

## History of Architecture and Culture - I

### Unit - II Ancient River Valley Civilization - Egypt

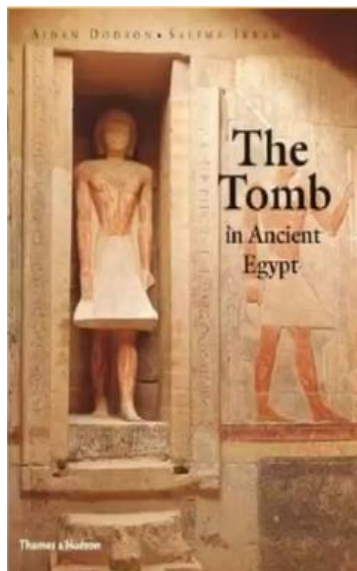
#### Lecture 3

##### Contents:

- Early Kingdom Tombs
- Stepped Pyramid
- Pyramid
- Middle and New kingdom Burial Chambers
- Mortuary temples

##### Early Kingdom Tombs:

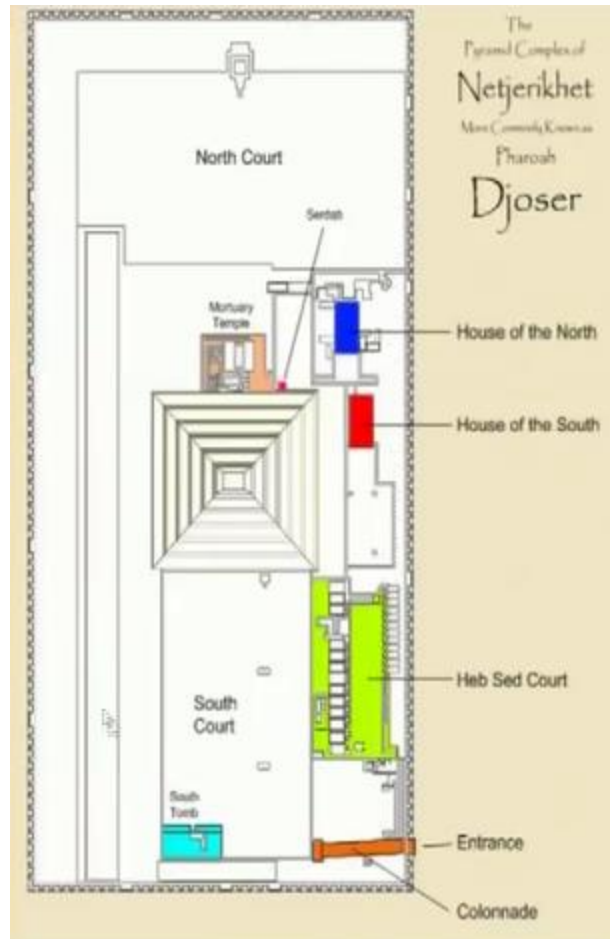
- King Zoser was the powerful pharaoh of the third dynasty of the old kingdom.
- It was built as a funeral complex in the necropolis at Saqqara.
- Imhotep initially conceived of the tomb as a large Mastaba of stone.



### **Stepped Pyramids :**

- Dissatisfaction with the result led to the stacking of mastaba one, on top of the other.
- The result was the stepped pyramid with five sloping setbacks.
- The stepped pyramid has 6 huge steps, making a monumental one. It is about 200 ft and has 6 slopes.
- The Serdab is located on the north side, along with the funeral temple.
- The stepped pyramid stands at the middle of the large complex. ( as in the image below )
- They were all surrounded by a fence wall of about 33 feet high.



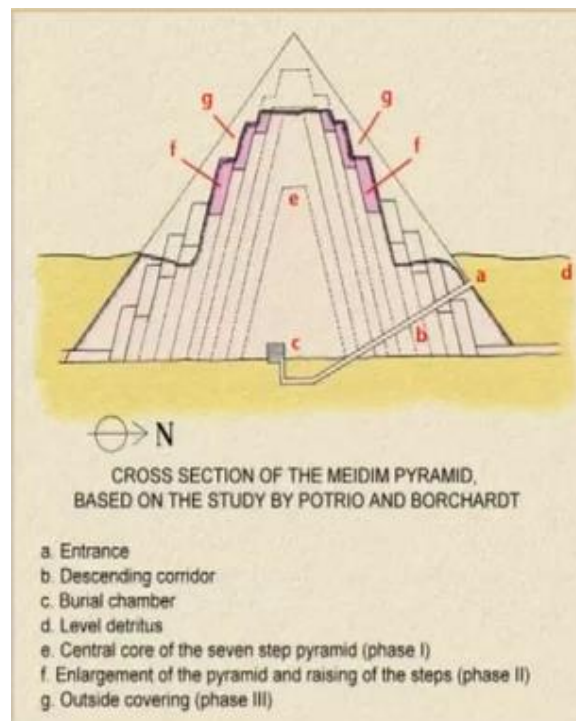


In the north palace, there are stone columns with capitals found as well. They were designed to look like the papyrus plant. Zosers funeral complex, was designed as model of his place, city and kingdom.



### Attempts at Pyramid Building:

There have been several attempts at pyramid building, King Huni made the first attempt at building a pure pyramid at Medium. He constructed a seven stepped pyramid with a square plan and height of 90 meters and an angle of incline of 51 degrees.



Snefru's first pyramid, is the place where he was buried. It was bent midway, thereby being known as the 'Bent Pyramid'. It was at the height of 100 ft and at an angle of 52 degrees.



Snefru's second pyramid, the north pyramid is the place where is buried. It has a low pitch of 43 degrees instead of 52 degrees, making it look stunted.



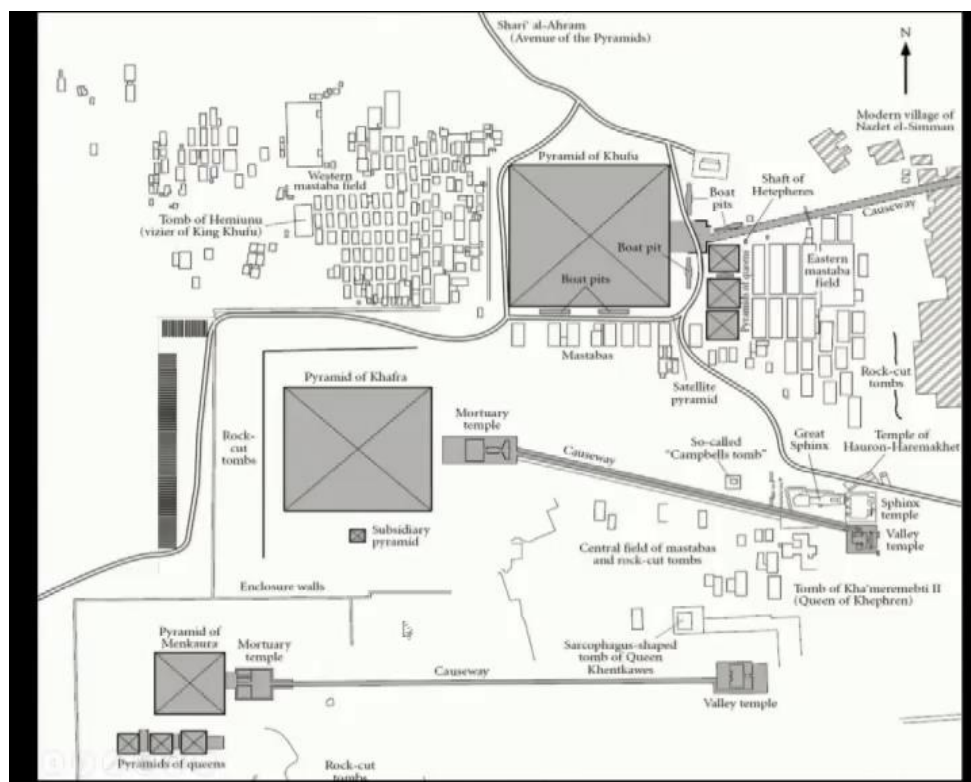
### **Early Pyramid Tombs:**

### **Pyramid of Giza**

This is one of the most monumental structures of Egypt. It was very famous due to its monumental structure, especially its height. The construction of a true geometrical pyramid was achieved during the reign of Cheops, son of Snefru. This was located at Giza. This pyramid is called the Great pyramid because of its size. The pyramid is 482 ft high on a plain of 760 sq ft.



There were two additional pyramids, that were subsequently built at Giza. The second largest in the center, was built by Chefren, son of Cheops. The third and smallest was built by Mycerinus, the son of Chefren.



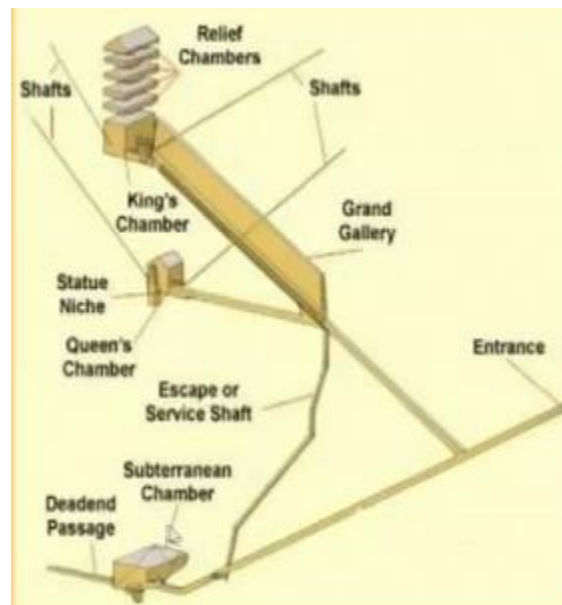
All the three pyramids are part of a big complex known as, Pyramids of Giza. It includes; Pyramid of Khafra, Pyramid of Khufu, you would also notice the smaller mastabas and the smaller pyramids on the right side of Pyramid of Khufu which are meant for queens of the kings.

The smaller mastabas are meant for the relatives of the royalty. The Pyramid of Khafre has the mortuary temple in the front, which is connected to the valley temple through a long causeway, The valley temple also has the great Sphinx temple in front of it. The causeway which is the link between the valley temple and the mortuary temple, was the way through which mummies were brought through it. The complex also consists of palaces, temples and other mastabas for the queens.

### **The Great Pyramid Cheops**

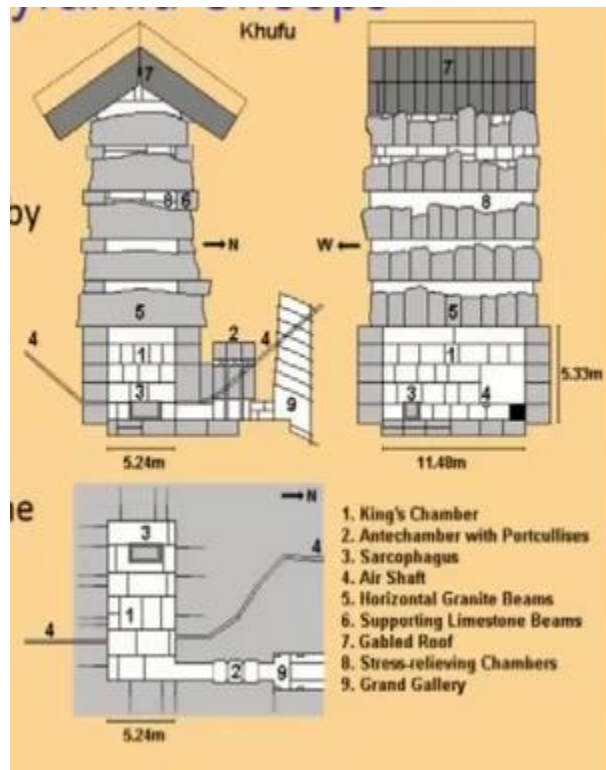
The entrance to this pyramid has a descending passage, which contained the Subterranean chamber, which constitutes other main chambers like; The queen chamber and the king chamber.

As you can see in the image, the entrance leads to the descended passage, the subterranean chamber is where the acropolis is kept and half way through the descending passage is the, ascending passage which leads to the grand gallery, which further leads to the king's chamber. The king's chamber is basically a colorful room which consists of air shafts for ventilation, it also consists of the king's body in the relief chamber, which also consists of all the gold which is needed by the king. In between the king's chamber and the descending passage is the Queen's chamber, which consists of Statue Niche which is for the burial of the queen.



The image below is the chamber where the king was buried in his Sarcophagus. The king's chamber was 35 sq ft by 17 ft in plan and 19ft high. Both the king and the queen's chamber are connected via the entrance on the north side. Two air shafts are also connected to the king's chamber outside for ventilation.





## Pyramids of Giza



Chephren's complex is the best preserved example; the complex consists of three interconnected units.



1. A valley temple by the river Nile where the Pharaoh's body was embalmed.
2. A pyramid mortuary temple for rituals.
3. A long narrow causeway connecting the two .

### **How were pyramids constructed?**

There is no accurate language on how pyramids were constructed. It is believed that more than 1,00,000 people worked 3 months each year for 30 years to build the pyramids. The limestone is a basic material used for the construction of a pyramid. This limestone was quarried from nearby and transported by lever action. They were paid in food, clothing and drinks.

### **The Sphinx at Giza**

This is located in Giza, with the body of a lion and the head of Chephren. It may have also been built to stand guard over the temple, and tomb of Chephren. This sphinx is present close to the valley temple.



### **Why did Egyptians construct pyramids ?**

The pyramids were in general a response to the vast deserted landscapes. For structure to be visible in a desert land, they had to be gargantuan size. The pyramids were also a product of the

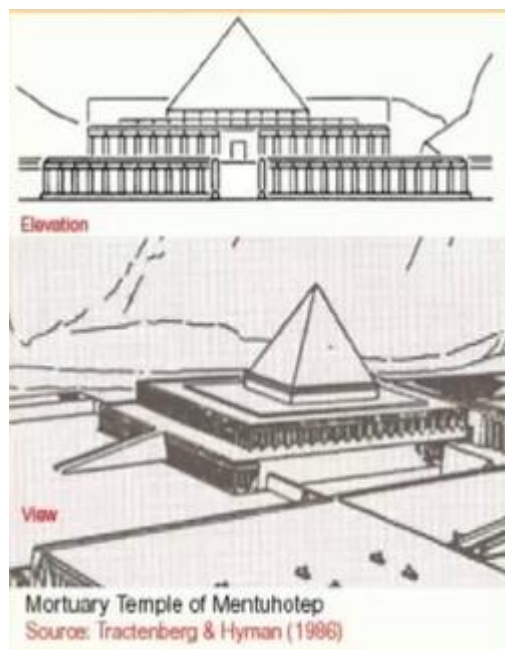
will to achieve immortality by the pharaohs. Pharaohs conceived pyramids to be a permanent image of themselves since they believed in life after death.

## Mid and New kingdom Burial Cham

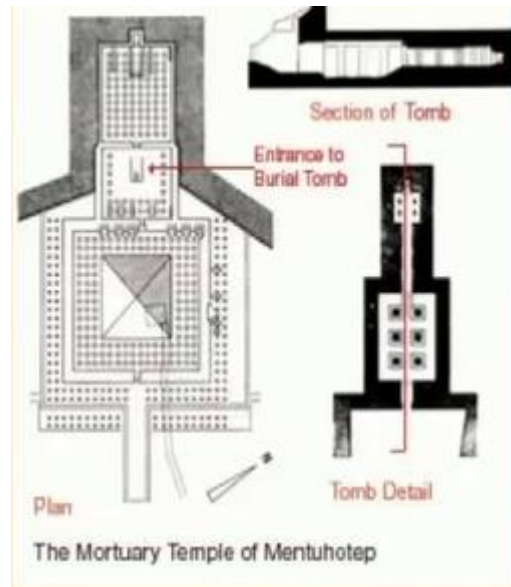
### Mortuary temples Introduction

The Middle kingdom began when pharaoh Mentuhotep united with Egypt once again, after the first intermediate period. During the middle kingdom, the practice of pyramid construction disappeared. Two categories of structures came into use; (i) *mortuary temples* and (ii) *underground tombs*. These two categories came into being only because, pharaohs believed in life after death and also because of the fear of burglary, since people kept coming to steal the gold, hence the underground advanced security. Two mortuary temples were built at Del al Bahari, mortuary temple of Mentuhotep and Hatshepsut. Mentuhotep was the first Pharaoh in the middle kingdom. He built the first mortuary temple at Del al Bahari.

The structure in the image below itself depicts how the Pyramid is placed over leveled platforms, which are connected to the ground by the ramp. The small pyramid is placed at the center of the tomb, it acted as the place where the body was buried. It acted as a dummy burial chamber.

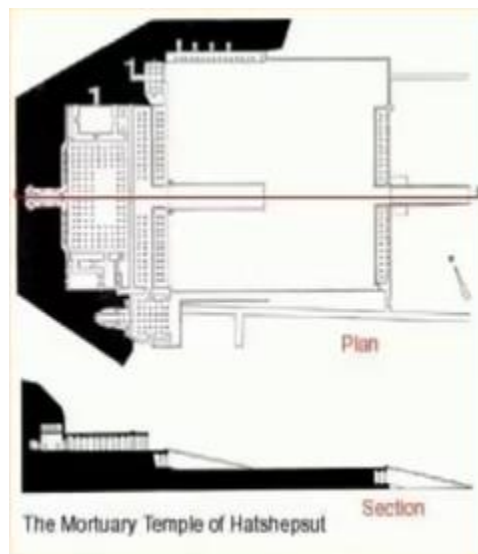


Entrance to the real tomb is found at the rear from the western courtyard. The burial tomb is accessible through a ramp leading down at the center of the court yard. Just like the pyramid funeral complexes, the temple of Mentuhotep also has a causeway leading to a valley temple.



### Mortuary temple at Hatshepsut

The temple of Hatshepsut is like a giant stage on three levels. Each of the three levels was connected by a ramp. On the top level is her chapel dedicated to Hathor. The chapel was dug out of the rock cliff, which helped increase monumentality of the temple. The temple of Hatshepsut has no dominant mass. Instead, there was a strong horizontal axis running across the set of terraces perpendicular to the mountains.

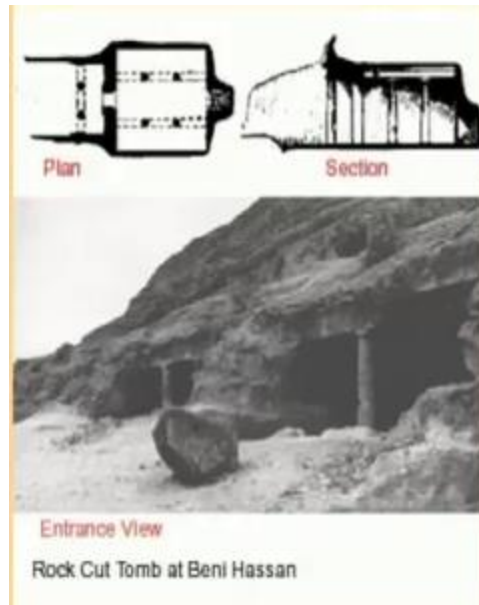




### **Mid and New Kingdom Burial Cham**

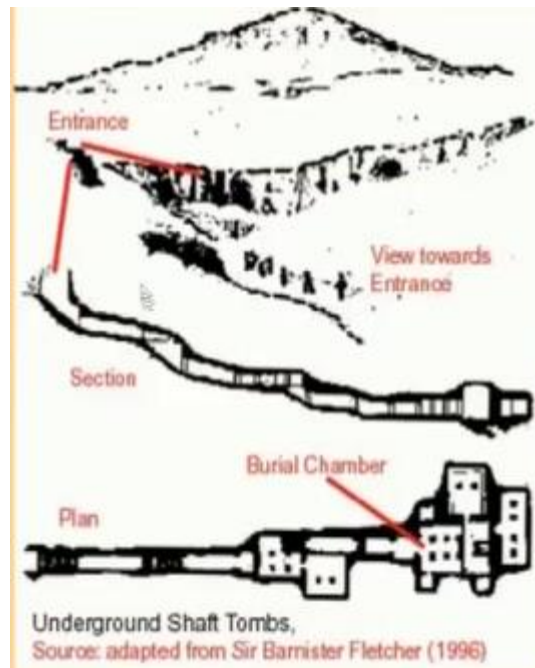
#### **Underground Tomb - Rock cut Tomb**

There are two types of underground tombs that were built by pharaohs and nobles during the Middle and New kingdom periods - Rock cut tombs and Shaft tombs. Rock cut tombs are tombs that are carved out of rocks. Many of these are found along the cliff of Nile.



The Rock tombs generally have colonized structures in the front. Inside this tomb, situated there was a chamber which consisted of colonnades that had about 16 facades each. Inside was a small adobe, where a dead was placed. The colonnades on the exterior were shaped like a prism with 8 or 16 sides, while the interior were designed as a bundle of reed tied together by rope.

The other tomb, being the shaft tomb were a complex series of underground corridors and rooms cut out of the mountains in the valley of the king at Del - Al - Bahari. These corridors led to the tombs and the rooms/ chambers were constructed since too many thefts were taking place otherwise. A dead pharaoh or nobleman was buried in one of the many underground rooms. Once the burial is finished, the entrance is sealed permanently and hidden from everybody. The large number of rooms and their complicated arrangement is deliberately done to create a maze or a puzzle.



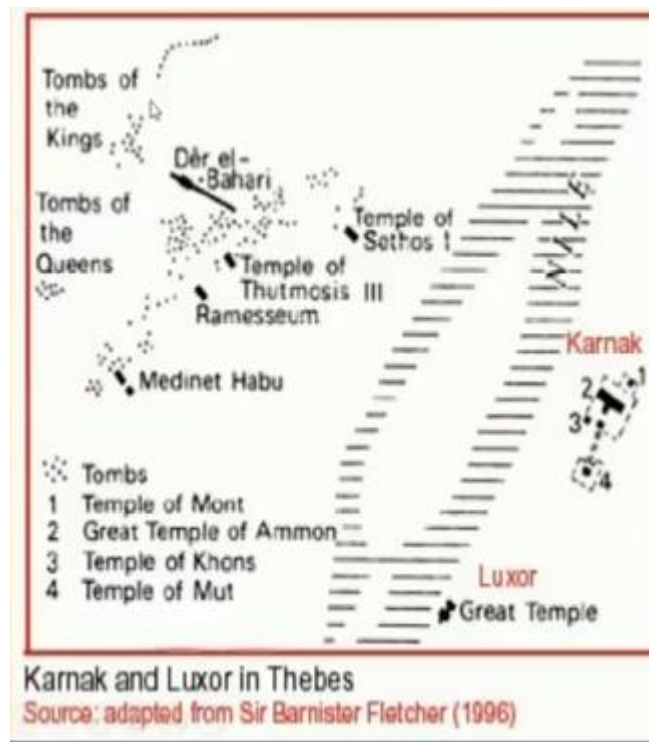
## New Kingdom Cult Temples

The Middle Kingdom lasted for about 275 years. The New Kingdom started after the end of the second intermediate period. This lasted for about 500 years. During the New kingdom, the capital of ancient Egypt moved from Memphis to Thebes.

The most important and common architectural elements of the new kingdom were temples. These temples borrowed a lot of elements from the funeral complexes at Giza. The temples also borrowed elements from the Mortuary temples at Del - al - Bahari.

*The borrowed elements include :*

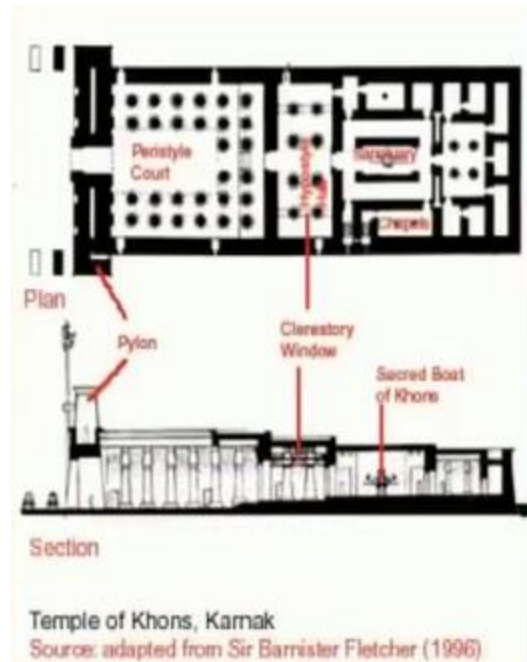
- > Long approaches
- > Guardian sphinxes
- > Collonaded vestibules and inner courts
- > Darkening shrines
- > Intricate linear progression of constructed space.
- > Many examples of the new kingdom temples are found at Karnak and Luxor, all in Thebes.
- > An avenue of sphinxes connects the two sites.



### Temple of Khons, Karnak

The temple of Khons at Karnak is a good example of a simple New kingdom cult temple. It was flanked by the Pylons in the front, then the Peristyle court followed by the sanctuary in the end. The had huge Pylons up front, which were later followed by colonnade structures, which led to the sanctuary within, where the deity and the boat was placed.





These structures are inspired from the Papyrus leaf and they use different colours to decorate them.



Beyond the Peristyle courtyard, is the hypostyle room. The Hypostyle room means, a room with many columns. The ceiling is usually painted blue to resemble the sky with stars twinkling. The columns in the center of the hypostyle hall were usually higher than on the other two sides,

giving the room two roof levels .In between two roofs, windows were placed to allow light to enter. Such windows were known as the ' Clerestory windows' .

Furthermore, a gate from the hypostyle hall leads into the sanctuary hall. Only the pharaoh and the priest were allowed here. On the whole, it is evident that the height of the temple decreases as you proceed further in, the floor rises as the ceiling height decreases, this only curtails the amount of light that enters each section of the building.

#### **LEARNING OUTCOMES:**

- Detailed study of construction of pyramid
- Early Kingdom Tombs
- Middle and New kingdom Burial Chambers.