

restoration architecture: rejuvenating the past

each building has its own biography, and a knowledge of the life of a building brings an essential understanding of its features and problems. when historical structures decay, restoration, or 'adaptive reuse' restores, repairs and renews an existing structure. ifj visits this fascinating area of architecture in the first focus of the year.

Restoration architecture

may precisely be defined as the process through which the material, historical, and design integrity of mankind's built heritage are prolonged through carefully planned interventions. The first step in a building conservation project is a sensitive assessment of its history and merits. Well-known architect Donald Insall says in this context, "Every building has its own biography. A knowledge of the whole life of a building brings an essential understanding of its features and its problems."

The decision of when and how to restore or conserve a building is a sensitive issue and is usually the result of a combination of artistic, contextual, and informational values. However, in some cases, a decision not to intervene might be the most appropriate choice.



what is restoration architecture ?

restoration architecture is in some respects very different from mainstream or 'regular' architecture and so the approach in dealing with the two varies significantly. Ar. Manish Chakraborty, Principal Architect, Continuity, Kolkata says, "Restoration is another name for 'adaptive reuse'. We need to restore our heritage monuments and for that we take up a harsher intervention to restore, repair and renew an existing building structure."

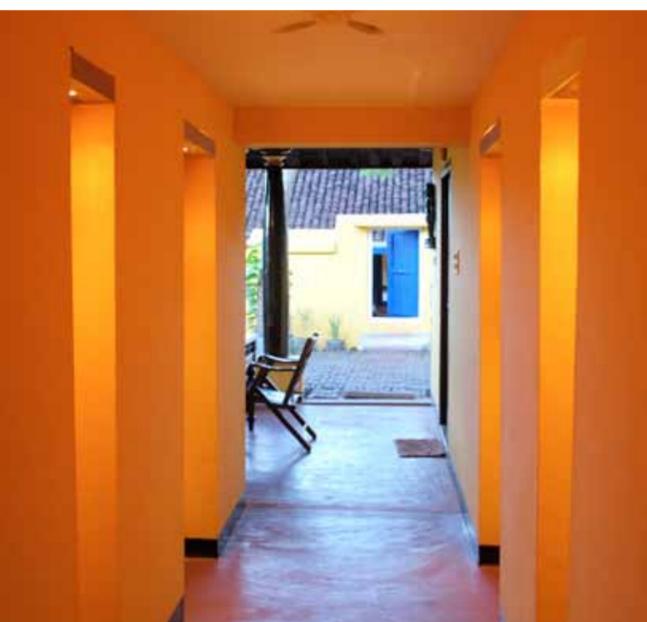
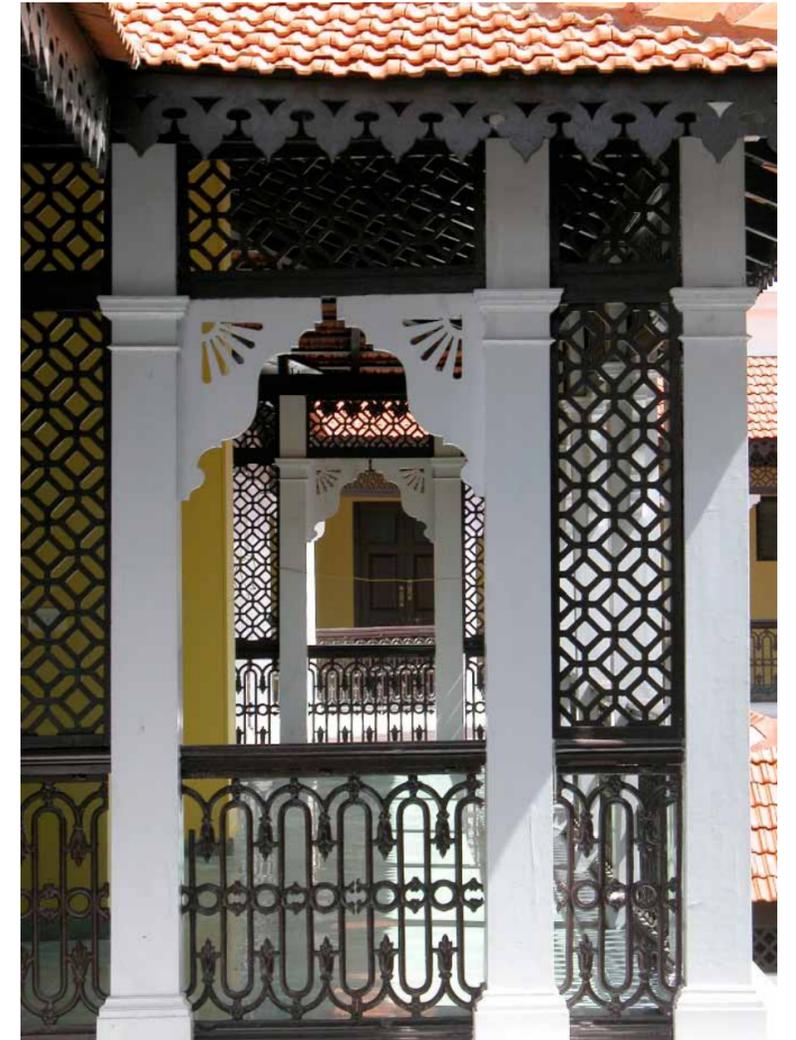
Restoration architecture is often treated as a specialised branch of the mainstream. Ar. Radhika Laura Somana, Principal Architect, Radhika Somana Architects Pvt. Ltd., Bangalore, says, "Restoration architecture has a different appeal of its own as it restores period architecture so that it becomes functional for the future." Transcending external aesthetics, which is a cause for concern in itself, it is the functional value of a heritage structure that is of utmost importance and perhaps what drives us to restore historic structures, feels Ar. Somana.

India is a country rich in heritage and ethnic culture. The abundance of historic structures perhaps enhances the need to preserve these structures in this country, which makes the art and science of restoration, more significant. Ar. Sheila Sriprakash, Shilpa Architects Planners & Designers Pvt. Ltd., Chennai says, "India is a truly unique country for its variety of heritage monuments, given the rich and evolving historic influence, as well as the range of architectural styles." Stressing on the reason why we also need to preserve these structures well, Ar. Sriprakash says, "In our country we continue to use these historic structures on a daily basis and so the need arises to weather them from functional deterioration."

"Restoration in India will have to account for preservation of the monument and also, treatment of the ambience for continued usage, making it particularly challenging for a preservationist," she adds.

Believing conservation architecture deserves a status beyond the normal architectural domain, Ar. Sangeet Sharma, Principal Architect, SD Sharma Associates, Chandigarh, says that when architects conserve or restore heritage structures, it is a noble mission, a cause that goes beyond the known parameters of architectural work. "We restore these structures with a noble mission to preserve our heritage, so it can never be compared to normal architecture. Restoration architecture demands much more sensitivity and compassion towards our heritage and culture; something not always required in normal architecture," he adds.

While some architects consider restoration architecture a specialised domain, which is much different from normal architecture, Ar. Benny Kuriakose, Principal Architect, Vedika, Chennai, feels it should not be demarcated as something different from the mainstream. "In mainstream architecture, one learns about steel and concrete and designing new buildings, whereas in conservation, one learns about traditional building materials such as lime, stone and timber. Conservation also includes designing new buildings and extensions, but the design has to be one which respects the architecture of the existing building and in harmony with it," says Kuriakose.



fine line of divide : restoration and conservation

Architectural work on a heritage structure is variously called restoration or conservation, with a fine difference between the two.

Ar. Manish Chakraborty sums up the difference between restoration and conservation interestingly. He says, "Restoration is a somewhat harsher way to 'restore, repair and renew' an existing structure, while conservation is a much more sympathetic approach to try to accommodate the historic fabric within the restored structure". Conservation requires a special understanding of the materials used in old structures, which are then used to authentically repair them to maintain the structure, as it exists. Whereas, restoration implies that as per the demand of the structure, it is repaired with the aim of reconstructing the lost structure.

The development of conservation principles in the second half of the 20th century has been regarded by many as the most significant achievement of conservation activities, internationally. These principles or guidelines, promulgated either as charters, recommendations, resolutions, declarations or statements, were drafted and adopted by several international organisations, such as the United Nations Educational, Scientific and Cultural Organisation (UNESCO) and the International Council on Monuments and Sites (ICOMOS), with the objective of protecting cultural heritage properties.

The most significant guideline was the International Charter for the Conservation and Restoration of Monuments and Sites, commonly known as the Venice Charter 1964, which set a benchmark for principles governing architectural conservation and restoration.



The Charter has helped to broaden the concept of historic buildings, the application of modern technology to conservation work, international cooperation and, most important of all, has provided a set of principles for the protection of architectural heritage and sites. Since its adoption internationally in 1964, the Venice Charter has been used as a reference point for the development of a number of other conservation documents around the world.

At the ground level, it is the discretion of the architect whether to actually reconstruct a dilapidated structure or maintain it as it stands to preserve the historic element. Ar. Brinda Somaya, Somaya and Kalappa Consultants Pvt. Ltd., Mumbai, feels the historical perspectives must be handled sensitively in a reconstruction project. She says, "An architect has to understand the age of the building first, its context, why it was built, what was its purpose, its architectural style, the maintenance till the present moment and the purpose it will be used now." These are crucial issues that face architects while making the decision to conserve or restore.

Ar. Anindya Basu, Principal Architect, Anindya Basu & Associates, Kolkata, says this genre of architecture is very sensitive and making respect for the old, essential, so that post-reconstruction, the heritage site should look genuine and reflect its authentic heritage status. "An architect's focus is to be sympathetic to the old and certainly not to create a mimic. Prevention is the first gesture of restoration so intervention should be minimal to preserve the original fabric."

So, while the objective would be to preserve the authenticity of a structure rather than reconstruct it, a final decision is taken with due consideration of the need of the hour and the final use profile. ifj



restoration architecture design: conserving the grandeur and timeless appeal of heritage structures

the idea of restoration is to resuscitate the erstwhile aura of a built form. for this it is important to be sensitive to history and understand the nuances of an older architectural language, always with the aim that the restored structure should not look like 'pastiche' or fake.

Restoration

architects try to preserve the old and regain the lost. While not all old buildings are architectural masterpieces, most times, a particular structure or monument carries forward with it a stream of memories of incidents that have a strong historical lineage. Perhaps one reason why a special sensitivity is expected from architects in the conservation of historical structures, is that they are custodians of history.

design considerations

Otherwise the best part of the process, design is a challenge for a restoration architect because it is not a 'green field' project like other architectural works, where they start from scratch. In restoration projects, the need is to renew the structure as per the discretion of the architect, and make it suitable for 'adaptive reuse'. Explaining this, Ar. Dulal Mukherjee, Principal Architect, Dulal Mukherjee & Associates, Kolkata, offers the reference of family. He says, "How do you deal with your grandfather who is very old and maybe not fit enough to keep pace with you and your peers in a race? You show compassion and warmth towards him and try to make him as healthy as possible. But you don't dare to ignore him because he is a person of rare intellect and his age is a result of his experience and depth that he has amassed over the years. The



same treatment is meted out to a heritage structure – a sensitivity that the structure demands and is expected from an architect."

Agreeing with him Ar. Rachana Vishwanathan, Principal Architect, Rachana Vishwanathan and Associates, New Delhi, says, "Heritage structures have a timeless appeal of their own. So conservation architects require an in-depth analysis of our heritage monuments and then can carry on their work without affecting its timeless appeal. We try not to touch the character of the building. Suppose we see a stone panelling that need repair, we use our own discretion whether we actually would want to repair it or leave it just like that so that its natural look is not tampered with."



Taking a cue from this, Ar. Anindya Basu, Principal Architect, Anindya Basu & Associates, Kolkata says, "Our heritage structures are our collective responsibility and in order to be respectful to the old there is a protocol that has been adopted internationally. The UNESCO charter says even if you add something to the original structure so as to restore the building, that add-on should be detachable any point of time. I am working on an interesting project of restoring scientist

Acharya Jagadish Chandra Bose's residence into a museum. Detailed study and extensive research were essential before we took up the project. To change a residential house into a museum needed many improvisations, we have

ensured that whatever changes we have made are prominent enough to stand out from the actual building and can be detachable if required. In this way the flavour of the heritage structure is not tampered with."

Heritage monuments were usually well-known for their intricate works and grandeur of style. So a restoration architect should keep that in mind while taking up a project feels Ar. Ravindra Verma, Chief Architect, Kothari Associates, Pvt. Ltd, New Delhi. "He should start placing himself in that bygone era and think from the ambience of the space of the past. Then only he might possibly bring some justice to his work," he says. However, apart from the aspects of design, numerous challenges

face the architect. Renowned conservationist, Ar. Abha Narain Lambah, Principal Architect, Abha Narain Lambah Associates, Mumbai, says, "The challenges a conservation architect faces range from playing the role of advocacy, often to save an endangered monument, to raising awareness about urban conservation issues, working with grass root level organizations and local communities towards implementing urban conservation and signage control. Apart from these, a conservation architect also has to deal with bureaucratic delays and lack of funding or awareness towards heritage conservation and finally, the entire issue of project implementation which brings about challenges of site, ensuring quality and project standards."



material requirement

Given that most heritage buildings were built centuries ago, it seems obvious that the patterns and styles of architecture and the materials used in that era are very different from those that are available now. In these circumstances, restoration architecture becomes a challenge.

There are different schools of thought that say historic structures must be kept as is, in order to maintain their authenticity, while others feel they must be repaired with the materials that had been used at that period. Veteran conservationist and restoration architect, Brinda Somaya, Somaya and Kalappa Consultants Pvt. Ltd., Mumbai says it is hard to procure materials of a bygone era and often impossible to actually source the exact materials. The path to restoration is then completely left to the architect's discretion. Ar. Brinda Somaya says, "The materials used should not create a structure that would overshadow the old look of the building, while the architectural vocabulary should be of today's context and not 100 years old."

Agreeing with her Ar. Manish Chakraborty, Principal Architect, Continuity, Kolkata, says, "Along with sourcing of correct materials, detailed documentation is necessary to have a building restored. In the end, the restored structure should not look like 'pastiche' or fake. It should synthesize with the mood of the past. Many of the materials that are available now cannot be used in heritage structures but at times we use materials like 'lime,



katni, brickbat (shurki), egg yolk, gur, stone dust and curd' to bring in the old flavour", says Ar. Chakraborty.

However, it is not always the materials that are the biggest challenge to an architect, it is also the style and form of architecture of the past that are to be considered in the restoration work. Ar. Jesudiaan Inbaaraaj, Proprietor, J. Inbaaraaj Consultants, Chennai, says, "We try and make minimal repairs to the broken building. Even if we do not manage to get the required materials by which we can get back that old structure, our main motive remains to strengthen the present structure without tampering with it in any way. While we were working on the 300-year-old New Jerusalem Church, we took the following steps to strengthen the building:

- Excavation of the area to expose the foundation.
- Racking up of the joints and removal of loose particles and scaling the joints with waterproofing and hardening with chemical plaster.
- Brushing waterproofing coatings and plinth protection slabs around the building to keep away rainwater.
- Creation of a superstructure to attend to the cracks by pinning method using stone slab or RCC slab or reinforcement 'U' pins and chicken mesh.
- Plastering with waterproofing chemicals.

All the structural work was done using suitable technology of old or modern to suit the requirement using weather-proof and anti-fungal paints. "It is always important to keep in mind to use materials that would give a fool-proof protection to the structure so that it would last centuries before restoration work is started on it again," he adds.



india lags in heritage restoration

India is a country in heritage and culture. Not surprisingly we have innumerable heritage buildings and structures. However, it appears that India, instead of taking pride and preserving these monuments and structures, is extremely negligent compared to other countries. Ar. Brinda Somaya, Somaya and Kalappa Consultants Pvt. Ltd., Mumbai, says, "When you have an abundance of something you tend to neglect the treasure. We have so many of these heritage structures that we neglect them. We need to learn from England when it comes to preserving heritage buildings." "The government is slowly getting sensitised because of certain regulations and statutory requirements, which prevent it from knocking down their buildings. But even if these buildings are not knocked down completely, they are not maintained properly as well. The government bodies need to be sensitive enough to restore these structures. And it is a luxury of sorts for private owners to afford living in a heritage building these days because the government does not facilitate non-wealthy owners in maintaining a heritage property," she adds.

Ar. Dulal Mukherjee, Principal Architect, Dulal Mukherjee & Associates, Kolkata, who has done restoration projects of both government and non-governmental bodies, says, "Privately owned properties are more hassle-free in the sense that owners are more successful in dealing with the tenants, who in most cases are unwilling to

submit their ownership on a property, which might be given out for restoration. The Government has more problems in dealing with these tenants."

Ar. Mukherjee feels the issue masks a broader lack of concern with exterior spaces. "It's time we Indians start taking pride in our streets, buildings, monuments and overall in our own nation. The day we start thinking of the heritage buildings, monuments as our own, we shall start taking their responsibility as well," he adds

Ar. Mukherjee has undertaken several important restoration projects like the Metropolitan Insurance Building, Park Mansions, Great Eastern Hotel, Minerva Theatre and Victoria Memorial Hall among others.



what the future holds

The buildings of the past have a saga to convey to us. Each structure, pillar, motif, stone carving and sculpture is a store-house of unknown treasures of the human condition of a bygone era. It goes without saying that they should be handled with care and sensitivity and most importantly see that restoration work does not tamper with authenticity. Ar. Ashish Sharan Lal, Chief Architect, Alleya and Associates, Kolkata, says, "An architect must understand that there is a major difference in the approach to architecture between then and now – the size, the technology, the style, the materials used – everything has undergone a basic change. So the architect should go into the depth of everything before he takes up a project. The important thing to remember is, after restoration the building should bear its individuality and the changes made on them should be explicitly shown rather than hidden. For example, if a portion of a wall is broken somewhere, we prefer to work on it so much so that further damage is controlled but we do not rebuild the wall. We might give a glass addition to it to show that we have restored it to prevent further damage control."



Historically, India has not displayed much respect for its monuments and structures. However, it appears that this is slowly changing and that the nation has begun to understand the worth of our treasures and to respect them. The government too has a changed policy on such monuments, with the discovery of the opportunities for heritage tourism that are a revenue stream that the Government of India could consider.

Ar Ashish Lal continues, "Kolkata was the capital of British India till 1911 and quite naturally it is very rich in heritage structures. However, our nation has innumerable heritage buildings. If we take the initiative we can increase awareness among the people and make our nation an even more lucrative tourist destination."

Jawaharlal Nehru, in his opening address in a seminar on architecture at Lalit Kala Academy, New Delhi, had said, "The past was good when it was the present, but you cannot bring it forward when the entire world has changed into a technological period." Taking a cue from his statement Asha NM, Executive at Venkataramanan



Associates, Bangalore, which did the restoration work of Hotel Metropole, says, "The idea of restoration is to resuscitate the erstwhile aura of a space or built form and be sensitive to history and understand the nuances of an older architectural language.

"When we recreated the hotel we had to take into account that we have to make it the most comfortable living space for people of this generation. So our focus was to recreate the structure in such a way that its historical element is maintained as well as that it becomes modern in terms of facilities offered."

If architecture is obstinately tied to the past, there is the danger of stagnancy. It begins again to lose itself if not appropriately stitched to the present, making the preservation of heritage monuments in a modern context, the need and challenge of restoration architecture. ifj