

**B. ARCHITECTURE**  
**THEORY OF ARCHITECTURE – I (AR6102)**  
**INTRODUCTION TO ARCHITECTURE -**  
**ARCHITECTURE & HUMAN NEEDS**  
**Lecture - 3**

**Understanding Human Needs for an Architecture, Analogy, Functional & Psychological:**

What is the need for architecture? In which ways does architecture satisfy human needs? Is architecture building a simple building that encloses an activity or is there something more to it? Can we call a simple building that acts as a container to hold a specific human activity, as architecture? We cannot call so. Because there is difference between what is called as a simple home and what is called as a house. What is called as a simple place of worship and what is a chapel? What is called a house has to have more values to be called home. The same applies in the next; the place of worship that has four walls has to have more meaning to it, to be called a church or a cathedral. We can say architecture is not just a container or a tool for a function of human activity. Architecture is different from pure functional structures like Bridges, Towers, ware houses, etc. These structures if you see, there are meant only for a certain function and they don't have to perform anything other than the mint function. But architecture has to perform more than the basic functional needs.

Architecture has a purpose more than just satisfying functional needs, it has to satisfy physiological and aesthetic needs as well. An analogy or what is called as the comparison of the field of architecture with other design fields like furniture design and apparel design in such a case. Take the field of furniture design, what do you see in this picture is the design of a particular chair. The furniture design of this chair is not just for a function of sitting, rather the chair will perform more than the function; it has to satisfy the psychological needs of the user. A chair has to be designed differently for a child; a chair has to be designed differently for an elderly person. It has to give the psychological comfort and further to that, the chair can express

certain artistic qualities which the designer or artist might want on the chair. Next, we will move onto the field of Apparel design and the clothing design in particular. The clothing design is not just meant for the functional need of covering the human skin and to protect the human skin from the heat and wind. It has to perform more; it has to give the psychological comfort for the user. Moreover, we all know that the costume or clothing can express the artistic sensibilities, the taste of the user. What is called as a costume can express the person's personality like these two fields of design - furniture design and apparel design, architecture also has to perform more than basic functional needs. Architecture like any other field of design has a purpose more than just satisfying functional needs. We will see the various needs in details, we will start with functions and how architecture satisfies these basic functional needs of human beings. Every creation of architecture serves a various layers of human needs. Starting from the basic Functional needs are of basic importance and many more needs. Even though the functional needs are basic, they are an indispensable aspect. A building can't deny a functional need and it can't just speak about aesthetics and psychological comfort. It has to solve functional needs. This is not the case for other fields like art, painting or a sculpture.

For architecture, functional need is its basic thing. In its origin, if you see architecture just solve the basic need of giving, providing shelter or an enclosure for a human dwelling, you see in this picture, you can see how architecture was in a very rudimentary form and provide simple shelter to the human activity, living in the space. the concerns of space making of a primitive man was to give through architecture; protection, safety, security. Protection against natural forces and safety and security against threats from animals, threats from any other human beings. That's the basic function, primitive architecture.

As human life evolved - human needs also evolved in complexity, along which the architecture typologies evolved. Initially during the primitive life of a human being, there was just a space to reside. As the civilization grew, there were more typologies that were required. For example - they was a place required for worship, a space to gather and a space to learn and a space for political gathering and other religious gathering.

Main typologies of architecture came like - what is called as a temple, what is called as an educational institution, what is called as a library and many more. Architecture kept solving various complex levels of functional needs of human beings. In the course of evolution of human needs, in many instances the functional need gets sophisticated to an extent of luxury. Never did architecture only solve the basic need that is called a necessity. Necessity grew into what is called as sophistication and sophistication grew into what is called as luxury. Architecture through history have catered to all these various levels of functional needs. Now we will move on to see the next set of needs - psychological needs of a user in a building. We will see architecture as a psychological entity in this discussion.

Architecture has to satisfy both - Physical aspects of space and psychological aspects of space. Satisfying spatial needs in terms of quantity is not enough but has to essentially satisfy qualitative aspects. For example, even within the design of a simple home, not every space needs the same psychological ambience, what is called as a simple living room in a home, what is called as a space to sleep, needs a different psychological comfort. Architecture has to cater to the needs of psychological feeling.

Now, we will look at what all goes into the design of a small classroom or what is otherwise called as a space to educate or a space to learn. Architecture can't simply stop with providing a space in terms of quantity for this many number of users, this many number of activities, it can't just stop by giving quantitative space. Architecture has to go beyond and have to think about the ambience the space needs. For example - a classroom has to have a good ventilation, proper appropriate lighting for the learning activity, and architecture through the colour of the walls, the materials of the floor and the ceiling and the arrangement of the furniture. Through every holistic aspect, architecture has to cater the psychological ambience of the learning space of what is called as a classroom. It can't just stop by giving a quantitative space. We can take another example of a space design that caters to one's psychological need or what is called as an ambience. This is an example that you'd see - a performance space and a space for the audience to sit and look at the performance, what is called as an Amphitheatre. It is located in Ahmadabad. This is not a simple space for performance; many thoughts have gone into designing it. The form of the seating, the lower location of the stage, the backdrop behind, the location of

the entire building, the colour of the walls, everything is designed so as to provide a proper ambience for the performance.

If you actually see a performance that happens at night at this space, your audience can completely enjoy the performance. Even the performer can perform better. It is more about satisfying the psychological needs both the performer and the audience.

## **Understanding Human needs for an Aesthetic:**

Aesthetic needs of architecture. Where architecture acts as an artistic entity. Before looking into aesthetic needs of architecture, you'd see the meaning of the word aesthetics. In architecture, aesthetics refers and synonymous to aspects like beauty, expression, symbolism, appearance, image, etc. If you look at the actual meaning from the dictionary, architecture is a branch of philosophy that deals with beauty, ugly and sublime pertaining to art. What does the building communicate through its form, through its colour and many other visual aspects that form the aesthetics of architecture.

Every human being has a sense of aesthetics. Through which he expresses himself, in fine art forms like sculpture, paintings. In the fine art forms like sculpture, paintings and many more. You can see examples from history, the three images you see in the picture, the first one is a wall painting during cavage, the other is the sculpture from medieval age in India and the other is modern contemporary sculpture. Through many art forms, human beings have continually expressed their aesthetic sensibilities, their beliefs, philosophies, likes and dislikes coming back to architecture, is architecture capable of any artistic expression? Is architecture is very capable of conveying meaning at all? The answer is yes. In fact architecture can be called so only if it has an aesthetic meaning. Otherwise it will be considered as a mere building.

We can demonstrate that definition with an example. Here we have an example of a dwelling, dwelling both from regional Gujarat in India. The image you see on the left is the interior of an old house in Ahmadabad. You can see that the interiors are decorated with wooden surfaces in the courtyard of the house. This is an urban house of a rich man. The image you see on the right is also a space for living. It is the house of tribal men,

people who live in desert areas. But there also if you see even the simple mud walls is treated and decorated in a fine manner. What is called as a simple storage space has an artistic expression. This is what every human has an artistic sensibility which they express in their buildings, in their architecture, even if it is a small home or a big cathedral. Here is another example of aesthetic sensibility. Another house with a unique form merging with nature. Here the architects have not just designed a space to live, the architects have a sensibility of merging visually the architectural form along with the forms of nature around. Building aesthetically merges with the nature around. In typologies of buildings like Cathedrals, temples and mosque.

In most of the religious buildings, there is a strong need for expression of meaning of philosophy through art. The image that you see on the left side is the interior of a cathedral, a place of gathering and worship. The choice of material, the sculptures there, the windows, the magnificent scale of the interiors, the high volume, the stained glass window behind the altar, everything gives an ambience for worship. Everything gives a lot of philosophical meaning to it. It was an example from medieval architecture in history and the image you see on the right is a contemporary example of a place of worship. Here also, architecture has a strong meaning. It is not a simple box that contains the whole activity of worship, Here, you can see a simple box but at the end of the box, there is a cross that brings in light, a spiritual light that has a religious meaning to the worshipper in the hall. Architecture in many ways can communicate meaning which is very much needed in religious places like churches, temples and mosques.

Architecture may involve many layers of meaning like historical meaning, a personal aesthetic meaning, an emotional and philosophical meaning. What is called as an aesthetic meaning can vary according to the typology of the building. Here is another example of Gothic architecture, the medieval age of architecture where the mere height, the verticality of the spheres gives a magnificent sense of spirituality to the worshipper. Other than the typologies like houses and cathedrals, there are certain typologies of buildings and some other where the need for aesthetics is a must. If the building is not aesthetically performing, then the architecture will be a failure. The image you see on the top is a resort in Goa, the image you see below is a resort in Rajasthan. You'd see the architecture in both these buildings express the

character of the locality through its visual meaning. Right from the location, right from the vegetation around, the choice of material, the form of the building, everything is according to the local architectural visual character which is also aesthetics. The first image shows a resort built from laterite stone, with a slope traditional Goan roof. The image below shows a mud wall architecture with a traditional roof, which is a common typology in Rajasthan.

We will see few more examples of artistic expressions in buildings. Here we can see the image of a traditional south Indian home, what is called as a Chettinad house. The house has many artistic details right from the columns and the windows, the flooring and everything else. Architectural expression here is not just about providing a space to live, here architecture is a symbolic expression of a social status of the person. This is an example of architectural expression, building designed by architect Charles Correa, this is called Jawahar Kala Kendra in Jaipur. Here, the architect has thought about the traditional cultural architecture of that space.

We all know that Jaipur is called Pink city. Even in this building, the choice of material is according to the traditional building which is pink in colour. Not just the form of the building, not just the colour, even the shape, the planning, the steps around the central courtyard, everything is according to the traditional architecture of the place. The building even though a modern building can communicate a traditional meaning through its form and arrangements. Here we have another example, a building's interior space, an office space designed by architect Frank called Johnson's wax building in USA. This building was thought of to provide a perfect ambience, a perfectly matching psychological ambience for a workspace during that time. This is half century old. The unique form of columns in the interior is in form of a concrete forest and the space between the columns provides a unique skylight to the working space below. Here again we see another example of a building with a unique form. Here the form doesn't communicate any meaning that pertains to the culture and activity.

The meaning is totally accounted by the architect. He wanted to show the meaning of the form of a fish in the water body nearby. That is what the building form represents in this case. Here we have another important example of a museum designed by architect Dennie. A Jewish museum

located in Berlin. The architect has to express the torture and the hard time the Jewish went through during war. How can a museum express this? Through the building plan, the detail of the scars and windows and the interior void spaces in the museum, the architects have expressed the meaning of Jewish life in this building here we have another example from India, A space for spiritual meeting, what is called as the Lotus temple. The form of the building is in the form of a Lotus. The flower that is very closely related to the Indian religion. Not just Hinduism, even other religions in India. The building symbolically conveys the spiritual meaning through its form. Here we have another building, a form that is unique. Here in this case, the architect wanted to convey the locality of the building. The railway station that shows shape of a bird which symbolizes the airport nearby, for which this railway station was built for. This building is designed by architect Satriono, this is in Spain, near an airport in a place called Lionnes.

Finally, we have another modern example of a building with the unique form in its exterior skin. The form with nothing but in this case symbolises the tree in front of the building. The architect has taken the shape of the tree branches and has shown as a design element in the building's facade. So far we have seen few examples of how in many different ways, architects can express meanings, symbolize meaning, character of the locality and the artist's thoughts and ideas.