

A History of Knowledge

Oldest Knowledge

What the Sumerians knew

What the Babylonians knew

What the Hittites knew

What the Persians knew

What the Egyptians knew

What the Indians knew

What the Chinese knew

What the Greeks knew

What the Phoenicians knew

What the Romans knew

What the Barbarians knew

What the Jews knew

What the Christians knew

Tang & Sung China

What the Japanese knew

What the Muslims knew

The Middle Ages

Ming & Manchu China

The Renaissance

The Industrial Age

The Victorian Age

The Modern World

What the Egyptians knew

Piero Scaruffi

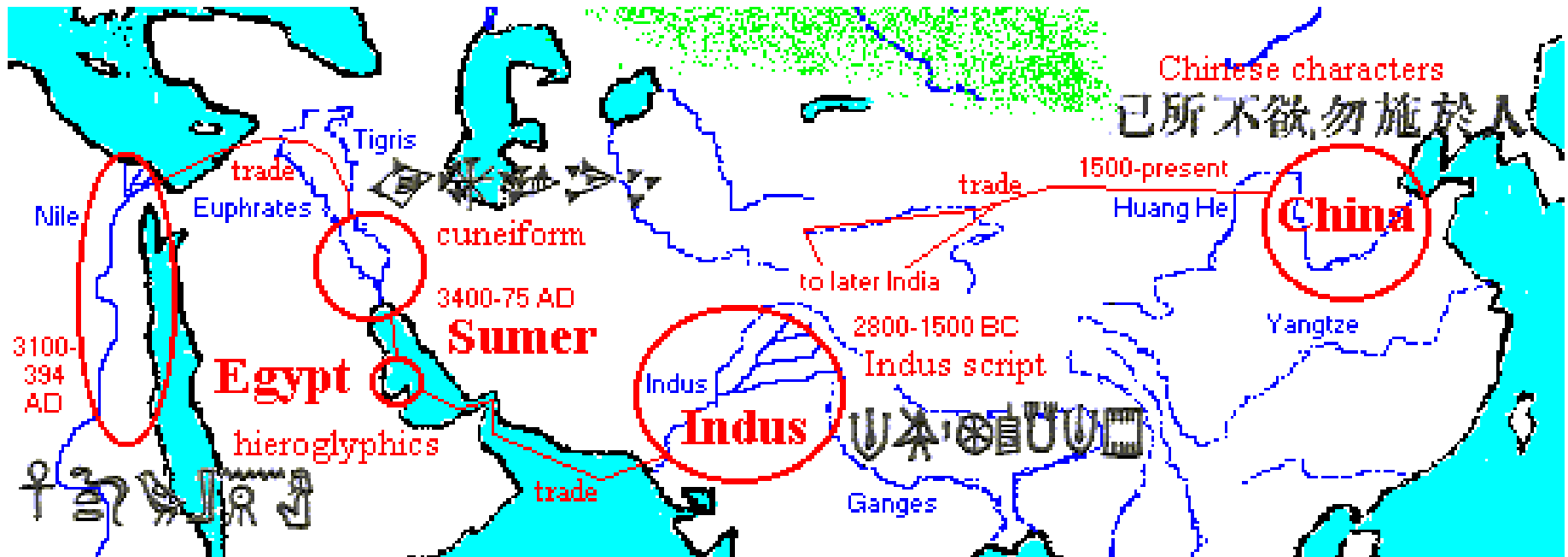
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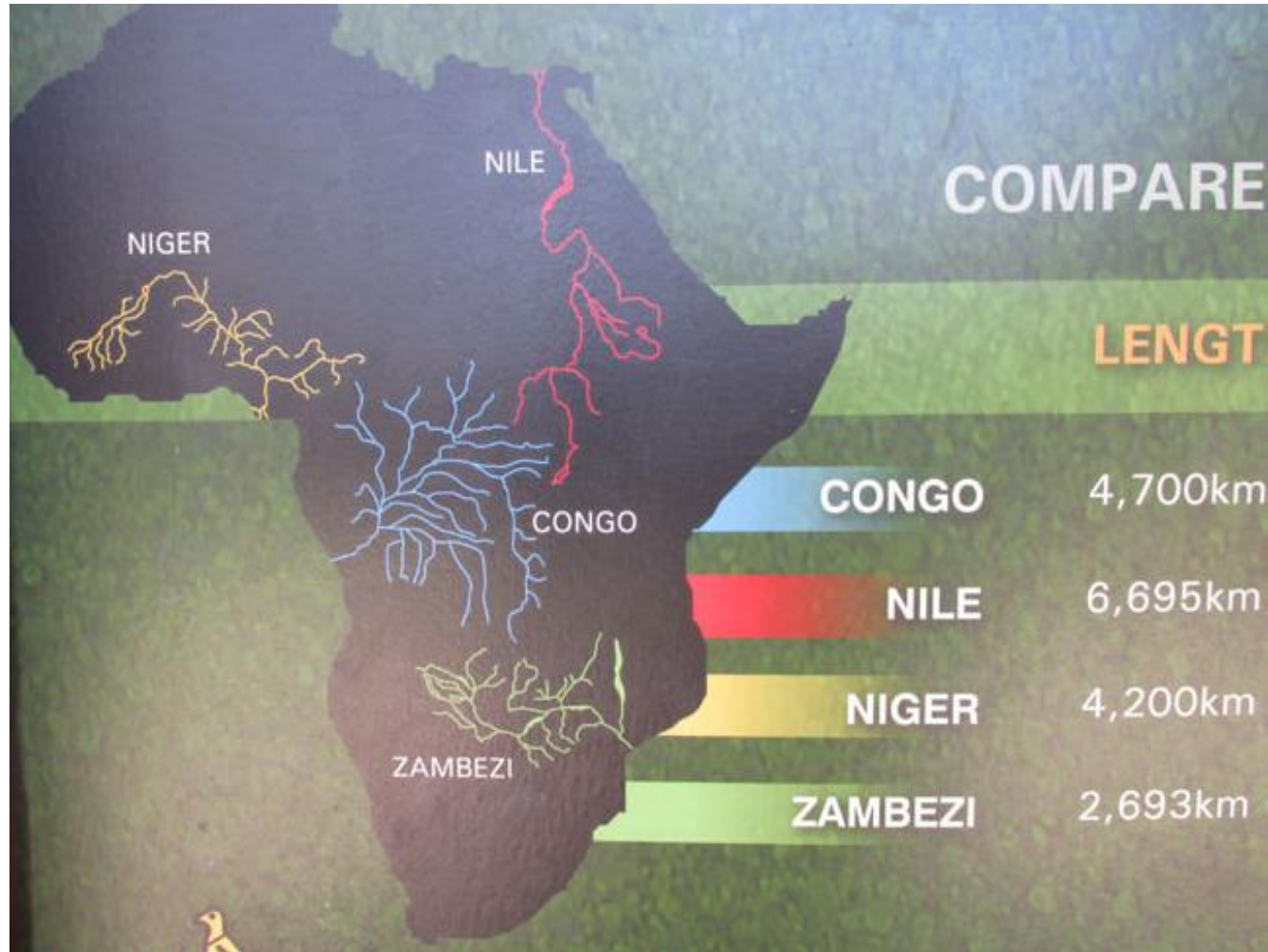
What the Egyptians knew

- **Bibliography**
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 - **Rosalie David: Handbook to Life in Ancient Egypt (1998)**
 - **Henri Stierlin: Pharaohs Master-builders (1992)**
 - **Alberto Siliotti: The Dwellings of Eternity (2000)**

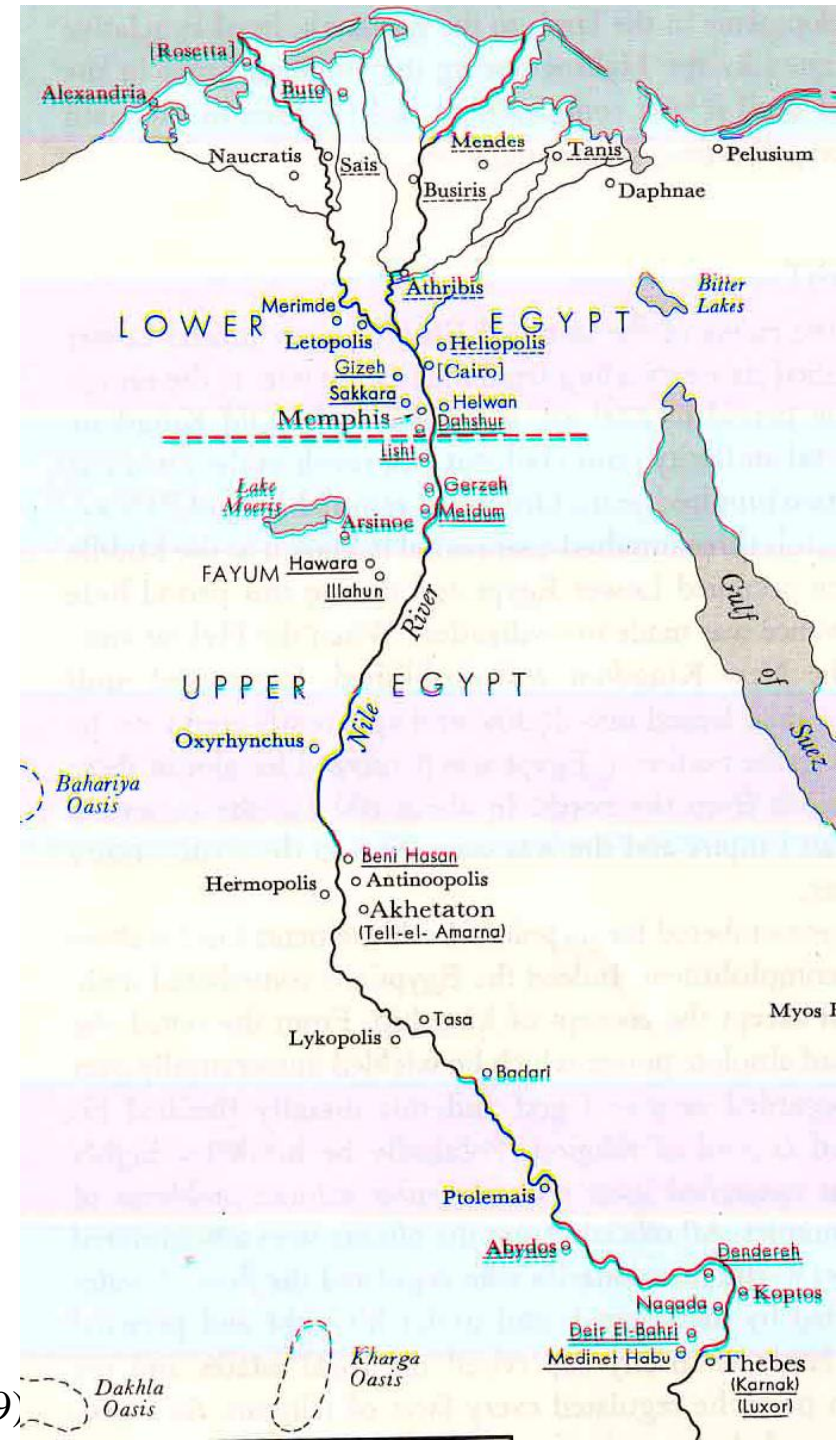
Ancient Civilizations



Rivers of Africa



Egypt



What the Egyptians knew

- **The Nile**
 - **An easy river to tame:**
 - **the flood season is highly predictable and even synchronized with the seasons for planting**
 - **the river is navigable in both directions (float downriver and sail upriver)**
 - **the surrounding desert provides a natural protection from enemies.**
 - **The biggest crisis in the history of Egypt correspond with extended periods of low flood**

Egypt

- **4000 BC: Egyptians trace their origins to the Mount Rwenzori range in East Africa**
- **Skulls buried separately from the body before mummification invented**
- **Female figurines of Badari (4,000-3,500 BC)**



Egypt



Rowing (not sail) boat
of 3,500 BC
(Nubia Museum,
Aswan, Egypt)

- **3500 BC: Egyptians invent the sail**
- **3400-3100: two independent kingdoms**
 - **capital in Pe (north, Delta), chief deity Edjo (cobra goddess) worshipped at Buto**
 - **capital in Nekhen (south), chief deity Nekhbet (vulture goddess) worshipped at Nekheb**
 - **corresponding to the two geographical regions (Delta and Valley)**

What the Egyptians knew

- **Sources**
 - **"Turin Canon" (13th c BC): Kings list, written in hieratic papyrus**
 - **Manetho: "Aegyptiaca" (3rd c BC): history of ancient Egypt, written in Greek**
 - **"Admonition of the Prophets" (): fiction that expresses the decline of the Old Kingdom**
 - **"Prophecy of Nefertiti" (): decline of the Old Kingdom**

What the Egyptians knew

- **3600 BC: Hierakonpolis, metropolis along the Nile**
 - **First mummies**
 - **Temple of Horus, first Egyptian temple (vaulted structure composed of posts and lattice work shaped in the silhouette of a crouching animal complete with tail and horns), the prototype for temple architecture of the following millennia**
 - **Oldest deities: Horus is associated with the king, Hathor with the queen**
 - **The only known elephant burial**
 - **Egypt's first capital (3000 BC)**

What the Egyptians knew

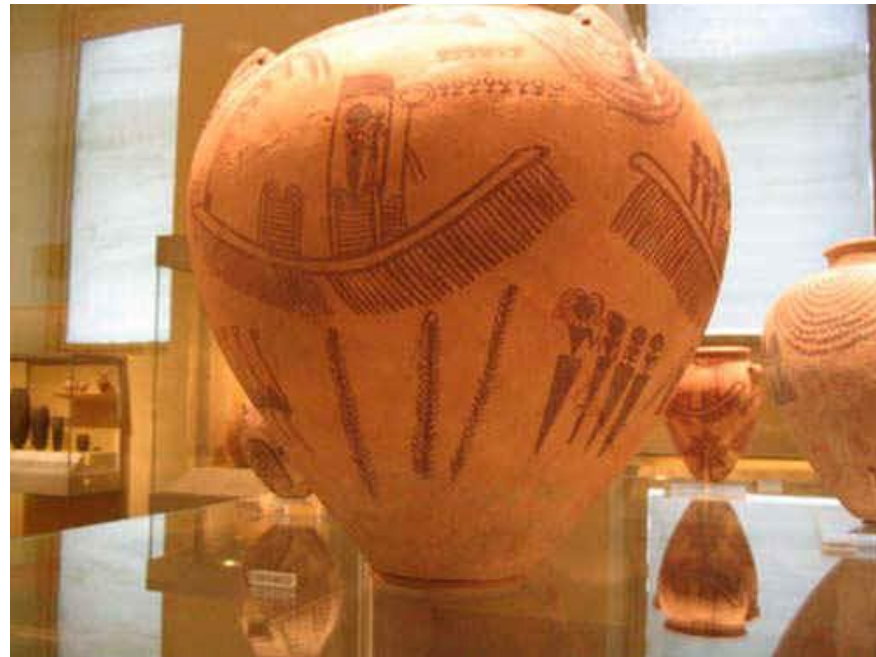
- **Horus**

- a general term for a great number of falcon gods
- worshipped throughout Egypt
- the prince of the gods
- the “guardian angel” of the living ruler
- avenge the death of his father Osiris by fighting his uncle Set.
- Fights Set daily to ensure the existence of the world



What the Egyptians knew

- **Jar with boat procession (36-33rd c BC)**



(Metropolitan)

What the Egyptians knew

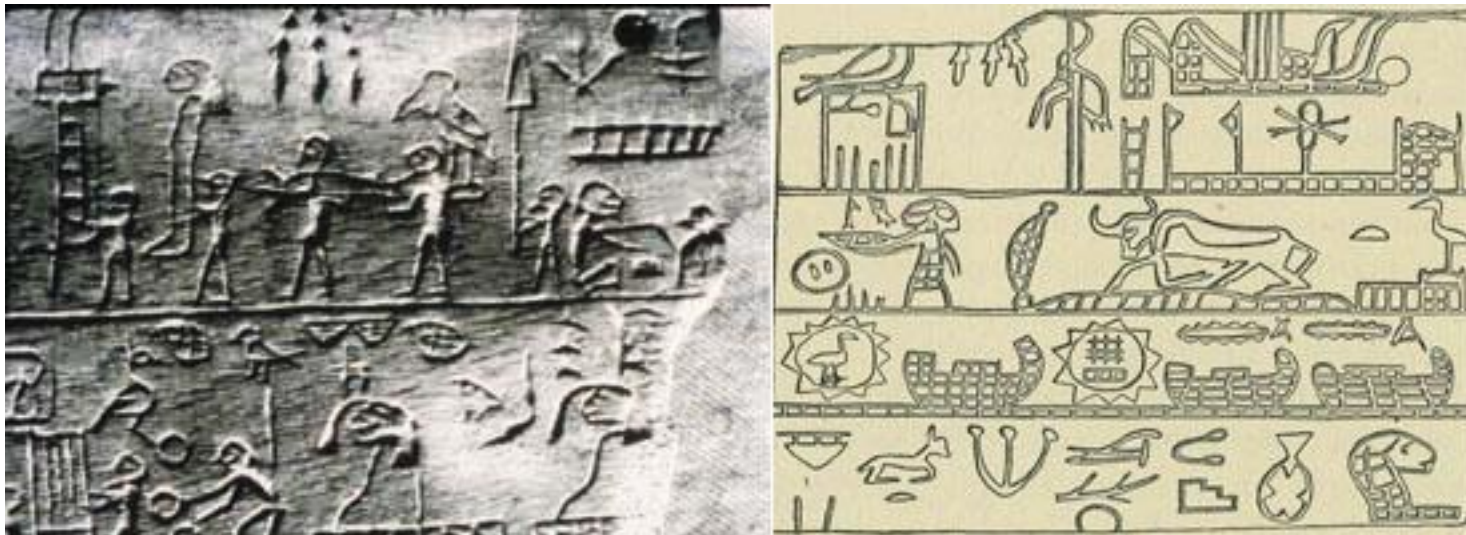
- **3000 BC: Narmer/Menes of Hierakonpolis unifies Egypt and founds new capital Hiku-Ptah (Memphis) in the north (Delta)**
 - **Memphis: first megalopolis**
 - **This/Abydos (100 km north of Thebes): main religious center**
 - **Saqqara: royal burials**
 - **Worship of the sun**
 - **Deities of animal form, later anthropomorphized**
 - **2900 BC: king Djer is buried at Abydos, seat of the cult of Osiris, lord of the Underworld and husband of Isis, and his "mastaba" becomes the grave of Osiris**

What the Egyptians knew

- **3000 BC: Narmer/Menes unifies Egypt and founds new capital Hiku-Ptah (Memphis) in the north (Delta)**
 - **Hieroglyphic writing (3100 BC): 800 hieroglyphs**
 - **Pictographic, phonetic and (24) alphabetic characters**
 - **Calendar based on the three natural cycles (the solar day, the lunar month and the solar year): 12 months of 30 days plus five days (the “Nile year”)**
 - **The five “epagomenal” days are a festival to Osiris**
 - **By analogy with the “circle” of the Sun around the Earth in 360 days, the circle is divided in 360 degrees**

What the Egyptians knew

- **Hieroglyphic writing**
 - Hieroglyphs evolved from pictographs when scribes devised rebuses to represent words that are difficult to represent visually
 - Eventually the majority of characters became phonograms (vs only 100 pictograms)



Oldest pictographic writing: Ivory tablet of King Zet (3100 BC)
(Cairo Museum)

What the Egyptians knew

- **The Narmer Palette (from Hierakonpolis) commemorates the unification of Egypt**

Preceded by four people holding standards, Narmer inspects a heap of beheaded corpses

King's name

Two men tying together the necks of two fabulous animals.

A bull, symbolizing the king, destroys the walls of a city

King barefooted wearing a skirt, an animal's tail and the Upper Egypt crown, striking at a naked captive, followed by a servant

Falcon over six papyrus plants

Two dead enemies



What the Egyptians knew

- **Hunters' Palette (3100 BC)**



British Museum

What the Egyptians knew

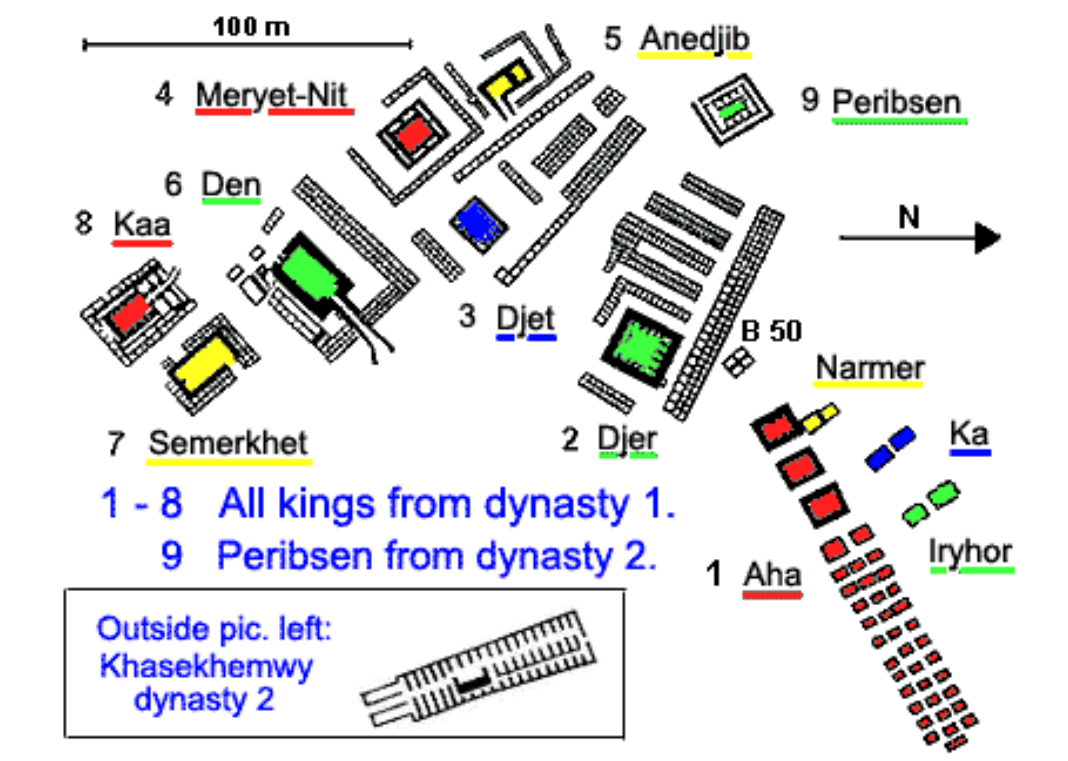
- **Archaic burial (3100-2630BC)**
 - **Archaic rulers were buried in mud-brick tombs located inside facsimiles of their palaces (also mud bricks)**

(Boston Museum of Fine Arts)



What the Egyptians knew

- **Oldest royal cemetery: Abydos**



What the Egyptians knew

- **Oldest royal cemetery: Abydos**



Royal boats of 3000 BC
(National Geographic, 2005)

What the Egyptians knew

- **Old Kingdom (dynasties 3-6, 27th c.BC-22nd c.BC)**
 - **1.5 million people**
 - **Centralized theocracy**
 - **Only the king (demigod) is eternal**
 - **Religious centers: Iwnw/Heliopolis (Re), Hermopolis (Thoth), Memphis (Ptah)**
 - **Chief deity: Re/Atum/Khepri (Sun cult)**
 - **The king is the son of the Sun god (Re, Atum)**
 - **Six temples to the Sun (dynasty 5), modeled after Heliopolis' temple (never found)**

What the Egyptians knew

- **Pharaoh**
 - **The king is a divine administrator, not a warrior**
 - **The Old Kingdom had few enemies**
 - **The Old Kingdom had no standing army**
 - **The king's job is to administer the land of the Nile, not to conquer**
 - **The king is assisted by a bureaucracy of court officials, provincial administrators, project supervisors, scribes, tax collectors**
 - **Projects are carried out by metalworkers, stonemasons, artisans, painters, etc employed by the king**

What the Egyptians knew

- **Old Kingdom (dynasties 3-6, 27th c.BC-22nd c.BC)**
 - **State-controlled economy (as opposed to Sumerians' capitalist economy)**
 - **No need for code of laws**

What the Egyptians knew

- **Old Kingdom (dynasties 3-6, 27th c.BC-22nd c.BC)**
 - **Royal burial: pyramids (originally associated with sun cult)**
 - **Step Pyramid at Saqqara (necropolis of Memphis) for Zoser (Imhotep, 2620 BC): a miniature city (and mostly underground)**
 - **Red Pyramid at Dahshur (2575 BC)**
 - **Great Pyramid at Giza for Khufu (Hemon, 2550 BC): a cosmic city (146.5m x 230.38m)**
 - **The Sphinx is built in Giza for Khephren (2515 BC)**



Step Pyramid



Giza



What the Egyptians knew

- **Old Kingdom (dynasties 3-6, 27th c.BC-22nd c.BC)**
 - **Pyramid-driven economy**
 - **Pyramids and temples become a focus of Egypt's economy, from training to quarrying to transportation to engineering**
 - **Up to 70,000 workers per pyramid**
 - **Agricultural surplus used to feed the pyramid and temple workers**
 - **Furnishing pyramids and temples creates demand for luxury goods**

What the Egyptians knew

- **Old Kingdom (dynasties 3-6, 27th c.BC-22nd c.BC)**
 - **Religious texts are inscribed in the burial chamber of pharaoh Unas/Wenis (2350 BC)**
 - **Nobles' burial: tombs around the pyramid**

What the Egyptians knew

- **King Pepi I's tomb (2300 BC)**



National Geographic

What the Egyptians knew

- **Old Kingdom (dynasties 3-6, 27th c.BC-22nd c.BC)**
 - **Writing on papyrus (2700 BC)**
 - **Copper age (weapons and tools)**
 - **Mud bricks for domestic building, stone for monumental building**
 - **Limited use of the wheel (sledges instead of wheeled vehicles)**
 - **Gold jewelry**

What the Egyptians knew

- **Old Kingdom**
 - **Trade**
 - **Gold from Nubia**
 - **Copper from the Sinai**
 - **Timber from Lebanon**
 - **Syria a crossroads of trading routes**

What the Egyptians knew

- **Old Kingdom (dynasties 3-6, 27th c.BC-22nd c.BC)**
 - **Condition of women**
 - **Women have the same rights as men...**
 - **... except for education (which de facto keeps them out of the bureaucracy)**
 - **Queens (Meryt-Neith of 3000 BC and Hatshepsut of 1504 BC)**
 - **Descent traced through the female line**
 - **Incest**

Scribe and wife (25th c BC)
(Art Institute of Chicago)





Menkaura triad (2480 BC)

Cairo Museum



**Limestone statue
of scribe (2500 BC)**

Cairo Museum



Rahotpe's stele (2600 BC)

British Museum

**Oldest royal
sarcophagus
(2600 BC)**

Maidum,
mastaba 17



**Diorite statue
of Khafra (2500 BC)**

Cairo Museum





Menkaure and wife
2472 BC
(prototype for Greek
kouros)



**Copper statue
of Merenra
(23rd c BC)
Cairo Museum**



**Tomb of Nefermaat and Atet at Meidum(26th c BC)
Cairo Museum**

**Relief of the Mastaba of Ipi (23rd c BC)
Cairo Museum**

Harvest
→

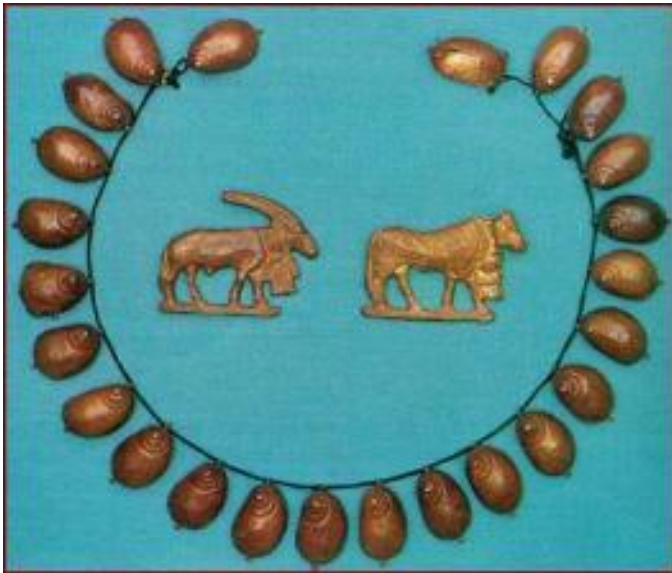


→
Slaughter
of livestock



What the Egyptians knew

- Gold



Gold jewelry from a tomb at Nag ed-Deir (3000 BC?)
(Cairo Museum)



Gold jewelry from the tomb of King Djer at Abydos (2500 BC)
(Cairo Museum)



King Mycerinus (Giza 2530BC)
colossal alabaster sculpture
(Boston Museum of Fine Arts)

Treasury Inspector and his wife
(Giza, 25th c BC) about 70 cm tall
(Boston Museum of Fine Arts)

Statue of officer from Giza 25th c
(typical position of Egyptian male statue)
(Boston Museum of Fine Arts)

What the Egyptians knew

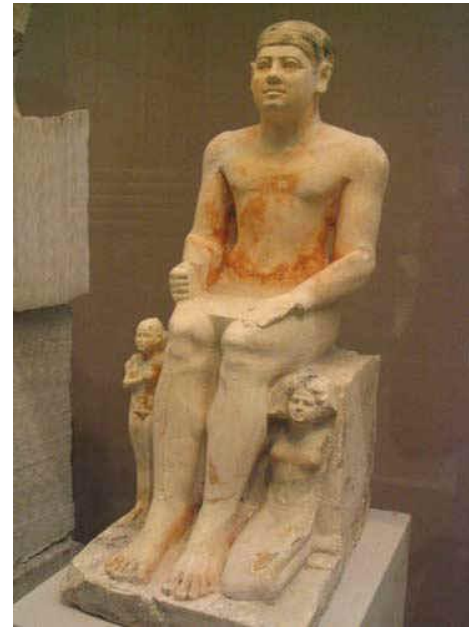
- Old Kingdom



Man 25th BC
from El Kab



Gneiss statue of King
Sahure & God 25th c BC



Nikari's family
(chief of granary)
25th c BC



Friends of the king
25th c BC

What the Egyptians knew

- **Portrait sculpture**
 - **Statues of individuals were not meant to be seen: they were for the tombs only**

What the Egyptians knew

- **Theater**
 - **“Memphite Drama” (inscribed on a a black basalt stela of 8th c BC at the Temple of Ptah at Memphis that copied a papyrus of 3,000 BC): Ptah creates the world**
 - **Texts of the pyramids of 2800 - 2400 BC that include dialogue and prescribe a “play” to be performed periodically by priests to insure the well-being of the dead pharaoh**
 - **Abydos Passion Play (inscribed on the tomb of a court official in 1849 BC): reenacts the legend of Osiris and his sister/wife Isis**
 - **Osiris is killed by his brother Set. Isis resurrects Osiris. Osiris and Isis have a son, Horus, before Osiris dies again. Horus avenges his father’s death.**

What the Egyptians knew

- **Medicine**
 - **Diseases are caused by evil spirits that enter the body**
 - **Cure: make the body uncomfortable for evil spirits (eg spread excrements on it) and use magic to beg for help from good spirits**
 - **Egypt: The body is analogous to the valley of the Nile (irrigation canals, dykes, etc)**
 - **The heart is the seat of consciousness and the control center of the body**

What the Egyptians knew

- **Medicine**
 - **The heart is a precise record of all the deeds of a person. At death the heart is "weighed" to assess the merits of the dead person.**
 - **Many organs of the body treated with deference after death (packed in parcels next to the mummy) but not the brain**
 - **Indifference towards the brain (just discarded)**

What the Egyptians knew

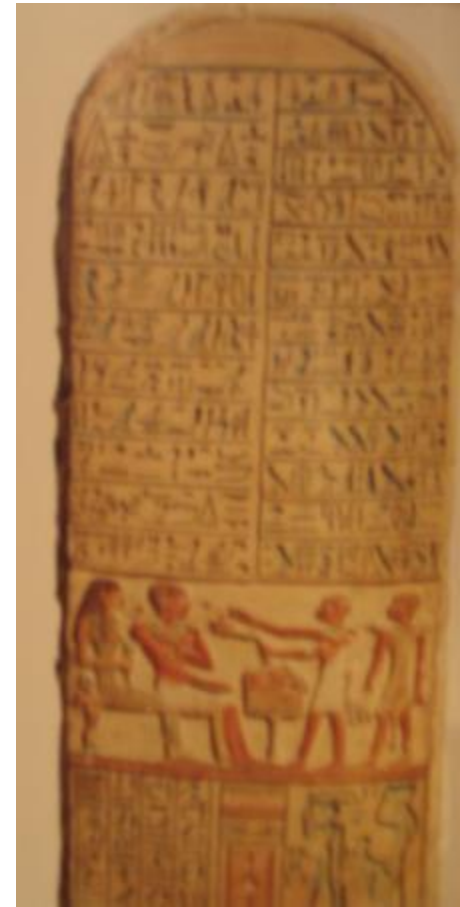
- **Philosophy**
 - **Ethics: “Maxims of Ptahhotep”(2500 BC)**

What the Egyptians knew

- **First Intermediate Period, Middle Kingdom, Second Intermediate Period (dynasties 6-17, 22nd c.BC-17th c.BC)**
 - **Osiris replaces Re, promising eternal life to everybody**
 - **Democratization and decentralization of power**
 - **The king is the son of Osiris (and the incarnation of Horus at death)**
 - **Egyptian Book of the Dead (2100 BC)**
 - **Ceremonies are held in Abydos to honor Osiris ("Osiris' mysteries") that recount the death and resurrection of the god (1900 BC)**

What the Egyptians knew

- **Mysteries of Osiris**
 - **Stela of Nemtyemhat (“Ikhernofret Stela”) at Abydos**
 - **The First Day: procession of Wepwawet:**
 - **The Second Day, procession of Wesir**
 - **The Night of Vigil**
 - **The Third Day: Wesir is reborn**



The Papyrus of Ani (1250 BC)

British Museum

The soul declares its innocence in front of gods assembled from all over Egypt



Anubis, master of ceremonies, leads the deceased by his hand to the Hall of Maat. In his left hand he holds the ankh, the symbol of life.

Thoth writes down the decision.

The scales are topped by Maat wearing a feather on her head. Ammut is ready to destroy the deceased should his heart's sins weigh more than the feather of Truth.

What the Egyptians knew

- **First Intermediate Period, Middle Kingdom, Second Intermediate Period (dynasties 6-17, 22nd c.BC-17th c.BC)**
 - **Political capitals: Memphis in the north and Thebes in the south**
 - **The first obelisks are erected at Heliopolis (2000 BC)**
 - **Chariot**
 - **Bronze age (1,000 years after Mesopotamia because tin had to be imported)**

What the Egyptians knew

- **Fiction**

- **"The Shipwrecked Sailor" (1990 BC): fairy tale of a castaway on an island with a talkative serpent**
- **"The Tale of Sinuhe" (1875 BC): epic novel about the picaresque and exotic adventures of a servant who flees Egypt, becomes powerful and then returns to die in his homeland**
- **"The Plea of the Eloquent Peasant" (1875 BC): fiction (story of a peasant who is robbed by an official) + didactic (moral duties of the state official)**

What the Egyptians knew

- **Non-fiction**
 - **"Maxims of Ptahhotep" (2500 BC, Egypt) [h]**
 - **"Song of the Harp Player" (2100 BC, Egypt) [h]**
 - **"Dialogue of a Misanthrope and his Soul" (2000 BC, Egypt) [h]**
 - **Khekheperre-sonbu: "The Admonitions" (1800 BC, Egypt) [h]**
 - **Ipuwer: "The Admonitions" (1780 BC, Egypt) [h]**

What the Egyptians knew

- **Philosophy**

- **“Song of the Harp Player” (2100 BC): fear of the afterlife**
- **“Dialogue of a Misanthrope and his Soul” (2000 BC): a portrait of social decadence and corruption**
- **Amenemope: “The Wisdom” (1290 BC)**
 - **Monotheism: God as the architect of the universe and of human destiny**
- **Khekheperre-sonbu: “The Admonitions” (late 19th c BC): indictment of social injustice**
- **Ipuwer: “The Admonitions” (1780 BC): apocalyptic vision of the present and messianic vision of a savior who will deliver the Egyptians from all evils**

What the Egyptians knew

- Middle Kingdom



King Nebhetepre Mentuhotep I
who reunited Egypt in the 21st c BC
(foundation of the Middle Kingdom)



Sphinx king Senwosret
III 19th c BC



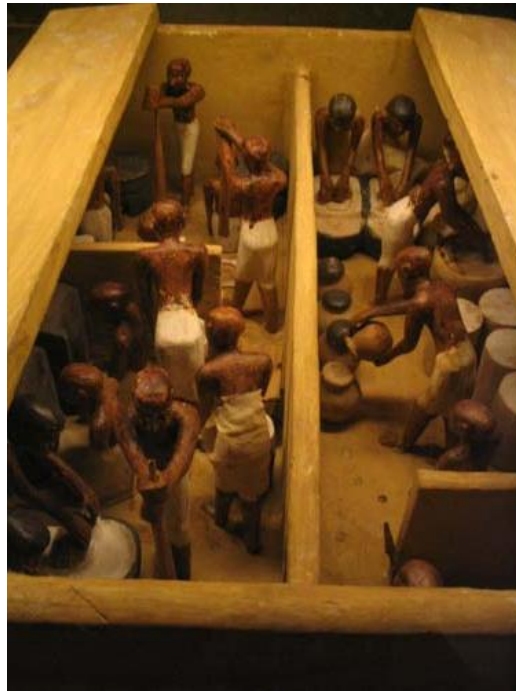
Coffin of Khnumnakht
19th c BC



(Metropolitan Museum)

What the Egyptians knew

- **Middle Kingdom**



House and boat models from the tomb of Meketre
20th c BC

(Metropolitan Museum)

What the Egyptians knew

- **Collection of boat models of Djehutymakhty tomb (20th c)**



(Boston Museum of Fine Arts)

What the Egyptians knew

- Red granite sphinx at Tanis of Amenemhet III (1800 BC)
- Black basalt pyramidion of Amenemhet III (1800 BC) (Boston)
- Papyrus bud column of temple (18th c BC)



(British Museum)



(British Museum)



What the Egyptians knew

- **Senet**

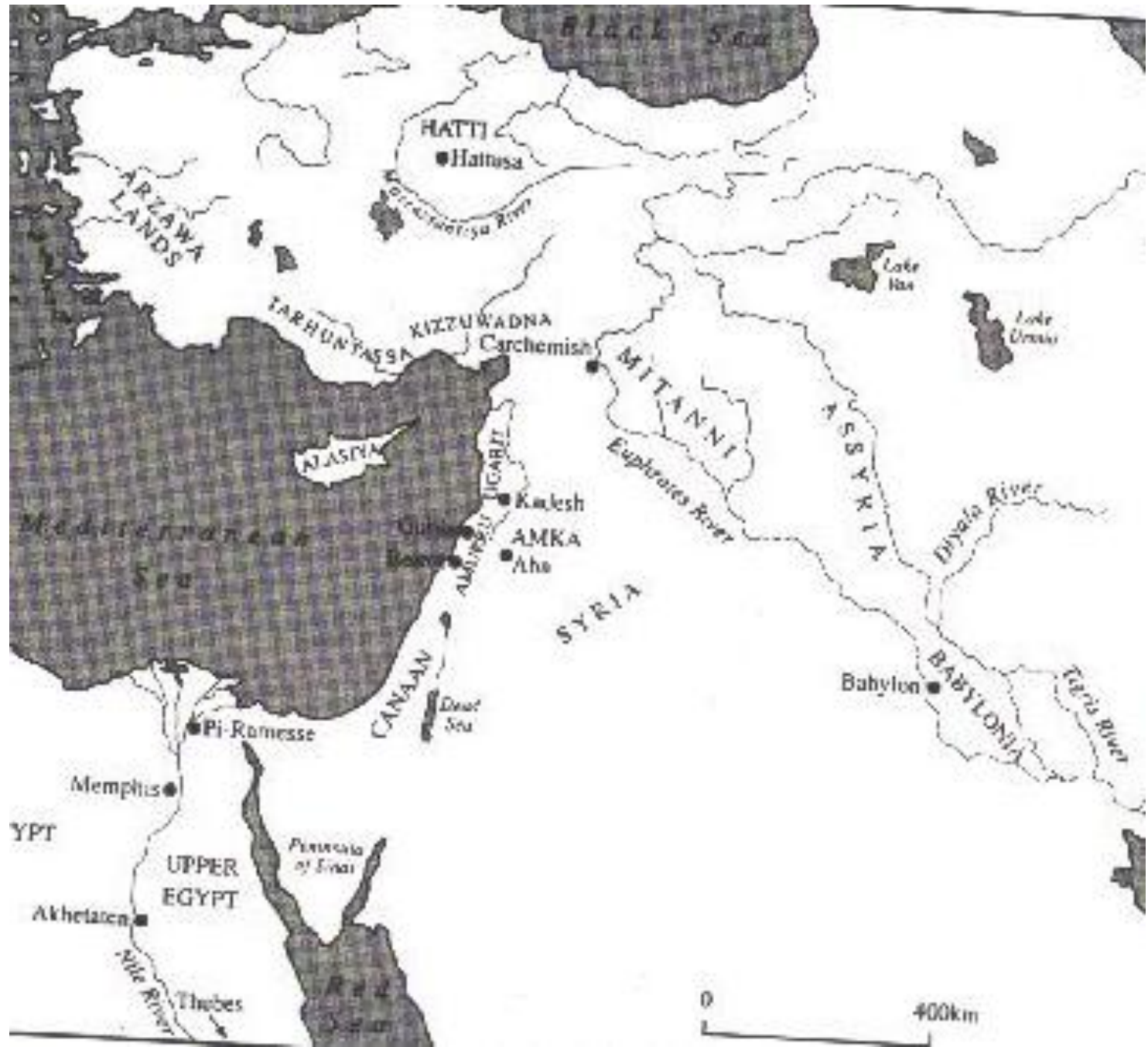


(Metropolitan Museum)



What the Egyptians knew

- **1640 BC - 1532 BC: Hyksos invasion of the Delta (during dynasties 15-17)**
 - **Semitic people from Palestine**
 - **Technological innovations**
 - **Horse-driven chariot (of Aryan origin)**
 - **The foreign world**
 - **Main political center: Memphis**
 - **Spoked wheel (faster chariots)**



What the Egyptians knew

Piero Scaruffi

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- **Continued on Part II**