frame with strong vernacular sentiments that serve

as a stoic backdrop, where the form as well as the materials used feature amidst dramatic changes in seasons as well as landscape, creating a unique, iconic experience for travellers in all seasons.

“Being a reclaimed riverbed, the site was challenging with the water table at 600mm”, says Akshat. “While local sites represent solid stone in an intense and intricate manner, the hotel is evocatively fabricated in frugal stone masonry that is locally available, serving as a timeless expression, a contrast between the old and the new, the light against the heavy, in a spectacular changing landscape occurring through the year.”

The residential project B23 is one that effectively addresses an active dreamer. Standing as a tribute to the 70’s Indian Modernism in its contemporary theme, displaying exemplary style and beauty, serves as an extremely interactive home for a close knit joint family, embracing their roots while simultaneously being progressive. Though giving the impression of transparency in the design style, the residence actually provides ample privacy amidst the expansive interactive spaces.

“Technique is personal and is based on how you understand and use technology. The design comes where the technique of usage brings forth that personal expression. Unfortunately we undervalue this technique.”



Neel Sutra



India Pavillion

Sunlight streams into the interiors in different modulations depending on the time of the day, while the glass used is heat reflective. With everything having been crafted on site, not surprisingly, the stone used too was developed primarily first hand by using crushed Mother of Pearl extracted from oysters collected from local vendors and cast in mosaic. The flooring is made from waste wood, offering an environment friendly option.

Emblematic of Indian design ethos is Neel Sutra, an Indian fashion store complementing through its design the themed and curated collections displayed. The design ambience is distinctive, making

it stand apart amidst the global hi-design brands displayed in the shopping quarter of the luxurious five star hotel. The store is envisioned as an austere House of Indian fashion employing the hut as a rudimentary notion of a shelter, with facets of Indian design ethos serving as architectural interventions. To address the evolutionary nature of the space brought in by its changing collections, a perception of order and Indian tenet is endowed through a play of scale, materiality and technique.

The entrance has a rendering of the surfaces with multiple shades of the forgotten eleven timbers of Indian origin. The central space is



India Pavillion

left vacant for topical display, generating a scale that alludes to the pitched roof, insinuating the home for Indian fashion. The hut wall mimics the elevation of a house with a window and is clad in distressed zinc simulating the Indian fabrication experience.

The project Discovery Centre depicts amply his belief of making buildings last longer through the utility of longer life span materials. The design here exhibits cultural continuity and creates a built form that need not be conditioned and spruced up periodically. Given the design brief of a flexible town hall that would be placed only for 6 years in the expansive 125 acre site, post which the building would be relocated, the structure was essentially an assemblage of parts. Instead of being placed on the edge of the site as an open flexible structure, the Discovery Centre is placed at the heart of the site to engage the visitor right through the development. The design intent here focuses on creating a progressive experience demonstrating the high quality of life. Innovation is hence crucial, creating something that is very distinctive in form, colour, revealing

a narrative of the township. An egg shaped auditorium was thus conceived amidst an urban plaza. Red being a strong colour, the single flight of steel staircase is in red, standing out along with the regional granite, inviting the visitor to enter and explore.

The longer life span materials have been used in a modular manner, taking modularity beyond the theoretical understanding to a more literal level while earth fill forms the plinth, putting to use all the earth dug up at lower levels. Trusses cover the large 20 m span of the 90 m long building, keeping the roof light, permitting natural light into the double height space and deck. Discovery Centre along with Mana Ranakpur received the World Architecture Community award.

Year 2015 saw Akshat assigned the task of designing the India Pavillion at the Hannover Messe. Not surprisingly his project was judged the best pavilion in the 65 year history of Messe. The achievement culminated in a felicitation by the Minister of

Trade & Commerce and Department for Industrial Policy & Promotion. Year 2015 also saw Akshat cornering two JK awards, one of which was Young Architect of Year. Incidentally, Akshat was the recipient of the Young Architect of the Year award in 2014 too. This is besides the multiple awards cornered year on year since he set up his studio in 2007.

Interestingly, architecture is not the only passion of Akshat as revealed by the huge collection of guitars in his music studio, some of which are totally unique pieces, handpicked from across the world. "It is another passion I indulge in when not designing structures", smiles Akshat.



Discovery Centre



Hotel Mana



Hotel Mana



Hotel Mana



India Pavillion

CONVERTING PASSION TO PROFESSION

GAYATHRI SHANKAR

BY NANDHINI SUNDAR



“Artists tend to shy away from three dimensional artworks as the effort required for this is far higher. Even if three dimensional pieces are sought, the tendency is more to restricting it to semi-three dimensional paintings”, says **Gayathri Shankar**. “The area of use of Tanjore paintings is immense, limited only by our own creative thinking and appeal.”

She was just a child, barely twelve, when her intense artistic inclinations prodded her to pursue her leanings with a passion that would later transform the same into a profession, catapulting her to the status of an acclaimed artist in traditional art form. **Computer analyst Gayathri Shankar** is a self-taught Tanjore painting artist, where the art was mastered by her tireless pursuits that lacked formal training, yet brought in a finesse that befits a perfectionist who will rest at nothing short of reaching the highest level of delivery.

Sheer interaction with artists and relentless trials and experimentation, that involved many hours of dedicated work to correct the ever prevailing errors, offered Gayathri the final knowledge of creating these

exquisite pieces of artworks. “It was a major challenge, not having been formally taught the mode of doing the painting. The journey involved meeting multiple artists, interacting with them, observing their work, posing queries and returning back to replicate the technique and perfect the same”, smiles Gayathri. When errors arose, not having a formal trainer, Gayathri had to also find the solutions herself, researching, experimenting and fine tuning them. “The commitment had to be total and intense to learn without formal training”, she adds.

And errors, there certainly were plenty but Gayathri remained undeterred as “every error taught something new and aided in perfecting it better.” Not surprisingly her initial forays threw up cracks in the board,

patches emerged, many of the stones laid would get displaced, many times at the very end of the artwork. “It was certainly heart breaking when such things happened and unfortunately such things happened quite frequently in the initial periods of my learning. But every error taught me something, helped me perfect more, taught me patience, aided me to offer the extensive effort that is integral to Tanjore paintings.”

The tireless, dedicated work certainly paid dividends, as witnessed by her workmanship in each art piece. Whether it is the manner of laying of the semi-precious stones, the gold foil or the perfect facial features, Gayathri’s work stands a class apart in traditional Tanjore paintings. Having achieved perfection in the two





dimensional Tanjore paintings, Gayathri was restless to try her hand at something more complicated and thus started her experimentation with three dimensional Tanjore paintings. "Artists tend to shy away from three dimensional artworks as the effort required for this is far higher. Even if three dimensional pieces are sought, the tendency is more to restricting it to semi-three dimensional paintings", she adds. Incidentally, the three dimensional pieces crafted by Gayathri are not cast through a mould but simply moulded with fingers, revealing further the dexterity of her hands.

Tanjore paintings invariably reflect traditional artworks but Gayathri wanted to pursue beyond the traditional dimensions. Thus, modern depictions as well as design styles have been actively explored,

implemented, the same prevailing as distinctive decorative pieces in the form of furniture, tile cladding. "The area of use of Tanjore paintings is immense, limited only by our own creative thinking and appeal."

Her Tanjore paintings thus prevail as table tops, tea coasters, runners, on wardrobes and doors, as miniature wooden figurines, as embossed features on floor and wall tiles. The paintings displayed on these mediums are not covered by glass to offer protection but instead given a weather proof coating that safeguards the artwork. "This applies even to those embedded on the wall tiles in the bathrooms."

She has successfully used these paintings on large flower pots, lamp shades, on furniture but insists that she is still in the process of

perfecting them. While Tanjore paintings, given their inlay of semi-precious stones, gold leaves, bring in a sense of grandeur to the décor, Gayathri also likes to experiment with other mediums such as crafting murals from waste cloth, discarded cardboard, metal pieces, small stones, sand and even the most unlikely material, coffee powder. The art pieces made from such unlikely materials are silent testimony to her intense creativity as well as innovative streak.

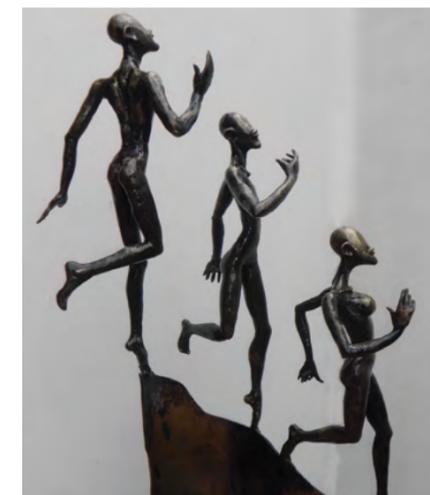


SCULPTED TO SET FREE

DIMPY MENON

BY NANDHINI SUNDAR

"Bronze has been the perfect medium to express my thoughts despite it being time consuming and arduous. The age-old lost wax process has been a continuous learning for me. With each work, a new facet is revealed.", says **Dimpy Menon** The featureless faces of her spectacular figures convey more in their form, the language of the rhythm and movement displayed in stillness being more profound than a candid expression revealed on the face.





It is a language of freedom, of breaking free of all the shackles and reaching out to the skies, in a fluid motion of gay abandon. It is a language that equally evokes wonder as well as joy, of beauty and indisputable skill, of creativity and fine taste. It is a range of bronze sculptures that are lovingly handcrafted after being cast into the mould, the desired emotions pronounced loud and clear on the featureless faces of the artwork.

Sculptor Dimpy Menon makes no attempt to curb this intense positivity, a sense of bliss in her sculptures, the figures sculpted to infuse this boundless joy in their beholder, almost prompting the viewer to break free and pursue this transportation to the next dimension.

“For me life itself is an inspiration and what richer way to depict this than through my works and eternalise it”, smiles Dimpy. “There is a sense of celebration in my work because I believe life is a celebration.” She further adds, “Low moods are not inspirational. It is the feeling of joy that is boundless, and that is what I like to capture in my work.”

Dimpy, who graduated from the College of Art Chennai in 1986, has been exhibiting her work even before, starting with her first solo show in 1984. “My five-year course in Chennai was a very rewarding experience. The campus, with its old buildings and expansive library, well-equipped studios and the freedom to explore the various forms of art helped find your calling,” says Dimpy. She worked in Bangalore, Chennai, Delhi and Dubai before returning to Bangalore in 2002 to set up her own studio.

Dimpy knew early that her forte was sculpture, particularly bronze although she also paints and does etchings. “Bronze has been the perfect medium to express my thoughts despite it being time consuming and arduous. The age-old lost wax process has been a continuous learning for me. With each work, a new facet is revealed.” According to her, it is also fascinating as “there are tense moments before you break the shell. It is like giving birth every time! Despite having done this for over three decades, the thrill has not diminished.” The job does not end with casting, the sculpture needing to be finished. This is

where the power tools, the chiselling and filing come in. “You have to work on the imperfections to bring it to the original form.”

Most of Dimpy’s sculptures are on a massive scale. While the larger pieces need to be made in separate parts and put together, the techniques followed are the same as for the smaller works. “I work on the pieces to the last grain of filing. This gives me a sense of ownership as well as satisfaction as the entire sculpture is mine.”

Interestingly, Dimpy approaches her massive pieces that are hoisted up, almost defying gravity, without worrying too much about any scientific computations. “It is an intuitive understanding of physics. I feel if I can visualise the work in my mind, I can make the whole sculpture work.”

Nevertheless, she still has had quite a few challenges in installing some of the extra heavy pieces, raised as they were to appear almost in thin air, reaching up to the skies with merely a few inches of their metal bodies attached to a support.



“For example, a composition of figures each seven feet tall had to be attached to a ribbon that projected 3 feet from the wall. The challenge was to find the point at which the load would be borne by the ribbon. Often I do a dry run of the installation in my studio,” recounts Dimpy.

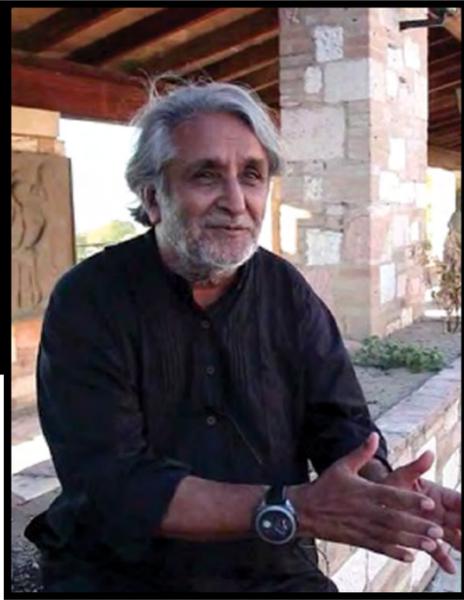
She faced similar challenge with another composition involving two figures, a man and a woman, soaring up to the sky. The sculpture depicts the woman suspended from the ceiling some 20 feet high, throwing the ribbon to the male figure leaping from the ground, the ribbon forming a fluid arch under which people walk.”

The figures, weighing close to 200 kg each posed quite a challenge on the site. “The final execution is an illustration of this intuitive understanding of how these sculptures can be contained in a space”, smiles Dimpy.

While her final execution is certainly intuitive, so is the language conveyed by her sculptures, bridging the gap between heaven and

earth, of being earth bound yet set free. The featureless faces of these spectacular figures convey more in their form, the language of the rhythm and movement displayed in stillness being more profound than a candid expression revealed on the face.

Last October, 2015, saw Dimpy winning the Lorenzo il Magnifico Bronze award in the Florence Biennale, becoming the first Indian sculptor to do so. The festival had over 450 artists from 64 countries participating. Dimpy is also the recipient of the Lalit Kala state award for her sculptures and painting.



Designing for the masses

IN CONVERSATION WITH

ARCHITECT KIRTEE SHAH

Is architecture the privilege of the elite, should architects be more concerned about semi-urban and rural segments too? How sensitive are architects' designs in their address of location as well as sustainability? Does our architecture education need rethinking? **Architect Kirtee Shah of KSA Design Planning Services** addresses a range of queries that often bother many a designer in a lengthy chat with **Antarya**. Architect Shah is also associated with Ahmedabad Study Action Group (ASAG) and Habitat Forum (Inhaf).



A drawing done by a flood affected slum child depicting the flood, the transit location and her dream house.



Q. Historically architecture has addressed the elite, design being more of a pursuit of the privileged than under privileged. Do you perceive this as a bourgeoisie element in architecture?

Not many architects today know or recognise the “service” part of their profession. The business part is their main preoccupation. However it needs to be understood that history of architecture is the history of monuments as well as monument makers. In short there is no getting away from the masters and celebrity

architecture. While such a monumental architecture of the elite minority is not going away, the architecture of the majority is emerging, something that always prevailed but was not recognised.

The ‘non-designed ugly’ part of the city, the utilitarian buildings designed by non-architects have always been the overwhelming majority over the designed masterpieces. This has existed over centuries and there is no reason why this will not continue. Architecture as a subject,

as an art form is too big for me to comment on. But the architecture profession as we perceive and practice it certainly needs a rethink, a paradigm shift.

Q. Across the globe architecture has eluded semi-urban and rural segments, raising the question, who does the architect work for? How can this be altered?

Architects are concentrated mainly in big cities and their clients are not the middle or lower middle class but the wealthy, forming the upper crust of the society that forms one to two percent of the population. This does raise the question, what about the others, don't they need services of an architect, wouldn't an architect's expertise make a difference to their buildings?

Take for instance the Indira Awas Yojana (IAY) which is arguably the world's biggest housing program. Every year nearly 2 million new houses are constructed under this program at an investment of about Rs.15 to 16000 crore. The program serves the homeless and the marginalised sections of the population. The question here is, how many architects know the purpose, scale and problems of this scheme and how many have attempted to do something to address it? How many have approached the government with suggestions of corrective measures to improve processes and performance?



If architects do not offer active participation and evince interest in matters concerning the housing needs of the masses, who else will?



How many architect associations have dwelt on this massive program in the past 30 years? If architects do not offer active participation and evince interest in matters concerning the housing needs of the masses, who else will?

Q. Rural houses reflect strong climatic, locational sensitivities, the structure and design sustainable, combined with a fine display of tribal art in many cases. Such rural heritage is however dying. How can this be revived?

Architecture has to belong to the place, to the soil, the culture, tradition and most importantly to the local people. Unfortunately, with the influence of designs from the West, architecture in our country is fast losing these roots, culture as well as locational and climate sensitivities. Here, Laurie Baker's design and approach merits mention. Baker gave new respectability to local materials, especially brick and clay tiles. His architecture merged with the surrounding landscape, being in harmony with nature. He improved and

popularized technologies, be it rattrap bond or filler slab, saving material, reducing cost while creating new aesthetics.

He challenged conventional engineering design, practice and wisdom by using 9" and 4.5" thick brick walls as load bearing structures for buildings taller than a single storey. Most importantly, he gave a new status to traditional construction artisans, especially masons, by working with them in inventing and popularizing alternative construction methods. He professed that



architects could learn from artisans, masons and carpenter, something we had never thought of.

He was a pioneer of sustainable architecture as well as organic architecture, incorporating even in the late 1960s, concepts such as rain-water harvesting, minimizing usage of energy-inefficient building materials, minimizing damage to the building site and seamlessly merging with the surroundings. Our current day architects have plenty to learn from Baker's sensitive designs.

Q. Design of urban spaces, especially major metros leave much to be desired. How can architects and urban designers contribute to create better and more public friendly spaces?

Decades back in a seminar on Design for Development at NID in Ahmedabad, Romesh Thapar, a public intellectual, asked a question on the role of the designer. Concerned about the emerging ugliness of urban spaces he asked, "What does a designer do with the waves of vulgarity invading our cities? Is his/her work restricted to putting up one well designed structure among hundred ugly ones or to work towards sensitisation against the invading ugliness?"

This question has become even more pertinent today along with the question, what are we doing about it? Smart Cities and Amrut programs notwithstanding, cities are currently facing a losing battle. Mumbai has half the population living in slums.

Delhi has its air so polluted prompting the High Court to describe it as 'Gas Chamber'. Varanasi requires a special ministry to address the cleaning of not only the Ganges but its city too. The point here is what role are architects playing to address these, both individually and collectively?

Cities, as they grow, need care as well as ideas and innovations to correct an erroneous growth pattern. Builders, politicians and officials cannot be left to develop them. Architects have a massive role to play, with their training, to make cities better places to live and work. It is not enough to say we are making our buildings look good. This is like saying we are not starving when confronted by the spectre of widespread poverty and hunger. We need to question, participate, contribute.

Q. Many designs tend to veer far away from environment and locational sensitivities. Similar insensitivities are seen in cost consciousness in the design solutions offered. How can this approach be changed?

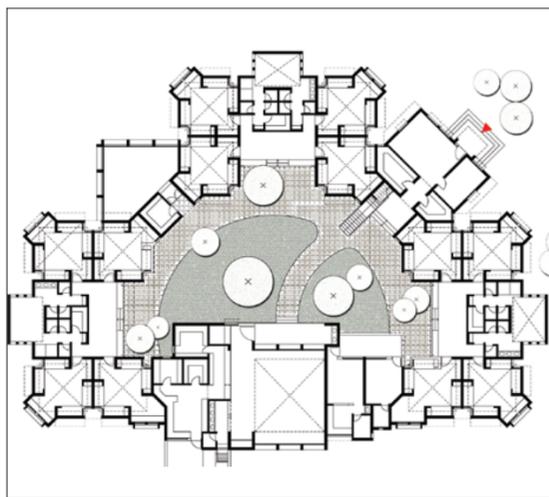
Most practicing architects understand little and care even less for the external environmental factors such as climate, energy, water while designing. Many are victims of western influences that make them practitioners of often unsuited inappropriate styles. Like a curtain wall glass façade that necessitates over working of the cooling system, or the design solutions that lack cost consciousness as many times such conscious efforts are viewed as inferior, more a preoccupation of struggling architects.

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Many architects are also not in tune with local sensitivities and materials, the demands of climate, energy crisis, resource crunch, divorced as they are from the rich local traditional practices, thus offering lifestyle choices that are in total variance with local requirements. These need urgent address and rectification through increased awareness as well as hands on involvement.

Q. Architects' work environment, many times, tend to be stifling, with the need to comply with local regulatory mechanisms, impacting creativity, innovation. How can architectural associations aid in altering such regulations to bring in more design sensitive policies?

Not much is said or done about the institutional environment within which architects operate. It is highly restrictive and constraining but to change it, architects are doing precious little. This pertains to the regulatory framework that includes building



by-laws and regulations, the building permit system and the compliance monitoring mechanism put in place and managed by local bodies and urban development authorities. The system is structured to kill design, creativity and innovation.

For instance, the stipulations and provisions are kept deliberately vague. Interpretations vary from officer to officer, desk to desk, time to time. Arbitrariness is the order of the day and corruption rampant. Yet, there is little public articulation of concern and even less joint action with other stakeholders, by the architect community, to protest, mobilize opinion, find and present alternatives to influence change.

Unfortunately, architects are the most qualified and equipped to bring to the

notice of law framers that supportive by-laws and building regulations go a long way to make cities beautiful, the urban forms richer, something administrators admire in foreign cities but fail to promote the same here.

Q. A fair number of our Architecture schools espouse designs of the West as compared to indigenous ones, reducing awareness of local design sentiments amongst students. Is there room to relook this format and explore more workable solutions pertinent to our urban and rural scenario?

Architects continue to look westwards for ideas, inspiration. While there is nothing wrong, especially in a globalised world in doing this, it is however crucial to be firmly rooted and have a reference frame to make

balanced choices. The western ideas and solutions may not always be relevant or workable in the local context.

Our architecture education too is currently removed from contemporary societal and even sectoral challenges. It unfortunately carries a hangover of the Colonial past that comes with a mind-set of looking down upon local indigenous solutions. The question arises, how much of our architectural and planning education is local and indigenous? These issues require address by our institutions and architect community.

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Can Council make the Difference?

IN CONVERSATION WITH

ARCHITECT UDAY GADKARI

It needs a lot more than common wisdom and commitment from Council of Architecture (COA) if a genuine change is to come about, says **Architect Uday Gadkari, former President of COA** in an interesting chat with **Antarya**. The understanding as well as patronage of the government is required, he contends, along with a change in perspective of the profession where engineers are considered equally competent to design and carry out the work of an architect.

Q. To bring in active transformation of public spaces, best designs need to be ushered using expertise of talented architects. But competitions held for designing public spaces work towards deterring the best and young minds of the profession from participating by specifying turnover and experience, instead of design ideas. How can COA address and alter this?

We are trying hard to ensure that there is fair and transparent competition where the best of the talents get to participate. In this regard, we are in active dialogue with the government that the norms need to be set by COA. Unfortunately, all the departments of government look for the easier option of employing a person who can offer all the services as a package: the design, construction and project management.

Not many architects have the above services coming under their bandwidth. A young practicing architect may come up with a brilliant design and display young emerging talent but will not be able to make headway under present scenario because of the stage and level of his practice and bandwidth. If COA has a clear mandate, such things will not occur as their selection basis will not be infrastructure that the architect can offer in terms of project management but rather

competence and the quality of design put forth. This situation can be remedied only if a very strong council makes the intervention happen.

Q. Many bye-laws in a metro hinder creative, innovative execution of designs by architects. How can COA sensitise governing bodies on the same and bring in more design friendly policies to offer better urban spaces?

This is difficult as firstly, the Architects' Act enacted by the parliament in 1972 envisioned only the architect to design a building but this was protested by civil engineers as literally all municipal bodies had engineers and even surveyors designing the buildings. The 1972 Act then had an amendment which stated that no one can use the title of architect unless qualified but it did not prevent one from designing even if one is not an architect. This was taken advantage of by engineers and others who are dominating the building industry by virtue of their numbers and this is not auguring well for the quality of design.

Secondly, the nodal ministry for architecture is the HRD Ministry which is not appropriate or relevant to design of buildings or urban

planning. We should ideally be linked to the Urban Development Ministry and only then the recommendations of the COA will be heard and implemented. Currently many of our resolutions are approved by the HRD ministry but the town planning departments in the states, who are in-charge of stipulating bye laws do not pay heed to them as they are willing to implement only those resolutions passed by the Urban Development Ministry to which they report to. Unless this fundamental flaw is corrected, we cannot make much headway.

Q. The manner of use of civic amenities sites should technically be the prerogative of neighbourhood residents. Not only do residents have no say in the matter, these sites are used to meet needs of governing bodies, negating the purpose for which they were assigned. How can COA prevent this and aid in bringing residential participation in designing them?

Community design should take place on neighbourhood pattern. We have no provision for the common citizen to participate in the project approval. For neighbourhoods to be appropriately addressed, Urban Development Ministry and Institute of Town Planners India, should come together in agreement over issues





and empower the local governments for approval of projects of significance and public interest. Unfortunately here again road blocks come in. The Institute of Town Planners India has a large number of both architect and engineer planner members. Yet, while it is a professional body, it does not have statutory position to implement its say. Besides, misunderstanding also prevails in its relation with COA which needs address.

Secondly, COA also has to work in tandem with other bodies working for urban development to bring in a change. We had many joint programs over the last few years and MOUs were signed with relevant organisations where we could work together. INTACH is one such where we had an

understanding over heritage architecture and executed some projects.

Q. Currently local governing bodies do not have separate teams of practising architects as part of their team to influence design of urban and public spaces. How can COA alter this and ensure a team of practising architects are on board besides the Corporations' regular cadre of architects.

In all the municipal bodies, housing boards and corporations, either they do not have an architecture wing or if they have, they do not have competent architects. Further, those who currently scrutinise proposals from architects in these bodies are either not architects or are not competent architects with very little or no faculty of understanding and appreciating

good design. For public projects, in-house architects are merely used for making a design proposal after which the engineering department takes over the entire execution of the project. They make changes in the design, specifications, technology and materials. Hence what finally gets executed is totally different from what the architect had envisioned. Private practising architects are never involved in the process as advisors.

As a result, not only architects employed by the government are disillusioned, there is also no parity with practising private architects, either in pay, recognition or execution of designs. Invariably they have no incentive to deliver and projects are then passed on to private architects. Here again



the method of selection of the designs is suspect as it is 'influence' that finally rules rather than competence. Unfortunately, even the architects nominated by the government to the COA do not have will to influence a change.

Q. MNC's with their foreign architects bring in fresh designs and an idea of aspiring to excellence in quality that can alter set beliefs and mode of working that may be set in mediocrity. But how can this factor be balanced by COA to disallow them from monopoly, yet allow their controlled participation for idea sharing.

Our Act determines that only a person registered with COA can practice in the country. Unfortunately no one follows this. If this is brought to notice and the concerned

person is prevented from practicing, COA is labelled as being narrow minded. If they do not register, there is no background check on the foreign architect, which is important. There is no answerability in such scheme of things. Their competence, technology and portfolio are appreciated but why not follow the rules laid by the COA and register, so that it is mutually beneficial? Unfortunately the rules of the COA are not followed even by the government in their practices. Many a time in such situation, it is the Indian architects who are actually doing the work for these foreign architects but credit is taken by foreign architects.

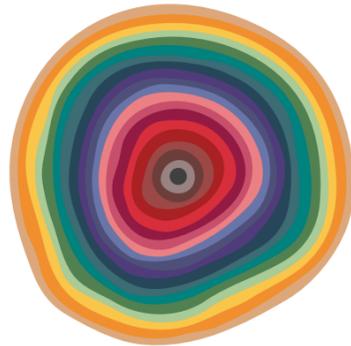
Q. How do you see the COA ten years from now?

Every president has to do his share. How

diplomatic they can be to make government understand the issues and get things done is important. The COA was established in 1975 with the first president Architect J. R. Bhalla continuing in the position for 16 odd years. I was the seventh president. The eighth president has now taken over. As a body which is ethical, comprising 50 odd people from various corners of India sharing common wisdom, COA will be stronger but to sustain and thrive better, it needs better support from the government.

THINKING OUTSIDE THE BOX

CELEBRATING 20 YEARS OF RADICAL THINKING



**SRISHTI
EXPO 16**



It was a celebration of twenty years of radical thinking in art, design and technology, the annual Srishti Expo 2016 hosting as its theme **“Generating Alchemy”** suggesting a perennially unfinished state of art that induces an unquenchable thirst for innovation and perfection year after year. It is not surprising to see the alumni of Srishti embarking on an unending journey of exploration, the artistic works offered standing out equally for their peculiarity as well as creative genius.

The 2016 Expo displayed these traits in plenty, be it in the form of banana fibres serving as luxury clothing, areca fibres fashioned as footwear, or using Kalamkari prints to perk your pets mat. Interestingly, it is not just mere art that grabs attention in the Expo but also the innovative handling and solutions offered for addressing various facets of the city, be it our dying lakes, the neighbourhood parks or Namma metro. The students had their creative hand reaching out to a varied segment of interests and issues.

Addressing the continuance of mindless pollution of the few lakes in the city that continue to prevail, one of the projects on exhibit offers a pedal boat-waste collector which enables you to enjoy a ride while aiding to extract waste from the lake while boating. Yet another project envisions a health doctor exclusively for lakes where

a wastewater digital monitor linked to sewage pipelines would indicate when the quality of water dips beyond acceptable levels. About 750 students worked for 18 days on various lake projects, the information gleaned offered as an open source Wikipedic form.

Namma Metro has found its way into an equal share of projects on display, the artistic interventions also finding their space into the Cubbon Park Station. A three dimensional installation brings in the unseen shifting moods of Bengaluru sky into the underground while an Art in Transit brings to the fore the displacement of the tiny inhabitants of the underground when a larger phenomenon such as underground transport decided to prevail in their domain.

The neighbourhood parks are certainly not to be given a miss as they can go beyond the picnic-yoga routine as one of the projects on display strongly put forth. The space could transform to become active community centres with newspaper stands, storytelling sessions, music potlucks.

Bengaluru being a city that is home to many cultures, be it national or international, the status and role of migrant workers who cater to this ever swelling inhabitants cannot be undermined. A calendar that synchronises with the seasonal migration of workers strikes a strong chord here.

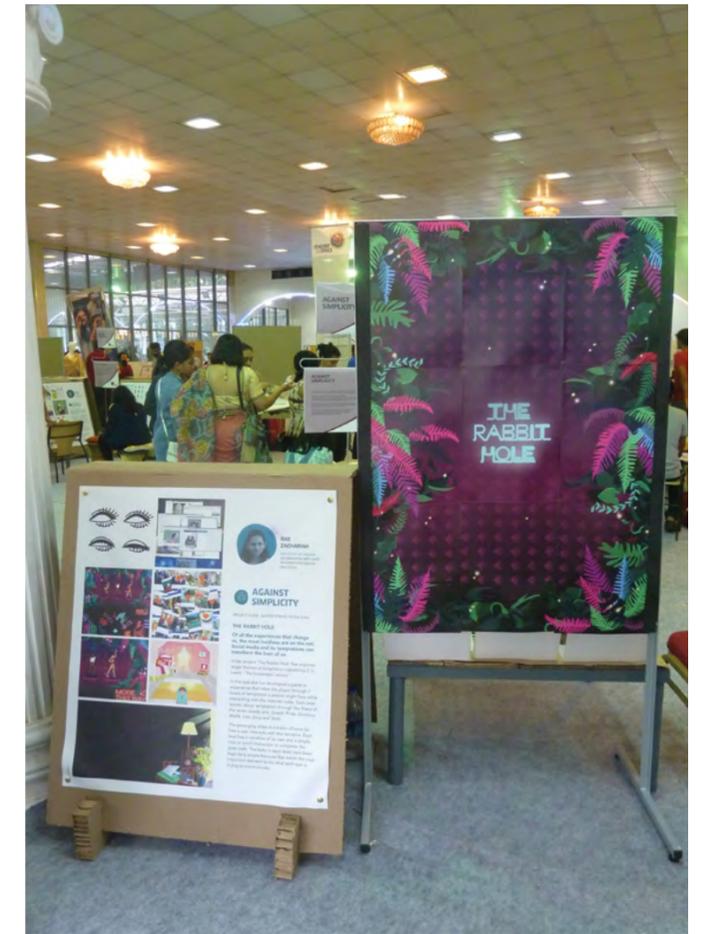
The 2016 Srishti Expo is a space where the alchemy of ideas holds sway. It is a space where young artists and designers give us a glimpse of their world-changing potential. It is an opportunity to see the beginnings of greatness, where young shoots will hopefully grow into giant trees.



IMPACT EDGE: BANANA BARK PROJECT Various Students



IMPACT EDGE: BANANA SILK PROJECT Various Students



AGAINST SIMPLICITY: THE RABBIT HOLE PROJECT Rae Zachariah



A Visitor at the expo



LED LIGHTLY: Upendra Vadaddi



AGAINST SIMPLICITY: Bansri Thakkar



IMPACT EDGE: URUVU PROJECT Aishwarya Kaura



IMPACT EDGE: A REST IN EVERY VILLAGE Juhi Kedia



NO LOGO BRANDING ABLE: The game Medha Mistry

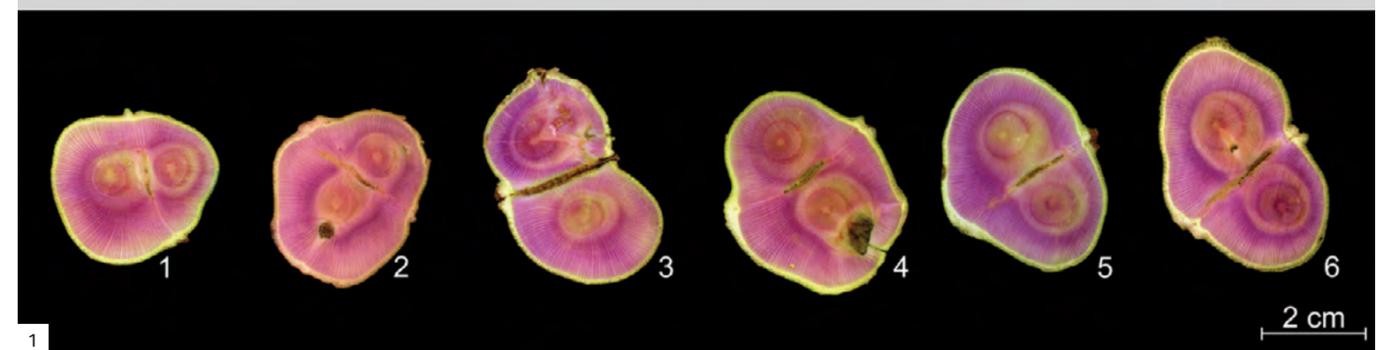
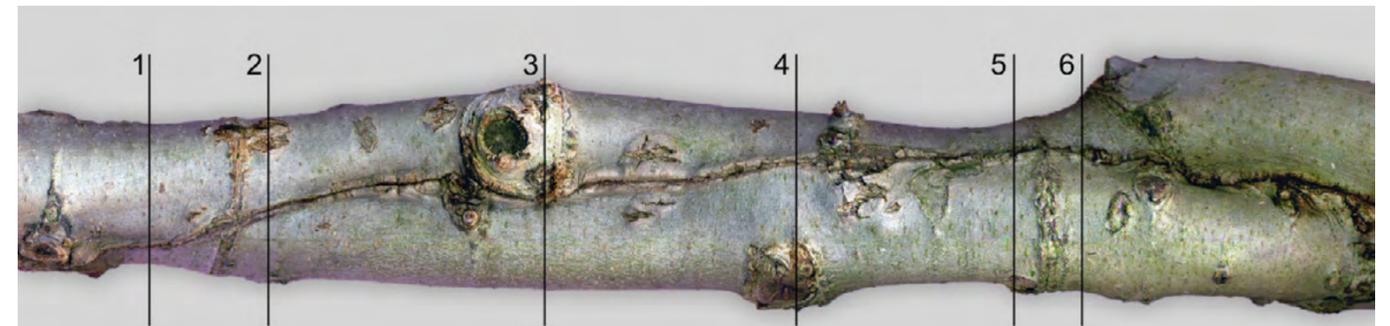


GREEN SENSE

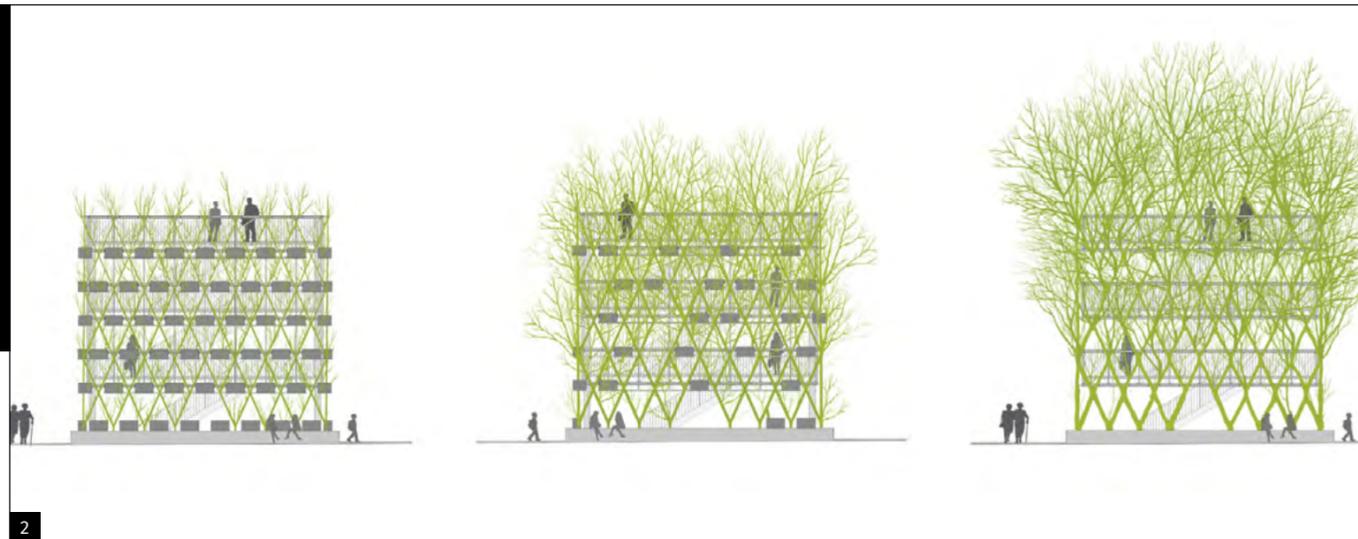
CONSTRUCTING A LIVING ARCHITECTURE

A REPORT BY ARCHITECT
AKSHARA VERMA

The language of nature outlines principles of systemic-thinking; which when adapted to the architectural design process, will ensure long-term survival, given our limited, depleting resources. Interdependence, co-evolution, partnership, flexibility and thinking-in-cycles are principles of the language of nature. It encourages architects to emphasise process over structure, cooperation over competition and most importantly resilience over rigidity.



1



Bill Reed, in his keynote address at the American Institute for Architects National convention held a decade back stated, “Sustainability is not a deliverable. Sustainability is not a thing. Sustainability is not simply about efficient technologies and techniques. It is about life – a process by which living things such as forests, neighbourhoods, people, businesses, mushrooms, and polar bears ensure their viability over the long haul.”

Understanding of ‘sustainability’ has come a long way since; from being limited to exceptional additions to improve a building’s performance to being a default parameter that a building of today must comply with. The adoption of a systemic-thinking in design - where buildings are designed not in isolation, but considered as part of the living fabric of a place - is the need of the hour.

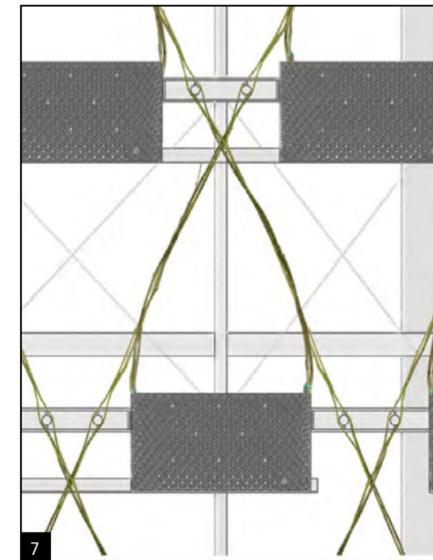
Similar concerns have been raised by Bangalore based architect, **Satyaprakash Varanasi**, such as ‘irreversible’ modes of construction – which will leave behind ‘a burden’ of built-forms and infrastructure across the built environment. Our shelters of the past were local and built with ‘common sense’. Our energies today need to be directed towards similar ‘green sense’. The language of architecture must derive again from the language of nature.

The language of nature outlines principles of systemic-thinking; which when adapted to the architectural design process, will ensure long-term survival, given our limited, depleting resources. Interdependence, co-evolution, partnership, flexibility and thinking-in-cycles are principles of the language of nature. It encourages architects to emphasise process over structure, cooperation over competition and most importantly resilience over rigidity.

Historically, tribes of southern Shillong built bridges from aerial roots of rubber trees, which can last for centuries. Partially reinforced with sticks and stones, these living-bridges self-strengthened and renewed themselves as their roots matured with age. Today, a German alliance led by architect

Dr. Ferdinand Ludwig and his team at **Baubotanik** have developed a construction methodology where a combination of living trees, metal scaffolding and other construction parts fuse together to form a living-building. Over time, as the trees age, this ‘living-building’ strengthens, thereby increasing its load-bearing properties. This fusion is possible due to the interdependence and co-evolution processes that trees are capable of.

Over time, due to the movement of branches, trees begin to exert pressure on one another, generating friction between them. This causes their top-barks to chafe, making their exposed tissues to interconnect, thereby allowing the vasculature of both trees to join together.



Information & Image credits

01. SERIES OF SECTIONS, SHOWING FUSION OF TREE BARK

Image © Ferdinand Ludwig; <http://www.ferdinandludwig.com/links.html> last accessed 29 Aug, 2016.

02. PREDICTING THE GROWTH OF THE PLANE-TREE-CUBE BUILDING

<http://www.baubotanik.org/en/buildings/cube/> last accessed 29 Aug, 2016

03. COMPLETION OF PLANE-TREE-CUBE BUILDING

http://images.adsttc.com/media/images/5629/5b72/e58e/ceb4/c400/001c/large_jpg/view_from_south-west_directly_after_completion.jpg?1445550948 Last accessed 30 Aug, 2016.

04. THE STEEL STRUCTURE

<http://www.baubotanik.org/en/buildings/cube/> last accessed 29 Aug, 2016

05. DETAIL OF WATER CONTAINER

<http://www.baubotanik.org/en/buildings/cube/> Last accessed 29 Aug, 2016

06 & 07. DETAIL OF CONNECTION JOINT

http://images.adsttc.com/media/images/5629/5b02/e58e/ceb4/c400/001a/large_jpg/connection_detail_2012.jpg?1445550839m , last accessed 30 Aug, 2016

After testing this construction system with over 10 different species of trees, it was observed unfortunately, that not all trees are suitable for this creative method of construction. Trees with thin, flaky barks – that are flexible and robust are best suited for this method. In the Indian context, ficus variants, chinar tree and the Indian banyan tree would be ideal choices.

Presently, the largest such building is the Plane-Tree-Cube. Set in an urban context in Germany, this living architecture addresses all vital parameters like providing shelter, sustenance, even oxygen while its roots help control soil erosion and improve water quality. The building facilitates a micro-climate due to nature’s cooling effect. This method of construction thus reduces energy demand, keeping greenhouse gas emissions under check. In its early years, the building appears formal and technical. The growth

processes in the subsequent years changes the proportions of the building. The language of nature, the fundamental geometry of the tree structure however remains the same. As the trees and the building begin to age, a crown arises at the top of the building. While the barks in the base re-generate and fuse to form a framework like structure, the building increases in strength. Once the trees gain stability, the external scaffold can be removed, revealing a continuously evolving, interdependent and flexible building. “If you do not respect the rules of growth in your design, the plant structure will not grow as you want it to and may even die”, says Architect Ludwig, as he prioritizes the setting out of design parameters consciously, that are derived strictly from nature’s language and botanical rules of growth. This process is dependent on a number of factors, but based fundamentally

on ensuring the rich health of trees that make up the structure. A series of plant containers constantly ensure that plants are well watered, facilitating how they intergrow into each other. A process based building in every respect, the outcome of the building in the future cannot be predicted.

Despite the buildings technical character, the space inside is phenomenal. The walls, adorned with leaves lend a charismatic aural quality. And with some imagination, visitors can envision how the building might look in the future. With similar imagination, we can envision how much more sustainable our urban realm can become, by adopting systemic methods of construction such as this.



Gushing water and S O L I T U D E

BY NANDHINI SUNDAR

PHOTOGRAPHS BY MAHESH CHADAGA

Time literally comes to a standstill, more so as the eco stay is sans all man-made interventions, be it the television, the internet or for that matter even the ubiquitous mobile. It is total severance and hence total undiluted bliss during the entire stay, the conversation happening purely with nature.

It was a ride through lush green forest land, the long winding path extremely narrow, the bumpy road adding to the adventure as the quaint green bus trundled down, taking us deeper within to reach a quiet stream tucked away amidst the thick greens. We were asked to disembark and climb on to a boat that eagerly greeted us, waiting to row us through the picturesque environs to a little island that was blissfully stashed away from all the travails of this human existence, by the enchanting gushing waters of the Periyar River.

The eco stay, **The Quiet by the River**, is literally situated in a 'No Man's' land, making it not only a memorable destination to relax, unwind, rejuvenate but also romantic, placed as it is, in its solitude, against the banks of the incessantly flowing river, the sound of water therapeutic to the senses as well as transporting those so inclined, to another dimension.

The island resort, situated on an erstwhile rubber plantation, is totally secluded, with only the surrounding green hills and relentless flow of water in the river for company. The only sounds that greet

the resident besides the gushing river are the chirping of the birds in the multiple trees and plants in and around the resort.

Time literally comes to a standstill, more so as the eco stay is sans all man-made interventions, be it the television, the internet or for that matter even the ubiquitous mobile. It is total severance and hence total undiluted bliss during the entire stay, the conversation happening purely with nature.

Keeping with the sensitivities of the location and the prevailing environs, the resort is deftly structured to merge with the landscape, the sloping clay tiled roofs, wood and stone walls of the cottages snuggling amidst the greens, blending in seamlessly with the surroundings. The four twin cottages are placed in the landscape in an uncluttered manner with each individual structure enjoying a sizeable portion of the existing green space in the small island.

The charming garden with its tall trees and picket fence demarcating the river bed is a feast for the eyes as you relax in the expansive old world open verandas overlooking the river and slip into a



quiet reverie. It is nature, undisturbed, in its magnificent best. Says **Benny Kuriakose** of **Benny Kuriakose Architects**, who designed the resort, “while locally available stones were used for the stone cottages, the timber used in the wooden cottages was salvaged from old buildings in Kerala. The objective was to use locally available materials or use salvaged materials and ensure the intervention into the natural characteristics of the location is minimal.”

The fine work displayed in the timber walls further stands testimony to the design sensitivities and wood structures that prevailed in the state earlier. The interiors offer an equally heavy wood décor, the walls and the ceiling revealing copious presence of wood, completed by the four poster wooden cot infusing old world charm.

The clay tiled roof indicates minimal use of concrete while the judicious placement of the individual cottages ensures there is minimal disturbance to the existing flora. The dining area reveals similar play of wood and tiles blending into its contemporary style, the first storey affording a spectacular view from the balcony, of the

expanse of water with its backdrop of green hills. The presence of water further seeps into the senses in the dining area, the visual connect prevailing through the wood and glass walls enclosing the section.

For those who choose to exercise their bodies while feasting on the greens, a charming 45 minute early morning trek through the nearby fields is offered on request. After a dip in the infinity pool and lazing by the river as you gaze dreamily into the relentless flow of water, soaking in its soothing sounds, a sumptuous meal awaits you, to pamper the palate. It is certainly with reluctance that we packed our bags and climbed on to the boat when it was time to leave the enthralling environs where the rest of the world seemed far away, almost non-existent.



MAKER-CENTRIC LEARNING

BY ARCHITECT PROF K.MURALIDHAR REDDY

Director, CMRU School of Architecture

The ever-increasing pressure on the finite resources of the planet is creating conflict between man and nature. Today's architects need to understand the huge responsibility on them to address the multi-faceted, multi-user problems.



Architecture is no longer an isolated profession limited to buildings and built environment, but needs to become a systemic approach to creative problem solving. The ever-increasing pressure on the finite resources of the planet is creating conflict between man and nature. Today's architects need to understand the huge responsibility on them to address the multi-faceted, multi-user problems.

The 5-year B.Arch. is the flagship program of the CMR University School of Architecture approved by the Council of Architecture. The program is strong in the fundamentals of architectural theory and practice, and responds to the changing definitions of architecture in the Indian and global contexts. The teaching and learning pedagogy is an integrated process of directed, experiential, hands-on, reflective and independent learning. The focus is to instill self-motivation to become an independent learner, laying the foundation for a confident practitioner.

The School's program forms a progressive sequence of 10 semesters delving into concepts of art, architecture, technology and humanities. The school lays equal emphasis on 'connected experiential learning' between the studio, workshop and classroom. Enough opportunities are created, provided and identified for learning to happen outside the structured environs of the school that include travelling, industry visits, competitions, exchange programs etc.

Maker-centric learning is the core approach of the school to address the previously discussed objectives of the school that lays emphasis on 'Practice to Theory' and 'Theory to Practice' making the B-Arch program competitive and relevant.

To fortify the maker-centric approach the School has incorporated some 'Unique Learning Propositions' to the structure of the program. The school conducts an intense weeklong mid-semester interdisciplinary workshop with credits. The maker-oriented

foundation workshop is incorporated in the first, third and fifth semesters with increasing levels of complexity.

Much needed integration of technology into the design process is facilitated by the MakerSpace. This makes visualization and understanding of the finer aspects of the design process clearer, which goes unrealized in the conventional approach.

MakerSpace as a collaborative workspace provides a platform to interact, brainstorm, and ideate with students and faculty of art, engineering and technology. This empowers students with a wide array of tools including 3D printers, Laser cutters and CNC router. Regular training sessions, workshops and demonstrations by experts keeps the students updated with the latest tools and technology

- Maker-centric learning tries to encompass the identity and practice of being a 'Maker', which is universal and core to human identity
- The salient strengths of maker-centric learning include and not limited to character building, failure positive attitude, empowerment and enabling, developing sensitivity, risk taking and a problem solving approach.
- The maker-centric learning intends to make the workshop, studio and classroom to become an integral part of the design process, unlike the traditional isolated approaches.
- The end user becomes an integral part of the design process in the maker-centric approach.
- The maker-centric approach involves an inter-disciplinary approach of bringing together various stakeholders resulting in the entire design process that is inclusive, simplified and efficient.
- The maker-centric approach of 'learning to see closely' engages and empowers to connect systems from nature to address problems of the built environment
- Identifying, seeing the potential, learning from other systems to be able to apply in a new context is one of the hallmarks of maker-centric learning.





Are universities 'enslaving' architecture Education

BY ARCHITECT PROF JAFFER KHAN

AUT University, Auckland, New Zealand

What is wrong with architectural education in India? I would say something is, but not everything! Having run an architecture school which had a standalone structure within the framework of a university, I can vouch for the issues schools face due to an unfortunate system that rarely allows exploration of new ideas and frontiers. The framework of universities across the country, with few exceptions, mandates certain qualifications for faculty teaching architecture that primarily focuses on academic future, rather than be contributive to practice of architecture. While many schools are struggling to get faculty to teach, most are struggling to keep pace with transformations in the architecture scene across the world. Add to this the university curriculum and obsolete subjects taught, wasting time of faculty and students who come with passion to learn architecture.

The Architects Act of 1972 lays the foundation for architectural education in India. The Act and rules have been more flexible to allow schools to have freedom to develop a curriculum that inspired many first generation architects in the country. The minimum standards of 1984 were drafted to integrate architectural education with the profession in an effective manner. We all studied under that structure, the curriculum allowing us to have more time and space to indulge in creative design, exploring architectural forms with strong philosophic expressions.

We were not taught everything, but learnt ourselves as most students do today. The obsolete CAD courses currently run by schools under the curriculum are classic examples where students learn on their own to meet industry needs. Incidentally our students excel when they pursue study overseas, the credit going to students themselves.

Presently, the CoA, under pressure of so called higher education policies, drafted the 2008 and 2015 minimum standards of education, which focusses on a structure advocated to satisfy AICTE norms and typical university requirements.

It makes most schools look like an engineering department rather than a creative cluster. This seems an offshoot of many new schools having no teachers. The CoA has opened a list of specializations for acceptance of a Master's degree for various academic positions. This list is debatable, needing review as many of these qualifications will dilute architectural education, whose effects can be seen in coming years. For instance, the 1984 regulations mandated postgraduate degree in architecture

as a required qualification, but not in "Town Planning" or "Country Planning". It is like an ophthalmologist teaching an orthopaedic subject, though it all deals with the human body.

While reviewing minimum standards 2015, CoA committee should look at revising and updating list of overseas schools and universities that offer excellent postgraduate programs from which many younger generation architects have acquired post graduate degrees. These young architects have excellent exposure and can contribute greatly to institutions through full time teaching and research.

If the new committee is to work on a broader vision to revamp architectural education and unshackle from university system, it must relook 2015 minimum standards before the gazette by government for implementation. CoA should also consult practicing community in bringing changes to the system. Representation from the practice side is very minimal and hence CoA should have consultative programs across the country, involve IIA and student bodies. There are also many practitioners outside IIA and CoA who can contribute to enrich architectural education.

CoA within the qualification structure must emphasize on practice of architecture by faculty who must produce a dossier every three years when the committee visits the school. This must be treated as equivalent to a research paper published in peer reviewed journals usually demanded by universities.

Unfortunately many have hardly practiced and hence lose confidence in the studio. Some conflict too develops between the core and visiting faculty. Involvement of visiting faculty should be increased to 50 per cent against prevailing 25 per cent. In my studio, I developed a module where studio would be managed equally by core and visiting faculty. This produced excellent results and put pressure on core faculty to do their homework.

It is time for CoA to work beyond university system and evolve a program that gives flexibility to national curriculum developed by an education board set up under CoA's authority to revamp architectural education. Times have changed but many of our universities have not. Time and again independent schools have performed better than those coming under a university that regiments architectural education. University system on architectural education needs review with a "Big Re-think".

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Meditecture

BY ARCHITECT PROF K JAISIM

I pen these lines sitting in the veranda of my cottage 126 in Suvidha, an elderly retirement village promoted by doctors of medicine. I am the lone architect. Over the five decades in this profession I have wandered in dreams and reality the many corridors that bind health centres.

Medical profession is a much disciplined one. They deal with pragmatic care. What they have learnt, they have to learn well and in depth. They have walked and lived in the spaces that finally absorb them.

The hierarchy of authority clearly established; from admitting and examining to operating and post care they are written and followed professionally, with great inter-disciplinary approach by all divisions. From pharmacy to operation theatre to the wards and beds, they are clinically efficiently nursed, cared and delivered.

Once, while addressing a civil engineers meet, I had this exploration. Engineers very clinically calculate and put things like structure and form together. From smallest of materials and elements, every item is studied for quality and with in-depth specification bound together. This is like walking into a mortuary or pathology lab doing post-mortem or studying a cadaver in front of medical students, each part of the body comprehended and put together.

Imagine if into that room walks in an individual after the body has been put together. And with a smile looks around and like a magician, smiles, takes a wand, touches the body saying "Rise" and the body comes alive. That individual is the Architect.

The reason I brought this small deviation is to understand the logical and psychological, bringing to life the otherwise dead corridors, wards, theatres with a smile and sense of joy. Currently there is an awakening in the design of medical centres which otherwise was full of boredom, with a sense of sickness pervading.

Visit and witness a medical centre, from the small clinic to the general and speciality hospitals and one will notice that the profitable ones are spotless on all the visible outside and inside. But if one dares to stroll into the interiors, unlauded muck as also the frightening garbage of medical waste prevails.

Leave these spaces and walk the regular runs. The patient comes in pain, gets diagnosed, sent to regulated and specified wards and depending on the extent of care required, spends time, from hours to days and even weeks, in a horizontal position on a raised bed.

What does he experience? A blank ceiling and depending on the pain, a bit of frozen clinical surroundings, besides the acoustical complaints and pains of fellow patients. These elements fuse the senses. Now imagine a scenario if these environments were brought to life to stimulate the senses through colour, music, texture, quality of air. A phenomenal turn around can happen.

Any psychologist will affirm that positive energy will bring in an environment of wellness. A closed space of darkness is the highest form of punishment. An open space has the potential but if not lit up, is like a foreboding island. Here an architect's role becomes inevitable. The integration of two disciplines will bring about a revolution in health care.

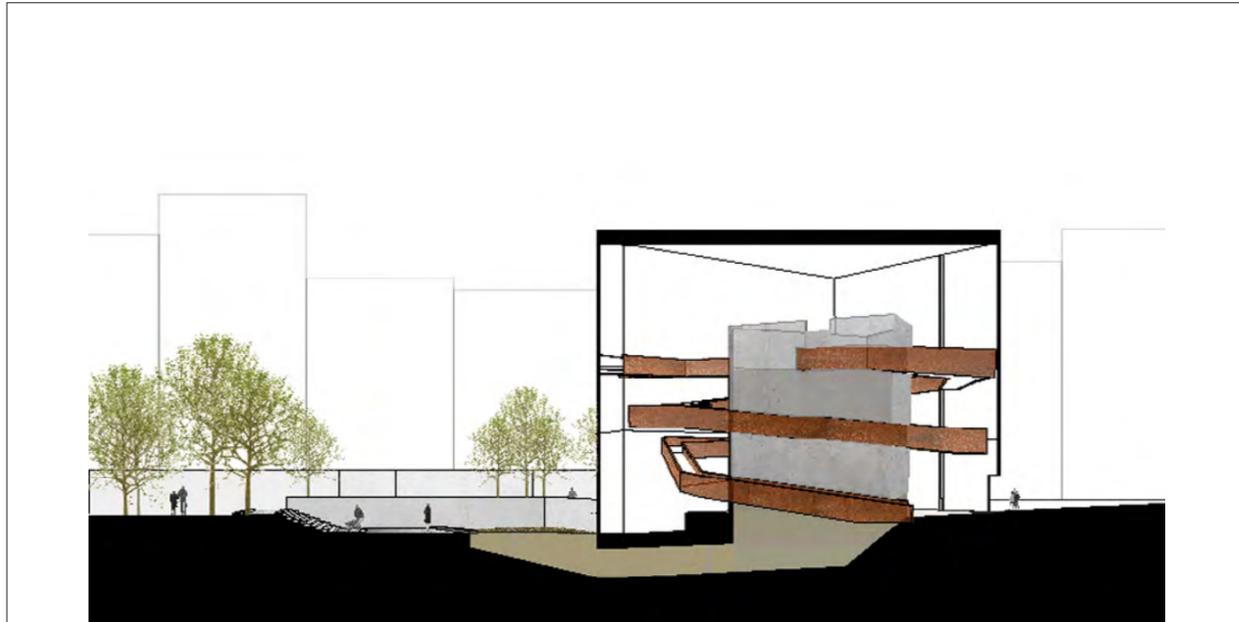
Imagine a ceiling of delightful art and windows laced at higher levels to bring in the exteriors. Corridors that softly sing and wards that have acoustic quality sparing the neighbour's pain. Take that most concentrated activity in a hospital, the operation theatre, a sanitized battlefield. The enemy lies prostrated in the middle staring unconsciously at brightness and a withering silence, unable to express. Depending on the depth of pain the incision of pervasiveness starts. Masked surgeons and nurses perform super human tasks with knowledge, trust, belief and faith, hoping they will prevail.

But a glimpse at the environment they perform in; why cannot they have a space that sends vigour and energy into their mental and physical bodies, this will encourage a superior performance, the sense of repetitive boredom can be kicked out and a sense of play infused.

It does not take much. Only a little care like a kinder garden, smiles and bright eyes with that sense of achievement will invade, the spirits will flow and there will be a glow in all the senses. Spaces with dynamic dimensions and planes enlighten the mind and create a sense of silent music to patients and staff who pace these areas. Aesthetic design can enliven these spaces of life into a sphere of joy.

BECOMING PART OF THE ECOSYSTEM

A REPORT BY ARCHITECT PRITI KALRA



To bury or cremate? A casket or an urn? These are questions life inevitably throws in one's path, when it comes to the disposing of the dead bodies of loved ones. Spirituality is personal, believers of different religions practicing differently. The origins of death practices in many religions remain incoherent.

However since most religions allow some leeway with regard to funerary ceremonies, Seattle-based architect Katrina Spade founded the Urban Death Project. Her vision? To develop a building proposal that offers an eco-friendly alternative to burying or cremating loved ones.

In 2015, statistics in the US showed that 9 million metric tonnes of hardwood and 81,600 metric tonnes of steel are being used annually to make coffins. Additionally, 15,400 metric tonnes of steel and copper, and 1.4 million metric tonnes of reinforced concrete are used for American burial vaults. Cremation is less wasteful. However, the US emits 272 million kilograms of carbon dioxide into the atmosphere every year, as a result of this process. Needless to say, these numbers will multiply enormously if extrapolated to include the rest of the world.

Spade proposes the construction of a building in which dead bodies wrapped in linen would be placed in a three-storey core that contains high carbon materials. The bodies would eventually decompose and become soil. By utilising the process of composting to safely turn our deceased into fertile soil, a sustainable 'green' alternative is created for the disposing of the dead.

The funeral ceremonies would be conducted within the building. Those closest to the deceased would meet the body in the shrouding room. Here, they would participate in wrapping the body in simple linen – along with the assistance of supportive staff. Mourners would then move to the top of the core via a ramp pathway where

the wrapped body would be placed. "Over the span of a few months, with the help of aerobic decomposition and microbial activity, the bodies decompose fully, leaving a rich compost," the designer says.

Her method provides the close family with the option of refrigerating the body for up to 10 days before the ceremony takes place. The need for embalming is eliminated because decomposition is an important part of the design. "It is disrespectful both to the earth and to ourselves that we fill our dead bodies with toxic fluid before burying them in the ground," she adds. The US utilises 2.8 million litres of formaldehyde-laden embalming fluid annually.

The project aims to be a solution in overpopulated cities where the availability of land for burial purposes is scarce. "Everybody is impacted by death, but people in urban areas and poor people are especially affected by a lack of burial space and the expense of conventional disposal methods," Spade asserts.

When confronted with the religious debate, Spade claims that she is not a religious person. Nature had been her closest connection to spirituality, while growing up in rural New Hampshire. However, this background has not closed her mind to the idea that there is something out there, bigger than us.

Furthermore, she firmly believes that the Urban Death Project does not conflict the tenets of religion. "It's beautiful to be able to celebrate, recognize, and encourage this idea that we're part of this larger

ecosystem," she says. She finds comfort in the thought that she could physically contribute to the earth's resources, when her time comes.

In 2015, a Kickstarter campaign hosted by Spade managed to yield funds totalling \$91,000 for the project. In addition, she is being financially backed by an organisation, Echoing Green, which promotes projects for social change. Her non-profit setup continues to raise funds to conduct research and build a prototype.

It is plainly evident that if the Urban Death Project were to be initiated on a global scale, it would find its biggest opposition in religion. Having said that, the model does reflect the general direction in which religions will inevitably turn for death rituals considering the prevailing scenario – the practical issue of lack of space leaving no other alternative. The moral imperative to take care of the planet must come from within. Spade's proposal urges the human race to introspect on the notion of connecting with the cycles of nature after death; to make environmentalism an integral part of our belief systems.

Information Credits

<http://www.dezeen.com/2016/01/12/urban-death-project-katrina-spade-composting-facility-dead-bodies> <http://www.urbandeathproject.org>

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A pavilion with a difference

A REPORT BY ARCHITECT PRITI KALRA

Awarded the prize for best building under the 'Display' category at the World Architecture Festival 2015, the Brazilian Pavilion at the Expo Milan 2015 was an inspiring example of how the essence of a country should be showcased on a global platform. Studio Arthur Casas and Atelier Marko Brajovic won the competition to design the pavilion.

In keeping with the expo's theme, "Feeding the Planet, Energy for Life," the team wished to combine architecture and scenography in an attempt to present to the world Brazil's values and aspirations in agricultural activity. With an economy that is primarily driven by agriculture and livestock farming, the South American country plays an indispensable role in food production. "The main concept is how to present Brazil to the world, and its vital role in food production, by a fusion of architecture, exhibition and experience," the team stated.

The temporary structure of the pavilion was envisaged as two adjoining blocks – the first being an open and informal gallery and the second, a formal and enclosed main exhibition space. The former block was visualised as a 'non-building' – a sensorial experience – bringing together leisure, interaction, technology and learning. The idea of 'network' – a flexible, smooth and decentralised network which represents the country's pluralism – and the notion of



a public square informed the concept of the design. A large volume articulated in Corten Steel welcomed visitors into the pavilion. The metaphor of 'network' took shape in the form of an extensive tensile netted structure – a literal translation – that stretched across the open volume and was accessible for people to walk on. The presence of the net and the effort required to clamber across it created interesting pause points and leisure spots for the visitors.

Once on the net, visitors could peek through the gaps below their feet at a wide variety of South American plants. "It's playful, of course, but it works as an installation where people from everywhere play together, discover the otherness of strangers, and share the same astonishment and joy. You play, but at the same time you see that this canopy takes you to other spaces, to the galleries or to this nice garden underneath your feet."

As such, the pavilion was a modern abstraction of a Brazilian garden and playground. The pre-weathered metal which framed the garden gave it an orange hue. Perforated cladding panels were finished in the same colour and lent shade to the space within. The netted rope, which spanned the entire length of the building, was held in place by metal fixings which attached themselves to the I-beam columns. "It's a reminder of our soil back home – fertile, filled with iron," averred the team.



Apart from the net, large runways and ramps reinforced alternate circulation routes between the spaces of the pavilion. The ground floor below the net was organized in clusters based on different themes – nutrition, family agriculture, forestry and integration between farming and livestock. Planter boxes were arranged in an orthogonal grid creating fluid pathways inspired by the Amazon River. The rope canopy above reappeared organically between clusters offering a demarcation between themes.

Contrasting the transparency of the garden, the block located at the rear of the plot was a more opaque volume housing exhibition spaces, an auditorium, a pop-up store,

a café, a lounge, a restaurant and office facilities. A large atrium linked the functions together, while distributing ample natural light within each. Interactive installations crafted by Brazilian artists and designers took visitors through the history of the Brazilian food industry and the technical revolution that it has undergone. Four major themes ran through the internal exhibits – natural wisdom, empire of colours, human power and creative fusion.

Sustainability was a key driver behind the construction of the pavilion. Right from water reuse mechanisms to prefabricated structural modules to the employment of recyclable materials, the pavilion made a loud statement of eco-friendliness.

Amidst 130 constructions, the Brazilian Pavilion successfully managed to generate curiosity and draw people in with its concept of being an 'ethereal plaza.' The earthy colours of the structure and the gradual transition between exterior and interior blended the boundaries between architecture and scenography to create an impactful and memorable experience.

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N A T U R E

AN ARCHITECTURAL INSPIRATION

It is a spectacular play of colours, textures and forms that **Interior Designer Mahesh Chadaga** discovers through his discerning lenses as he goes on the nature's trail. An inspiration that leaves the viewer spellbound, the natural structural formations unmatched by any architectural masterpiece.



The endlessly flowing dunes, the snow-capped peaks, the textures and forms of the steep mountain slopes, the intervening lakes and rivers are nature's open classroom in design, the visual an inspiration for every designer, almost taunting the viewer to make an attempt to replicate.



The curves, the steep majestic slopes of the mountains interspersed with spectacular rock formations that have been eroded to perfection, produce a texture and shape that would be foolish to even attempt to reproduce. The angles and forms flow so perfectly, mocking the physical attempts of designers to erect unique manual structures.

The serene water bodies that snake their way between the hills to flow in gay abandon ridicule their man-made counterparts that conform to a defined structure. The shifting sands, forever a surprise in offering the unexpected, rest in their glorious beauty, testing the traveller to capture their form before they decide to alter their façade once again.



Happenings in BRC

JULY TO SEPTEMBER 2016



A Yatra for design

Designing for the masses; that was the message of Designuru Bengaluru for the residents of Bengaluru, held by IID Bangalore Chapter just a few months back. But how about taking this message across cities, to various corners of the country? A message taken across in the form of a yatra so that it not only reaches the cities, but villages too, in a glorious journey that soaks in the flavours of various states and offers it back in the form of design.

IID BRC will be participating in the Design Yatra where architects and interior designers will drive through various cities and states across the country to interact with locals and bring in the concept of design to not just the city dweller but also to the residents of small towns and villages. Scheduled in the month of

November, a fleet of Nanos will reach Bengaluru, participate in a social and design extravaganza in the city before proceeding further.

As part of the Yatra, Bengaluru, in various parts of the city, will host multiple events ranging from panel discussions, design exhibitions, heritage walks, puppet shows and theatre performances, music shows, photography, sketching and painting competitions to name a few. While these, being held in multiple venues across the city, will create awareness on design and the need to address this especially in public areas, the Design Yatra will also involve social interventions.

Three main social interventions have been proposed. One is a government school which is also home to 35 orphaned children. Since the school lacks basic amenities such as clean as well

as enough toilets, the orphaned children residing there are facing acute hardship. IID BRC proposes to garner funds to refurbish the space so as to improve the living conditions of the children residing there, besides reducing the dropout rates that is becoming phenomenal due to lack of basic amenities in the school. The project interestingly will also involve architects in the form of providing materials that are salvaged from their project sites, so as to send across the message of recycle, reuse.

The second project envisioned involves coming up with a community centre in one of the slums that was developed by an NGO after successfully getting funds from financial institutions for the housing. IID BRC proposes to provide the design for constructing

a multi-purpose community hall in this enclave so as to facilitate interaction and community activities amongst the residents.

In yet another slum development, the prevailing houses are small and lack provision for vertical extensions to accommodate growing families as the residences use sheets for roofing. The condition of the existing houses too calls for attention. IID BRC proposes to provide the requisite designs for vertical extensions of these houses and also create a prototype and display in one of the architecture colleges. This prototype, which could serve as an excellent example of low income houses for future construction, will be developed by the students of various architecture colleges in the city participating in a design competition, which will again be hosted by IID BRC.

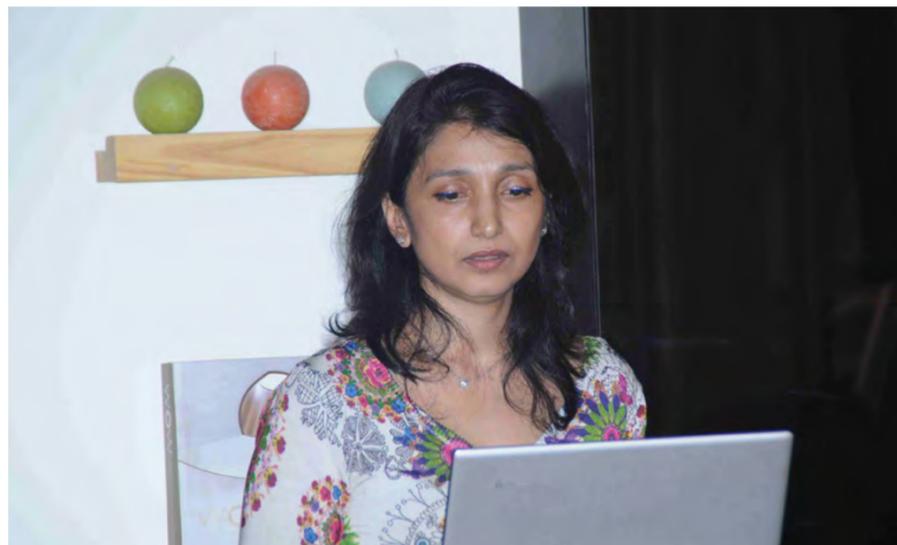


WORKSHOP IN LIGHTING

Philips Lighting Academy with IID BRC, held a one day Philips Lighting Workshop for participating architects, interior designers and students. The workshop was conducted by Nitish Poonia, Manager, Philips Lighting Academy and Ashish Sinha, Senior Manager, Philips Lighting Academy at the Taj Vivanta.



PRESENTATION: TWICE AS NICE
 Restaurants are not only spaces serving delectable cuisine but can also serve to be inspiring, rejuvenating spaces by the sheer manner of their design. An interesting talk on restaurant design was given by **Architects Kavita Sastry and Shruti Jaipuria** in one of the 'Out of Box' events hosted by **IIID BRC** and **Cucine Regale**.



kitchen model | Genius Loci | design Gabriele Centazzo

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