

Architectural Conservation

Conservation in India

Lecture 3

Museum Conservation

What is museum conservation? Conservation we have seen in the previous unit what it actually entails why is it doing it. Now the same conservation practice we are doing it and the theory if we bring it back to the scale museum where the indications of decay are much lesser, where the materials are not much exposed to the elements as much as it is outside. So we actually bring a brick of stone or brick inside a museum and test the different causes of decay and different test and analysis which are done on it, the results will not be the same. Because there are certain unavoidable elements which are there outside which the building is exposed to vs in a museum where the conservation, where in this context we refer to the conservation as well as restoration. Conservation actually relies on control factor such as light, humidity. So museum conservation is conservation and the study of conservation under controlled circumstances and when we talk of circumstances we are dealing with conditions like light and humidity where the fragile materials would otherwise deteriorated. The strength of the entire object may be jeopardized so it is very important that if any object is collapsing in museum standards itself. It shall not definitely survive in the exposed elements of nature. It is very important that these parts are replaced or added so we know that it is not going to do well and this is generally done only after the object is carefully documented and the replacement is easily identified. Why is it that the causes of decay are in museum environment? Again the same conditions are there, you have light and the environment of temperature, humidity and quality of air is still going to be there in the museum. But what happens in the museum is. The presence of living organisms like humans and insects is under control vs in an exposed environment of nature it cannot be identified or quantified. If we bring a stone in a museum environment, we know only 3-4 scientist or people analyzing it under working. So we can identify who is causing what damage. Now the same building standing in the exposed atmosphere we know there is

temperature, humidity, quality of air, pollution and other insects, micro-organisms, everything is attacking the building continuously. And this has happened just not over few years but 100 of years when we are talking about a monument. So what a museum environment helps us do is identify these qualities and quantifies these limits of decay and we can make sure that this effect that is causing on the element, this is definitely going to magnify in the outside world. So an unscreened window in a museum will allow light in it. But what happens to the light is the painting could get discolored over time and because of the UV quality of the light and the sun ray further damage could happen. So this is exactly how the paintings in Ajanta and Ellora caves were restored. In a museum setting we see what the rate of decay is and we have to magnify that by 10 times or 20 times depending on the real life humidity, temperature of the environment. So that is the importance of museum conservation. Now coming on to the salient features of monument conservation. We saw briefly what museum conservation is and how it can actually help us with monument conservation. Most monuments in our country have important historical, cultural and emotional associations. And even they combine as combinations of all three. It may also have an outstanding landscape around it. For eg if we look at the stone, things are equally important as much as the mine, we have the charba concept, we have the number of indigenous species of plants so all of this is also the part of the landscape of the sight and one of the chief of monument legislation and conservation is viewing evidence for our build heritage. And make sure that surviving evidence is preserved in such a state that it can be passed onto the future generation without any further damage or loss. So other features that we look at is we have to go through every monument as individual case study. We cannot take one monument and decide in similar way all monuments can be treated. They differ from each other and they require individual conservations solutions. All of them are unique and replaceable and we also should accept the fact that the impact of element will not be the same for all the elements. We could have seen 3 or 4 monuments made of sand stone but the effect of time and all 3 monuments need not be the same. So all of this has to be started and we also should accept finally whatever interventions are made finally in the buildings, all buildings do have a final life. They are not going to go

on and on. So we have to decide that what stage of life this building in and what can be done to ensure that at least same level of existence continues. If not making it better we should not disappear continuously. Works of conservation aim to prolong that life of a building, there has to be a balance that has to be achieved now. We have to make sure that the continuing existing as it is but also make sure that the changes we make on it do not hamper the historic significance of the monument. Because we do make changes that changes the character of the monument the whole purpose of conserving the monument is lost. And it should always be at the lowest level of intervention and unnecessary steps shouldn't be taken. For instance we cannot say ok what happens if an earthquake comes, should we do this? The what if situation should not be discussed with monument. We shall take the case as we get it on that day we have to study it. We cannot anticipate certain things and make unnecessary changes. Another thing which we have to look upon is the cultural significance and historical significance of the building with respect to the people and the surroundings. Another thing we have to look upon is the construction history what kind of material was used, what technology was used what are the different artifacts that are used any particular kind of paintings, sculpture any important painter of sculpture or artist was involved all of this is not only the part of historic fabric but also part of the history of building itself and any work that is carried out all these factors must be taken into consideration. And if at all any paintings are tampered with or we need to repair it. It should be done with the help of expert in that field. A conservation architect cannot decide that ok I will preserve the painting in so and so way, we have to call a person who is specialized in preserving the painting. The 2 schools of thought which we have discussed in the previous unit, what is correct or incorrect, nothing like that we can either preserve a building or restore a building. So what happens when we preserve it and what happens when we try to restore it? This is an example of chettinad palace in kanadukathan. This has been preserved because they use this palace and the owner are very much alive. It is the private residence of a family. They are very much looking at the building, funding is not an issue. They don't expect it from the government. They just want recognition of an important site that is of from the government. Because they are prominent family they don't need anything

like funding from the government so it can be afford to be preserved. If the same case was in a situation where the government is heeded and we need the money. We have to look into adaptive re use. Not that we can be preserving the building but we actually look at the present and the artifact of the important features that re in use like the corner details over here we can see the porch like structure that can be reworked that is very new at that point of time. The series of massive teakwood burning, columns. The beautiful ceiling paintings. The arcade the wooden columns, tile roof all of these are architectural features that we need to make sure that the original design is not tampered with. For instance now we could realize that lot of rain waters coming in through the roof and the sloped roof is not serving the purpose. But it doesn't mean that we can cover with glass or we can extend the roof. No. However important it is we cannot decide to tamper with architectural character of the place because we are preserving the structure. Now if we go to restoration in places like this we basically want to retire to its old state or original state as we can know of it. So what we can do is remove layers or additions if there are there, changes in time if there has been made and if there is not permitting to go onto the past. So any changes that are unnecessary or not true to that past or the original building will be removed but only after suitable documentation not after any haphazard removal. Now we have seen both preservation and restoration.

National Conservation Policy

Now we come on to the architectural conservation process in India. One major organization which is part of this is Archaeological survey of India ASI otherwise known as so this was basically established as pre independence by the Britisher's and their work has been carried out till date. Even though their main aim of ASI is to ensure that all the historical monuments are listed, documented and drawings and photographs are available for them so it is ready reckoner. If we suddenly want to decide how many buildings are there in Uttar Pradesh? Andhra Pradesh, we will have a ready reckoner as so many buildings are present and this is the age of the building, this is the architectural character of the building. So this is the aim of the ASI. They want to explore, excavate in places of archaeological sites, conserve and preserve to protect the sites of national importance and it is of

international importance for instance, sites like Hampi and Mahabalipuram have come under ASI's purview because UNESCO has recognized them as world heritage sites. How ASI happens to do this is, every state has its own chapter or unit, they take care of their region or state further on they have cities in charge which they look after the other buildings. So how is it, it goes about the doing its function. They have something called project survey which entails both survey of the buildings and temples. So when we look at the survey buildings it is basically institutional and secular buildings. They are non-religious buildings it could be Queen Mary's College in Chennai. It could be the secretariat building in Chennai, things that have been used only for secular purpose. Then there is a separate department that takes care of temple survey, they carry out all the survey in different parts of the country. They are in charge of detail plans as the survey structure as well as marking out any damages that occur on the structures. An excavation branch on such just true to the archaeological revision. Make sure that all these sites are taken care of. The prehistoric divisions take care of any old sites as that of Indus valley civilization in our country. Now we come on to the next organization that is in charge for conservation in our country which is non-governmental organization, non-profitable organization which is INTACH Indian National Trust for Art and Cultural Heritage. This was founded by Rajiv Gandhi in 1984. It was initially the Charles Wallace Trust which then INTACH absorbed into itself and it was set up. Their main aim was to preserve and conserve and before that their main aim to list the documentations of non-monumental buildings. If we actually look at the purview of ASI. They consider buildings that are 100 yrs and above into the purview. They don't consider the non-monumental buildings. So what INTACH decide to do is Indian heritage is not only about monuments or massive temples we have so many buildings that actually contribute to national state level important heritage sites that are 50 yrs or more. So they decided that they will start documenting the buildings of that age group. What is the role of the INTACH organization? Their main aim is, as I told it is non-profit organization their administrative level, they have again authority with respect to they teamed up with local authorities but as such they do not have legislative authority. Their aim to create awareness about the cultural heritage about the local area and provide significance. Their aim is to list culturally important

buildings or listing of cultural heritage which is again very crucial. Advocacy is next important thing it deals with. The fight for buildings that are close to demolition. For eg its because of INTACH that Kalsa mahal or thr Gokhle Hall which is there in Parrys corner has been preserved. INTACH would actually go to court and get stay order that would actually prefer enchrochments and demolishing of heritage buildings. Then they aim to network with schools institutions and colleges to have heritage club set up academically relevant heritage related groups and projects. Then they decide to start passion project. What passion project is to actually demonstrate INTACH is this about it. They require a project, the love and affection of people who are passionate about conservation. Then they are into writing and publication of books, pamphlets to actually educate the people in the field. MAY BE students of architecture, practioners. Planners etc. They wanted to develop a community based knowledge and wisdom which shows itself heritage walks, folk festival like madras week and celebrations like that and they encourage the establishment of a heritage cell within local bodies like MMDA. Now if we look at the INTACH they have many chapters for every city, every state and every chapter focuses on its own relevant information. Like they focus on awareness creation next focus is on listing and finding intangible and tangible heritage products. Finally taking up a passion project and making sure that those buildings are listed, documented and bestowed and a sign of communal level activity like art festival or crow festival so people are not only aware of the building or the heritage but also there is a fun element attached to it like economic twist given to it.

Purpose of Conservation Policy

Now we come to a serious part of architectural conservation. We will discuss the national conservation policy for monuments, sites and remains protected by the ASI what is the purpose of all these policies. Is it tough that we have or we know so that we know so many heritage buildings? It is definitely not sufficient. We need policies and legislations to safeguard them. So here this is the main thing of the Indian archaeological policy 1915. This was passed on in Calcutta.

"The functions of the Archaeological Department are, in the main, two – conservation and investigation. In the view of the Government both these functions have an equal claim to its patronage, and it will be seen from that follows that in recent years increasing attention has been paid to exploration and research of every kind. But for the present, owing to its persistent neglect in years gone by, conservation is, and for long remain, the paramount duty of the department. In the discharge of this duty the first essential is to take stock of the existing materials and to decide which of them are worthy of preservation".

So as the main law states, the 1st aim is to have very good listing and documentation of heritage. That is the 1st step of heritage. Its only when we have comprehensive list and we have documentation supporting the list. We know which building requires paramount work and which requires least work and It can be scheduled accordingly. Now we will look into a couple of policies and articles with this law that are pertaining to the life of a conservation architect in our country while we are doing conservation projects.

Article 4 Conservation Principles

Article 4.01

"Conservation" of monuments, archaeological sites and remains constitutes all necessary action or intervention within and around a monument to a) prolong its existence; b) prevent its decay, and c) minimise the impact of external agents of decay (natural and human induced) on its setting, structure and material.

So as an conservation architect we have to make sure that our aim is to prolong the life of the building prevent further damage happening to the

building and make sure that it is not going to hamper the other buildings around and it is not going to be affected by both natural and human factor.

Article 5 Conservation Approach

Article 5.01

Conservation of a monument should employ state-of-the-art scientific equipment and technology to facilitate research and understanding of the physical nature of monuments, analysis of its materials and construction technology, and that of its current condition (due to natural or human induced causes). Use of appropriate technology should also be mandated for documentation purposes.

So according to this article stress is actually placed on documentation and scientific recruitment to facilitate this documentation. This shouldn't be done just by look of or by the study of naked eye or how tall is this building. We have to employ the correct method, the laser measurements, the laser tape if we are not able to manure or measure certain buildings and the documentation is of paramount important. Apart from this documentation is the analysis of materials.

It is important to prepare Conservation Plan for a monument preceding any actual conservation work in order to understand proposed intervention[s] in the context of a monument's typology and function. Conservation Plan should clearly define approach to conservation and the extent of conservation interventions. Conservation Plans should be reviewed regularly to evaluate previous recommendations and their effectiveness and incorporate changes should any new issue be observed that is impacting the authenticity and integrity of the monument. The plan should be reviewed once every five years.

Here the article stresses importance on having conservation plan for any monument. It's better to actually have a plan if it is going to be converted into tourism sites and things like that because we will have the documentation of the original structure proposed interventions or proposed reuses. If it is going to be adaptive reuse project and what is the effectiveness or how these changes are going to help the building

Article 6 Role of Building Craftsmanship in Conservation

Article 6.01

India is blessed with the continuing existence of **traditional masons, crafts persons**, carvers, etc., with their practices still available and functioning in different parts of the country. They practice Indian ancient traditions of construction, detailing, sculpting, carving and painting, and their traditional knowledge systems are replete with the understanding of **ritualistic aspects and principles** and elements of design employed in the production, construction or carving of architectural or ornamental members **embellishing a monument**. In most cases these traditional knowledge have been **transferred within families** from a parent to his / her child for generations or following *Guru-Shishya parampara (teacher-disciple tradition)*.

The final article we are discussing here in detail is how craftsmanship is important in monument. Very important is traditional masons and crafts make sure that crafts lives on because there is no documented thesis or written about these crafts and if at all there is documentation. It is not going to be the same. For eg these Aathankudi time makers have 30 different families currently. And if we look into the 30 different family, the composition and style varies and 30 types. But the final product could be the same. But the new instances of making them is different. So no particular course can be taught or no people can be recruited to do this is as this is something that father teaches the son or daughter and it carries on from generation to generation. Now we come on to the importance of inventories and why inventories are required. Let it be a shop or a business, we have to know what is that we are selling and how much is that

you are selling. If we go to a shop he will have the inventory of all the thing he has similarly a country has to know what is the inventory in terms of its cultural heritage or built heritage. So that is exactly what an inventory does here. It helps us educate. It helps us learn about our legal rights towards the building it helps us making realized decision about the life of building, resource allocation and these decisions need to be well informed. Elements of inventories are another important thing that we need to take care. An inventory helps us to articulate the value there is mismatch of expectation sometime. But these expectations have to be done well through an inventory. It helps us list state, cities and finally national and international level what are the buildings that are there in our country that are of heritage and historic importance. Then the local legislation and national legislations will apply to this. We have learnt from the Australian model in similar way. An Australian model does the same thing. They have national, state and local levels. And we have done the same thing in our country as well. So as we have learnt from the boorah chapter in Australian model we have decided that we have to list our buildings based on aesthetic, historic, scientific and social criteria. So with this we will actually come to a conclusion of this lecture with inventories and the use of inventories.