What is architecture?

Architecture is the way through which humans create a “shelter” to make their life secure and comfortable; but architecture it is also a form of communication, is the physical representation of human thoughts and aspirations of the records of the beliefs and values of a culture.

We don’t know the exact time that humans learn to build because the very first houses were made of organic materials which quickly returned to the earth without leaving traces. However, the need for finding or making shelter became urgent with the glacial ages. The first human-crafted shelters were made, and architecture had begun (the oldest houses are the ones preserved in Monte Verde and are dated 14,000, 13,600 years ago).

As modern human beings moved into Europe, the Middle East, and Asia, structures, that were more developed, were crafted. These were more specialized structures due to the specialization of society, which leads also to a specialization of labor that permitted to spend energy on structures of stone for ceremonial purposes and ritual celebrations. Monumental architecture had begun.

The next step was an increased concentration of peoples in towns that grew into cities.

**PRIMITIVE ARCHITECTURE**

**Vernacular buildings** (450,000-350,000 b.C.): they were made without a special theory, when somebody founded out something new and useful, he passed it to other generations. They were made from the people who occupied them.

What kind of things influenced these buildings?

- Materials: rocks, wood, mud, depending on the place (in Mesopotamia: mud hut)
- Climate: (central Turkey: they didn’t really had streets because it is very hot so they stayed outside the most of the time 6000 b.C.)
- Social and cultural practices: in some places houses had a burying place underground; also political practices influenced the way of construction; religious practice: Ziggurat; symbolism: Carnac (menhir, dolmens)

There was a big variety among these building because of local needs and circumstances.

Early Hominids

The first humanoids appeared about 5,000,000 years ago in central Africa

1. *Ardipithecus ramidus* and *Australopithecus anamensis* (“Southern ape”)
   - Vegetable diet of fruit and leaves
   - Males 4’5 and Females 3’5
   - Lived in the warm equatorial savannas
   - Had no need for shelter nor fire
   - The beginning of symbolic thoughts and self-awareness
     (jasperite pebble shaped like the face of this species)

2. *Homo habilis* (“handy man”)
   - Made and used tools made out of stone
- Began to eat meat which accelerated the physical and complex social changes required in hunting
- The brains increased in size

3. **Homo erectus** – **Homo heidelbergensis** (Europe)
   - Where not limited to living in one fixed climatologically area, migrated
   - Moving from central Africa into southern Asia and China, and into Europe
   - Captured fire from natural sources such as lightning strikes

(Around each fire, protecting and warmed at night in these northern colder climates, early humans gathered and social bonds began to form.)

- With skills in stone-tool making, hunting, and the resultant knowledge of leather-making, this species survived the 2nd, 3rd and 4th ice age

4. **Neanderthals and Homo sapiens**

   Neanderthal probably lived in caves. They were already organized in a society, where older people were valued and sustained and they were the first taking care of the body also after death. Some burial place have been found (La Chapelled-aux-Saints), where men were buried with some tool, on an east-west orientation and with flowers, which means that they had come to think in a symbolic way.

The Neanderthals began to die during the last ice age whether through violence from Homo sapiens or perhaps because the new arrivals possessed better tool making skills. They were replaced by Homo sapiens sapiens.

Over time the kind of shelter changed, from the caves to structures built of bones, wood, leather, with usually a circular shape.

**Terra Amata, Nice, France (400.000-300.000 y.a.) (1)**

Terra Amata was a springtime camping ground for a group of Homo erectus hunters, who visited this spot annually for several decades. This was the place where the “first architecture” was found.

These first kinds of dwelling where round, had a wooden structure which perimeter was surrounded by rocks. The space inside showed a certain organization as work space, fire place etc.

With Homo sapiens sapiens the type of housing developed. ([Cro-Magnon dwelling, Ukraine](2))

They started to use mammoth bones (which means also that they were organized enough to kill them) but the internal structure was still made of wood; they became bigger in order to accommodate extended families. They developed also in a social way: they became aware of the cycle of life, of the unity of cosmos between male and female. → carved figures of fertile figures, with enlarged breasts and buttocks, animal paintings maybe with some religious meaning.

**Neolithic structures.**

Humans began to build permanent settlements. In the remains of a Neolithic settlement in Czech Republic was found a clay model of a rectangular house, with strait walls and a double-pitched roof.

**Skara Brae, North Island of Scotland(3)**
There were ten houses, with narrow alleys between them. The houses have a good insight organization: made of thick stone walls, it has the fireplace in the middle; it is divided into the right/positive/bright side and the left/negative/dark one (because the sun comes from the east and goes to west); the stones from the entrance direct people to a specific location, the bright one.

**The “Great Stone” structures. (massive stone megalith)**

This can be considered the first attempt to symbolic and religious architecture. With this kind of structures they showed to know very well how to shape space, to be good observer of the sky and the sun, to understand distances, size, heights, widths.

The construction of these stone structures could take years. They were of different kinds depending of what they symbolized.

**Menhir** = free standing stones, cut in a large number and used to make spots for ritual purposes, usually round shapes.

**Ggantija temple complex, Malta (3rd millennium)**: it consists of connected clusters of rounded rooms with parallel walls; the space in between filled with hearth and stone rubble; the insight walls were done of cut blocks of limestone; beams and rafters of wood may have formed the roof. The structure is aligned on an axis. It probably had a religious function, but we are not sure.

**Dolmens** = roofed tomb structures that consisted of at least three vertical stone slabs supporting a horizontal roof slab.

**New Grange Tomb, near Dublin (5)**: it is an extraordinary example of the knowledge they could gain just observing the sky. It was probably the tomb of a king. It is oriented south-east and it has a passage, partially closed with a stone, 19m long which leads into a cruciform inner chamber; the components of the passage are aligned in such way that once a year, the 21st of December (winter solstice), at 9:58, a beam of light penetrates all the way to the back of the passage and light it up for 20 minutes. The solstice light served as a “channel of communication” between life and death.

**Stonehenge, England (2700-1500 b.C.)**

It was built in around 1200 years, in three phases. We don’t know the function of it: it could be an astronomical observatory, it might have been used to mark phases and eclipses of the moon, it might have been a religious construction (14 years old kids bones found). It was a huge megalithic site where each year the cycle of the sun and of the life was celebrated.

**The first cities. Bronze age.**

The settlement of cities came out due to the change of climate, that accompanied the retreat of glaciers, and due to cultivation and breeding/domestication. → profound changes: now humans cared for each other, wanted to live together, social organization became more complex.

This encouraged more substantial buildings and cities grew up.

**Catalhoyuk, Turkey, (7500-5500 b.C.)**

The houses were made of clay. The houses were all one near the other, occasionally with courtyard; there were not streets. Access to the dwelling was an opening in the roof, which also served as the vent for
smoke. This city had maybe 8.000 residents a thousand years later. It was a very peaceful place, no walls were constructed. Dead people were buried under their houses.

Around 6000 b.C. this kind of cities were abandoned, and other cities grew up near rivers as Tigri and Eufrate.
PRIMITIVE ARCHITECTURE - PICS

Terra Amata, France  Homo erectus dwelling 400,000-300,000 b.C. (1)

Cro-Magnon dwelling, Ukraine (2)

Ggantija, Malta temple complex (4)

Dolmen

New Grange Tomb, near Dublin (5)

Stonehenge, England (6)