

UNIVERSITY OF ABOUBEKR BELKAID TLEMCEN

FACULTY OF TECHNOLOGY

DEPARTEMENT OF ARCHITECTURE

ACADEMIC YEAR 2024/2025

1st Year Architecture

Subject title: Critical History Of Architecture _ HCA1

Course leader: Ms BENADLA-KDROUSSI Houda Wafâa



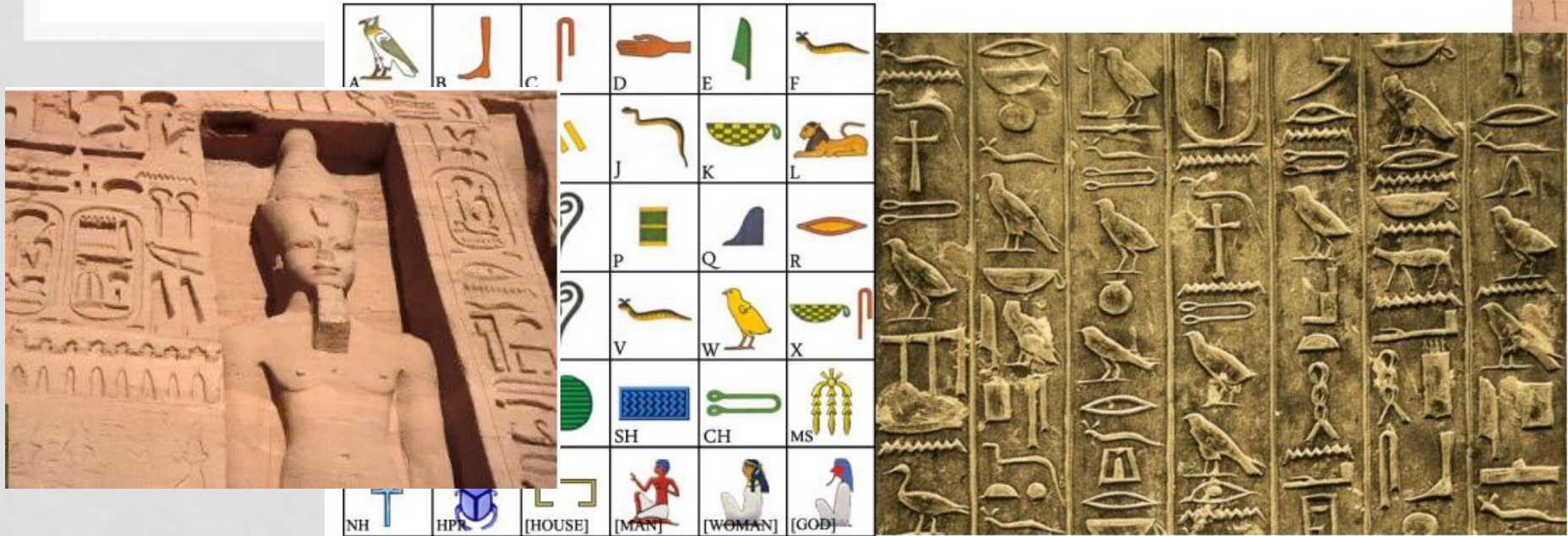
ANCIENT EGYPTIAN ARCHITECTURE

L'ARCHITECTURE DE L'EGYPTE ANTIQUE

LECTURE 3

Appearance of Egyptian hieroglyphs. Birth of Egyptian civilization

Apparition des hiéroglyphes égyptiens. Naissance de la civilisation égyptienne



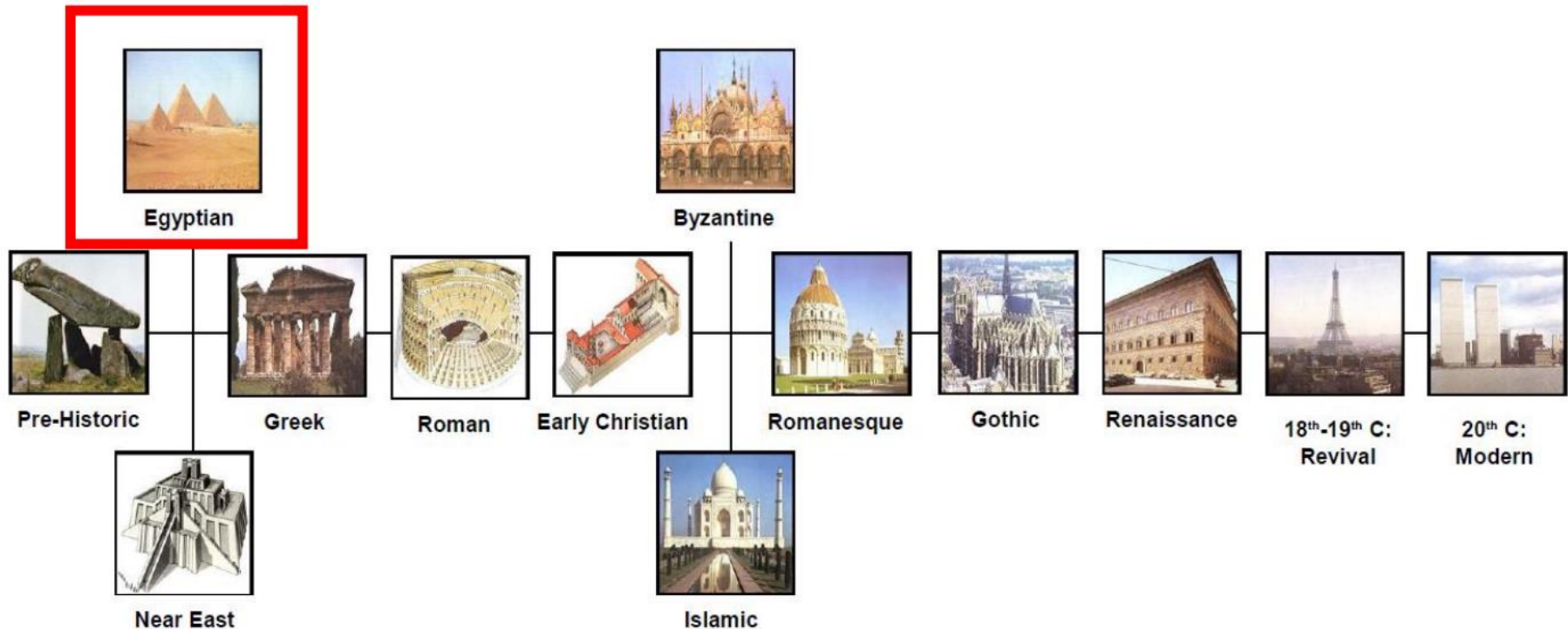
Egyptian hieroglyphs were the formal writing system used in Ancient Egypt. Hieroglyphs combined **logographic**, **syllabic** and **alphabetic elements**, with a total 1,000 distinct characters.

Cursive hieroglyphs were used for religious literature on papyrus and wood. Hieroglyphs were inscribed for **decorative purposes** as well as to record **historic events or spells, Political and religious**.

Social life of the Pharaoh is graphically depicted in the wall sculptures of tombs.

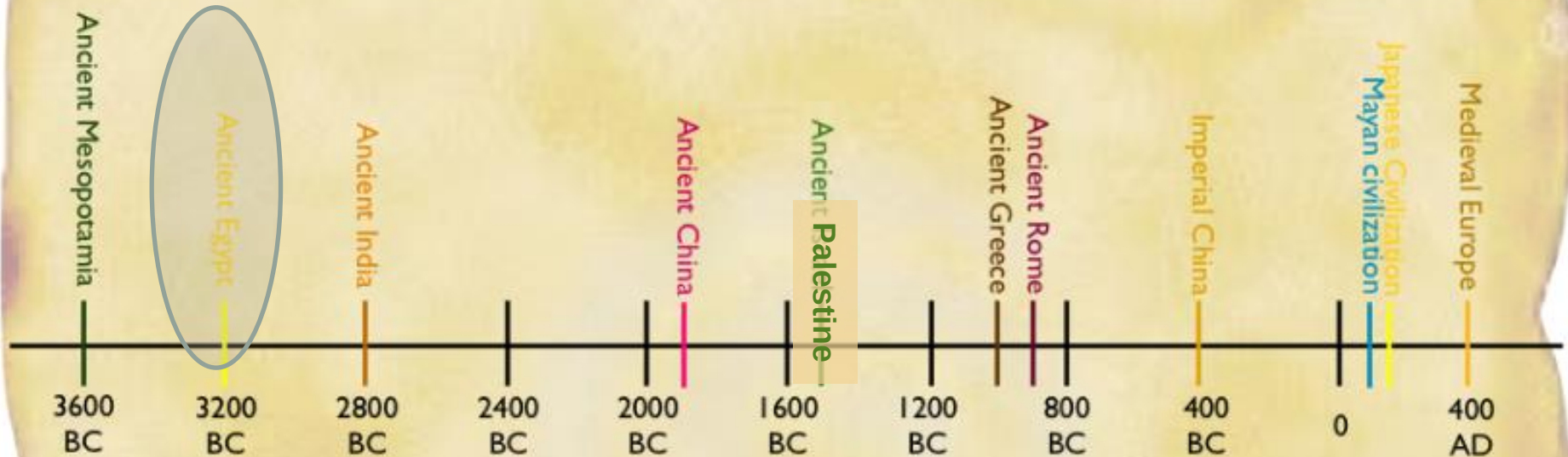
Birth of Egyptian civilization and its situation in history

Naissance de la civilisation Égyptienne et sa situation dans l'histoire



Historical context/ **Egypt among the first civilizations in the world** / **L'Égypte parmi les premières civilisations du monde**

Ancient Civilization Timeline



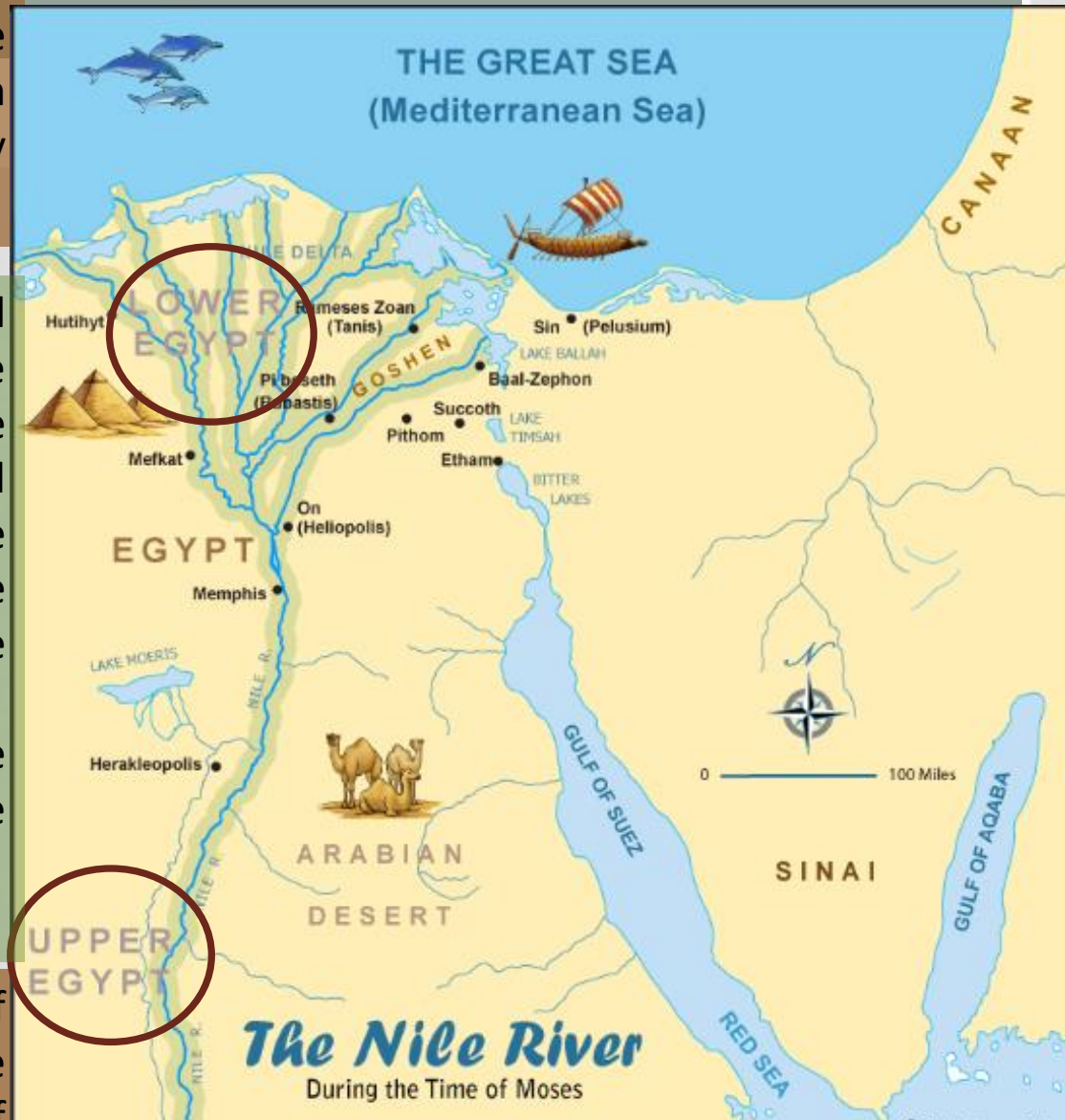
Geographical context / Contexte géographique

Ancient Egypt was a collection of settlements established on either side of the Nile and its delta. Apart from the Nile valley, the rest of the territory is desert.

The annual floods of the river created an ecosystem favorable to agriculture and sedentarization. Egypt before the reign of the pharaohs was divided into two parts: **Upper Egypt**: in the south, with livestock farming as the main activity. This region was more rural with little construction

Lower Egypt: in the north, near the delta; this region practiced agriculture and was more urban.

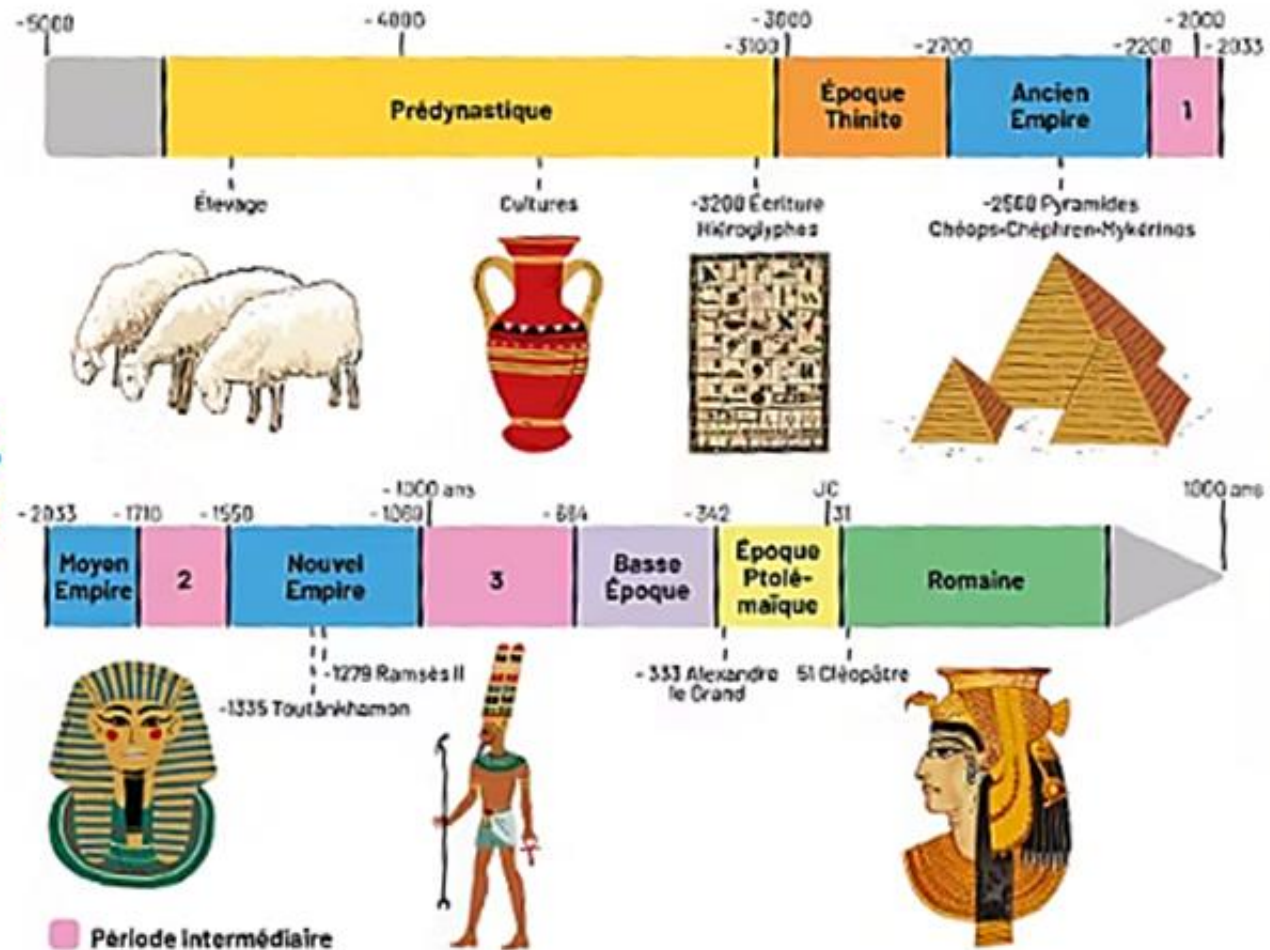
The necessity for a fair distribution of water through canals led the Pharaohs to the political unification of Upper and Lower Egypt.



Historical context/ Historical Chronology of Ancient Egypt

Chronologie historique de l'ancienne Egypte

MÔMES
par PARENTS



FRISE CHRONOLOGIQUE
DE L'ÉGYPTE ANTIQUE

Apprends les grandes périodes de l'Égypte Antique

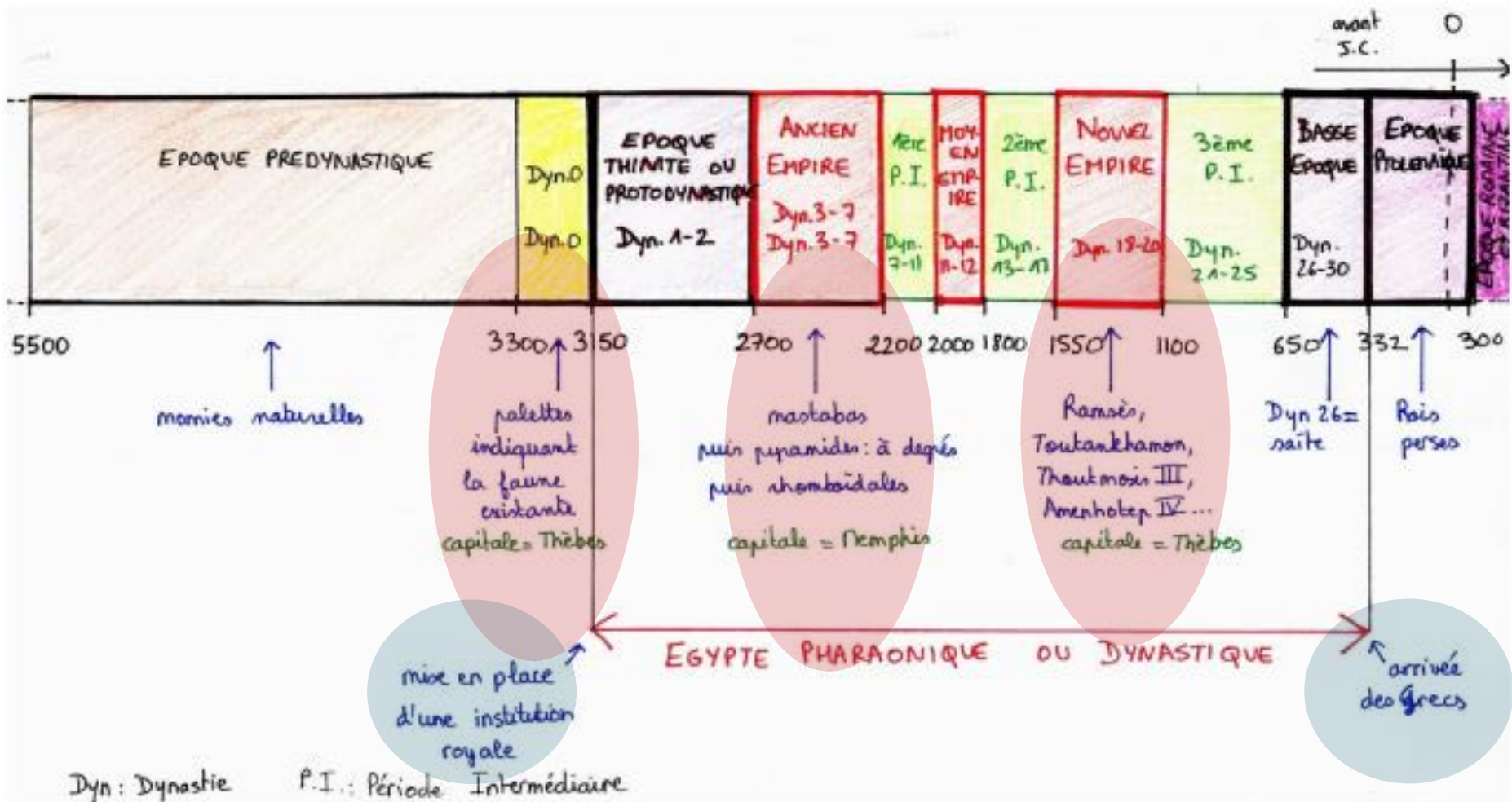
A
B
C

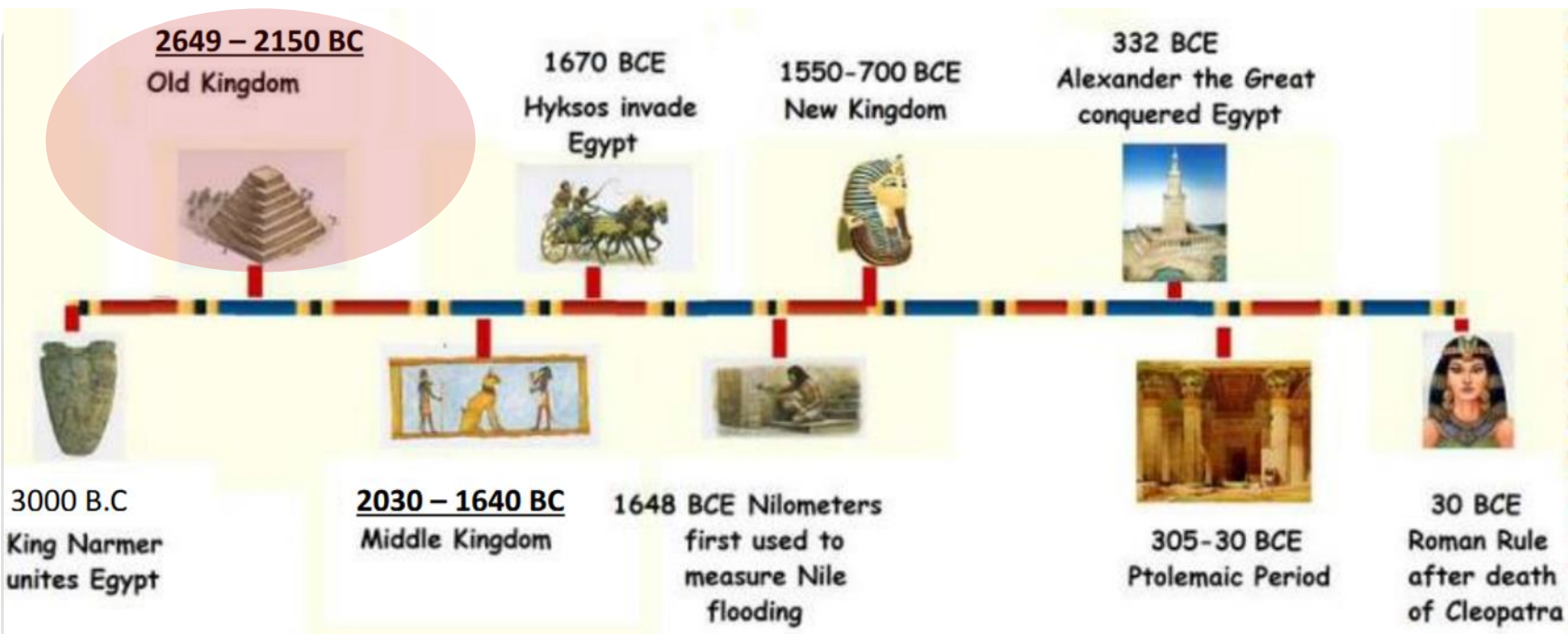
The history of Egyptian civilization spans 3 millennia, starting from the emergence of hieroglyphic writing and the creation of the Old Kingdom around 3300 BC, and ending with the annexation of Egypt to Greece around 300 BC, followed by its status as a Roman province around 30 BC.

Historical context/ Chronology of Egyptian empires

Chronologie des empires égyptiens

This chronology includes three empires, about thirty dynasties, and several intermediate periods.





Predynastic Period (c. 4000 - 3100 BC)

- **c. 4000 BC:** Emergence of distinct cultures in Upper and Lower Egypt, notably the Maadi and Nagada cultures.
- **c. 3100 BC:** Unification of Upper and Lower Egypt under the reign of King Narmer (or Menes), marking the beginning of the dynastic era.

Old Kingdom (2700 - 2200 BC)

- **2700 - 2200 BC:** Period of prosperity and centralization of power, characterized by the construction of pyramids, including those at Giza.
- **Imhotep, the first great architect, is active during this period.**

First Intermediate Period (2200 - 2050 BC)

- **2200 - 2050 BC:** Period of political turmoil and fragmentation of royal power, marked by rivalries between dynasties.

Historical context/ Chronology of Egyptian empires

Middle Kingdom (2000 - 1800 BC)

- 2000 - 1800 BC:** Cultural and political renaissance, development of literature, architecture, and arts

Second Intermediate Period (1800 - 1550 BC)

- 1800 - 1550 BC:** Foreign invasions, notably by the Hyksos, who introduce military innovations

New Kingdom (1550 - 1070 BC)

- 1550 - 1070 BC:** Apex of Egyptian power, territorial expansion into Nubia and the Levant.
- Reign of famous pharaohs such as Hatshepsut, Akhenaten, and Ramses II.

Third Intermediate Period (1070 - 664 BC)

- 1070 - 664 BC:** Decline of central power, rise of priests and regional governors.

Historial context/ Chronology of Egyptian empires

Late Period (664 - 332 BC)

- **664 - 332 BC:** Temporary resurgence of Egyptian power before repeated foreign invasions

Hellenistic Period (332 - 30 BC)

- **332 BC:** Conquest by Alexander the Great, beginning of the **Ptolemaic dynasty**.
- **30 BC:** Death of Cleopatra VII, integration of **Egypt into the Roman Empire**

NB: La XXII^e dynastie de l'Égypte antique fut composée de rois amazighs (Chachnak ou Sheshonq et 17 rois descendants).

Le roi Amazigh Chachnak avait détrôné le pharaon Ramsès II à Iwa vers -950.

Il avait fondé sa capitale à Tanis ville du Delta du Nil. (Actuellement San El Hadjar).

Cette époque (3^{ème} période intermédiaire) est intermédiaire entre le nouvel empire et la basse époque.



Statue de Sekhmet portant la titulature de Sheshonq Ier - Temple de Mout à Karnak près de Louxor



Gravure d'un relief de Sheshonq Ier trouvé à Karnak.

L'Égypte, le pays du Nil

La **civilisation** égyptienne est née et s'est développée grâce à un grand fleuve : le Nil. Sans lui, le pays serait un désert !

Le plus long fleuve d'Afrique

Le Nil est long de 6 700 km. C'est le 2^e plus long fleuve du monde, après l'Amazone, en Amérique du Sud. À l'époque des pharaons, la frontière sud de l'Égypte était marquée par une grande chute d'eau sur le Nil : la « première cataracte ».



Le delta

Au nord, le Nil s'élargit et se divise en plusieurs bras. Il forme un grand delta avant de se jeter dans la mer Méditerranée.

La vie au bord du fleuve

Les villes, les villages et les champs se trouvent tous dans la vallée du Nil. Le Nil est aussi la « grande rue » de l'Égypte : les hommes l'utilisent pour se déplacer et pour transporter les marchandises.

Au rythme des crues

Le Nil apporte l'eau nécessaire pour cultiver la terre. Une fois par an, de juillet à octobre, le fleuve est en crue. Il dépose alors du **limon** sur les rives et dans les champs. Cette terre très riche est bonne pour les cultures.

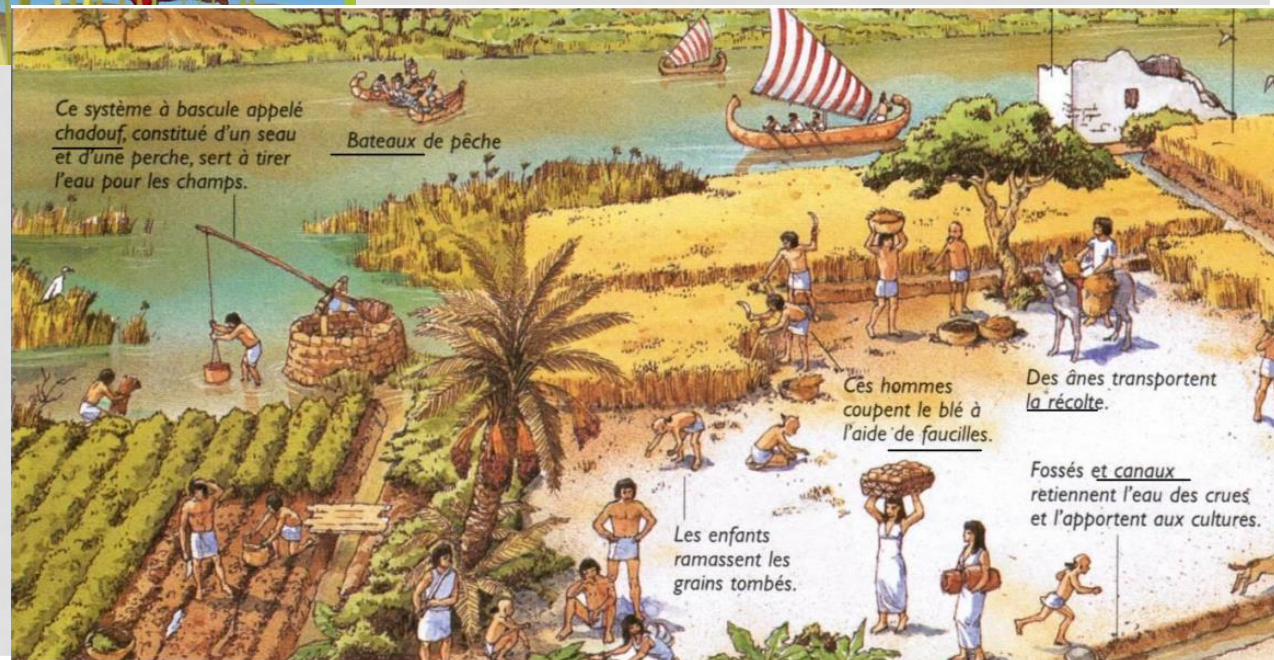
Dico

General context/ Life around the Nile

Egypt offers a continuous exchange of influences with Mesopotamia (clay construction systems, irrigation systems and canal networks; division of time *the Egyptians had a 365-day calendar*; geometry; arts...). This exchange continued during the incessant wars with Assyria and then Persia.

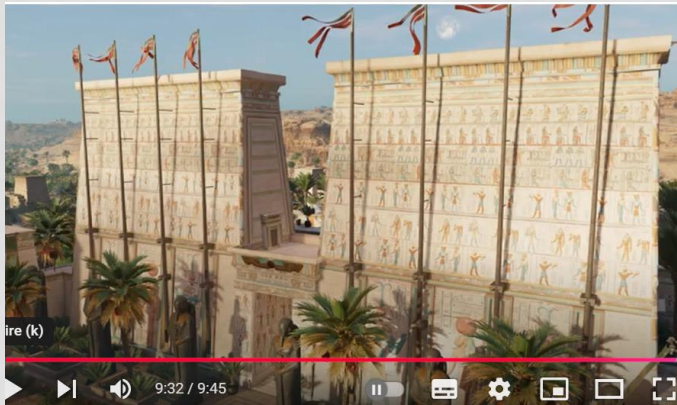
The Nile is the main resource for a social life and an economy based on agriculture.

The Nile is the internal trade route.



VISIBLE CHARACTERISTICS OF EGYPTIAN ARCHITECTURE

CARACTÉRISTIQUES VISIBLES DE L'ARCHITECTURE
ÉGYPTIENNE



General context / General characteristics of architecture

Caractéristiques générales de l'architecture



Pylons and obelisks marking the monumental entrances of cities, temples, and palaces.



Obelisks and statues of pharaohs



Pyramids and royal tombs



Dominance of decoration inspired by the surrounding nature of the Nile



Wall decoration with bas-reliefs, frescoes, and hieroglyphic inscriptions



Columns and hypostyle halls

Columns



**General
characteristics
of
architecture**

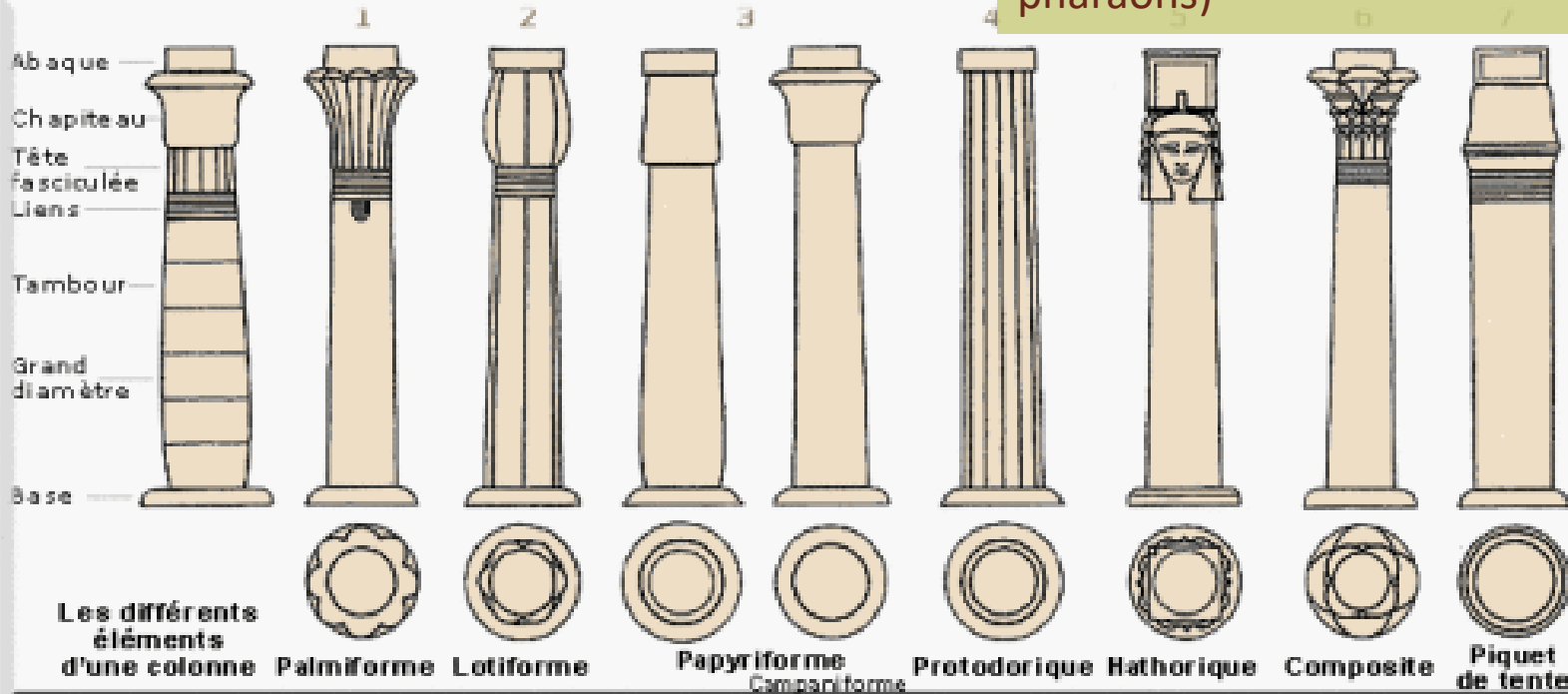


General characteristics of architecture / Column types



Inspiration de la nature,
parfois chapiteaux
représentant la tête d'un
pharaon (divinisation des
pharaons)

Inspiration from nature,
sometimes capitals
representing the head of a
pharaoh (deification of
pharaohs)



General characteristics of architecture

Pylons and obelisks

Pylônes et obélisques

Pylon



Obelisk

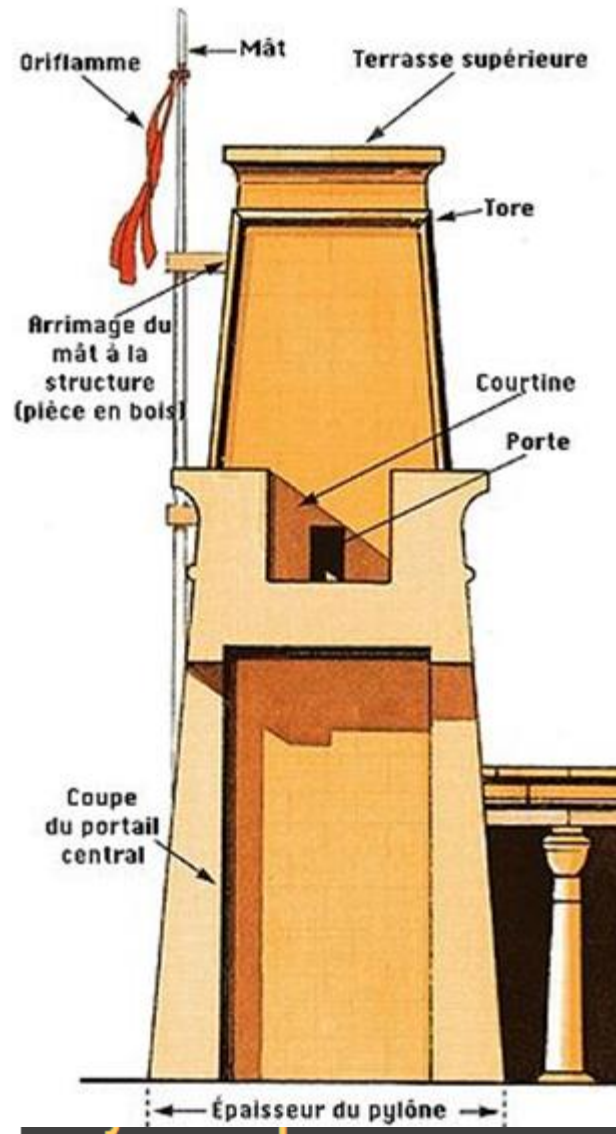
Pylons are iconic architectural structures that **mark the entrance of Egyptian temples**. They typically take the form of two massive towers, symbolizing the **twin mountains of the horizon**. This design represents the twin hills through which the solar disk rises and sets, embodying a cosmic and religious aspect.

Obelisks are monolithic pillars, typically carved from a single block of stone, often red granite from the quarries of Aswan. They are characterized by a square or rectangular base that tapers to a pyramidal top. **The obelisk symbolize a frozen ray of sunlight.**

General characteristics of architecture

The pylons in the urban landscape

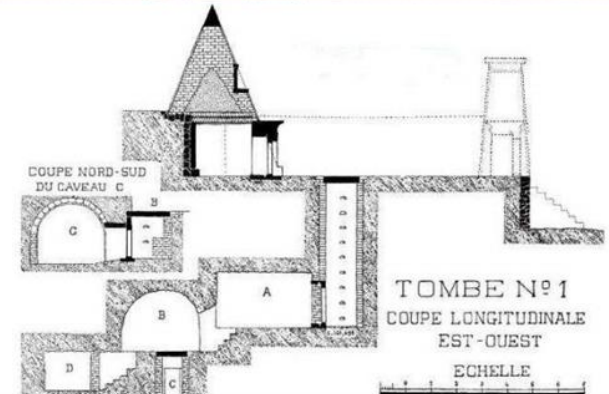
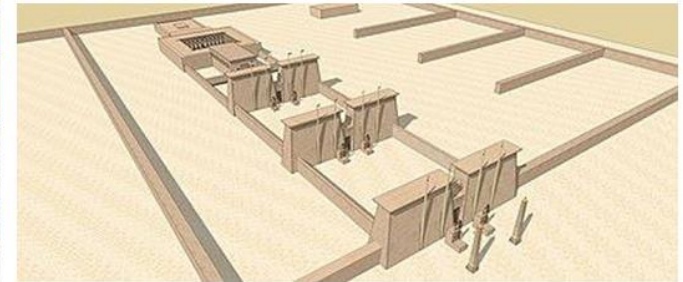
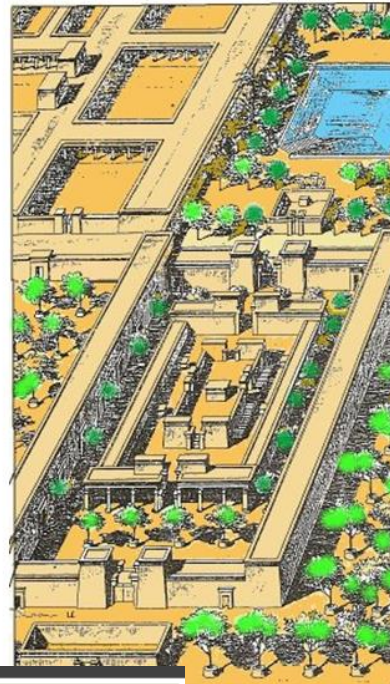
Les pylônes dans le paysage urbain



Détail d'un Pylône (coupe transversale)

The pylons are a characteristic of official gates and entrances: (cities, palaces, temples, tombs).

Les pylônes une caractéristique des portes et accès officiels :(villes, palais, temples, tombeaux



Plan de la tombe de Sennedjem (reine) selon Bernard Bruyère

General characteristics of architecture

Round- sculpture (colossi) marking the entrance of religious temples / Cornices and moldings

Ronde-bosse (colosses) marquant l'entrée des temples religieux / Corniches et modénatures

A molding

Une modénature: c'est un profil d'un ensemble de moulures dont les reliefs créent des jeux d'ombres et de lumière



Round- sculpture

Une ronde-bosse: c'est une statue posée sur un socle

Elle peut représenter un colosse ou un animal mythique

Corniches et modénatures
Cornices and moldings



General characteristics of architecture

Symmetry and axuality of monumental buildings

Symétrie et axialité des édifices monumentaux



Symétrie et axialité remarquée à partir du Dromos)

Symmetry and axuality observed from the Dromos

TECHNICAL AND ARCHITECTURAL INNOVATIONS

INNOVATIONS TECHNIQUES ET ARCHITECTURALES

Technical Aspects/ Specific Materials and Structures Matériaux et structures spécifiques Materials Used

Mostly Sandstone and Limestone

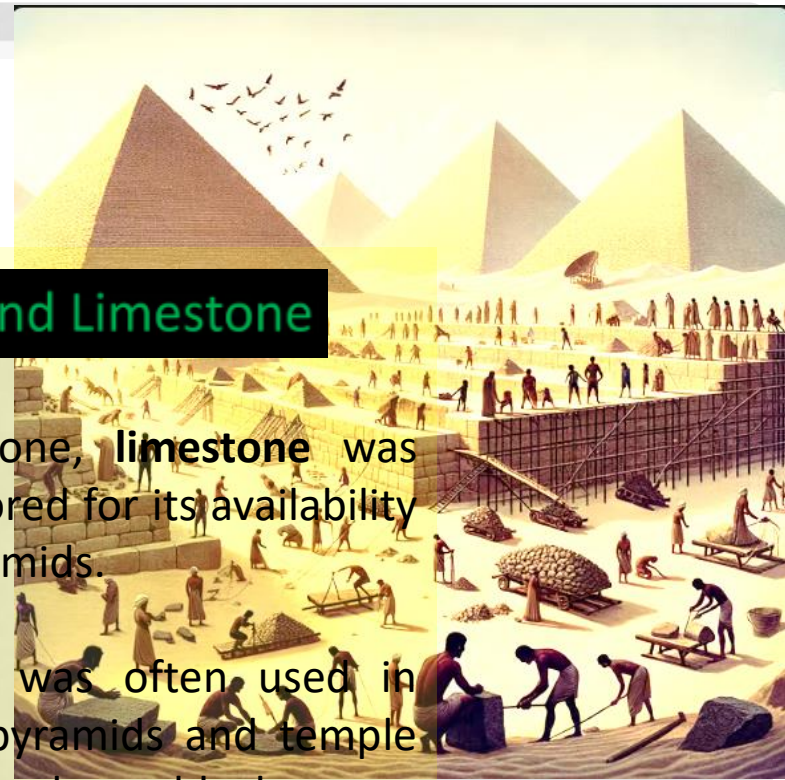
1. La pierre / Stone

- **Calcaire/ Limestone:** The most commonly used stone, limestone was quarried from the cliffs along the Nile Valley. It was favored for its availability and ease of carving, making it ideal for temples and pyramids.

- **Granite/ Granite:** Known for its durability, granite was often used in important structures such as the inner chambers of pyramids and temple columns. It was typically sourced from Aswan, where large blocks were quarried.

- **Grès/ Sandstone:** This material was also utilized, particularly in regions further south. Sandstone was often used for smaller structures and decorative elements due to its softer texture compared to granite.

- **Basalte / Basalt:** Primarily used for pavements and some statues, basalt is a hard volcanic rock that provided a durable surface for various architectural elements.



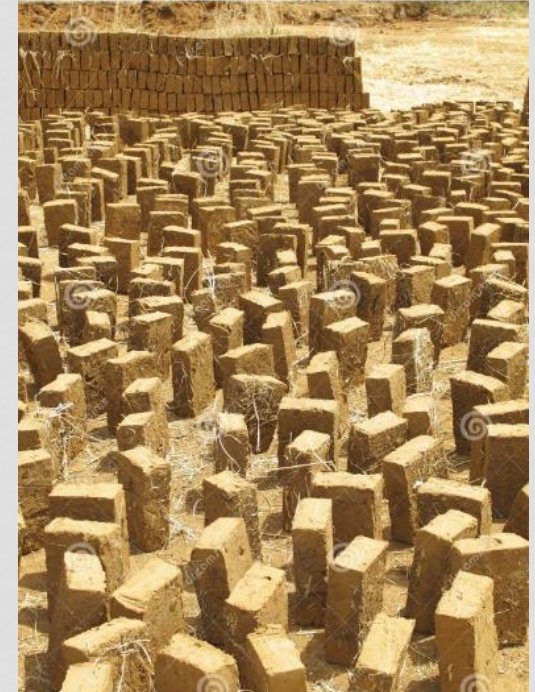
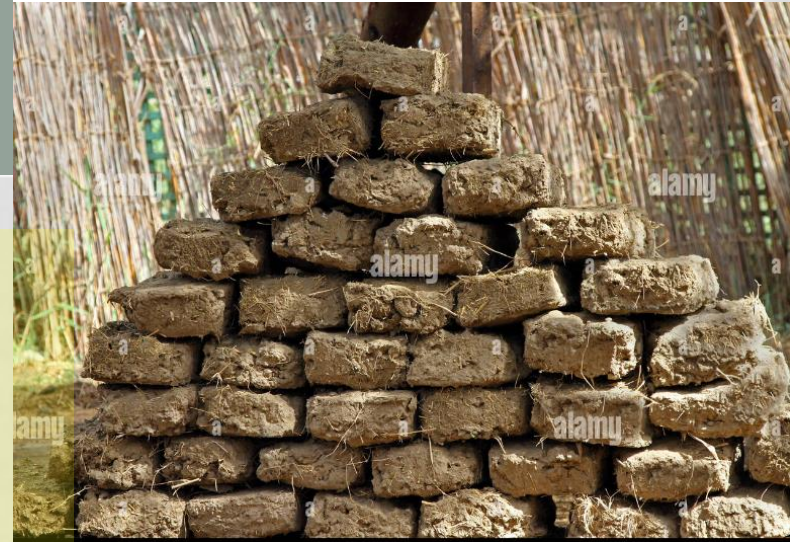
Technical Aspects/ Specific Materials and Structures Matériaux et structures spécifiques

Materials Used

2. Brique en Argile / Mud Brick

• **Brique en Argile Non Cuite / Unbaked Mud Brick:** This was the standard material for domestic architecture throughout ancient Egypt. It was made from Nile mud mixed with straw and dried in the sun. While less durable than stone, mud brick was widely available and used for houses, palaces, and fortifications.

• **Brique Cuite au Four / Kiln-Baked Brick:** In some cases, bricks were fired in kilns to increase their strength and durability, making them suitable for more significant structures.



Technical Aspects/ Specific Materials and Structures Matériaux et structures spécifiques

Materials Used

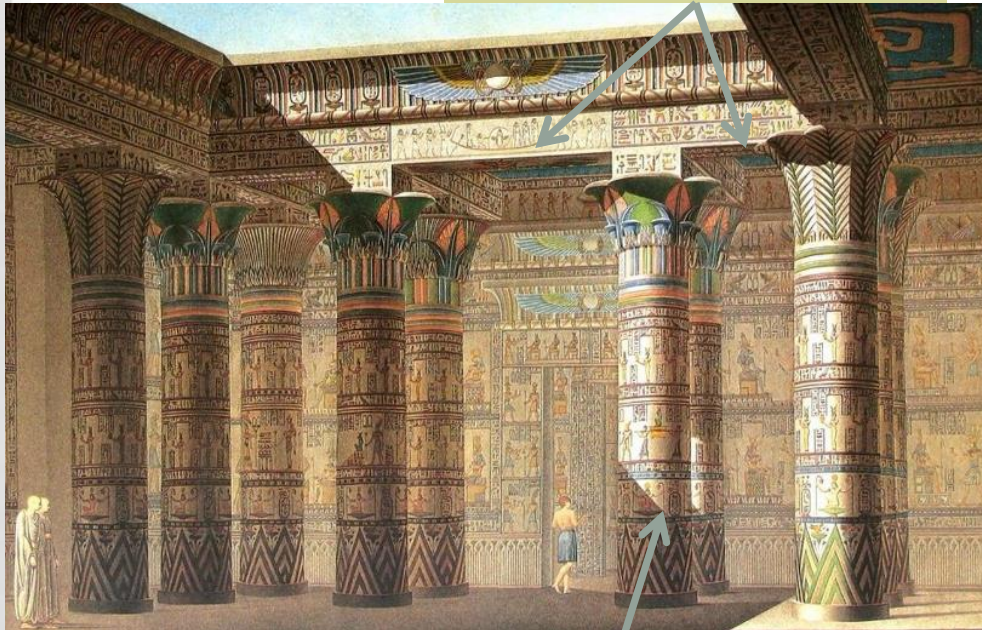
•3 Le bois / Wood

•**Wood** was less commonly used due to its scarcity in Egypt. However, it played a role in construction for **roofs, doors, and furniture**. Local trees such as **tamarisk** and **acacia** were utilized, while coniferous wood was imported from Lebanon for more substantial constructions.



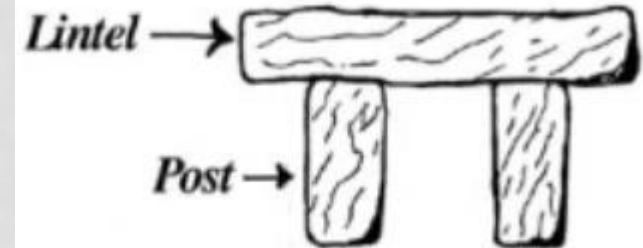
Structural system/ Post and lintel structure Structure en plate-bande

Lintel /beam



Post /
Column

The post-and-lintel structure is one of the oldest and simplest methods of construction, characterized by the use of vertical supports (posts) that hold up a horizontal beam (lintel).



POST & LINTEL

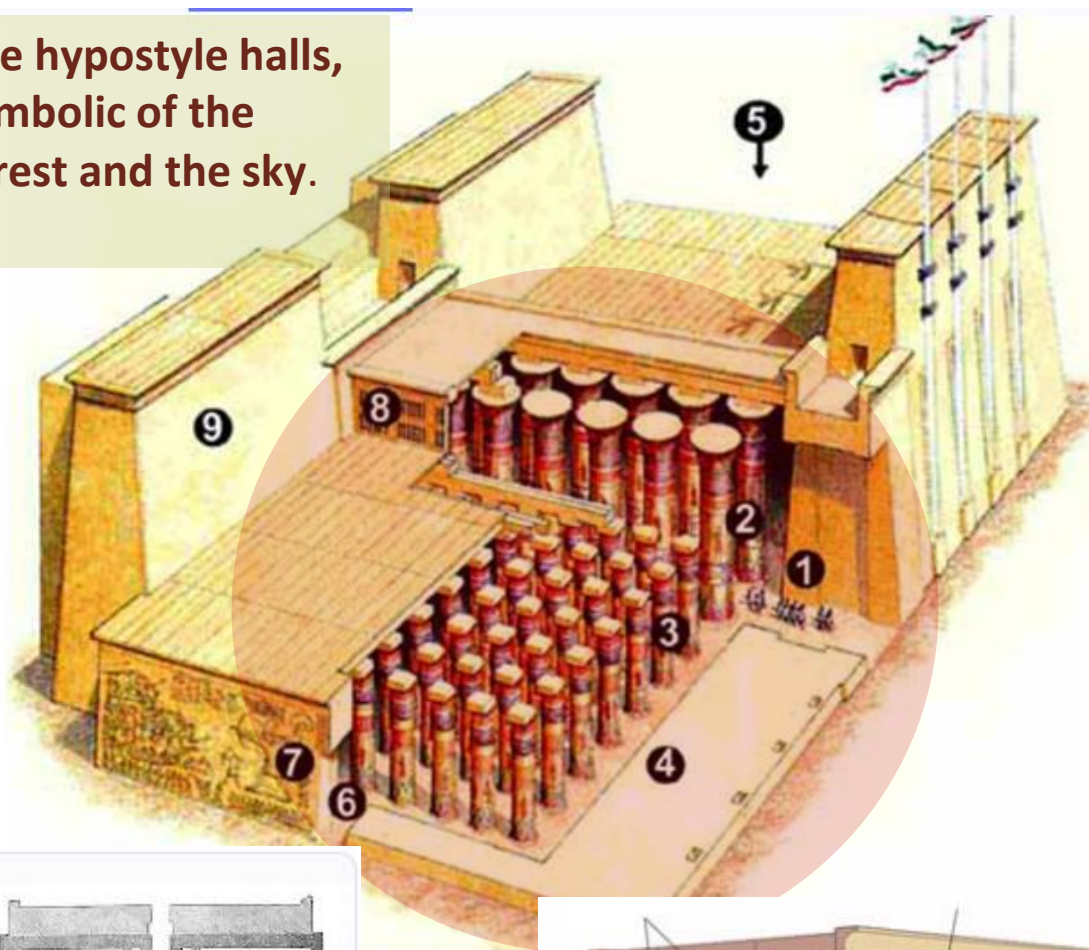
Simple form of construction involving posts carrying horizontal beams or lintels, as in timber-framed work or in columnar and trabeated architecture.

Ancient Egyptian and Ancient Greek architecture was of this type, using stone.

Stonehenge is an example of post and lintel construction



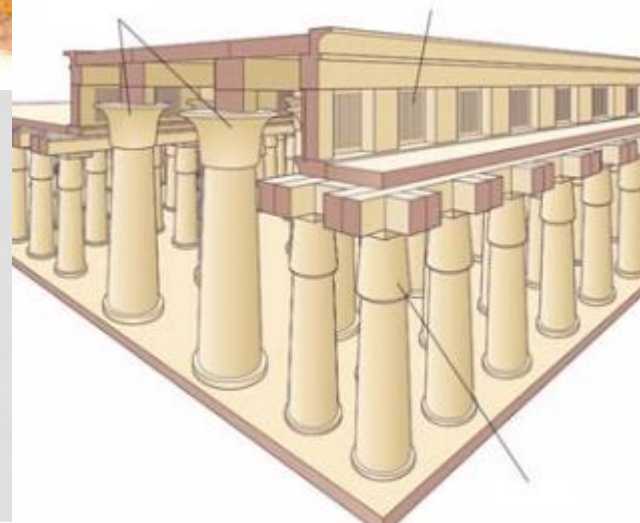
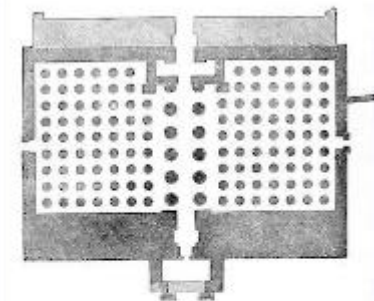
The hypostyle halls, symbolic of the forest and the sky.



Structural system/ Hypostyle halls Salles hypostyles

A hypostyle hall is an architectural space whose ceiling is supported by columns.

The term "hypostyle" comes from the ancient Greek *hupostulos*, meaning "supported by columns."

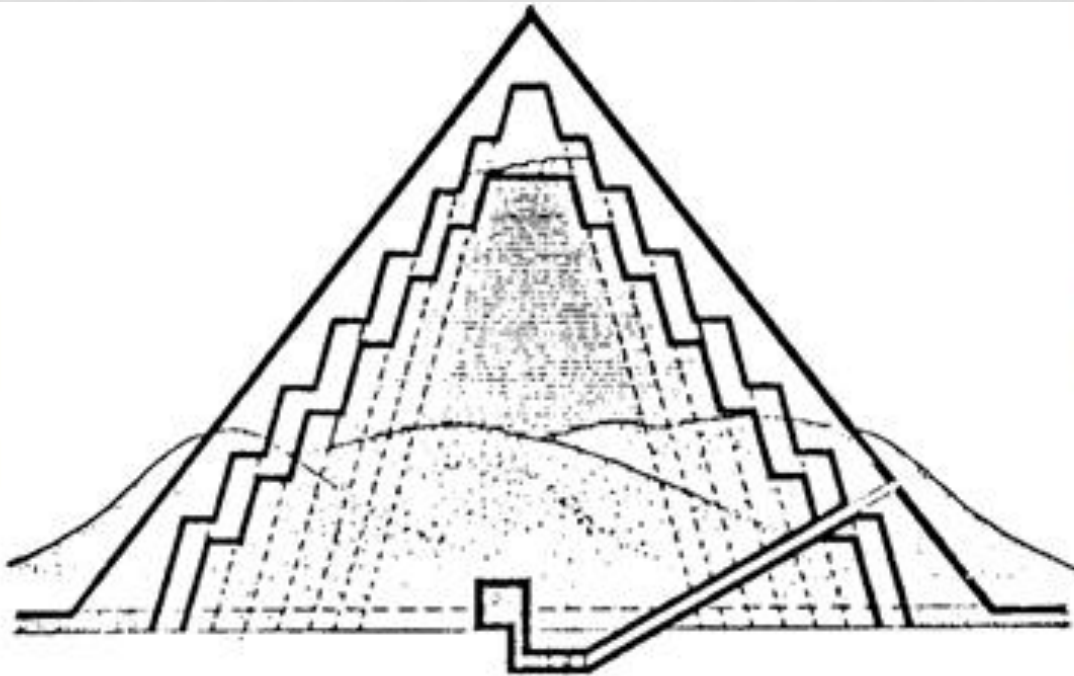


These halls are particularly associated with the architecture of ancient Egyptian temples, where they often served as a transition between outdoor spaces and more sacred areas.

Structural system/

Corbelled vault to support the pyramids

Fausse voûte (Voûte appareillée en encorbellement) pour supporter les pyramides



The corbelled vault (corbel construction) is the technique that allowed the pyramids to avoid collapsing under their own weight.

Interior section of a pyramid

MAIN TYPES OF EGYPTIAN ARCHITECTURE

PRINCIPAUX ÉDIFICES ÉGYPTIENS

THE MAIN TYPES OF ARCHITECTURE INCLUDED

1. Tombs – Which can be subdivided in to

- a. Mastabas
- b. Pyramids
- c. Rock Cut Tombs

2. Temples – Which can be subdivided in to

- a. Mortuary Temples

Which were mostly Rock Cut

- b. Religious Temples

Which were mostly Built with stone masonry

3. Palaces

EGYPTIAN TOMBS

LES TOMBEAUX ÉGYPTIENS

Evolution of tomb typology

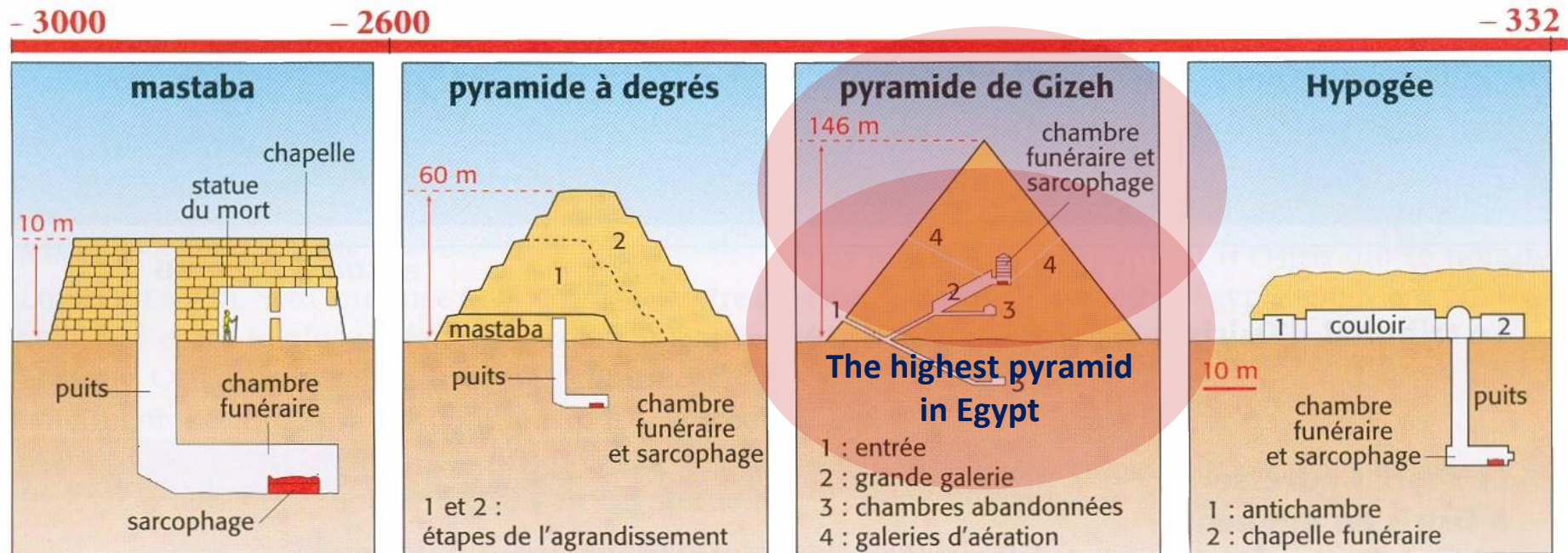
From mastaba to pyramid and then to hypogea (Rock cut tomb)

Evolution de la typologie des tombeaux

Du Mastaba à la pyramide puis à l'hypogée

The tombs successively take on three forms: **mastabas**, **pyramids**, and **hypogea**.

Du mastaba à l'hypogée : l'évolution des tombeaux royaux sous l'Egypte antique



From the desire to express the strength and grandeur of the deified pharaohs (pyramids) to the desire to conceal their tombs to prevent looting (hypogea, tombs carved into the rock).

Specific characteristics of Egyptian pyramids

Caractéristiques spécifiques des pyramides égyptiennes

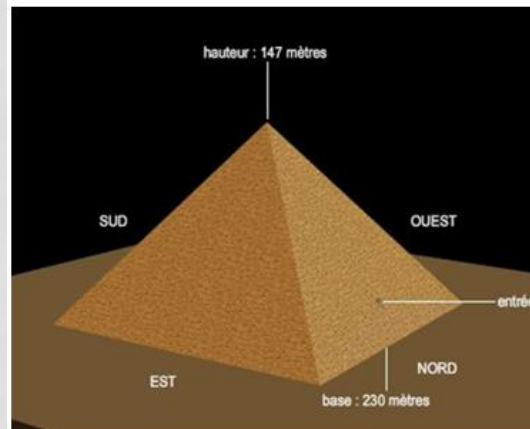
The precision of stone masonry reaches its greatest perfection in Egypt. (Almost invisible joints).

Harmony, stereometry, and good proportions characterize pharaonic architecture.

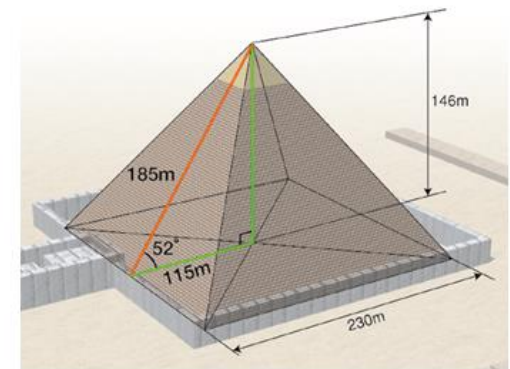
Stereometry is the geometry that measures the dimensions of solid volumes.

La stéréométrie est la géométrie qui mesure les dimensions des volumes solides.

Les caractéristiques de la pyramide



Orientation parfaite des faces vers les quatre points cardinaux.



Proportions harmonieuses (pyramide de Kéops _ 2500 av.J.C.): $146/115 \approx 1,618 \approx \Phi$ (le nombre d'or)

L'harmonie, la stéréométrie et les proportions caractérisent l'architecture pharaonique.

La précision de la construction en pierre de taille atteint en Egypte sa plus grande perfection.

EGYPTIAN TEMPLES

LES TEMPLES ÉGYPTIENS

Two types of temples: mortuary (funerary) and religious Deux typologies de temples:funéraires et religieux

Mortuary temples near to tombs in the Necropolis

Temples funéraires près des tombeaux dans la Nécropole



Hatshepsut Mortuary Temple, stunning! ~ Bat...
batnomad.com

Religious temple in the city of livings

Temple religieux dans la ville des vivants



Temple of Horus | , Egypt | Sights - Lonely Planet
www.lonelyplanet.com

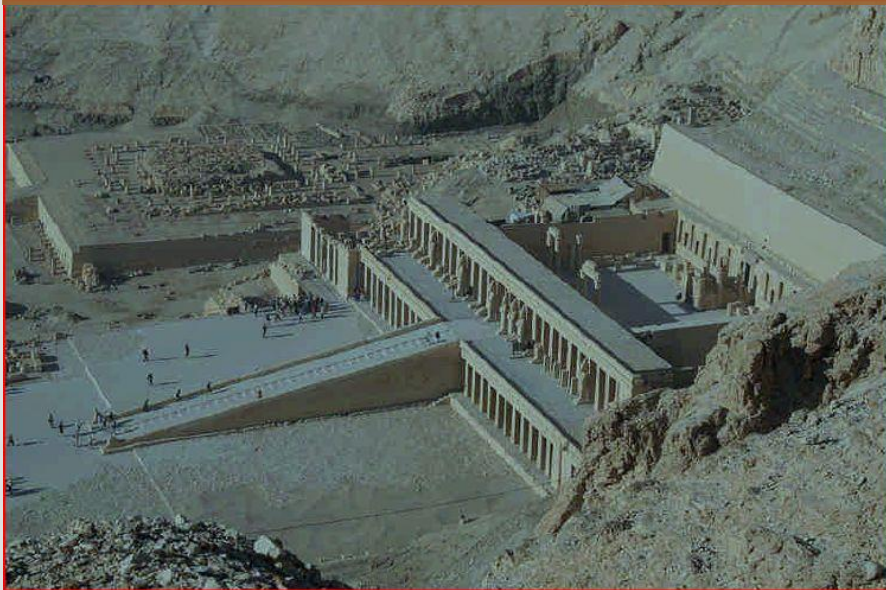
They are of two types: completely carved from rock or partially carved from rock (**hemispeos and speos**).

These types of temples are built in the city of the dead. The oldest known temples date back to the 5th Dynasty (the solar temple of Neuserre).

Mortuary temples **Les temples funéraires**

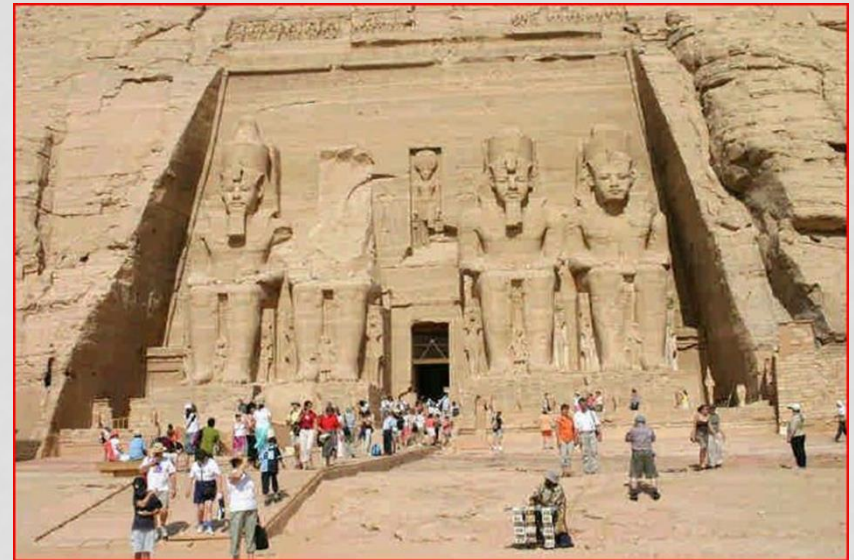
Hemispeos Temple/ Temple

Hémispéos : à demi-entaillé dans le roc et à demi-construits de matériaux rapportés.



Le temple funéraire d'Hatshepsout (1508-1458 av. J.C.; XVIII^e dynastie), à Deir el-Bahari.

Speos temple/ Temple Spéos:
entièrement taillés dans le roc.



Temple de Ramsès II, à Abou Simbel

Religious temples / spatial organization

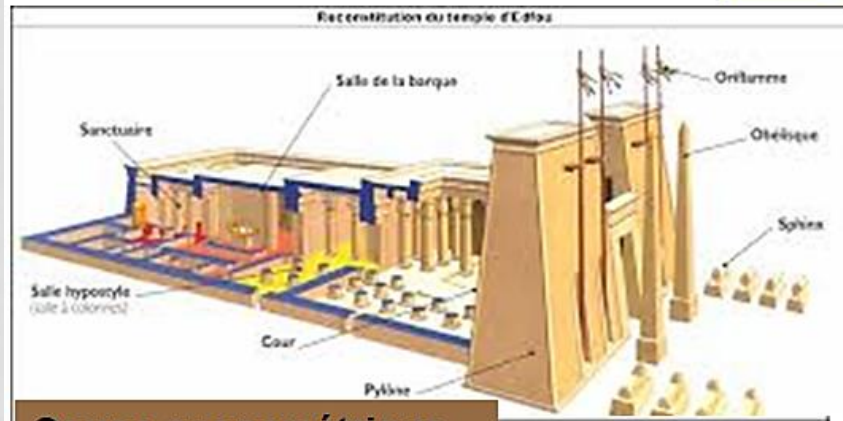
Les temples religieux / Organisation spatiale

The temple symbolizes the cycle of day and night.

Le temple est une symbolique du cycle du jour et de la nuit.

Les temples Religieux

Organisation spatiale



- 1: allée des sphinx (Dromos)
- 2: obélisques
- 3: statues royales
- 4: pylônes
- 5: cour péristyle
- 6: salle hypostyle
- 7: sanctuaire

Coupe axonométrique

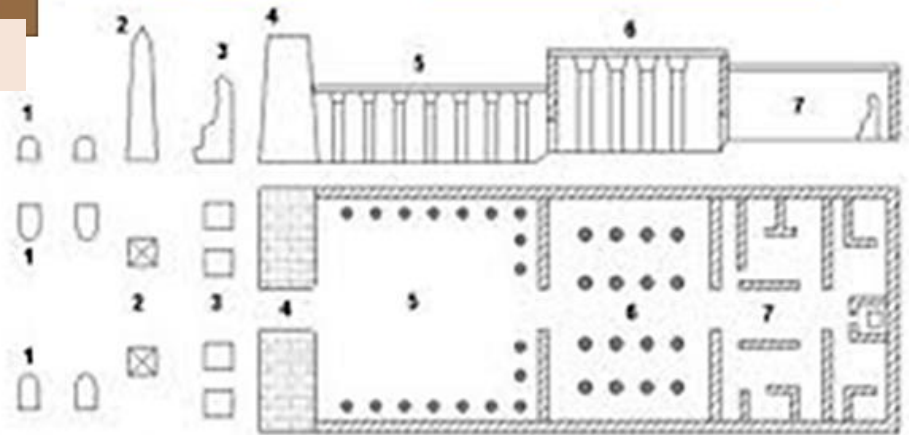
Axonometric section

Elévation

Section

Plan

Plan



1. Avenue of the Sphinxes (Dromos)
2. Obelisks
3. Royal statues
4. Pylons
5. Peristyle courtyard
6. Hypostyle hall
7. Sanctuary

Le chemin axial qui mène au sanctuaire en passant de la lumière de la cour à la lumière tamisée de la salle hypostyle pour terminer dans le sanctuaire non éclairé reproduit le passage du jour à la nuit.

Religious temples / Interior - exterior views

Les temples religieux / Vues intérieur - extérieur



Cour à péristyle
(galerie)



Pylônes marquant
l'entrée du temple

MATERIALS



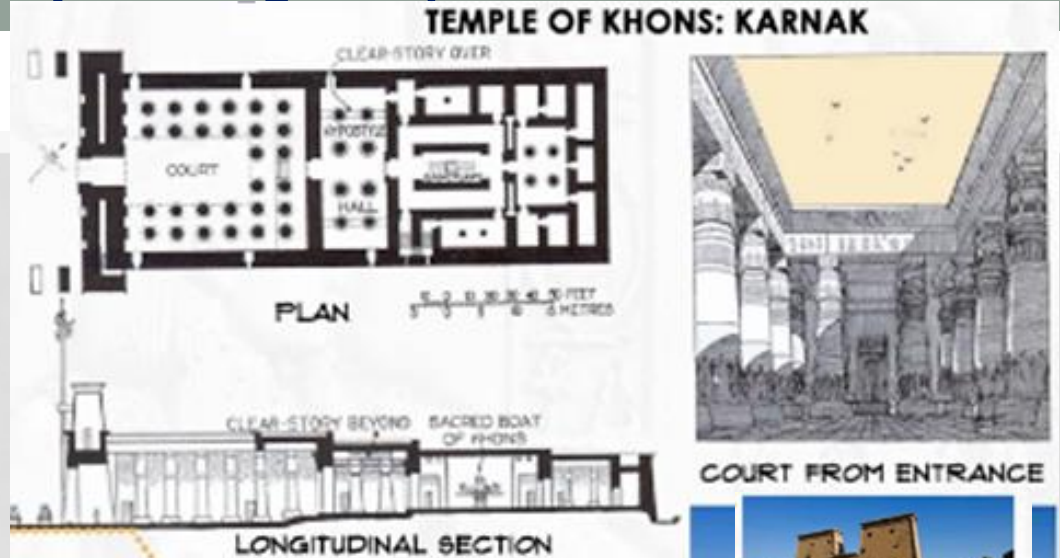
SUN-BAKED MUD BRICK



SANDSTONE BRICK



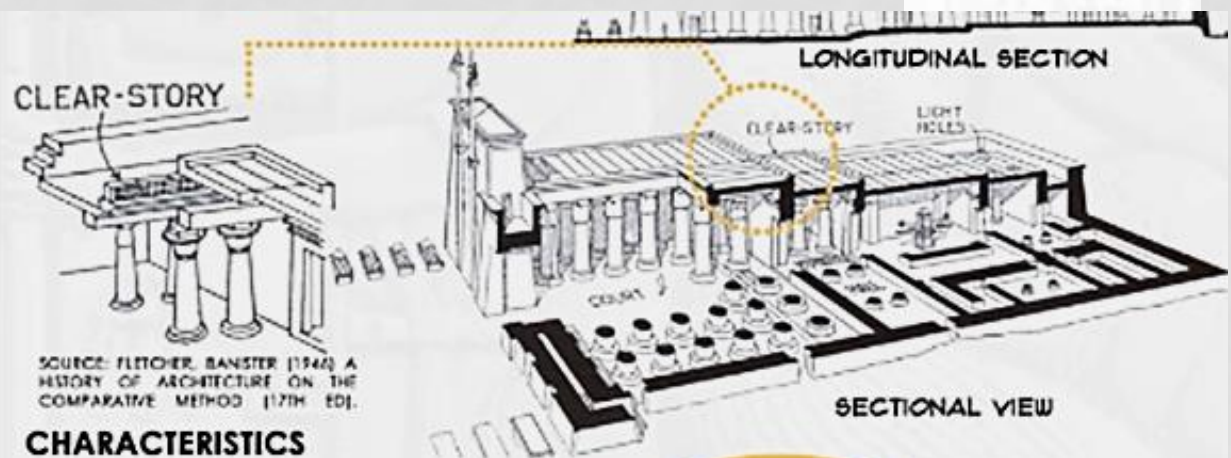
GRANITE



SOURCE: MOSTAFA ALSAGHEE 76.
TEMPLE OF KHONS WAS BUILT BY RAMSES II, AND IT IS A PROTOTYPE FOR THIS PERIOD.

CHARACTERISTICS

- ➡ SYMMETRY
- ➡ AXIALITY
- ➡ HIERARCHY
- ➡ MONUMENTAL SCALE
- ➡ TELESCOPING



Religious temples / Variations of columns Les temples religieux / Variantes de colonnes

Variations of the capitals between the peristyle and the hypostyle hall.

Variantes des chapiteaux entre le péristyle et la salle hypostyle

Chapiteaux ouverts du péristyle

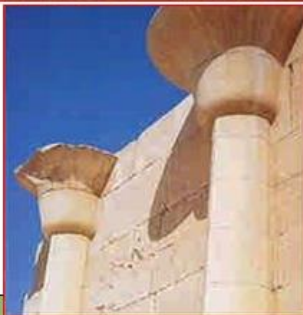


Open capitals of the peristyle

Chapiteaux fermés de la salle hypostyle



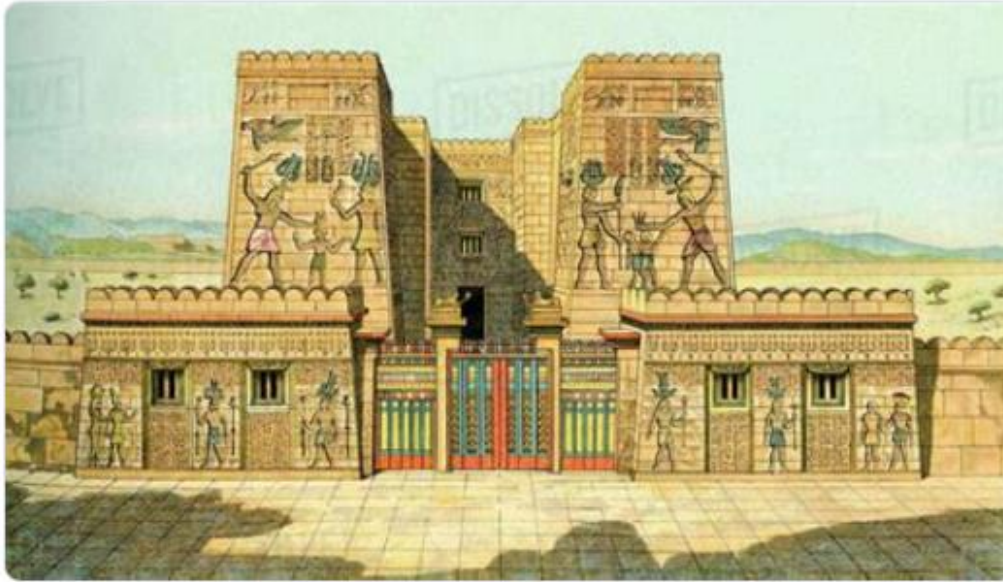
Closed capitals of the hypostyle hall



Les colonnes symbolisent les tiges de papyrus qui émergent d'un plan d'eau

The columns symbolize the papyrus stalks emerging from a body of water.





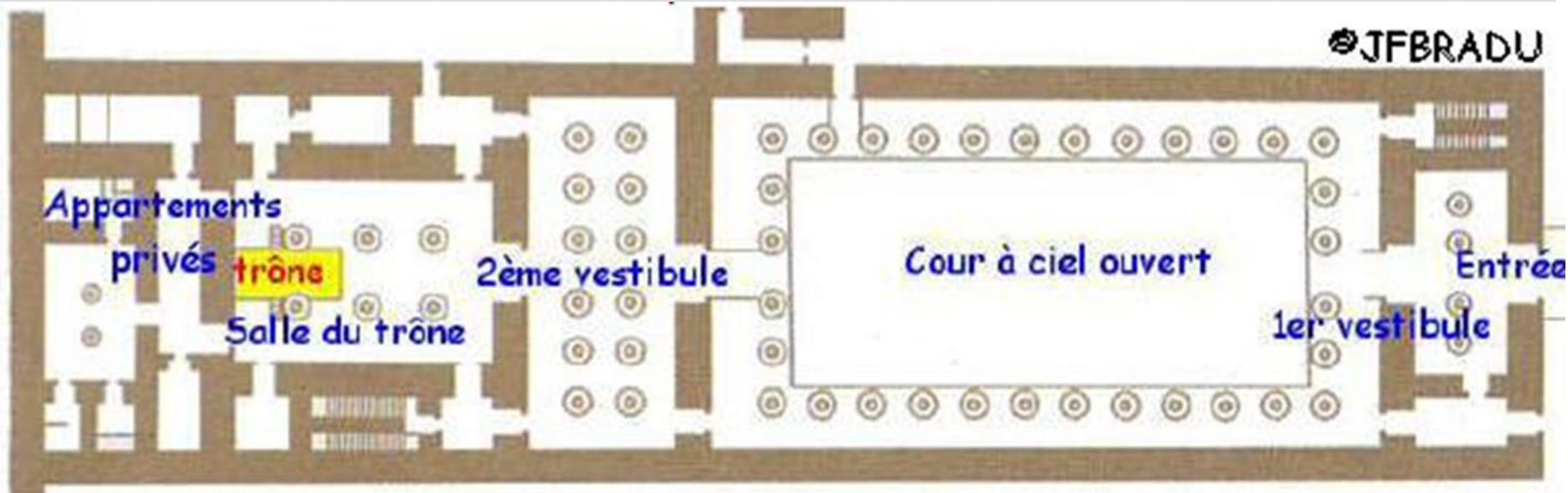
Imaginary reconstruction of an Egyptian palace in Pha...

EGYPTIAN PLACES

LES PALAIS ÉGYPTIENS

The royal palaces Les palais royaux

Their layout follows that of the religious temple. The throne is placed where the cella should be located in a temple.

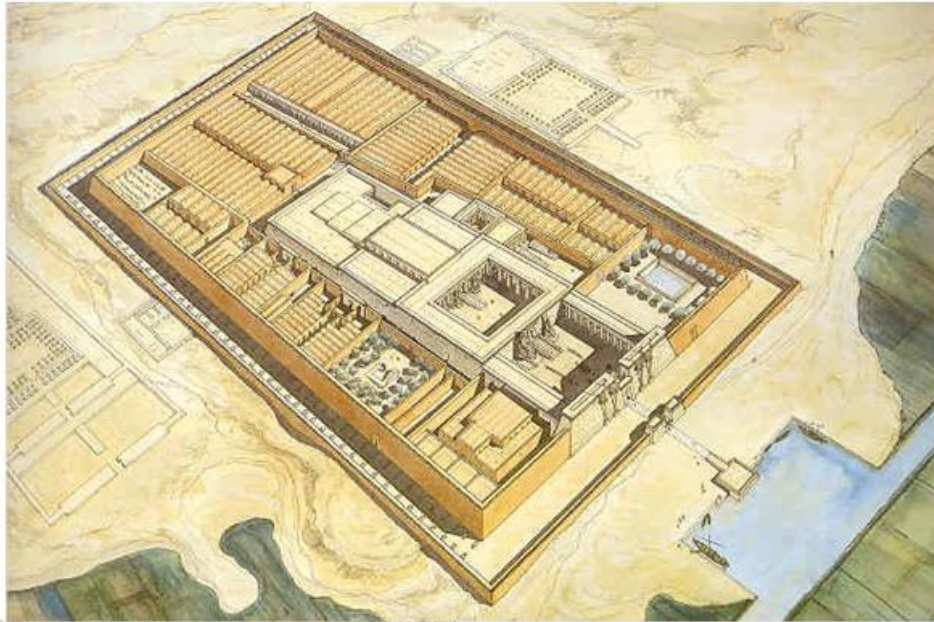


Plan du palais de Mérenptah à Memphis : le plan ressemble tout à fait à celui du temple.

Leur plan suit le plan du temple religieux.
Le trône est placé à l'endroit où devrait être placée la cella dans un temple.

The royal palaces Les palais royaux

Le palais une réplique (copie) du temple, mais aussi une forteresse entourant un complexe d'édifices



Reconstitution du palais de Ramsès II à Thèbes

Fenêtre d'apparition de Ramsès II

Dans l'enceinte du palais, sont construites les villas des membres du gouvernement, les logements des serviteurs, les cuisines, les greniers et les magasins où est entreposé le trésor royal. Le palais comprend aussi un temple, une bibliothèque et une école.

Le pavillon du pharaon est situé dans une grande cour, sa façade est ornée de piliers. L'entrée s'ouvre sur la grande salle d'audience qu'il faut traverser pour accéder à la salle du trône. De chaque côté de ces deux salles sont installées les appartements privés du souverain et de ses épouses. A l'occasion de certaines fêtes ou lors de remises de récompenses, le pharaon et la reine se tiennent à la fenêtre d'apparition.

The palace is a replica (copy) of the temple, but also a fortress surrounding a complex of buildings.

EGYPTIAN HOUSES

LES HABITATIONS ÉGYPTIENNES

The Egyptian house

The ancient Egyptian houses were built with adobe bricks and were home to large families comprised by parents, grandparents, uncles and four or five kinds, as an average. Most of the people were farmers and lived in small villages near the crop fields of the coast of the mythic Nile River. The rooms had different purposes and there were also basements and terraces. The Egyptians also invented the living room, where all the family members shared food, work and spare time. The windows of these houses were located high up the walls to avoid the direct entry of the sun, earth and sand. The white walls were also decorated with geometric and pictorial motives. Within these family cells, original furniture was used and they lived together with their pets.

Adobe: irreplaceable

The Egyptians, such as other contemporary civilizations, seized soil as a raw material. It was dried under the sun in wooden matrices to create bricks which, covered with bitumen, were rain-proof.

Strong walls

The walls were solid combinations of adobe bricks piled up on stone foundations.

First access

The entrance door was much thicker than the rest, and it counted with a system of safety locks. They were made of wood.

Safety

As the windows lacked glass, stone bars or grids were placed to avoid the entrance of unknown people or animals. The valuable objects used to be kept in the basement, the most inaccessible area of the house.

Ventilation

These houses counted with vents on the roofs and also with windows on the upper part of the walls. They were small, rectangular openings without glass.

1 Welcoming

The lobby was the first room of the house, where the people outside the family were received. It used to be intensely decorated since an altar to honour the god Bes, who was the protector of the family, children and pregnant women, was placed there.

2 Cooking

The kitchens were well equipped, with areas destined to culinary and cooking utensils, such as big spoons, vases and jars of diverse shapes. They had mortars and original mud ovens where they prepared, among others, bread with yeast.

3 Basement

This area was mainly used to store food: for instance, onions, pulses, radish and fruits. Accessing the basements was not easy, since their entrance was always hidden or covered with some kind of cover or trapdoor.

4 Obligations

The Egyptians dedicated most part of the day to work. In addition, they dried and salted the meat and fish they ate on the roofs.

Unwinding

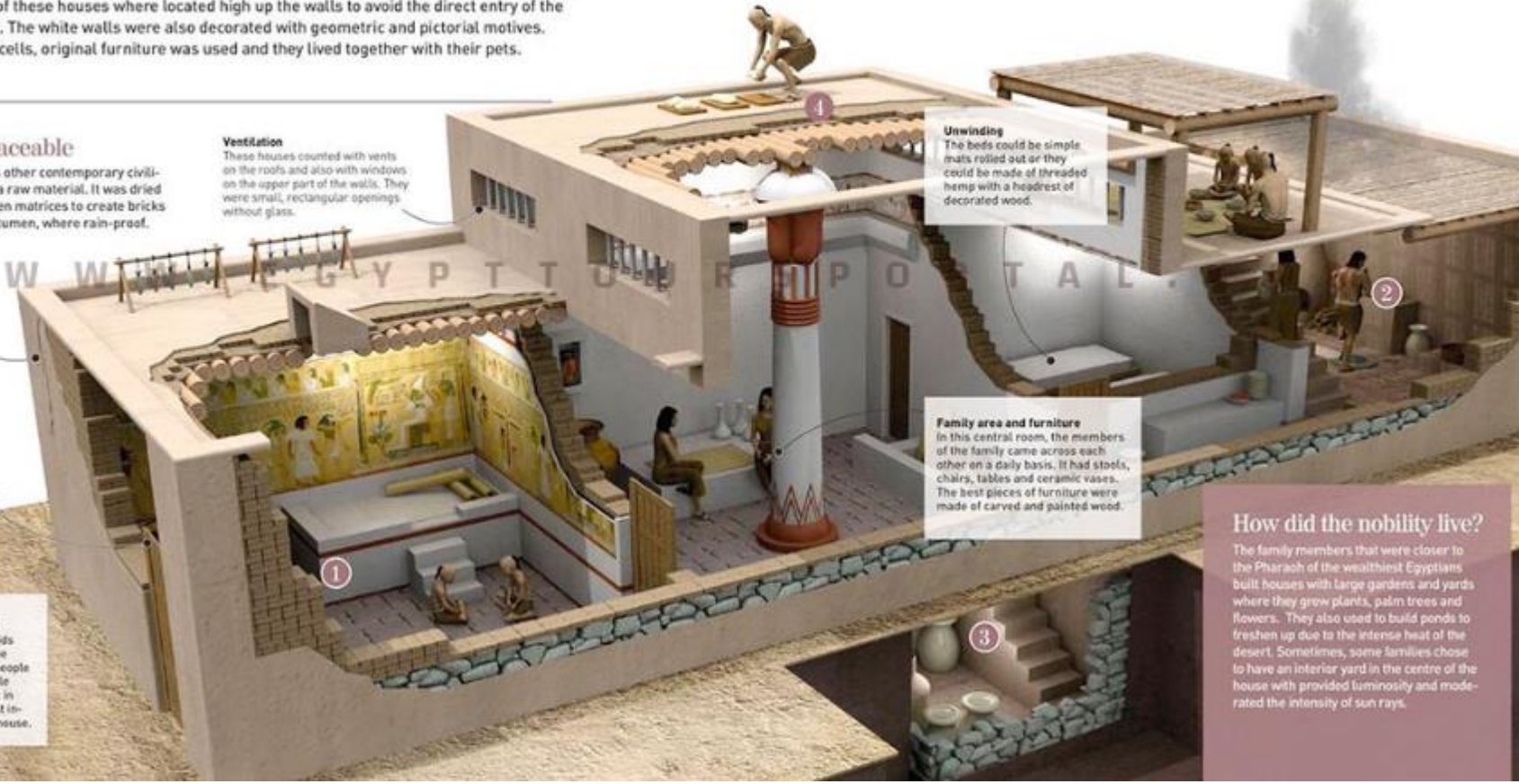
The beds could be simple mats rolled out or they could be made of threaded hemp with a headrest of decorated wood.

Family area and furniture

In this central room, the members of the family came across each other on a daily basis. It had stools, chairs, tables and ceramic vases. The best pieces of furniture were made of carved and painted wood.

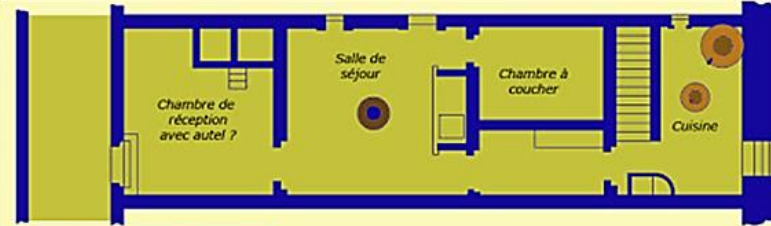
How did the nobility live?

The family members that were closer to the Pharaoh of the wealthiest Egyptians built houses with large gardens and yards where they grew plants, palm trees and flowers. They also used to build ponds to freshen up due to the intense heat of the desert. Sometimes, some families chose to have an interior yard in the centre of the house with provided luminosity and moderated the intensity of sun rays.

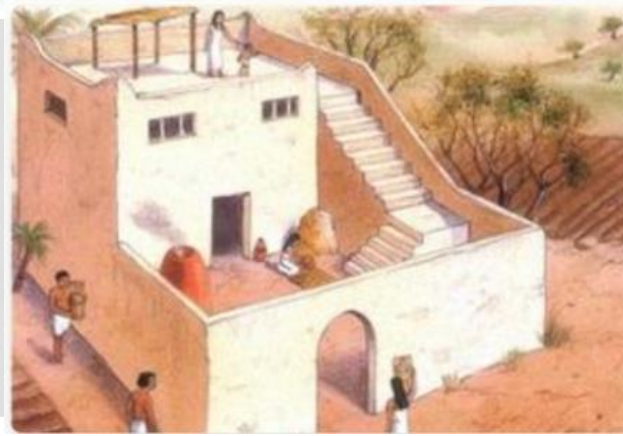
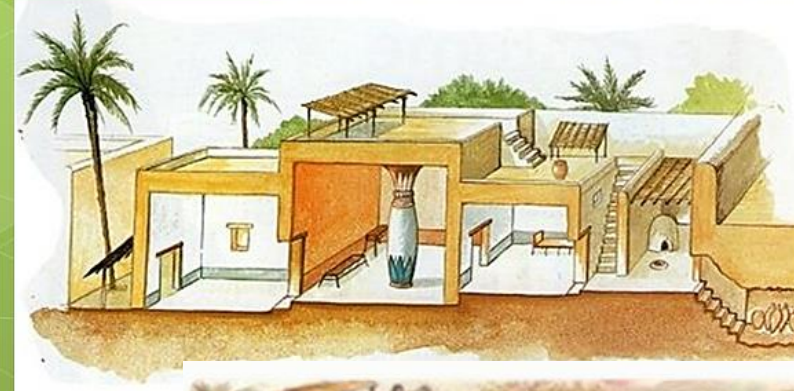


The dwellings / The residences The artisan's house La maison d'artisan

The artisan's house in ancient Egypt, typically located in villages like Deir el-Médineh, was primarily constructed from sun-dried mud bricks suitable for the dry climate. These homes generally featured three to four rooms, including an entrance hall and a main room with a raised ceiling. An interior courtyard often served as a kitchen, equipped with an oven and shaded by reed mats. Designed for functionality, these houses allowed artisans to live and work in the same space, sometimes including a cellar to keep food fresh.



DEIR EL-MEDINEH Maison d'ouvrier - artisan. Coupe et plan. XVIII^e - XX^e dynastie



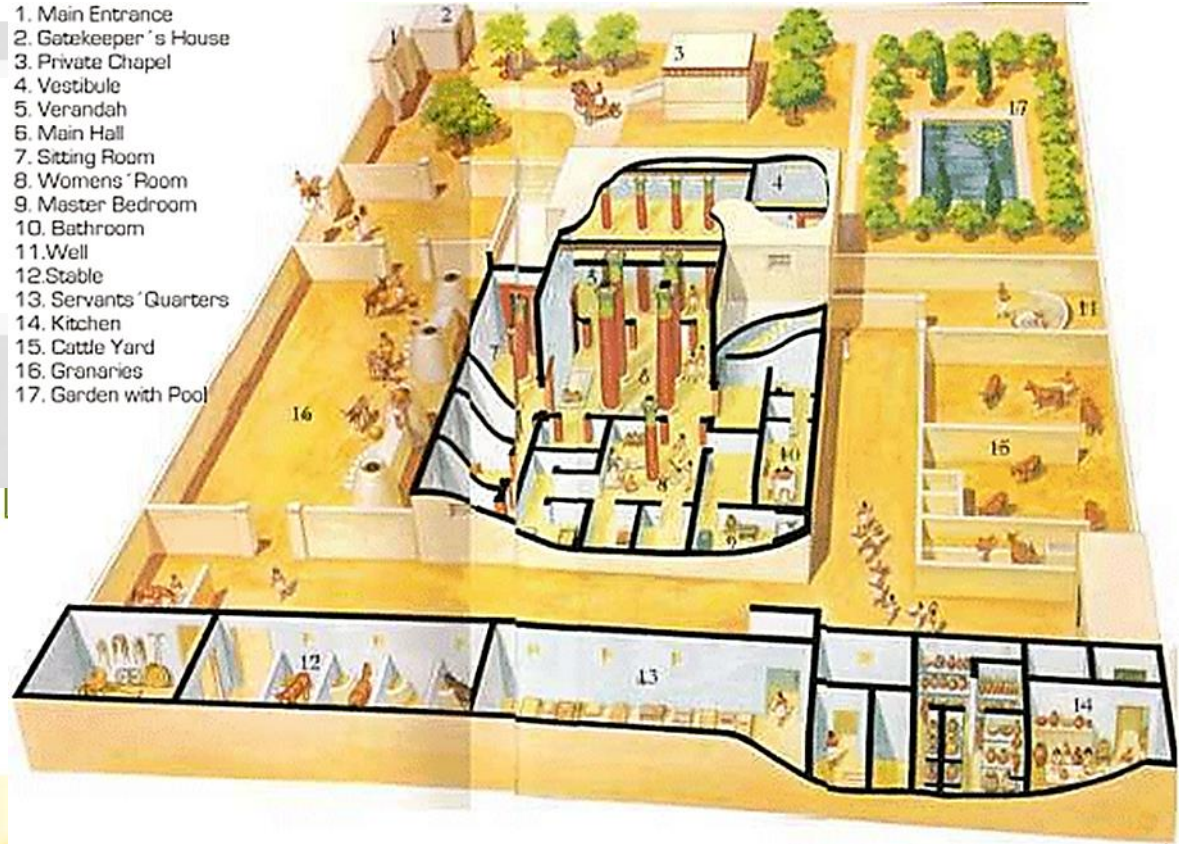
Les habitations

La maison d'artisan

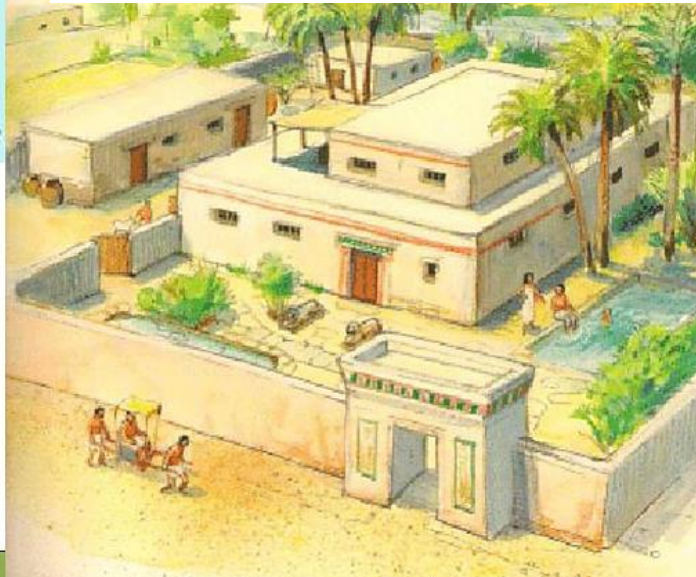
La maison d'artisan en Égypte antique, typiquement située dans des villages comme Deir el-Médineh, était construite principalement en briques crues, adaptées au climat sec. Ces habitations comprenaient généralement trois ou quatre pièces, dont un hall d'entrée et une pièce principale avec un plafond surélevé. Une cour intérieure servait souvent de cuisine, équipée d'un four et protégée du soleil par des canisses de roseau. Les maisons étaient conçues pour être fonctionnelles, permettant aux artisans de vivre et de travailler dans le même espace, avec parfois une cave pour conserver les denrées alimentaires au frais.

The dwellings / The residences The notable's house La maison de notable

1. Main Entrance
2. Gatekeeper's House
3. Private Chapel
4. Vestibule
5. Verandah
6. Main Hall
7. Sitting Room
8. Women's Room
9. Master Bedroom
10. Bathroom
11. Well
12. Stable
13. Servants' Quarters
14. Kitchen
15. Cattle Yard
16. Granaries
17. Garden with Pool



C'est un complexe pavillonnaire ceint d'un mur de clôture et agrémenté de plans d'eaux et de jardins.



It is a pavilion complex surrounded by a boundary wall and enhanced with water features and gardens

EGYPTIAN URBANISM

L'URBANISME ÉGYPTIEN



A planetary alignment between the Orion belt and the pyramids of Giza took place at December 3, 2012.



Sacred geography **La géographie sacrée**

The buildings were oriented according to a sacred geography, aligned with natural or astronomical elements, enhancing their religious significance.

Les édifices étaient orientés selon une géographie sacrée, alignés avec des éléments naturels ou astronomiques, renforçant leur signification religieuse.

Une orientation Nord –Sud pour tous les édifices et une orientation différente Est-Ouest pour les temples.

A North-South orientation for all buildings and a different East-West orientation for the temples.



The city of the living and the city of the dead separated by the Nile
La ville des vivants et la ville des morts séparées par le Nil

Egyptian urbanism is characterized by a rigorous and symbolic organization, marked by the **separation between the city of the living and the necropolis (city of the dead) on both banks of the Nile.**



L'urbanisme égyptien se caractérise par une organisation rigoureuse et symbolique, marquée **par la séparation entre la ville des vivants et la nécropole (ville des morts) sur les deux rives du Nil.**

Main Characteristics

- City Organization:** Egyptian cities were often built with parallel and perpendicular streets, creating a dense network without empty spaces. The streets were narrow (2 to 3 meters) and oriented to maximize shade, but they were not paved.
- Administrative Function:** Each city contained essential administrative buildings, such as palaces and grain warehouses, affirming central power.
- Places of Worship:** Temples occupied a central place in each city, often dominating the surrounding architecture with their size and symbolic importance.
- Absence of Public Squares:** Unlike other civilizations, Egyptian cities lacked large public squares, focusing instead on high urban density.

The city of the living La Ville des vivants

Caractéristiques principales

- Organisation des villes :** Les villes égyptiennes étaient souvent construites avec des rues parallèles et perpendiculaires, créant un réseau dense sans espaces vides. Les rues étaient étroites (2 à 3 mètres) et orientées pour maximiser l'ombre, mais n'étaient pas pavées.
- Fonction administrative :** Chaque ville comportait des bâtiments administratifs essentiels, tels que des palais et des entrepôts de grain, affirmant le pouvoir central
- Lieux de culte :** Les temples occupaient une place centrale dans chaque ville, souvent dominant l'architecture environnante avec leur taille et leur importance symbolique
- Absence de places publiques :** Contrairement à d'autres civilisations, les villes égyptiennes manquaient de grandes places publiques, se concentrant plutôt sur une densité urbaine élevée



The organization of neighborhoods by trades reflected a functional specialization, with each area dedicated to specific activities such as commerce or craftsmanship, which promoted economic efficiency within Egyptian society.

Neighborhood specialization

Spécialisation des quartiers

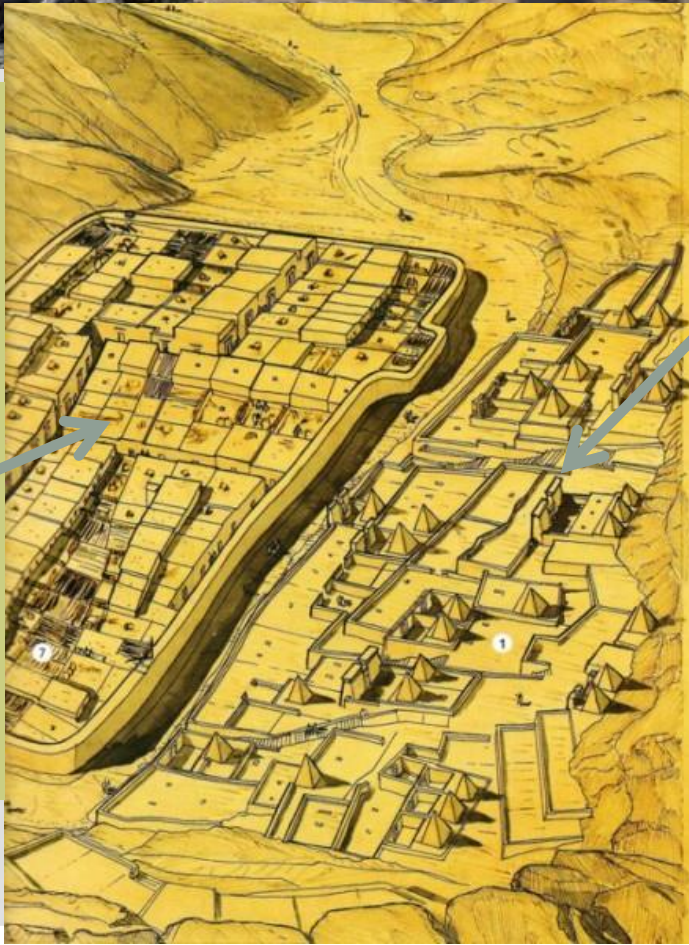
L'organisation des quartiers par métiers témoignait d'une spécialisation fonctionnelle, chaque zone étant dédiée à des activités spécifiques comme le commerce ou l'artisanat, ce qui favorisait une efficacité économique au sein de la société égyptienne.



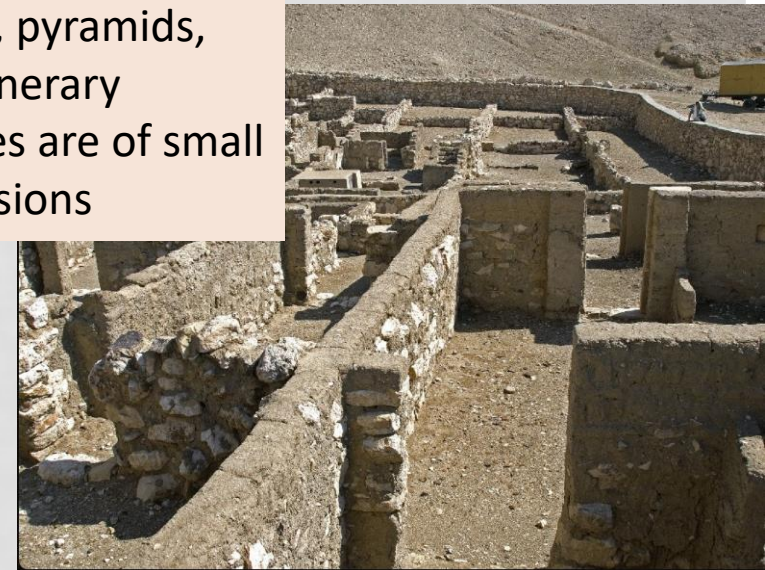
The necropolis and the artisans' village

La nécropole et Le village des artisans

The residential area is surrounded by a wide wall, its neighborhoods are dense, and its alleys are narrow and winding

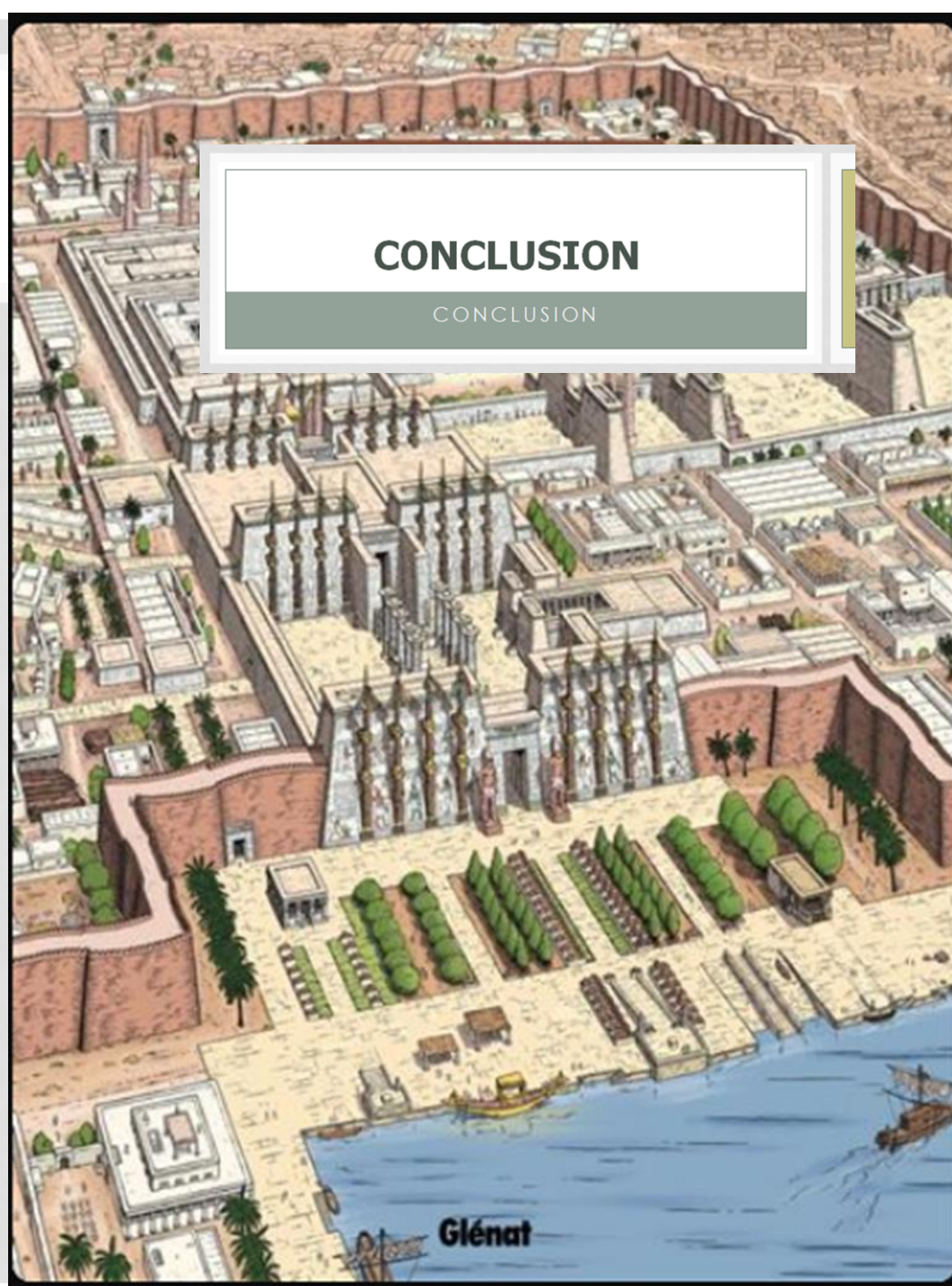


The necropolis of the artisans is in proportion to their social rank; their tombs, pyramids, and funerary temples are of small dimensions



CONCLUSION

CONCLUSION



...In synthesis
... En synthèse

Egyptian architecture was deeply influenced by religion and mythology, and it represented a strong inspiration from the surrounding nature of the Nile.

Each monument was designed with a strong symbolic meaning, often related to the cult of the dead and celestial phenomena.

The use of color, sculpted reliefs, and hieroglyphic inscriptions added an artistic dimension that reinforced the sacred character of these structures..

L'architecture égyptienne était profondément influencée par la religion et la mythologie. Et représentait une forte inspiration de la nature environnante du Nil.

Chaque monument était conçu avec une signification symbolique forte, souvent lié au culte des morts et aux phénomènes célestes.

L'utilisation de la couleur, des reliefs sculptés et des inscriptions hiéroglyphiques ajoutait une dimension artistique qui renforçait le caractère sacré de ces structures.



...In synthesis
Late influences
Influences tardives

Egyptian architecture has profoundly influenced later periods, notably through the **integration of its elements into Greek and Roman architecture, which adopted Egyptian techniques and motifs.**

In the Middle Ages, **the Islamic Mamluk architecture reinterpreted these styles** while incorporating Islamic elements.

Today, the architectural heritage of Egypt **continues to inspire modern and eclectic designs around the world.**

L'architecture égyptienne a profondément influencé les périodes ultérieures, **notamment à travers l'intégration de ses éléments dans l'architecture grecque et romaine, qui ont adopté des techniques et motifs égyptiens.**

Au Moyen Âge, **l'architecture islamique mamelouke a réinterprété ces styles** tout en intégrant des éléments islamiques.

Aujourd'hui, l'héritage architectural égyptien **continue d'inspirer des designs modernes et éclectiques à travers le monde.**

...In synthesis
Late influences
Influences tardives

Obélisques à Rome :

- De nombreux obélisques égyptiens ont été transportés à Rome, où ils sont devenus des symboles de pouvoir et d'autorité. Le **Vatican** abrite un obélisque égyptien qui illustre cette influence.

Temples Ptolémaïques :

- Les temples construits durant la période ptolémaïque, comme le **temple de Philae**, montrent une fusion entre les styles égyptien et grec, intégrant des éléments architecturaux grecs tout en conservant des motifs égyptiens traditionnels.

Architecture Mamelouke :

- Au Moyen Âge, l'architecture mamelouke a réinterprété les styles anciens tout en intégrant des éléments islamiques, créant ainsi des structures comme la **mosquée de Sultan Hassan** au Caire qui reflètent cette continuité.

...In synthesis
Late influences
Influences tardives



Flaminio obelisk

Emplacement : Piazza del Popolo

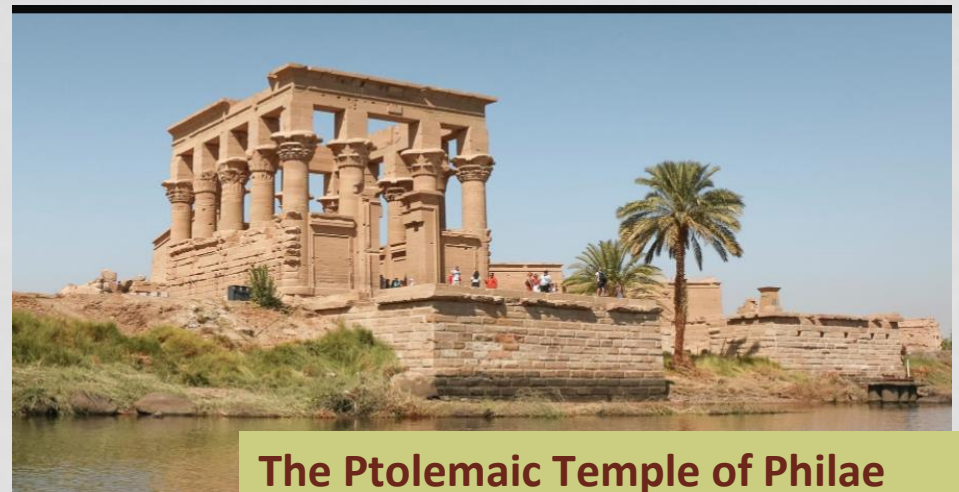
Origine : Temple de Ra à Héliopolis

Hauteur : 24 m

Construit par les pharaons Sêti Ier et Ramsès II, cet obélisque a été amené à Rome par Auguste en 10 avant J.-C.



The Pyramid of Cestius in Rome

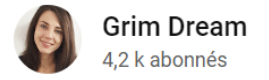


The Ptolemaic Temple of Philae

Video Bibliography links

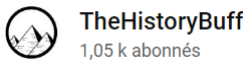
<https://www.youtube.com/watch?v=scpWMRpRwlo>

HISTORY OF ARCHITECTURE IN SKETCHES - "Ancient Egypt"



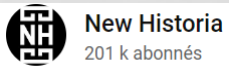
<https://www.youtube.com/watch?v=AhOltfEm79I>

The Temples of Ancient Egypt



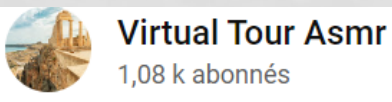
<https://www.youtube.com/watch?v=omajagaozk0>

What Did Ancient Egypt Look Like? (Cinematic Animation)



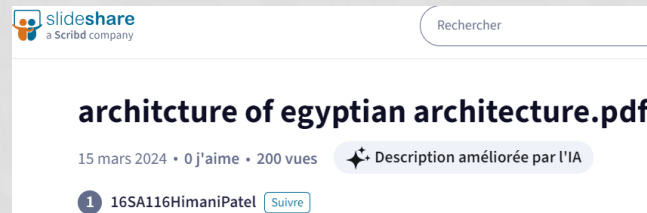
https://www.youtube.com/watch?v=_H68AJsf8XU

Virtual walking tour in Memphis, ancient Egypt in 49 a.C. | AC Origins | 4K



Bibliography links

<https://fr.slideshare.net/slideshow/architcture-of-egyptian-architecturepdf/266809900>



https://fr.slideshare.net/slideshow/report-16348716/16348716?_gl=1*1iblycv*_gcl_au*MjA4ODgzMDExMy4xNzI3ODk3NjY0



https://fr.slideshare.net/slideshow/04-egyptian-architecture/37202955?_gl=1*jnh7gh*_gcl_au*MjA4ODgzMDExMy4xNzI3ODk3NjY0

