

[lighting talk]

Mrinalini Ghadiok talks to Shimul Javeri, architect extraordinaire, who is as sensitive to daylight as she is passionate about the dark.



COULD YOU TELL US...

...what made you become an architect. My love for science and a passion for art, brought me to the inevitable crossroads in grade 8, of having to decide my future. Reluctant to pick one over the other, I was advised that there was indeed an area of study that formed a wonderful synthesis of the two subjects. I was introduced to architecture, a field that was far removed from me, or my family.

Delving into the subject, I soon realised what an amazing mix of culture, technology and art, the profession was. It was a heady time in India, with Ahmedabad at the epicenter of the changing tide of architecture. My family is from Ahmedabad and we visited at least every winter. The combination of 'vavs' and 'pols', and Corbusier and Kahn was a strong inspiration.

...what excites you about light and lighting. I gravitate towards sunlight, and I literally wilt in its absence. I wait for the occasion to play with sunlight. I welcome it or block it out when necessary,

modulate it to create an emotion, or to perform a function. It is the very basis of our work. It is like any medium - if you understand it, it works with you, aiding, abetting and enhancing. And if you don't, it is problematic and requires complicated solutions, such as mirrored and tinted glass, double blinds etc. During the day most of our projects don't require artificial light, but we revel in the opportunity for night lighting. What I love most, is the joy in hiding the fixture and enjoying its beam of light; the right temperature, the correct cone, it is all very exciting.

...how important is light in your designs. We begin all our work with a thorough analysis of the climate, understanding the prevalent wind conditions and the sun path. Our buildings get designed around the central idea of the orientation, making a conscious effort to capture good light and to avoid harsh light. Design detailing and innovations are generally created around

light in our office. Moving screens, vertical louvers, skylights and clear storeys, often form the back bone of our design; all in an effort to make the most of the light conditions on our site.

...how important is the night for you. We are as passionate about the dark. The changing state of our environment driven by the fact that day turns to night on a daily basis, shifting our entire perception of light as the sun goes down, is fascinating. I believe in celebrating the night. Our work sees very subtle use of artificial light after dark. We do not believe in flooding our spaces with light, instead we add light where it is needed and on what needs to be seen.

...how does light affect your environment and designs. I believe that night-light should be like stars in the sky, where one can see the shimmering effect but not the source of light. Our project in Karur is designed with a series



The Leaf House, Alibaug

of courtyards linking various spaces together. The open courts, some big, some small, catch the sun, pulling light into the building. Water bodies in each open space, act like reflectors, rendering the small courtyards into big light bulbs. The dispersed light captures interesting details - a beautiful wall, joinery of well-crafted wood, colours and textures. Everything comes alive if one is able to bring in beautiful filtered light from the right direction, at the right time. And it is not a difficult task, as long as you follow the laws of nature.

...about your projects like the Jain Museum and Nirvana. They are wonderful examples of spaces that allow interplay between the inside and outside.

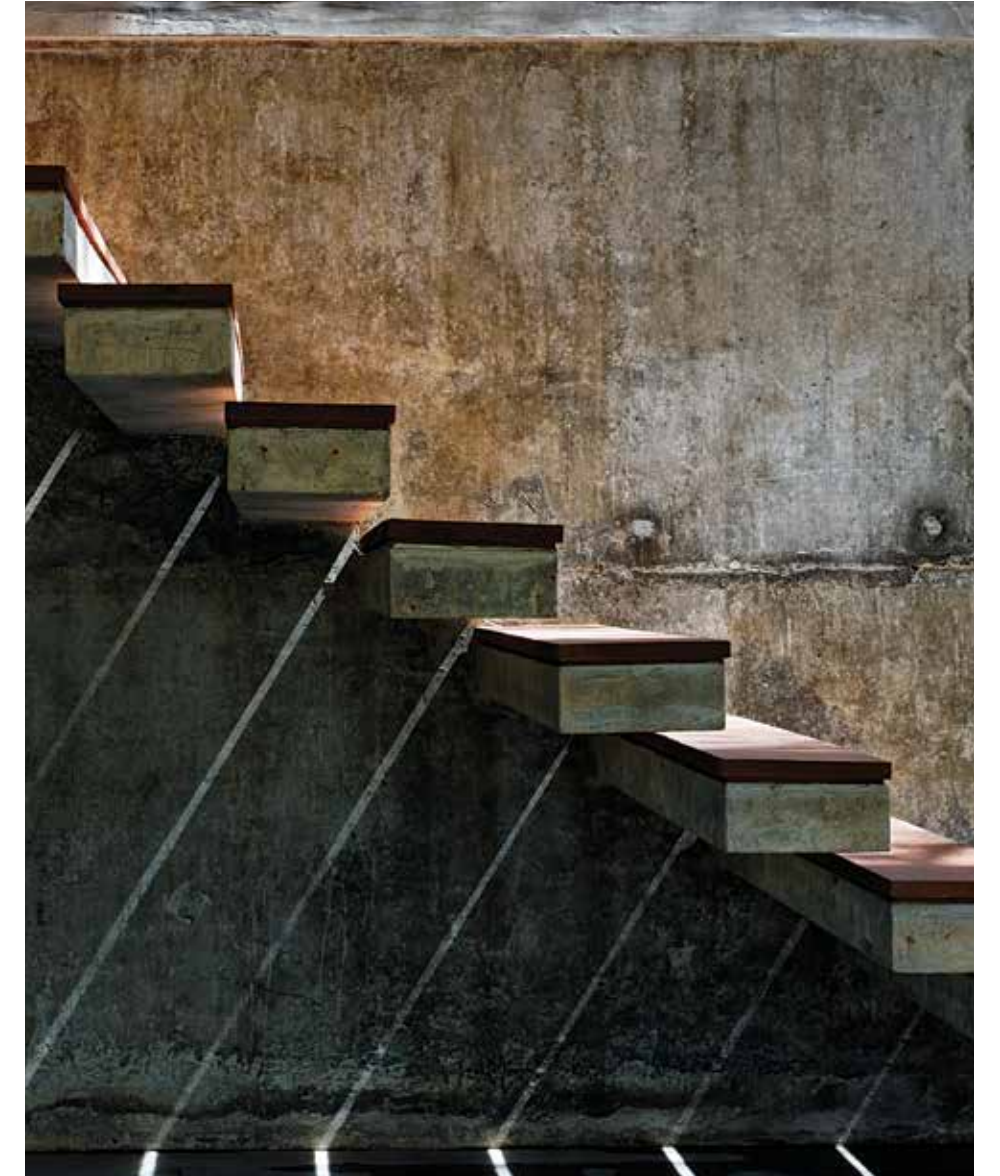
The Jain museum is an apt example of a modulated relationship between the outside and inside. It is diametrically opposite to curtain glass buildings, which allow and encourage everything to hang out. Here, the museum building is inward looking and



Jain Museum

lifted on stilts. While the exterior façade is predominantly blank with white lime *araish* work, with very few openings; a central courtyard that frames the existing *Neem* tree, acts as a filter for light and air. This prevents heat from entering and helps modulate light and air in the space,

drastically reducing the consumption of electricity. The openings were designed based on exhaustive computer analysis and simulations of the sun path, keeping in mind the location, time of year, quantity of sunlight etc. The building is actually a very controlled



Nirvana Films Studio, Bengaluru



interface between the in and the out. The Nirvana project on the other hand, is designed for this interplay between the inside and outside. While there are large openings, floor to ceiling glass walls and doors that are fitted with moveable louvers to allow a controlled passage of air and light, the relationship is inverted. The walls are transparent glass and the windows are solid. The tight plot left us with little room for play. Facing west and south, the design was choreographed with the conscious decision to bring light into the space and from certain defined opportunities. Openings were therefore framed towards existing large trees that provide ample shade to the building. The two projects have a definitive response to natural light, but distinctive approaches to the relationship between the outside and inside.

...how do your spaces transform from daylight to artificial light. How does your passion for the night inform your response to space after dark?



The Dasavatara Hotel, Tirupati

For me, the day is all about natural light, modulating it and bringing it into the building, to the extent that it is desired in that space. The night on the other hand, is about highlighting aspects of the building and accentuating what we desire to see or show. The interesting and fun part about the night is that one can choose what to hide, what to show, what to sparkle or even spotlight. In Nirvana, the space is lit very subtly at night. Being an office building, there isn't a need for functional lighting at night. Thus, only the structural elements are accentuated by up lighting the thin round columns and highlighting the staircase. In Tirupati, the Dasavatar Hotel is well used after dark. So the approach to lighting is very different. Here too the effects are kept subtle, but what transforms drastically by night is the beautiful water body at the centre of the space. All peripheral areas and elements are kept dimly lit to highlight the water, injecting a sense of drama and keeping ones focus on it. Night lighting has that potential of playing with elements and creating theatrical settings.

...about the role lighting plays in the life of a city. How do you contribute to it through your work?

As architects we love to believe that we have a huge impact on our cities. Unfortunately most of us deal with single buildings or building complexes, which play a role in the city but don't eventually change the way a city works. A beautifully lit building is one in which architectural elements are highlighted with a profound gentleness. The building does not stand like a scorching beacon within the city fabric. It does not shout out for attention, but attracts the eye in a sophisticated manner. Instead of flooding the city with light and adding to the menace of light pollution, lit buildings can celebrate the beauty of the night in an understated way.

...about the importance of shadow, and the balance of darkness and light in your work.

We work with assessing sun paths, in-depth analysis of site conditions and modulating light through courtyards. The minute light hits a form; it creates a graphic in the space around it - adjacent walls, floors and other surfaces. It is essential to design

the courtyard to a correct scale in order to bring in just enough light and plenty of shadow. The masters have used this to create phenomenal spaces. While Correa used the drama of light in most of his buildings, Kahn's work was a delight to photograph due to an intrinsic play of light and shadow. *Light and shadow is almost the basic hygiene of architecture* - we all use it, we all love it, and the masters taught us amazing ways to work with it.

...why there seems to be an inherent lack in awareness about lighting, and its importance in architecture. What is the role of a lighting designer in your work?

Light, for us, is the starting point. If one has conceptual clarity on any project, the clarity on light just follows. In any project, if we have the design clarity; we know how the building should look and how we want to light it, then the lighting designer's role gets limited to technical inputs; product specifications, lenses, beam angles, degrees, and how to get the correct optics. When we know what we want to achieve, they help us find the optics that will achieve it. There are lighting designers who work as



Mahindra Automobile Design Studio, Mumbai

collaborators by introducing ideas that we did not imagine and that takes the building to another level.

While we cannot isolate lighting as an independent design tool, the idea of design as a whole needs rethinking. We have reached a stage where more is more. There is too much of everything, too many choices, too many inputs, and too many images in our minds. This leads to a cut-paste approach to design and therefore an inherent lack of soul in the work. Without a central thematic idea, one wouldn't know how to light the space. The result is that the lighting also becomes a vestige of many thoughts and ideas. While lighting may be quite simple, the technology has become complex. The challenge lies in the understanding of what is available where. A lack of streamlined vendor data makes it difficult to navigate the process. The Indian lighting industry being so nascent has an abundance of quality compromising products, which is terrifying. Their rock bottom prices play the perfect bait for clients; however, their output and efficiency are highly questionable. This makes us dependent on international products, which then are available at a hefty premium.

New technology is also becoming more easily available, however, the dearth of awareness and availability of quality leaves us high and dry. While we love the new LED, we are also aware that if the optics and the chip do not match standards, there are reasonably high chances of failure. LED runs on quality and if one can manage the perfect diodes, drivers and optics, it would make for a great fitting. Some brands such as ERCO can happily claim a switch to 100% LED, but they are backed with their sophisticated technology and come with a price tag to match. Like any great technology, it has a following of poor quality knock offs.

There are various instances where LED might not be the most efficient form of lighting. For a residence in which lighting is not the dominant consumer of electricity, an incandescent bulb would provide good quality of light, and even over a period of 10 years, its cost implications would be marginal compared to LED lighting. Some of these ideas are a little over the top and need to be reconsidered.

...about the best and the worst illuminated places you have visited.

The best-illuminated spaces I have visited have been sacred spaces - churches and temples. The need to create the transition from the material to the profane has led to one of the most incredible architectural sciences in the design of the Hindu temple. The light quality that filters finally into darkness in the garbagriha, illuminated by a diya is impactful and transformative. I also recall Herzog and de Meuron's Laban Dance Centre in London as an incredible space for its light filtering through the polycarbonate skin. Louis Kahn and Corbusier were masters in their use of tropical light.

Mumbai's older regenerated areas have afforded some wonderful sky lit spaces such as Cafe Zoe in the Todi Mill Compound, and Kala Ghoda Cafe in the old Fort area. I also love the design of Blue Frog and its night illumination - befitting a nightclub and yet so understated.

The worst illuminated spaces are malls, call centers and hospitals. They do not respect the Circadian rhythms of the body and create uniformly illuminated spaces irrespective of the time of day and nature of activity. www.sjkarchitect.com