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Of architectural truths and lies

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When I am designing a new building, there are a few basic principles that guide me.

The first, of course, is that I want to get to know my client and what is in his mind. If he merely wants to show off or flaunt his wealth, I don't take him on. Otherwise, I enjoy getting to know him (or her, a family, an institution or even a Government department).

If it is to design a house, I want to know the client's eating habits. Do they all eat together at regular times? Or is it a smash-and-grab affair? I also want to know about the bedroom. Do they merely use it to sleep in? Or does he do his writing in one corner (like me) and his wife do her sewing or embroidery in another corner?

I always want to see, right at the beginning of our association together, their building site. Not only do I want to know what sort of a site it is (is the land level or sloping?) and what trees there are, but I also ask whether they desire a good view, a garden and whether they keep animals. I want to know about the water supply and from which direction the breeze and rain come from. And I have to always keep in mind that it is they who are going to use the building and not me.

Then I have my own principles, which I am unwilling to abandon. I dislike falsehood and deceit. A building should be truthful. As a typical example, I can think of many "big" buildings, say, in the Thiruvananthapuram Central road.

One building that immediately comes to my mind is three or four storeys high - it is a reinforced concrete frame structure, and between the columns and beams there are windows and brick-work. The bricks are plastered and painted all over. The front of the building, facing the main road, is covered all over with bits of flat stone, to look like crazy paving. So the whole building is actually deceitful - it is a concrete-and-brick structure, but neither material is visible.

I am, of course, asked what I would have done for such a structure. First of all, I would not have used a reinforced concrete frame structure. I would have used brick, and this is perfectly capable of carrying four storeys. Brick has a variety of colours, and I would want it to be seen and not covered over with plaster and paint. If the client must have his crazy paving, I would have put it on the ground.

I rarely build high-rise buildings. Once I did one - the library at the Centre for Development Studies in Thiruvananthapuram. Eight-storeyed, it did need a frame structure. This is visible and forms part of the design. Brick was the obvious wall-making material. So between the concrete, everything is brick. After 25 years, the building is still clean and looks new, with no stains and dirt as is invariably seen on plastered walls after a very short time.

On the subject of material, I would like to mention what I consider as one of the most foolish architectural lies that anyone can imagine - build a brick building, then plaster it all over and paint bricks on the plaster to make it look like a brick building! How stupid can we be! There are several such prominent buildings in Thiruvananthapuram.

My next principle is to use locally-available material. If the area makes good bricks, use them. If I want to build in an area full of laterite or stone, I would use it. This is not only economical, but the building would also look as though it belongs; it would not sport an imported look.

Also connected with local material is the whole aspect of local traditional plans, designs and building techniques, which have evolved over hundreds of years. Unsatisfactory design and usage have been abandoned and ideal material and designs have, by trial and error, remained and coped with the local terrain, climate and cultural patterns of living. So why abandon these for expensive, unsuitable energy-intensive material, merely to look "modern"?

In Kerala we have fierce sun and heavy rain. So the typical logical, effective roof is a huge umbrella to protect the interior and the walls. This is just pure common sense. So I don't want to leave off the overhanging roof, the kind that our ancestors built, for the sake of "looking modern".

As far as buildings are concerned, we are a poor country. There are probably between 40 and 50 million families here without homes. So to me it is not only foolish but wicked to waste material. So one of my main principles is to avoid waste. Plaster costs approximately 10 per cent of the cost of a "normal" building and once plastered, your client is committed to an annual expenditure for upkeep and painting.

Plaster may be necessary in a few areas, for example in a bathroom or a kitchen. But not all over both sides of every wall. So why go on doing it everywhere all the time? Windows are costly, a gate is just as effective in a corridor or staircase. Do you need all the doors that are usually built into a house (each one, which necessitates unnecessary use of timber and paint, costing several thousand rupees)? In a master-bedroom with its attached bathroom, is the door necessary? Do you have to lock yourself in the bathroom? Wouldn't a curtain be adequate?

The other big principle is to avoid as much as possible energy-intensive material (that is, material that requires a lot of fuel in their manufacture). India just does not have enough "energy" (i.e., fuel). Our coal is concentrated in the East and is not plentiful for the whole country. Iron ore, we have mountains of it, but we don't have enough fuel to convert it into all the steel we use. We have very little oil and have to import it from the Gulf.

Cement uses a lot of energy to be produced from limestone and calcium, whereas lime from the same basic material and with an ultimate strength as good as cement, uses almost no fuel at all. We all cry out about the destruction and depletion of our forests for timber. Forests can be replaced, but not the iron ore and the limestone. So which is the more "eco-friendly"?