

## **Vernacular Architecture**

### **Lecture 01**

#### **Vernacular – Definition**

This is an image from around the world in South Africa. The next is a Maasai house, Tanzania. This is a house from Timbuktu and Payerhutte, Italy. This is Black house from Scotland. We had a quick look at five houses from around the world. I will take you closer to a few examples at home; Dhungas or the boat houses in Kashmir, the Havelis in Gujarat, Agraharams in Kerala and TamilNadu and mansions, Chettinad. Now, we had quick look at all these images. I want you to consider the following definitions and derivations.

In order to understand any field or any study, any specific character of any study, you need to look at the words, their epitomology and derivations. When you look at Vernacular architecture, let us look at how the word was derived. Vernaculus, meaning domestic, native and indigenous. Verna meaning native slave or home born slave. This you could overlook and look at something to the effect of homemade or of homeborn needs. In the field, the study of linguistics or of home born needs. In the field of linguistics, Vernacular language refers to a language use particular to a time, place or a group. Those were some of the derivations. Looking at definitions and derivations, they help us to draw closer to understanding the study. Now, we will look at some direct definitions of Vernacular architecture - I have started out with a very critical definition but one of the renowned architects - he defines Vernacular architecture as 'Folk building, growing in response to actual needs, fitted into environment by people who knew no better than to fit them with native feeling'. This is rather a critical way of defining vernacular architecture. Nevertheless it is a definition. The next definition is by a certain person called Ronald who is an English academic, who has done extensive study in British Vernacular architecture. He defines vernacular architecture as "a building designed by an amateur without any training in design; the individual will have been guided by a series of conventions built up in his locality, paying little attention to what may be fashionable.

I'd like you to take a keen note on the word fashionable.

...The function of the building would be the dominant factor, aesthetic considerations, though present to some small degree, being quite minimal. Local materials would be used as a matter of course, other materials being chosen and imported quite exceptionally." If you look at these key words without any training in design, little attention to what may be fashionable, the function of the building and local materials. These are some keywords that are to appear throughout Vernacular architecture and they in fact define what Vernacular architecture is all about. We looked at two different critical definitions and that is for you to understand Vernacular architecture a bit more critically.

I would also like to mention what vernacular architecture is not; It is important to understand what something is not, so as to get closer to understanding what it is. Vernacular architecture is not something that is designed by architects. This can be quite ambiguous. Nevertheless, it's more accurate because architects usually put a lot of time into design, have a pre-meditated notion but vernacular is not so. Architecture designed by architects is usually not termed vernacular architecture. Though which is being followed a lot and a good practice would be to incorporate those features in our present times. The very process of conscious design makes it not vernacular. Putting conscious design into something makes it non vernacular. Also, Vernacular architecture is not necessarily specific to olden days or modern times, it's simply the nature of approach that defines it. So when someone says Vernacular architecture, it doesn't necessarily have to refer to something from the past or history, it can be something today. You walk into a rural setting today, they'd be constructing something on their own for their own needs, that can be termed vernacular but not necessarily ancient. This is what architecture is not. I did tell you about FL Wright while talking about Vernacular architecture even though he said he'd offer some food for thought - FL Wright suggests that Vernacular architecture is a primitive form of design lacking intelligent thought, but is a better worth study than all highly self-conscious academic attempts at the beautiful works throughout Europe. While Vernacular architecture may not be intelligent, may not be fashionable, intended in terms of aesthetic appeal, it does have a lot of things to shed light upon in terms of the evolution of architecture, the needs of the people and how vernacular architecture has evolved from time to time to the effect that he says it is a better worth study than all highly self-conscious academic attempts at the beautiful works throughout Europe.

Those were critical definitions and understand what vernacular architecture is essentially not. But when someone asks you what vernacular architecture is, these could be some terms or definitions that you could use. Vernacular architecture is a term used to categorize methods of construction which use locally available resources and traditions to address local needs. Vernacular architecture tends to evolve over time to reflect the environmental, cultural and historical context in which it exists. Another definition; it is an indigenous architecture with specific time or place which not necessarily is imported or copied from elsewhere. It is most often applied in residential buildings.

When you study vernacular architecture from the past, you know it applies to residential buildings and dwellings. In contrast to planned architecture by architects, the building knowledge in vernacular architecture is often transported by local traditions and is thus more but not only based on knowledge achieved by trial and error. Vernacular architecture resides basically on the foundation that everything has been tried out, researched about its errors, taken further and evolved into its final shape. This is a generation of trial and errors which

makes its starkly contrasting to architecture that is more systematic and based on geometry rather and often handed down through the generations rather than calculated on knowledge of geometry and physics. The architecture today is dependent on a lot of aesthetics today that is governed by geometry, physics, fashion. This though is passed on by local set of traditions, trial and error basis. We have gone through a few images to understand visually what Vernacular architecture is all about putting words to effect to what derivations and definitions are brought to explain what vernacular architecture is all about. Some books to ponder about; Architecture without architects - the term itself suggests Vernacular architects are a bit distant cousins. Architecture without architects by Bernard Rudofsky - Encyclopedia of Vernacular architecture of the world by Paul Oliver. These are the two important books that not necessarily explain vernacular architecture throughout the world but helps you to understand the system and structure which you can apply to the study of vernacular architecture.

### **Vernacular & The Architect**

The next topic we will be going through; The relationship between the Vernacular and the architect. I would like you to consider these two images. The one on the left is in Britain, British Colonial architecture. The image on the right is from England but its Vernacular architecture. If you look at both of them, you will understand visually what I mean, its self-explanatory. This is based on geometrical technicalities, a lot goes into the aesthetic appeal, while the image on the right is based on what a person needs at that moment, on a very local and temporary basis. This is the contrast between architecture and vernacular architecture. I have taken you through how an architect defines Vernacular architecture in the words of Wright. As I said earlier, Encyclopedia of Vernacular architecture is a good way to start. Paul Oliver is an important person who contributes to the study of Vernacular architecture. In his words it is contended that 'popular architecture' designed by professional architects or commercial builders for popular use, does not come within the compass of the vernacular. That is pretty obvious. Popular architecture or generally architecture of today is not considered vernacular architecture and it does not come under the compass of vernacular. It can be contrasted against polite architecture which is characterized by stylistic elements of design intentionally incorporated for aesthetic purposes that go beyond a building's functional requirements. This is the most primary point, when we talk about vernacular architecture, a person identifies his needs, puts some methods and principals to address his needs with the local available material and gets his works done. While in terms of architecture, to incorporate stylish elements which may or maynot be functional. They do serve functional purposes, they also appeal a lot to the aesthetic needs of the present day.

This maybe a bit shocking but it is true, only 1 in 10 of the buildings in which we live or work are designed by architects. Contrary to the very precipice of architects practising architecture, here

is the truth of how buildings are not always designed by architects. Only 1 in 10 buildings are designed by architects and a huge part of the world's architecture is vernacular. The rest of the architecture may or may not fall under vernacular but it certainly isn't architecture. The rest of the world, as you see, everyone doesn't employ architecture, what they do is, they address their own needs and they come up with buildings that address their needs.

Many modern architects have studied vernacular buildings and claimed to draw inspiration from them, including aspects of the vernacular in their designs. As I said earlier, even though Wright has mentioned before, even though it hasn't been an intellectual or intelligent work in terms of buildings, it is nevertheless a study that can be used to study ongoing evolution, the reasons for which a building gets shaped and various other factors like climate, the available materials, the social, cultural and economical aspects. While it may not be termed vernacular, studying the approach and concepts of vernacular architecture helps them understand the culture, context and climate.

Here I have some examples of how architects have looked at Vernacular architecture as an example, as a way to study and incorporate in buildings. Hassan Fathy, works primarily in Egypt. He is an architect from the times of Le Corbusier and Wright. He is an inspiration for people who studied Vernacular architecture and tried to retain its features. Hassan Fathy studied Traditional Nubia settlements and technologies, he incorporated the traditional mud brick vaults of the Nubian settlements in his designs. An important work of Hassan Fathy would be the housing he did for thieves and robbers. You can have a look at it and most of his work, when you look at it, you can understand that it is a product of study from the past. The first traditional Nubian settlements and technologies that he applied, failed. Nevertheless, it has been a start for such studies. The experiment failed due to a variety of social and economic reasons, as I said Vernacular architecture is not specifically restricted to the local needs or available materials. In terms of that, this experiment failed but led to other things. It is the first recorded attempt by an architect to address the social and environmental requirements of building users by adopting methods and forms of the vernacular.

Continuing further, another person who did a lot but not just in terms of study, not restricted to vernacular architecture but added modernism to it, is Geoffrey Bawa - the architect from Sri Lanka, originally from England living in Sri Lanka. He brought about the style of architecture that is currently relevant a lot in South Asia, called Regional Modernism. He also derived a lot from Vernacular architecture. Charles Correa and BV Doshi are two pioneers of the vernacular adaptations of the local architecture. Adaptations of the local architecture, I don't need to tell you about them cause there are a lot of their works to look into. Sheila Sri Prakash, an architect who used rural Indian architecture as an inspiration for innovations in environmental and socio-economically sustainable design and planning. On one side, vernacular architecture is good to

study about in order to look into architecture and its needs better. On the other hand, to look into the future, Vernacular architecture is an inspiration since Vernacular architecture in its very foundation to address local needs, keeping climate and culture in mind makes it a bit of a sustainable concept. That is an example that can act as inspiration for future settlements.

Here, the image on the left is by Sheila Sri Prakash, the one in the middle is Geoffery Bawa's work, the one on the right is Charles and bottom is by Hassan Fathy where he studied about Vernacular architecture and he brought them into housing experiments that he has done.

### **Moroccan Desert Fortresses**

Next, we move on to, a simple study. We had an understanding of Vernacular architecture, what Vernacular and architect have in common and such things. Now, I will apply a direct study, distance yourself from the definitions and let's talk about some direct examples. Here is an example of the Moroccan desert fortresses. You look at the image and you can understand that it has nothing to do with present day architecture or architecture that involves a lot of design. I'll read out some features for you, that has shaped what it looks like, rather defines Vernacular architecture more or less. It is a Fortified village - commonly called as Kasbahs. In case you want to read more about these desert fortresses, they are called Kasbahs with small windows built high and close to each other. So you notice that every design feature has a design that they have been put through. This is a direct response to the climate and utilitarian aspects. When you design, when these people design for themselves, they don't consider fashion, they don't consider aspects like premeditated notions to be considered for design. This is also a method of expression for wealth and prosperity. As much as we talked about the utilitarian aspects, culture and socio economic reasons also form an expression in terms of building Vernacular architecture. It was also a defense strategy and Kasbahs are a skillful adaptation to the harsh climate in hot-arid regions. Apart from doing what they need, our direct response to the climate dictations of that particular region. The layout of the Kasbahs. height, orientation, the use of materials play a major role in the temperature regulation. It's a direct result to the climate.

Another example is the; Norias of Hamas. We were talking about a desert fortress which directly deals with dwellings and residential buildings. This is an example of vernacular which does not have to restrict itself to just living buildings or immediate needs. Norias of Hamas is nothing but a huge wheel that is used to elevate water from one level to another level. This is simply a direct need answered. Since it did not have much of design or pre meditated notions, it forms an important example of the vernacular architecture. An example of how vernacular was not just architecture but also extended to other aspects such as mechanical and social purposes. Norias are water wheels to raise water from one level to another. A response to

harness water utility which can be termed an ingenious method. Indigenous, ingenious, local, these are words that are going to be played around in vernacular architecture. It is a significant example of how the vernacular is a process.

Vernacular architecture does not specify only architecture, it talks about how the vernacular is a process of how a settlement evolves in terms of socio economic reasons, in terms of culture, in terms of architecture, also in terms of planning and settlement development as well.

We are going to be talking about the influences that affect vernacular architecture. I want you to consider these two images as well. If you look at these images, you can get a rough idea of what influences Vernacular architecture. The first thing that should strike you is the materials that are used. When you look at a modern building, the materials are rather brutalist or rather evident of what they are in themselves but these show that these are locally confined materials that are easily available and can be put to use easily. Next thing that you'd notice is that, they are rather temporary and not premeditated for a long time or not intended to stand for a very long time. They just answer their need which shows that they adapt themselves to a lot of reasons. It helps you understand that there are a lot of reasons that go into the making and evolution of vernacular architecture. The next thing you can see is the response to climate. You have a sloped roof which means that it is a response to precipitation of the area. There is something called the wind tunnel, they are reacting to the wind that's there. The openings are not typically big or with shutters as such which means that these are small and meant for the wind. These are all direct responses to the climate. Next image you can see is more relevant to the Indian context. If you notice, you look at courtyards. There are Gables, waterbodies and the Plinth. These are direct responses, you raise the Plinth so that you can capture the wind. There is a water body which shows it is a reaction to the climate. In order to cool the relevant temperature of the zone, there's a waterbody. The courtyard acts as a way to funnel the hot air upward and bring in the cool air. Then there are Gables that bring in light and also a way to release hot air. This gives you a rough idea of what influences architecture. We will talk about them in detail.

Factors influencing Vernacular architecture; Climate and Geological reasons; Local materials used and the technology adopted. The reasons or the various factors affecting Vernacular architecture would be different in different typologies, we can have a broad category and a broad look at each of them. Vernacular architecture is influenced by a great range of different aspects of human behaviour. Apart from all these, human behaviour or human intent is an important part of shaping Vernacular architecture, leading to different building forms for almost every different context. You can notice the difference between one village to the next, that's how much vernacular architecture is complexly driven by. Even neighbouring villages may

have subtly different approaches to the construction and use of their dwellings with significant similarities in structural forms.

The way of life of building occupants, and the usage of shelters, greatly influences building forms. You talk about occupants, human intents and human needs. The size of family units, spatial usage, preparation of food, interaction of people and many other cultural considerations affect the layout and size of dwellings. You must be wondering what cultural effects can it have on a building in particular? I will give you two examples; in Indian context women are supposed to mingle with each other on various occasions of the day, they have a space for themselves. On the other side, men act as teachers and students have another set of places. When you consider these two reasons, these have a lot of influence themselves and so there are numerous other reasons like these to shape Vernacular architecture.

Culture also has a great influence on the appearance of vernacular buildings, as occupants often decorate buildings in accordance with local customs and beliefs. People have different forms of shelter appropriate to different seasons and geographical locations. You can't make a prototype product, it's rather an evolution. People use summer spaces and winter spaces in a particular building, they make it adaptable to different climates in different cultural locations. The development of different solutions in similar circumstances because of cultural influences is typical of vernacular architecture. A typical influence on Vernacular architecture is culture and its effects.

It is considered a study of worth. Vernacular architecture and its associated aspects of socio, economic, cultural and artistic features has been a source of study that has thrown light on approach to our living environment by people before us. In order to be a good architect, in order to understand architecture better, it could be a study worth that you could take up because it directs you in terms of socio, economic, cultural and artistic features as well. Vernacular architecture not only interests architects and archeologists who can study from them. It also includes and interests people from other fields. In the field of sociology, the intensive surveys of individual communities that discovered the buildings of different people. When you talk about different people and the buildings, you also throw light into the different individual communities. Likewise, they also interest geographers, students of folk life, architectural historians.

Some types of Vernacular architecture are;

Domestic, Agricultural, Industrial and Religious. It started with domestic but it can't always be restricted to that, it moves on to Agricultural, Industrial and religious. We talk about Vernacular types in detail in the coming presentation. Domestic Vernacular architecture, Agricultural, Industrial, Religious and so.

