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The Importance Of Natural Materilas In Civilization And The Protection Of Old Historical Buildings

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Abstract
Istanbul is very rich with historical buildings which reflect the culture of very old civilization in the world. So the protection is impotent duty of each architect and engineer. This will be the important trace for our future and culture.
The end of architecture is to build well. Well building has three conditions: commodities, firmness and delight. These three conditions are timeless: commodity: the arrangement of plan unites to satisfy the social requirement; firmness: the disposition of structure to give shelter and stability; delight: the ability of combining firmness and commodity to give visual and sensual pleasure. At beginning of life on this globe the separation between human and beast was comparatively slight, and men and women lived in conditions similar to the animals. But a primitive desire for shelter soon arose caves probably formed earliest homes. Then the use of wood was discovered together with methods of cutting it. This led to primitive tent from in which boughs were leant against each other, bound at the apex and covered with brush and moss to keep out the weather. Later a simple post and lintel system was evolved by making use of natural materials. The Egyptian with their early civilization took this post and lintel stage further by discovery of new materials – stone and, to lesser and less successful extent, mud bricks. The factor of the natural materials like stone and bricks played very important role in to construct huge building like temples and prides which could resist all external effects and could be stood till these days. The aim of this research to declare how they could do construct these buildings without falling even exposed to earthquakes in the past.

Key words: mud bricks, architecture, well building, civilization, culture.

The civilization and natural materials of construction

There are many ancient huge buildings which could resist against the natural disasters like earthquake and flood. There are bridges and palaces which had been constructed before thousands of years. The materials and the way of construction are significant as well. The architectural design requires the materials and experience of the foremen and workers. Even if the using technology has changed the view of this era and provided the acceleration of

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constructions of tamps and palaces. For instance the Palace is one of the late-flowering wonders of Mesopotamian culture. Although built by the Persian kings of Sassanid dynasty, it is many ways a summary of vigour and grand architectural ambitions of many civilizations of this region. Its most obvious feature-a vast, single-span brick barrel vault-is part of what must have been a truly magnificent open-fronted banqueting hall. This arch is an astonishing 36.7 m high and spans 25.3m, rivalling anything built by the Romans. The influence of Rome is very much in evidence throughout the design of the palace: massive walls flanking the central banqueting hall were with Roman-style arcading set between pairs of attached columns. The actual building, however, is very un-Roman; the stupendous banqueting hall was open ended, forming, in effect, a hugely stylized tent. The east wall of the palace remains; the west and rear wall have collapsed, and tragically, engineers now fear for integrity of arch itself.

The largest vault in the ancient world, the impressive arch at the Ctesiphon is made of unfired mud bricks.

Contemporary construction have wall. People living in such a building will be affected cold radiation created in the structure due to cold outside air because its heat transfer value.

However, earth constructions wall are thicker and indoor air temperature and indoor surface temperature are close to each other. In that way, it will not create radiation on people. Low heat transfer value of earth wall provides temperature (Plus, minus 20degrees) with outdoor temperature on the wall which does not create discomfort.

The parameters of out and indoor climate consist of air pressure, humidity, temperature, velocity of air circulation, and internal sunshine in the form of radiation heat. Efficient design principle that controls of these factors leads to optimum room comfort and contributes to man's overall health. Thermal comfort is experienced when the thermal process within the body are in balance.

Renewable material

Renewable is defined in Merriam-Webster as" capable of being replaced by natural, ecological cycle. A renewable materials has economic and environmental value that can replaced the same amount. Soil is renewable materials for construction because it is a supply through the natural decomposition cycle or through composting and it is a non-toxic resource which can be readily recycled.

Low Fire Risk

The biggest threat of fire is to cause the collapse of building load bearing structures and result with harm to goods and human life. There are no flammable components in the earthen construction. Since fire turns earth into ceramic it increase its strength. Compared with other building materials, such as wood, earth house feature efficient fire protection owing both to the use of concrete and the properties of the earth itself.

The Body of Architecture

Young Student goes to university with aim of becoming architects, of finding out if they have got what it takes. What should we teach them first?

Practicing architecture is asking oneself questions, finding one's own answer with the help the teacher, down, finding solutions.

The strength of good design lies in our ability to perceive the world with both emotion and reason. A good architectural design is intelligent. The roots of architectural understanding lie in our architectural experience. Students have to learn to work consciously with their personal biographical experiences of structure.

The architecture's materials, which we do not know them. In order to design, to invent architecture, we must learn to handle them with awareness. This is research; this is the work of remembering.

Architecture is always concrete matter. Architecture is not abstract, but concrete. A plan, a project drawn on paper is not architecture but merely more or less inadequate representation of architecture, comparable to sheet music. Architecture needs to be executed. Then its body can come into being.

All design work starts from starts from the premise of this physical, objective sensuousness of architecture, of its materials. To experience architecture in a concrete way means to touch, to see, hear, and smell it.

The images of works of architecture are carried and influenced. But this does not yet make new design, new architecture. Every design new images. Our "old" images can only help us to find new ones.

At the beginning of the design process, the image is usually incomplete. The concrete, sensuous quality of our inner image helps us. It helps us not to lose track of the concrete qualities of architecture.

Conclusion

As conclusion, it could be pointed out that the ancient buildings involved essential two significant facts first, the usage of natural region materials, second, the type of building as arch. In this study the examples of ancient construction are investigated. The importance of natural materials and choosing the arch type were never been neglected. So the sustainable constructions related to the experience of engineers and architects as well.

1-"Mesopotamia" is a Greek word meaning that "civilization that flourished between the Tigris and Euphrates rivers.

2- The region known as ancient Mesopotamia was made up of three distinct civilizations, Assyria, Babylonia and Sumer.

3-The houses found in Mesopotamian cities such as Khafajah around 2700BC. were constructed of mud bricks with thick walls for insulation and flat rooftops for extra living .

4-Mud bricks were used in home buildings. Lumber also were found in the mountainous areas.

5-The typical Mesopotamian houses were constructed as one –story building containing several rooms.

6-The wealthy built larger, two story buildings containing rooms for the family who owned the house and quarters for their servants.

7-Arches and Domes were commonly used as structural and ornamental elements.

8- Housing in Mesopotamia, first floor is the most important floor in the houses.

9- The construction of houses is not important as much as construction of temples and palaces.

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