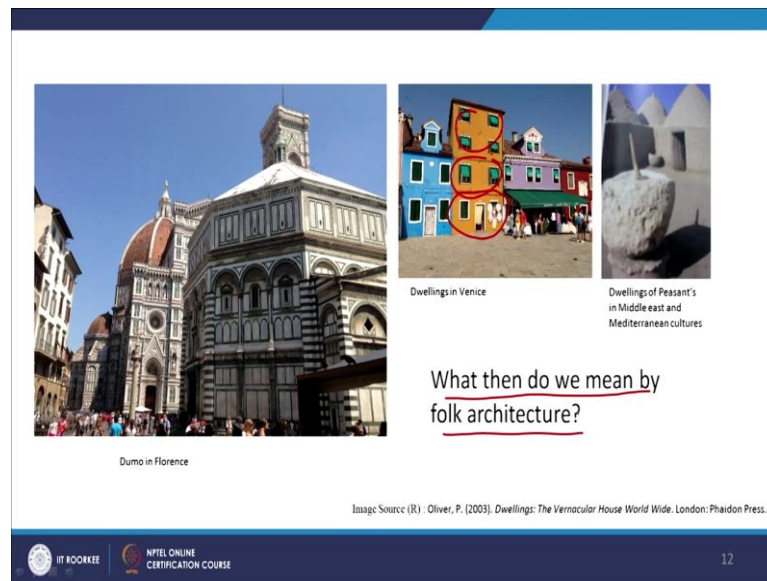


**Culturally Responsive Built Environments**  
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**Indian Institute of Technology, Roorkee**

**Lecture – 04**  
**A Home-Introduction to Vernacular Architecture**

Welcome to the course Culturally Responsive Built Environments, lecture 4. And today we are going to discuss about 'A Home- Introduction to Vernacular Architecture'. So, following a little recapitulation of our lecture 3; we actually discussed about Bourdieu's, habitats, fields, and games. And then we brought a little criticism of Bourdieu theories from the built environment perspective. And we introduced you to the vernacular architecture, house form and architecture, Amos Rapoport's work.

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So, what Rapoport actually points out here, he starts with work in the cultural geography series in, because there has been a huge discussion on monumental scales. On here you can see the right hand side, the left hand side, you can see that the Dumo is all monumental scales. And most of the architecture has been discussed in developing plazas, or the Vatican city plazas, or any monumental buildings, the Ziggurats, so, great granaries. So, this kind of scale always architecture has been discussed.

So, what about the folk, what about the peasants houses, what about the soldiers houses, what about the common man's living. So, has it considered as an architecture? So this is


a very fundamental question. So, on the right hand side, which you see here is dwellings in Venice. You know, where the embroidery work, the lace work, goes on and in the you have the shops in the bottom, you have the shops in the bottom, and you have the dwellings in the top, and they have a small workshop in the; so like that, the each and every common man's house is designed as per his needs and similarly, a kind of peasants dwelling in the Middle East and the African nations. But this is where, he talks about the folk architecture.

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The folk tradition, is the direct and unself-conscious translation into physical form of culture, its needs and values- as well as the desires, dreams, and passions of a people.

It often referred to the "ideal" environment of a people expressed in buildings and settlements, with no designer, artist, or architect with an axe to grind.

Bernard Rudofsky(1964) calls as non -pedigreed architecture.



**ARCHITECTURE WITHOUT ARCHITECTS**  
by Bernard Rudofsky

Rapoport (1969) House Form and Culture, PRENTICE-HALL, INC., Engle Wood Cliffs, NJ.

Rudofsky (1964) Architecture with out Architects : A short introduction to non-pedigreed architectureDwellings: Doubleday&company, Inc, Garden city, NewYork.

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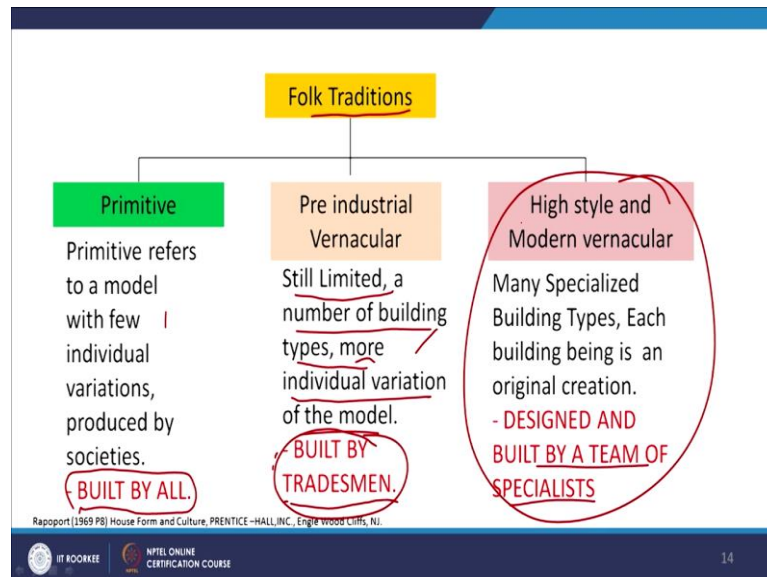
And when we talk about the folk architecture, it directly refers to the folk traditions. And it is folk tradition, is a direct and unself-conscious translation into physical form of culture, its needs and values, as well as a desires, dreams, and passions of people.

So, on the similar note, when we say it is not a conscious thing, it is an unself-conscious, it is a collective effort. And one of the important contribution in this field, I want to bring is by Bernard Rudofsky from the Modern art museum displays; one is architecture without architects. He brings a short introduction to non-pedigreed architecture. And so this is a kind of a contribution, which talks about a common the tribal architecture, and the symmetries. Where a man have built everything of by himself and as per his need, as per his values, as per his associations, and what kind of dreams he has.

So, Rapoport always refers it as a kind of ideal environment of a people expressed in buildings, and settlements, where there is no designer, artist, or architect with an axe to

grind. So, there is no technical person in the field, where someone is, because everyone is master of that and they built by themselves. So, he calls this as a non-pedigreed architecture.

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Now, there is always a discussion of what is vernacular architecture. Unfortunately or somehow, in many of the discussions I notice that it is very much narrowed down to materials itself. So, I would like to give a clarification in the whole this whole lecture series. At least one can become familiar about the vernacular architecture, and how it at least how it is addressed in the change context.

So, now Rapoport talks as folk traditions, he classifies into three stages, one is a primitive, and pre industrial vernacular, and the high style, and the modern vernacular. So, how these words came before this, because this was published in about 1969. And before this time, if you look at the literature, they talk about high culture, low culture, low communities, high communities, a popular culture. So, there are variety of high and low the depending on the status of their position, you know that is how the culture is always seen.


But now, Rapoport brings these discussions into the kind of time, and it is the how it is the how it is designed, and how it is built. So, he brings that particular you know, the context of how it is the process of design, and process of building it; as an important tool

making a reference of this primitive, and pre industrial vernacular, and the high style, and the modern vernacular.

Here, he refers to a primitive refers to a model with few individual's variations, produced by societies. And here everyone can build anything, and everything, so it is built by all. But, whereas in the pre industrial vernacular, it is still limited, a number of building types, more individual variation of the model. So, it is mostly built by the tradesmen. Whereas, in the high style, or a modern vernacular, here you have it is designed, and built by a team of specialists.

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In primitive societies, there is diffuse knowledge of everything by all, every aspect of tribal life is everybody's business. No technical vocabulary, because there is little specialization beyond age and sex.



Samoan fale construction 1896 in polynesia

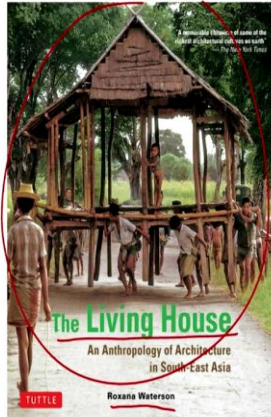


Image [R] Source: By Charles S. Greene [1856-1930]/Publisher: San Francisco news co. \*uploaded by Teinesavaii - Image from 1896 published book Talofa, Samoa: A Summer Sail to an Enchanted Isle.; (USA,1896)[1]. Public Domain, <https://commons.wikimedia.org/w/index.php?curid=8522054>

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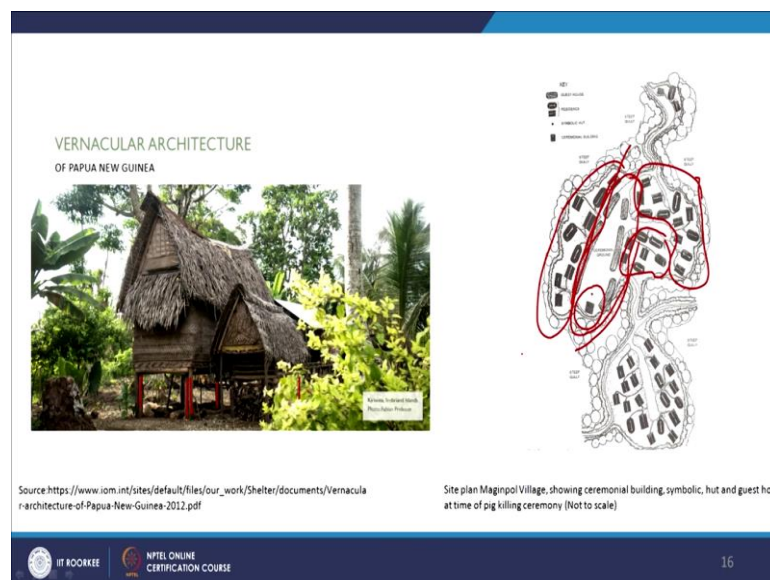
So, I will show you how it has been brought. And when we say the primitive societies, there is a great diffusion of knowledge of everything by all, you can see everything by all, every aspect of tribal's life is everybody's business. It is not my home, your home, it is our home. It is everyone makes it, everyone is part of everything. So, there is no technical vocabulary in this process, because there is a very little specialisation beyond age and sex, and the any gender.

And for instance, I would like to talk about Roxana Waterson's work, on the Indonesian, the Salang Toroja tribes in Sulawesi islands. So, where you can see, when all the children, men, everyone they you know they are involved in the construction of these house. And this is they call it a living, so it is a very interesting book, one has to really go through it 'The living house'.

And then and a very; and this particular process, very slightly differently from one community to another community; Whereas in the Polynesian communities, in the Pacific, there you can see all the dwellings are built by the villagers themselves, and the chief's dwelling is actually built by a carpenter. And whereas in the Melanesian cultures, where the villagers build their dwellings by themselves; but then whereas the chief's dwelling, the whole village contributes to the temple, or a ceremonial structure.

I will show you a good example. So, in Polynesia, in Samoan tribe, which we call it is a Fale. Fale is referred often referred from a very small structure to a very big structure also. And you can see that they are all raised on the piles, in a circular shape, and people start constructing with these kind of coconut palm, and other locally available materials.

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So, in the same similarly one of the interesting works of Vernacular architecture of Papua New Guinea which is adjacent to the Indonesia; you can see that these dwellings. Similar things you will also find in the Sri Lankan communities, a part of it, part of Sri Lanka as well. And you can see they use a kind of coconut leaves, embedded coconut leaves, and they made these kind of dwellings and in order to protect themselves from the floods and the rise on a slight plinths.

And here you can see the whole settlement. So, they are all the dwellings here, the residences all these are the residences right. They are all built by the villagers by themselves their own dwelling. They know the because, they know the needs, they know

their family size, they know the requirement. But whereas in the ceremonial building, here you can see which is a huge public place here, where they do certain rituals and the practices, so that is actually the whole village might come forward and build it.

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I will show you some good examples of that. And here you can see the big difference between the ceremonial buildings, and the residential buildings. Here they are very symbolic. And in fact, when the village builds this thing the fine crafts you can see, it is finely crafted. Now, this yam house details, sometimes it is a kind of a cultural building where they store some of their food products as well the roots, things like that.

And even they give a great detail even the selection of timber, the quality of timber. And even they give a great detail of the kind of finishing the kind of artwork it is done. Because, it also symbolises the wealth of the community because it has to be durable, it has to be it has to really indicate their sense of belonging. And you can see a little variations in the housing typologies where the elders house they built, and whereas the family houses how they built here and now.

Earlier in my previous slide which we talked about the primitive refers to a model with a few individual variations. So, which means in the Dogan tribe discussion also we talked of very few individual variations; may be a chiefs house or a ceremonial will be slightly different, but whereas the communals they are all mostly of a similar version of it. And it is built by all. But, when we coming to a little progression and we can see some kind of

variations whether it is an elderly house, whether it is a big family house or anything; so slight variations are coming out.

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In the Trobriand Islands, Yam houses contain highly symbolic architectural elements and adornments. The fine level of detail and craftsmanship indicate the cultural importance of such structures. Decorative features, construction quality, permanence and prominence of a Yam House are all indicators of a man's wealth and hierarchy. As the name suggests, these structures are used to store yams (a common root vegetable). However, only the most impressive yams of the harvest will be put on display in a Yam House. Food yams are stored separately in domestic storage areas.

Source: Julia A. Hendon, "Having and Holding: Storage, Memory, Knowledge, and Social Relations," *American Anthropologist* 102, no. 1 (2000)

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And now, which I talked about these ceremonial structures in Trobriand Islands in Papua New Guinea, these Yam Houses contain a very high symbolic architectural elements and adornments. And the fine level of detail and craftsmanship indicate the cultural importance of such structures. Decorative features, construction quality, and also the permanence and prominence of a Yam House are all the indicators of man's wealth and hierarchy.

So, and these structures why they are used, these structures are used to store yams which is a common root vegetable. So, however only the most impressive yams of the harvest will be put in the display in a yam house. So, why they are paying more attention to make it more attractive and make it more dominant and make it more identified as a cultural or a particular importance; so, because it also shows the wealth of the community.

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And now, we talk about some primitive aspect of it. I will give you another example, in Djenné and this is also one of the heritage site, the Djenné mosque. Here, it is completely built with mud and these come in the local communities; even today, how they restore this mosque is they do a kind of ritual every year. So, they get mud from the river; and then so, all whether it is by gender, by age, everyone participates in the construction of this kind of religious building.

So, here in they have every year, they celebrate a particular time of the year, they celebrate a particular ritual; so in order to because mud buildings always need certain maintenance. And in that particular maintenance process, it needs a very periodical maintenance sometimes, some structures, some they need for even sometimes in every couple of months or sometimes every one or two years like that.

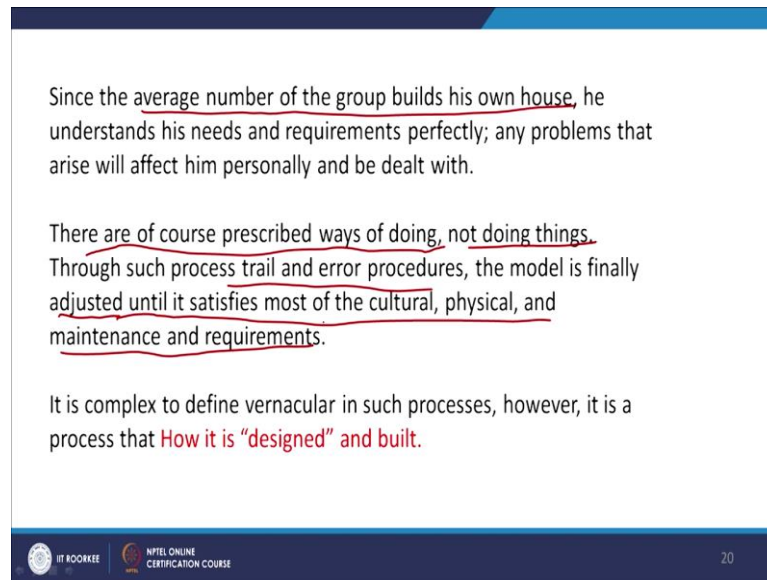
But here, you can see that all the men and women they get the sand, the mud, from the river banks and then they all make the mixture with all the animal leftover. I mean animal dung and all these things to make a mixture. And then you can see all these are the male workers, they do the finishing part of it. So which means everyone is supporting with each other.

So, why I am bringing this example. Now here, yes, everyone knows how to build it, but now each one of them are defining their roles. So, the woman is bringing all this mud and the children and the men, they are becoming the experts in making the plastering



work or the restoration work of it. So, in that way everyone is getting involved. And gradually, if you look at it, there, the specialisation the tasks are defining, individual tasks are defined.

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Since the average number of the group builds his own house, he understands his needs and requirements perfectly; any problems that arise will affect him personally and be dealt with.

There are of course prescribed ways of doing, not doing things. Through such process trial and error procedures, the model is finally adjusted until it satisfies most of the cultural, physical, and maintenance and requirements.

It is complex to define vernacular in such processes, however, it is a process that **How it is "designed" and built.**

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And here, from if we have to slightly move from the primitive into the post industrial vernacular; here, I want to refer the importance of the primitive. Since the average number of the group builds his own house, he understands the needs; he understands the requirements; and if there is any problems comes, then he himself try to modify it or he knows how to deal with it.

So, just imagine he made his own house and now he started dealing he put the whole covered with a, let us say, Dogan tribe. He covered with cow dung, the animal dung on the top of the roof. And imagine a small leakage comes. Now, he will try to deal with it with an alternative methods through a trial and error process. So, there are course prescribed ways of doing and not doing things. So, through this error and, trial and error procedures, so they develop certain ways of doing and certain ways of not doing. So, this is what we call a trial and error procedures.

And finally, through a certain time, he adjust that model. So, whatever the model he developed, yes, he defines it yes this is well, it is well fit. For example, a Bhunga from Gujarat; obviously, they might have tried and they might have fixed it for a circular shape or a particular heights, low height and with the central post in. So, all these things

have evolved in time. And until, so, how long he keep trying? So until it satisfies most of the cultural, physical, and maintenance requirements.

So, now with all these processes which I explained, it is very difficult to define vernacular. So, some often say it is domestically produced and domestically consumed, but here what I am trying to relate or from the Rapoport's work and the Bernard Rudofsky's work and various other's work is, it is referring not just a product, it is referring to a process how it is designed and built. It is not referring to just a product; it is a process of designing and building.


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**Transformation from Primitive building to Pre industrial Vernacular**

Here too, everyone in society knows the building types and even know how to build them, the expertise of tradesmen being a matter of degree.

The peasant owner is still a very much participant in the designing process, NOT merely a consumer.

In preindustrial vernacular the accepted form still exists, thus offering a way of arriving at a definition of vernacular by looking at the "design process."



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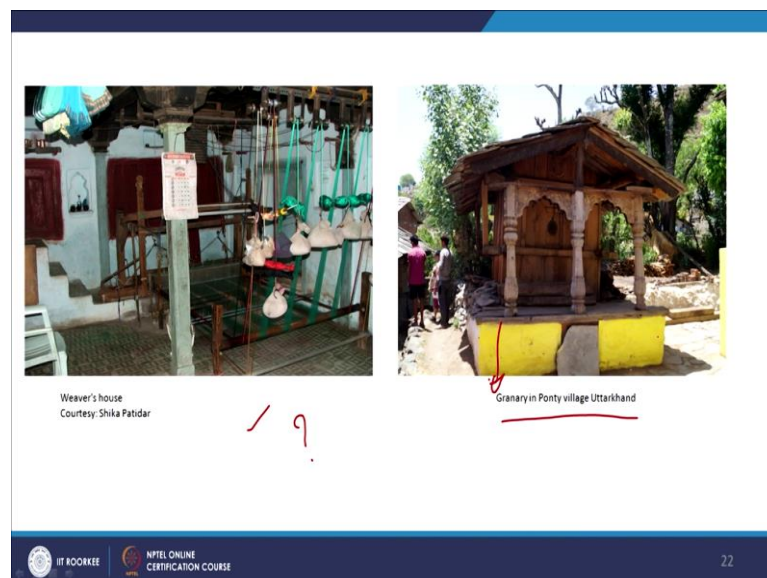
Now, when we say about the transformation from a primitive building to a pre industrial vernacular; so here, what is the difference between the primitive and the preindustrial vernacular? Even here also, everyone in the societies knows the building types and even know how to build them also, and the expertise of tradesman being a matter of degree. Here, you have your house, you know how to build it. But then, you know what you want, you know what kind of typology is accepted.

But then you also bring a trade, because in our previous discussion of Djenné's case that is still an indigenous way of looking at it. How everyone participates, which is a primitive way of doing it. But then they are also defining the roles of certain gender, bringing mud and doing things and certain men working on the plaster work. So,

obviously, it is giving a way for defining certain skills and that has gradually brought the tradesman into the picture.

And here also the present owner is still a very much participant in the designing process. But he is not a consumer, right. So, he knows the whole building typology, he knows how to do it. But now, the tasks are now getting scattered. In the pre industrial vernacular, the accepted form still exist, thus offering a way of arriving at a definition of vernacular by looking at the design process. So, here it is not the, it is not just everyone is building it, but then different, in time it has given a scope, let us say weaver.

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I will show you an example. Now, a weaver's house somewhere in a Bundelkhand or in area; he is he developed his profession, he knows how to weave in time. He is aware of what kind of spaces he needs, he is aware of his traditional houses which he got from his ancestors. But then with time, he is also interacting, but now the question is whether he is able to build it by his own.

Because, he is now, the skills are differentiated and the knowledge is also passed on from a weaver to weaver, a potter to potter, and now a builder to builder. So, that is how the tradesmen are employed for certain skills, though they know how to build and everything, but still these kind of integration happens.

Similarly, will tell you a good example of granary in Ponty village in Uttarakhand. So, you can find these kind of granaries all over in the hill regions of Uttarakhand. What the speciality is, because of being in a high altitude and also in a cold climatic conditions, they have a little underneath. They have the storage things and then which is basically covered with, built with wooden, built as a wooden structure.

So, why they have selected that wooden? Now, wooden has a quality in summer it makes it cool and as well as in winter, it makes it warm. So, even during snow season also, they can still store the whole food grains within these granaries. But now, in today's context can we find these craftsmen who can actually make these houses or make these granaries. It is very difficult to find these craftsmen. Now, here in the last slide what we have just discussed is about how we are actually moving from the primitive to the pre industrial vernacular architecture where built by all is going into built by the tradesmen, right.

Again I will go back to your slide of which we showed basic definition of pre industrial. It is still limited and number of building types. Now here, we got a granary type we got a chief's building, you got an elderly building, you got a different types based on their needs and the individual variation of the model, but built by the tradesmen.

Now, when we come back from here, I think I would like to summarise here. We are moving from 1969 and lot of work has been done in the past next two decades, and one of the interesting work comes from Paul Oliver. Paul Oliver who is also my mentor, and from Oxford Brookes University, who actually established a centre for vernacular architecture studies. So, his one of the important contribution is, he developed an encyclopaedia of vernacular architecture of the world. And this is a huge compilation.

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“Vernacular Architecture comprises the dwellings and all other buildings of the people. Related to their environmental contexts and available resources, they are customarily owner- or community-built, utilizing traditional technologies. All forms of vernacular architecture are built to meet specific needs, accommodating the values, economies and ways of living of the cultures that produce them (Oliver 1997)”.

Paul Hereford Oliver

Encyclopedia of Vernacular Architecture of the World

Source: Oliver, P. (ed.) (1997) Encyclopedia of Vernacular Architecture of the World Cambridge: Cambridge University Press

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This is a huge task; the whole world vernacular architecture has been defined. And here, the definition of vernacular architecture, he summarises the whole discussion whatever we have discussed, from primitive to pre industrial vernacular, the built-by-all and to built-to-meet needs. The vernacular architecture comprises the dwellings and all other buildings of the people, related to their environmental context and available resources.

They are customarily owned or community built. As I said, the owned or community built, which I gave you just examples, utilising traditional technologies so which are basically, locally available and how they have developed through a trial and error procedure. All forms of vernacular architecture are built to meet specific needs accommodating the values, economies and ways of living of the cultures that produce them. So, here one of the important thing which he mentioned is the ‘built to meet specific needs’. This is one of the important things we have to identify.

Now, here till now, we have just talked about the basic definition of what Paul has given; vernacular architecture’s definition. And we discuss about how Amos Rapoport have defined the various folk traditions, how he classifies from primitive to pre industrial vernacular and the high style and the modern vernacular. Here in the last case, we just go back to show you which we will be discussing in the later classes also.

Here, the high style and the modern vernacular which will be discussing later part of our course is; here now a carpenter has become, he has developed his own task. The builder

and a person, as landscape architect and it is now designed and built by a team of specialists.

So, in this whole process from a tradesman, it is again segregated into different pockets. Now, a landscape person is doing the horticultural part of it; and then the carpenter is doing the wooden construction of the wooden members or any other thing. And this is how it has segregated into the different teams and specialisations; so sometime this is a problem of how different teams do not correlate with each other.

So, any ways that high way of vernacular, we will be discussing later. But at least this has given you a basic understanding of what is vernacular architecture. It is not just limited to a product, it is not limited to a material, it is a process of how it is designed, and how it is built. So, it reflects from a scale of small tribal hamlets to scale of an urban design.

So, this is a very misconception that only people think that it is only the primitive or the indigenous things referred to vernacular architecture. But this course extends to the space how a settlement is planned, how their public places are evolved, how they those spaces. I think here I end my discussion on this.

And I thank you very much and see you in the next lecture.

Thank you.