

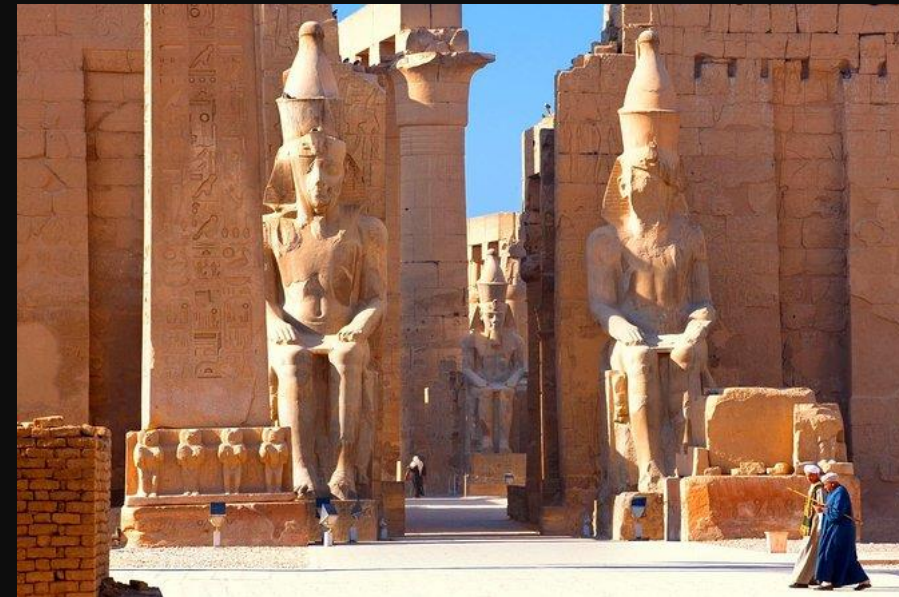
The Sky and the Sacred Landscape of Western Thebes

Dr Bernadette Brady

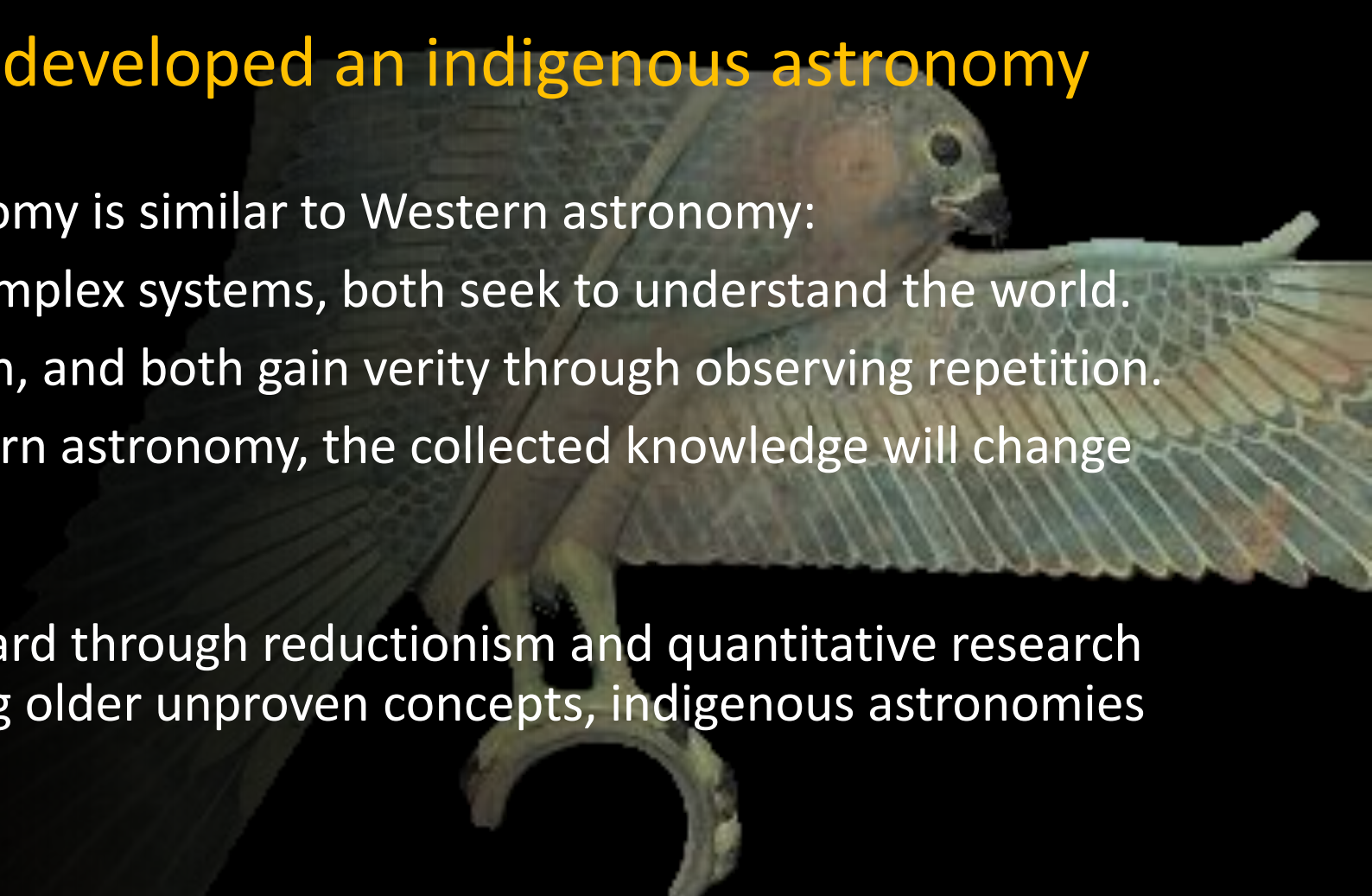


Prifysgol Cymru
Y Drindod Dewi Sant
University of Wales
Trinity Saint David

Canolfan Sophia
The Sophia Centre



The ancient Egyptians developed an indigenous astronomy

A detailed image of a falcon in flight, positioned in the upper right quadrant of the slide. The bird is shown from the side, with its wings spread wide, revealing the intricate structure of its feathers. Its head is turned slightly towards the viewer, and its sharp talons are visible. The background is a solid dark color, which makes the lighter tones of the bird stand out.

In many ways indigenous astronomy is similar to Western astronomy:

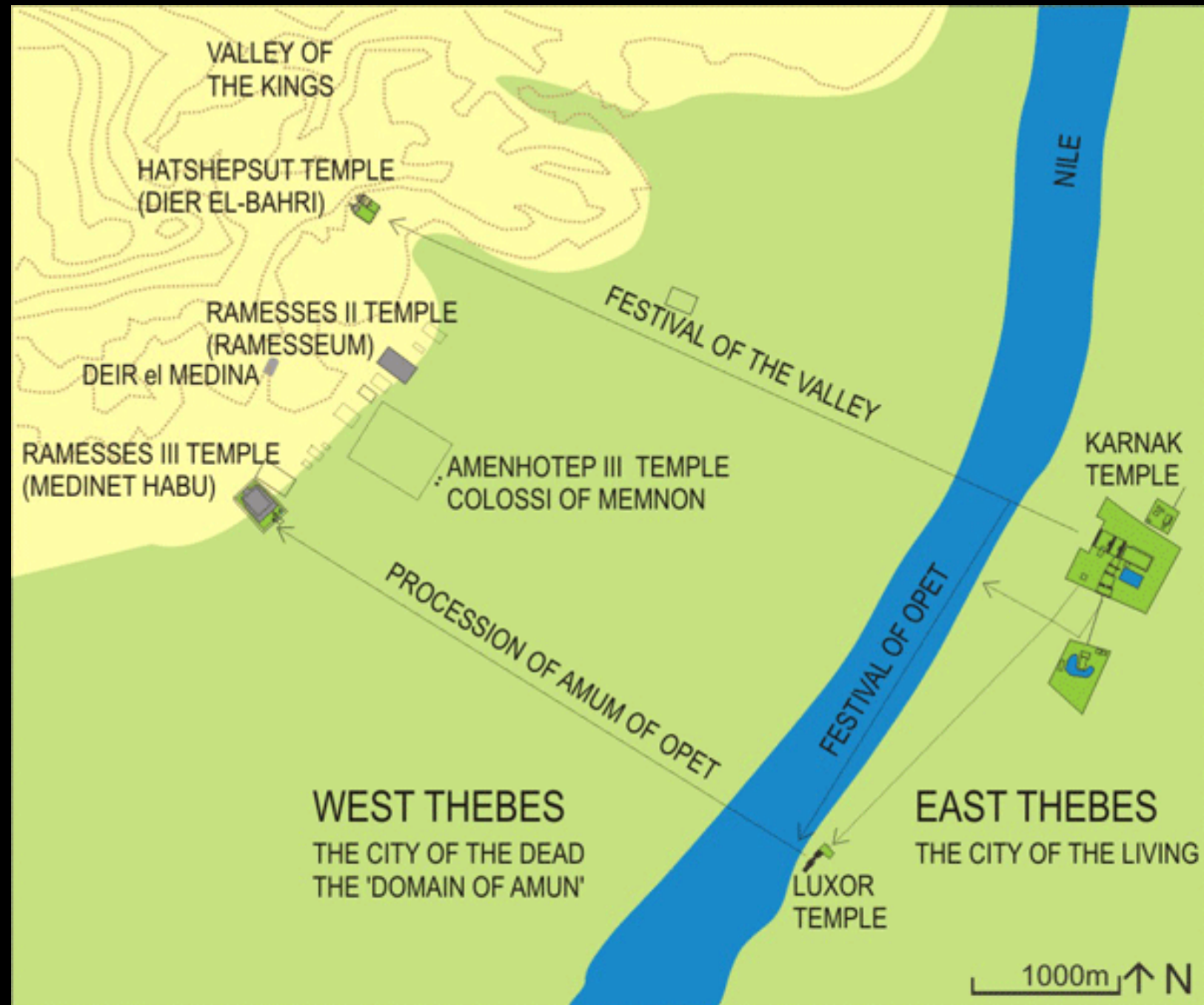
- both forms seek to explain complex systems, both seek to understand the world.
- both are based on observation, and both gain verity through observing repetition.
- In both indigenous and Western astronomy, the collected knowledge will change over time.

Western astronomy moves forward through reductionism and quantitative research hypothesis testing and discarding older unproven concepts, indigenous astronomies are different.

Indigenous astronomies are holistic and include both metaphysical and spiritual components, they seek context for the observable and do not discard older concepts. The goal of indigenous astronomies is not to find provable truths but instead to focus on sustainability, to maintain a culture.

The Estate of Amun

A map of the processional ways in the New Kingdom. Kemp, B., 1991. Ancient Egypt Anatomy of A Civilisation. 2nd ed. London: Routledge, p.266.



Karnak – by late New Kingdom

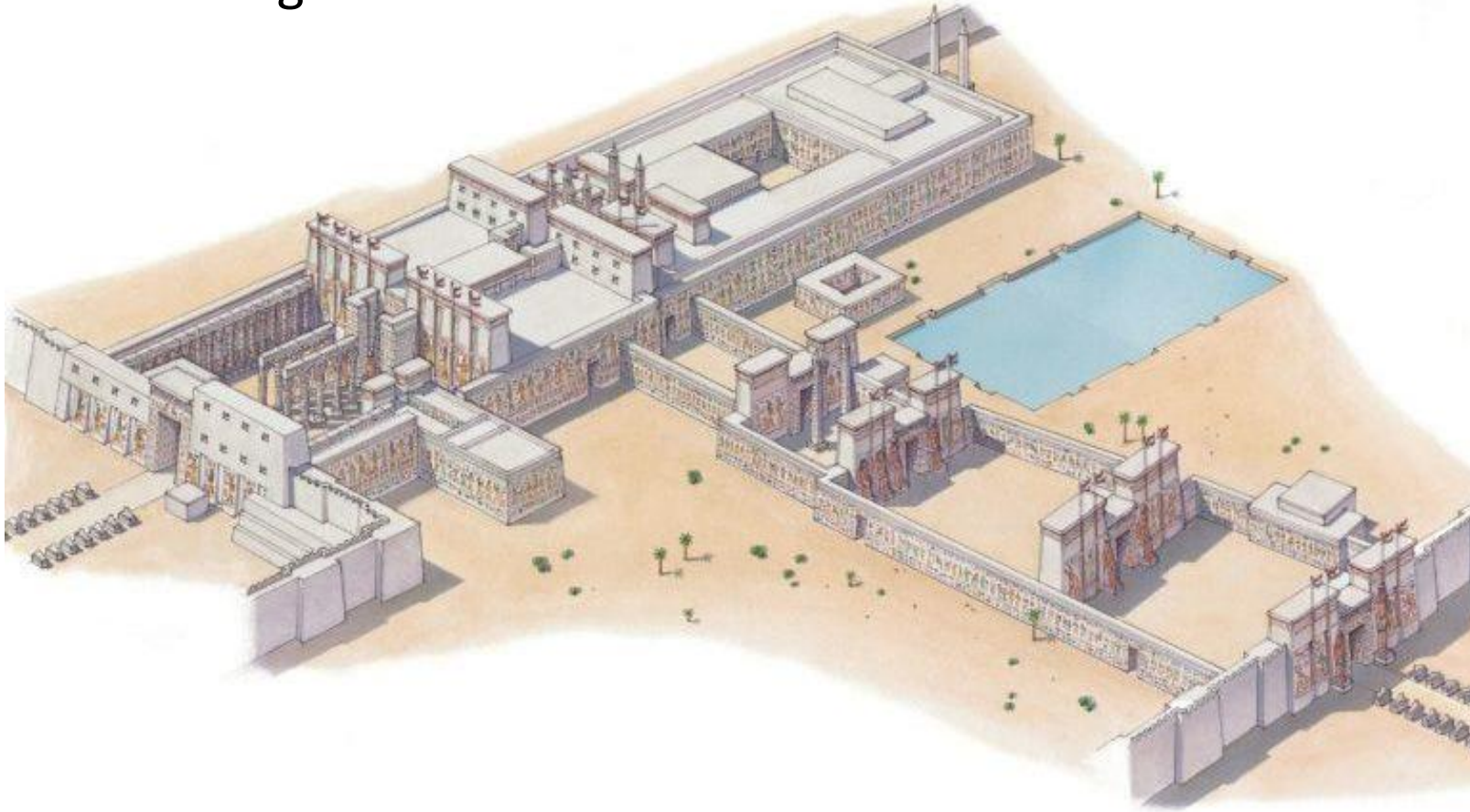
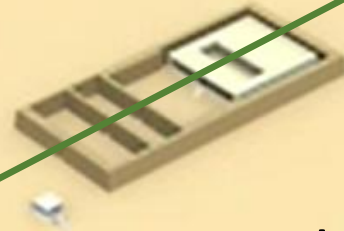


Image from:
Digital Karnak

East



At this time the axis
of the temple was
 90° to the Nile and
an azimuth of 116°



LIMESTONE TEMPLE

"WHITE CHAPEL"

MUDBRICK WALL
AROUND TEMPLE



Senusret I 1971-1926

From the original temple built by Senusret I – the orientation was maintained

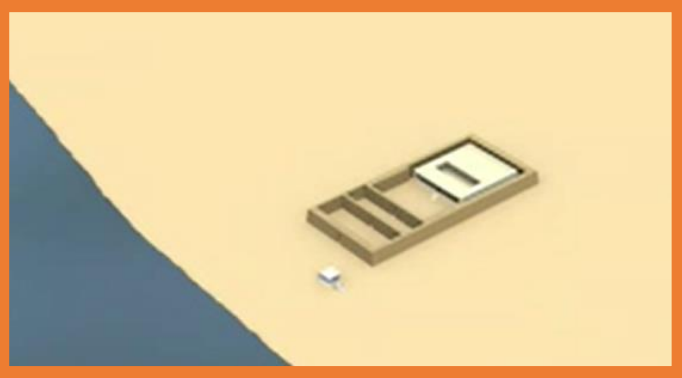
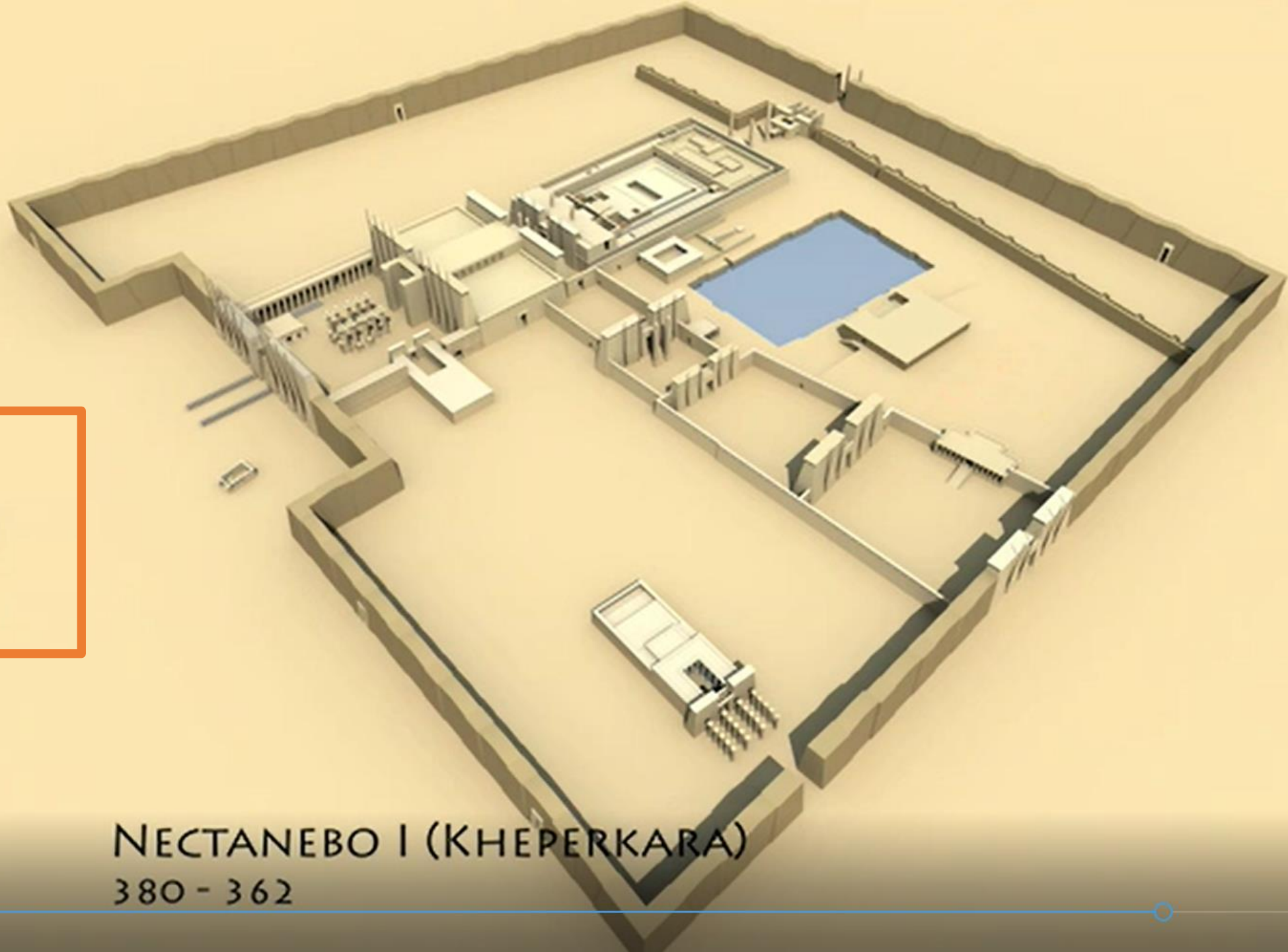
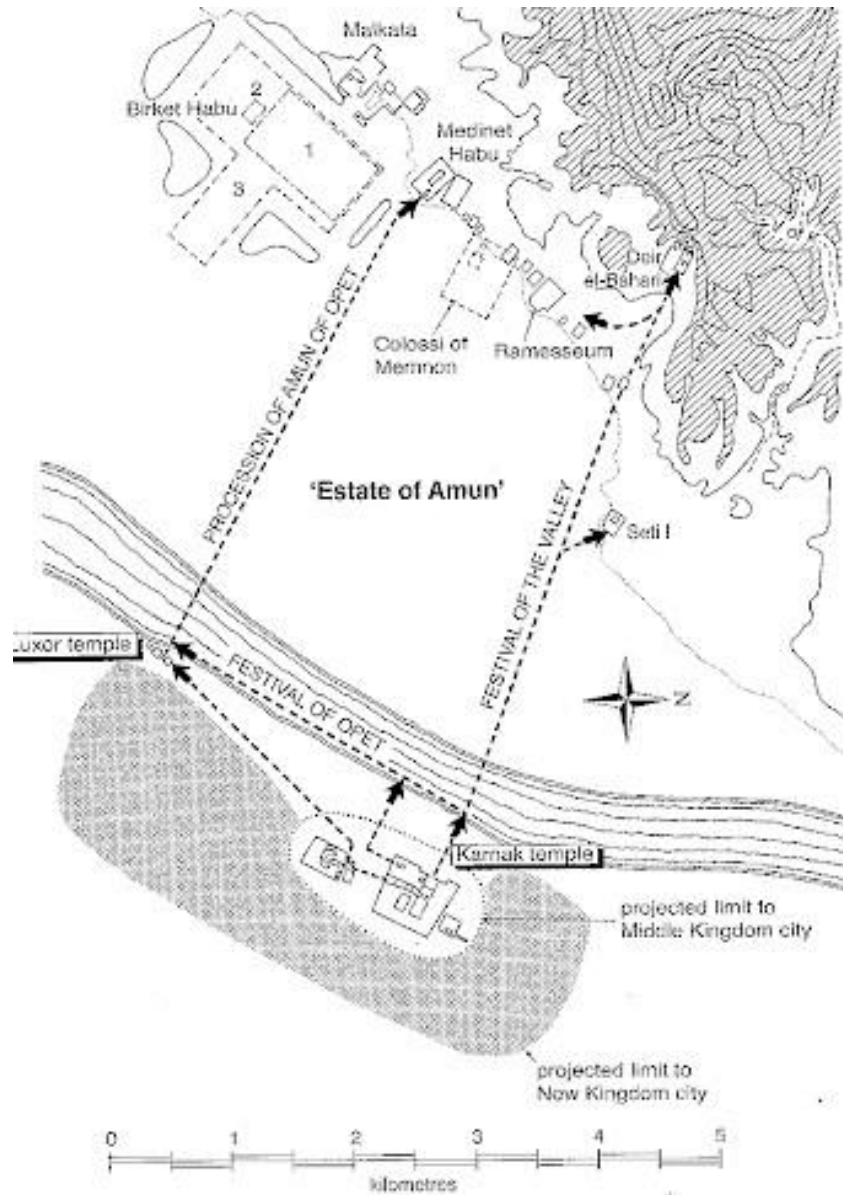
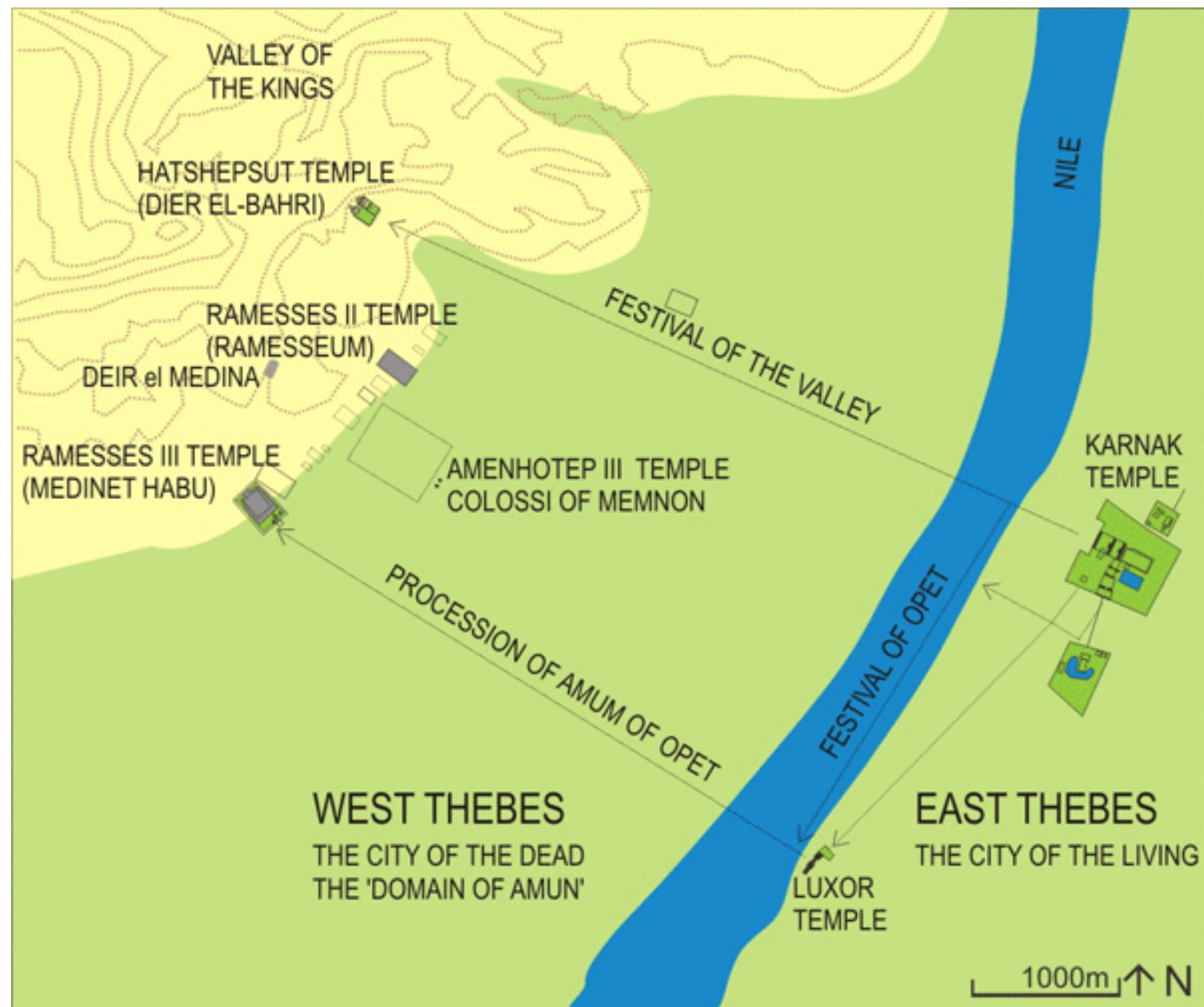


Image from:
Digital Karnak

NECTANEBO I (KHEPERKARA)
380 - 362



A map of the processional ways in the New Kingdom. Kemp, B., 1991. Ancient Egypt Anatomy of A Civilisation. 2nd ed. London: Routledge, p.266.



Deir el-Bahari

Built by Hatshepsut
in the early 18
dynasty c.1500 BC

Djeser-Djeseru



The Valley of the Kings
– began by Hatshepsut,
is located at the base
of ‘Ta Dehent’ – The
Peak, known today as
al-Qurn.

The Valley of the Kings
was the necropolis of
the Egyptian pharaohs
from 16th-11th
centuries BC.



Deir el-Bahari



116°

Karnak



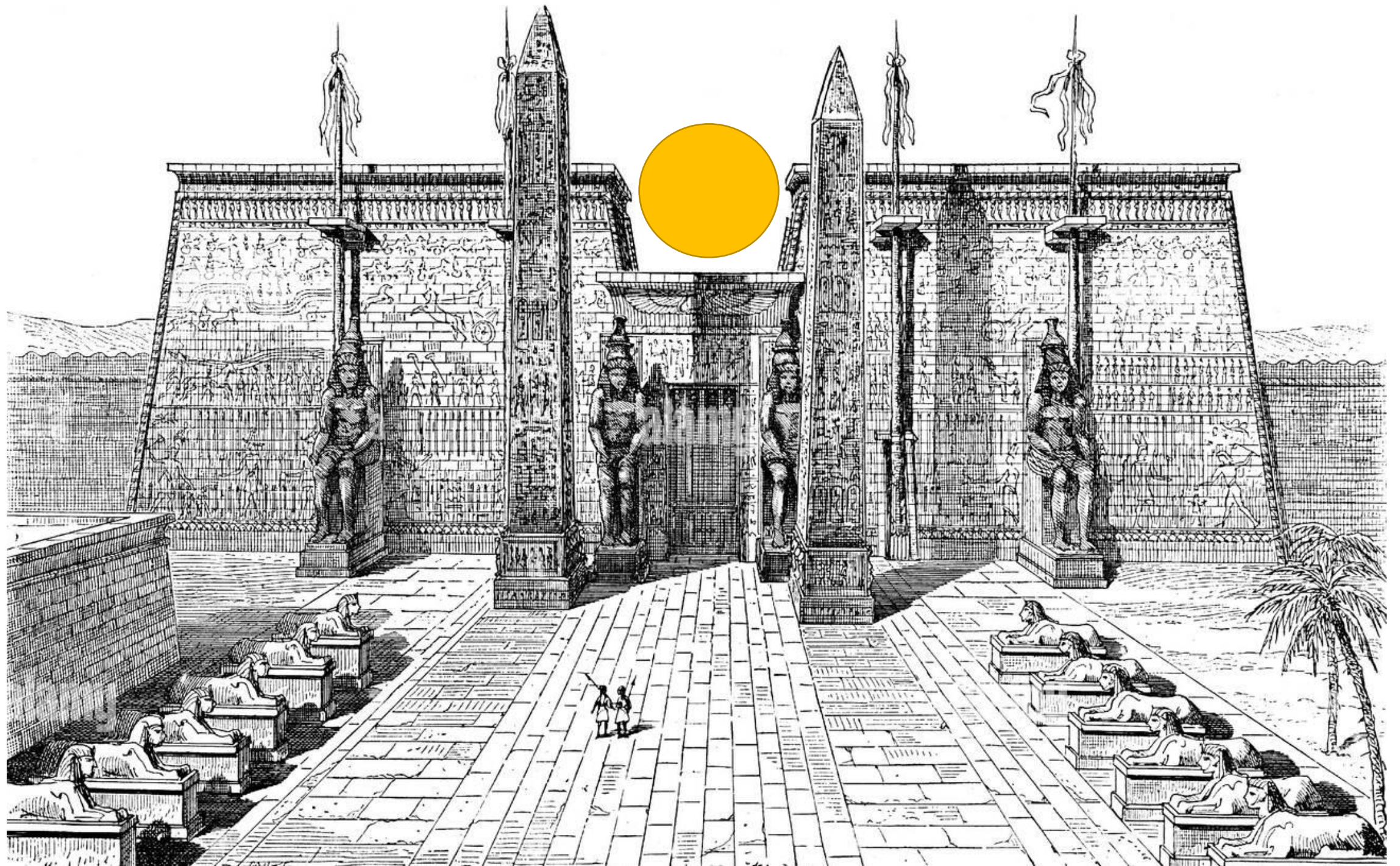
Orientation to Deir el-Bahari – Karnak



116°

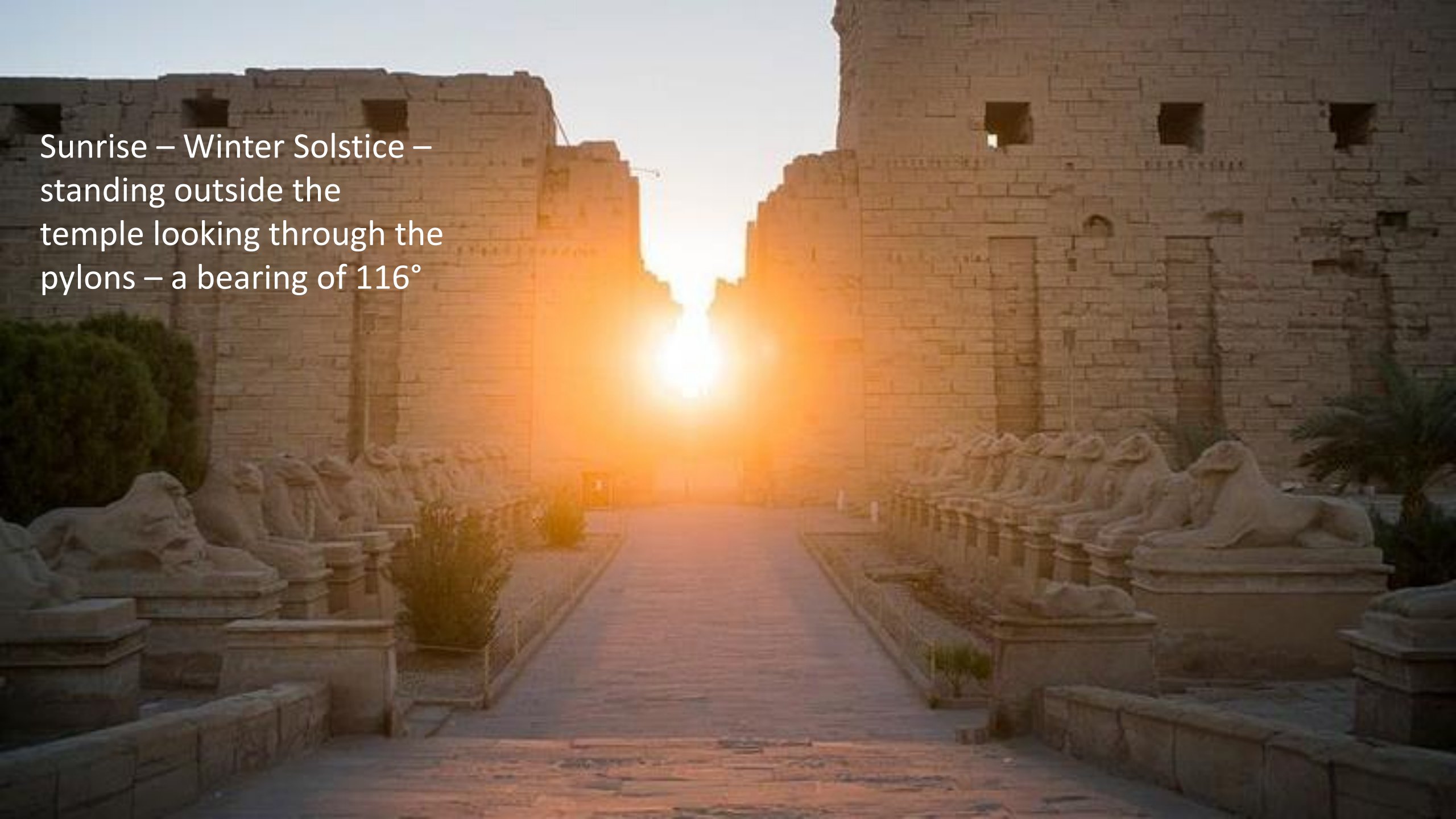
Deir el-Bahari







Sunrise – Winter Solstice –
standing outside the
temple looking through the
pylons – a bearing of 116°





The Egyptian calendars, unlike ours, was not linked to the sun. They had a civil calendar and a lunar religious calendar.

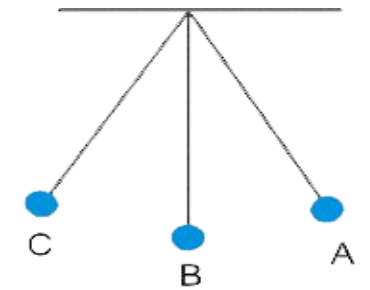
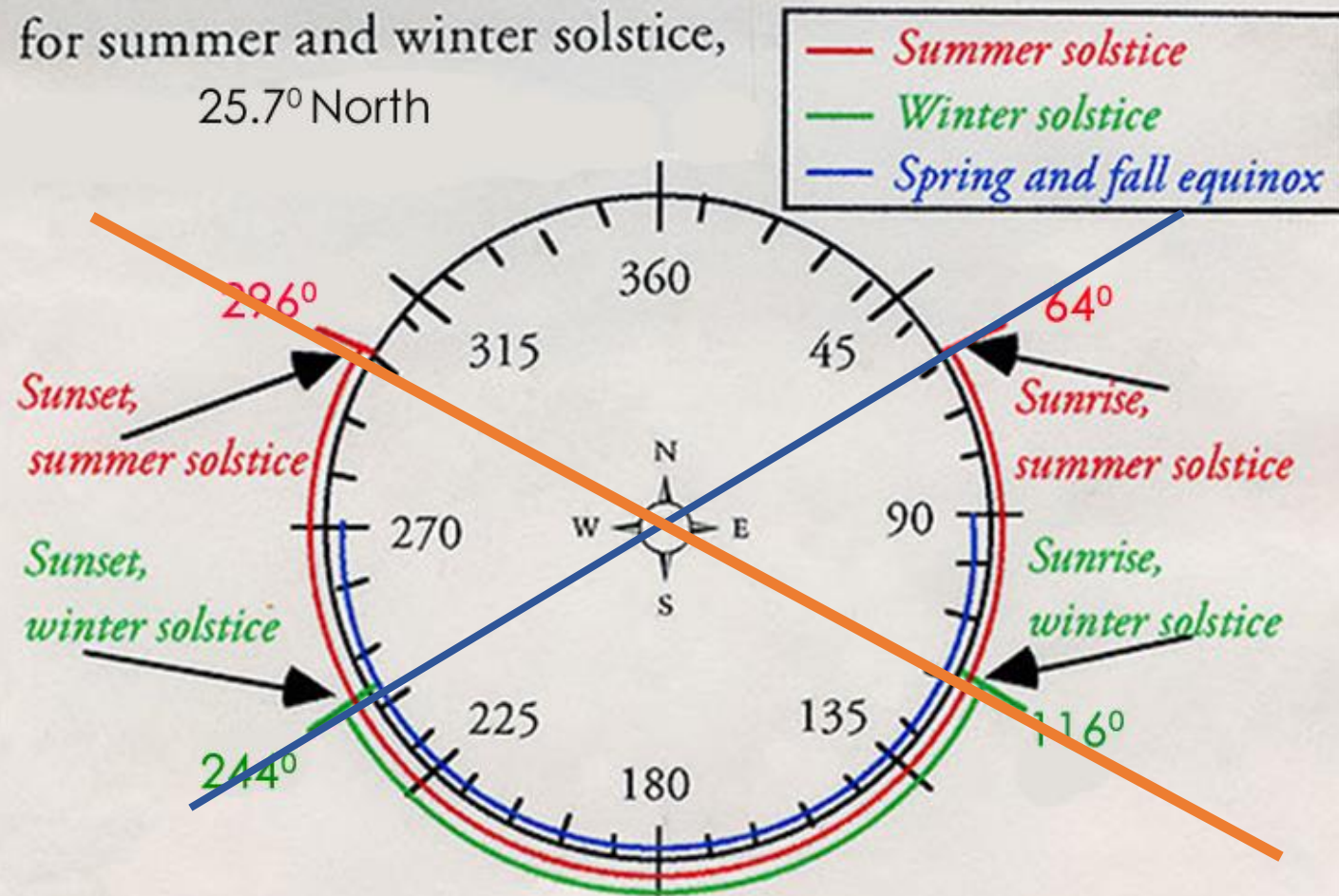


The civil calendar was a continuous count calendar (like our week). It was 365 days in length and thus drifted against the seasons by the rate of one day every four years.

Hence a given date of, for example, Day 4, Month 2 of the Inundation does not mean that it was the actual time of the inundation!

So why was Karnak oriented to the winter solstice? This would not have been a set date in their year. Additionally, it was the shortest day of the year!

Sunrise and sunset locations,
for summer and winter solstice,
25.7° North

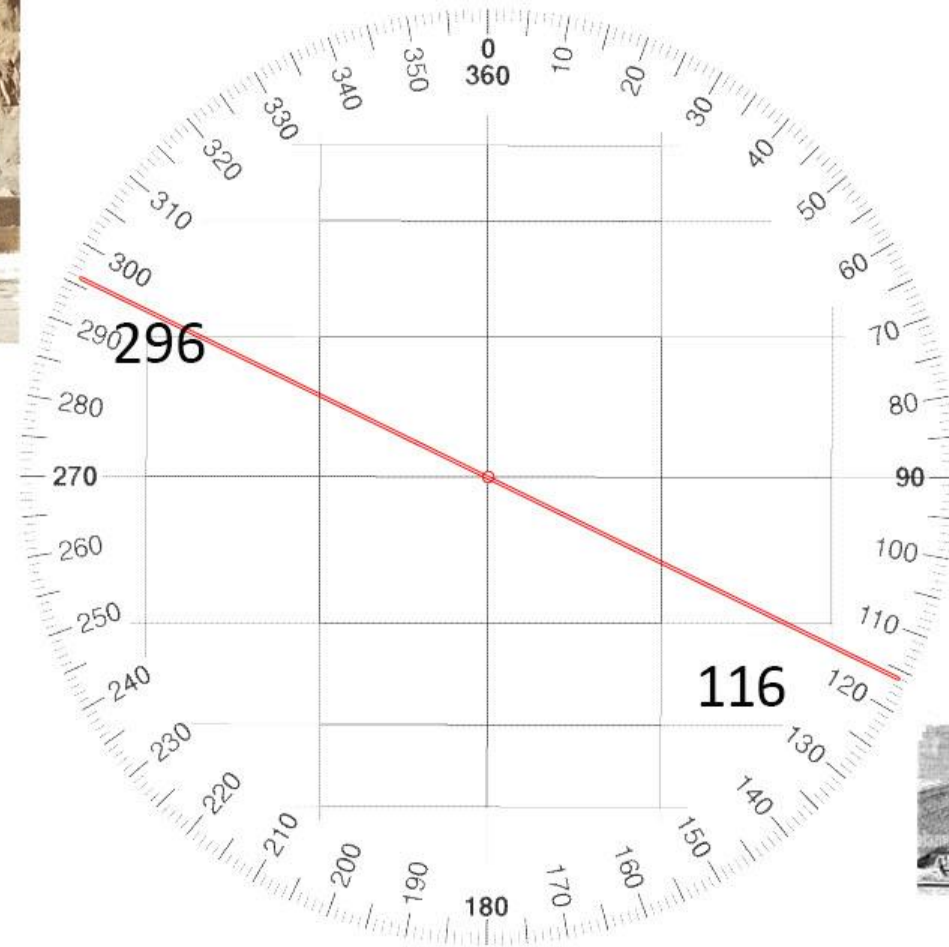


The sun moves
along the horizon
in a pendulum-like
movement.

SUMMER SOLSTICE SUNSET



21 June



**WINTER
SOLSTICE SUN Rise**



21 Dec



19 July 21 June



The pyramids with text are those of the kings:

Fifth Dynasty

Unis

Sixth Dynasty

Teti,

Pepi I

Merenre

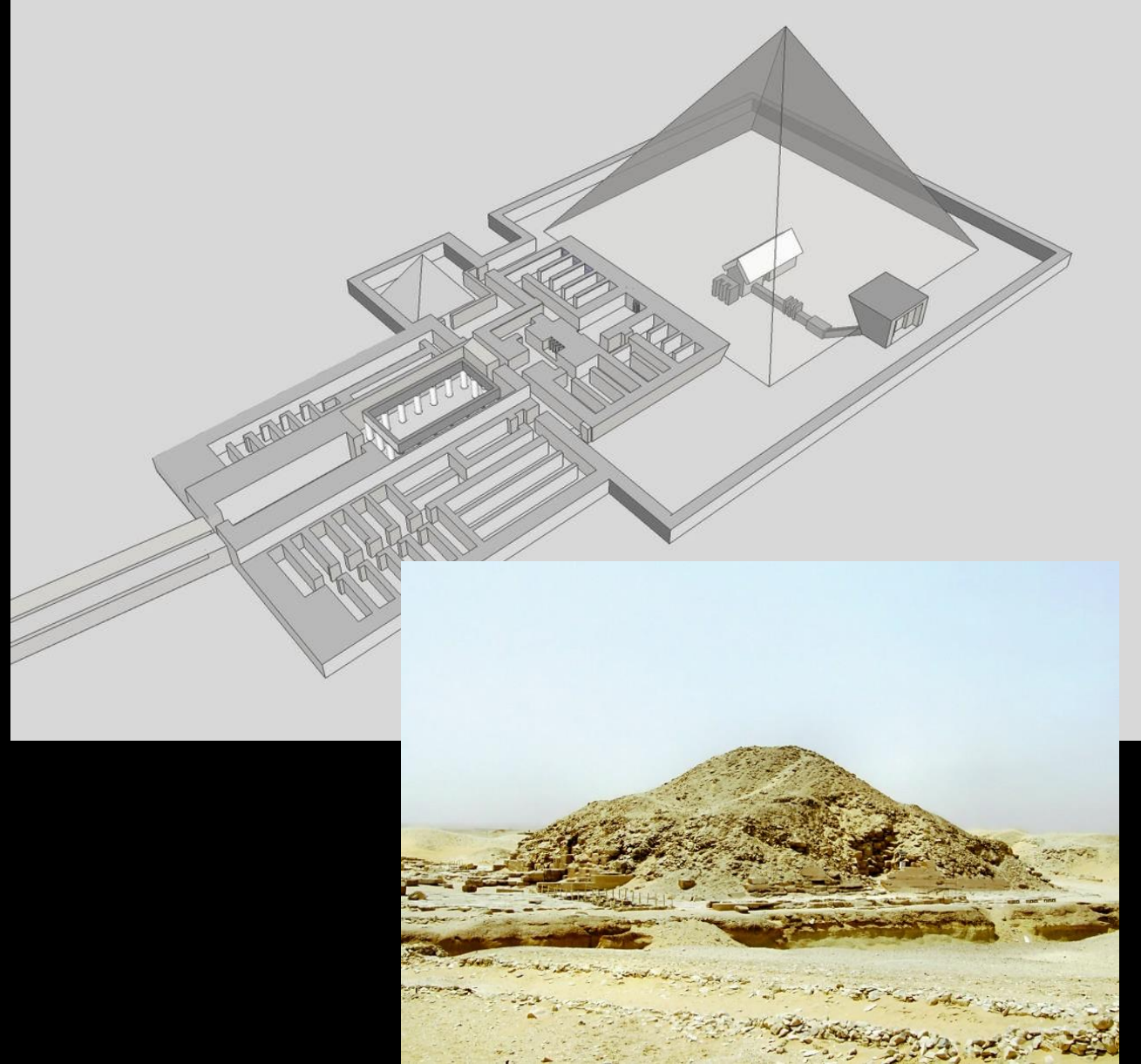
Pepi II

Also the queens of Pepi II: Oudjebten, Neit, and Apout.

Seventh Dynasty

Ibi, a king of the of whom little historically is known.

These pyramids were constructed, and apparently inscribed, between the years c.2350 to 2175 B.C.E. The text itself is now considered to be as early as 3000 BCE.



Unis Pyramid

Nut and the time of the flood in Unas Texts

Passing through the Akhet (west-south wall)

Look, she is coming, the beautiful West, to meet you, to meet you with her beautiful tresses, and she is saying:

“Welcome, you to whom I gave birth, with rising horn, eye-painted pillar, bull of the sky: your form is distinguished; pass in peace, for I have joined you”

—so says the beautiful West about Unis.



The flood

“Unis is the one to whom belongs the linen that the uraei guard during the night of the great flood that comes from the great goddess.”

Unis PT 106 (Allen)





Nut

The Egyptian Sky Goddess
and the Ecliptic

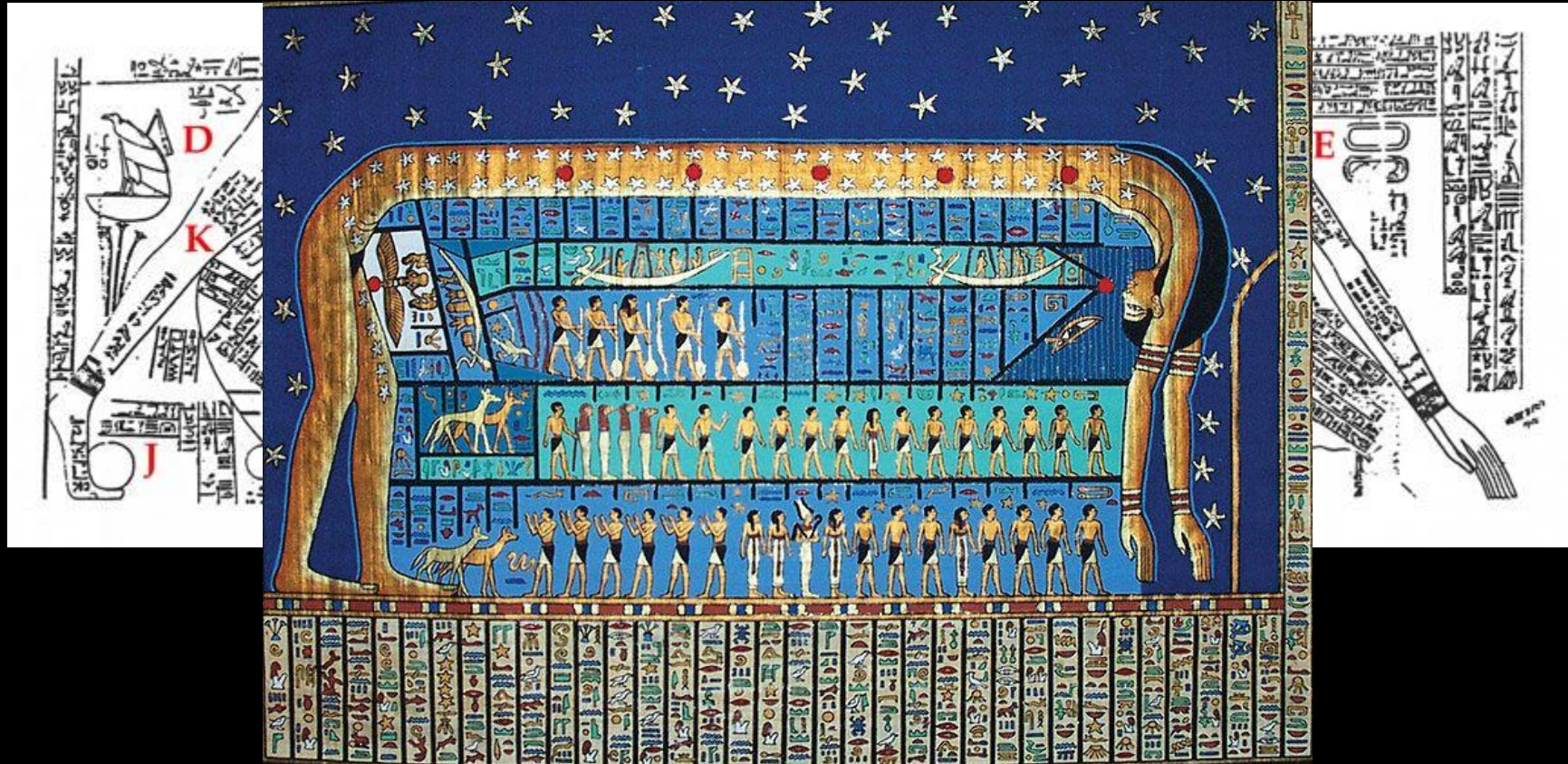


The sky goddess Nut and the Sun

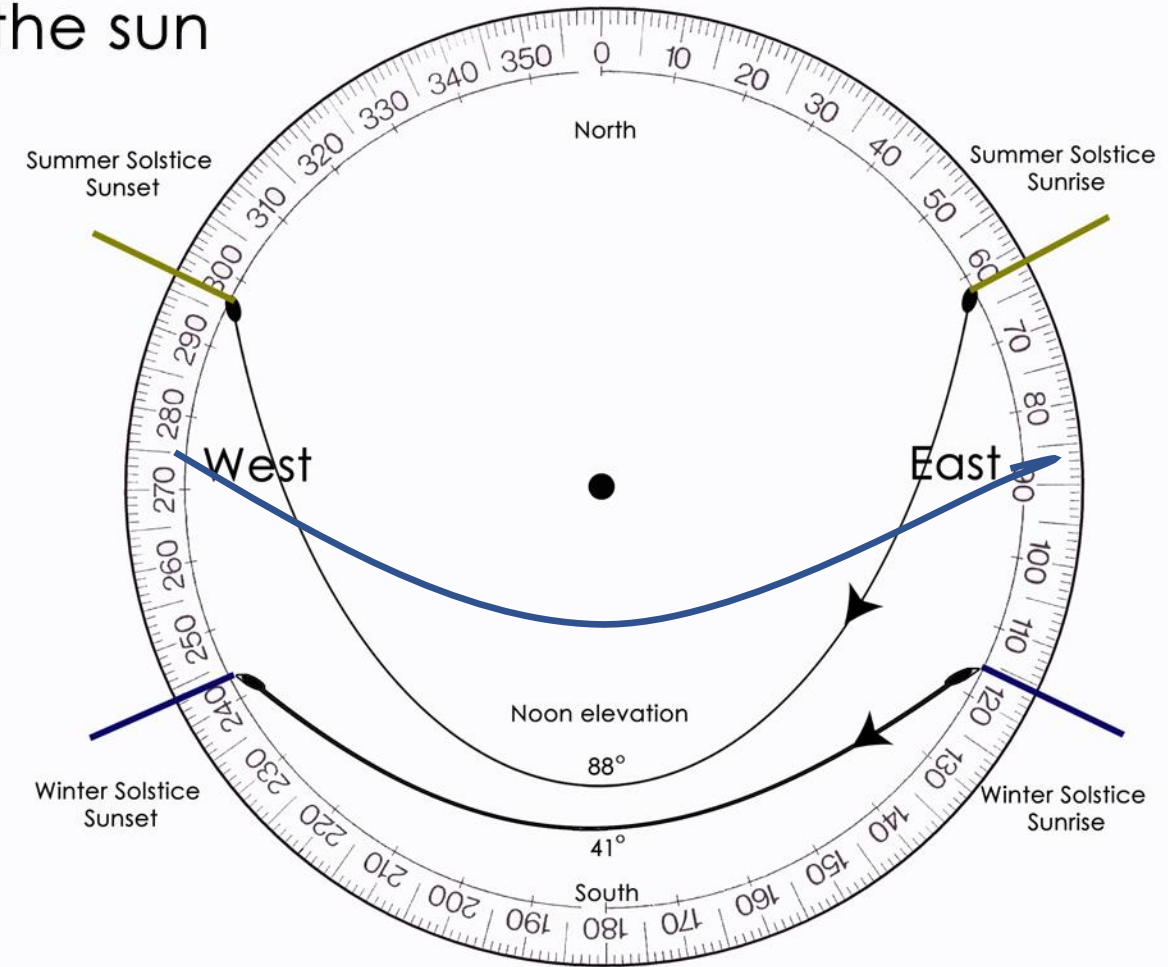
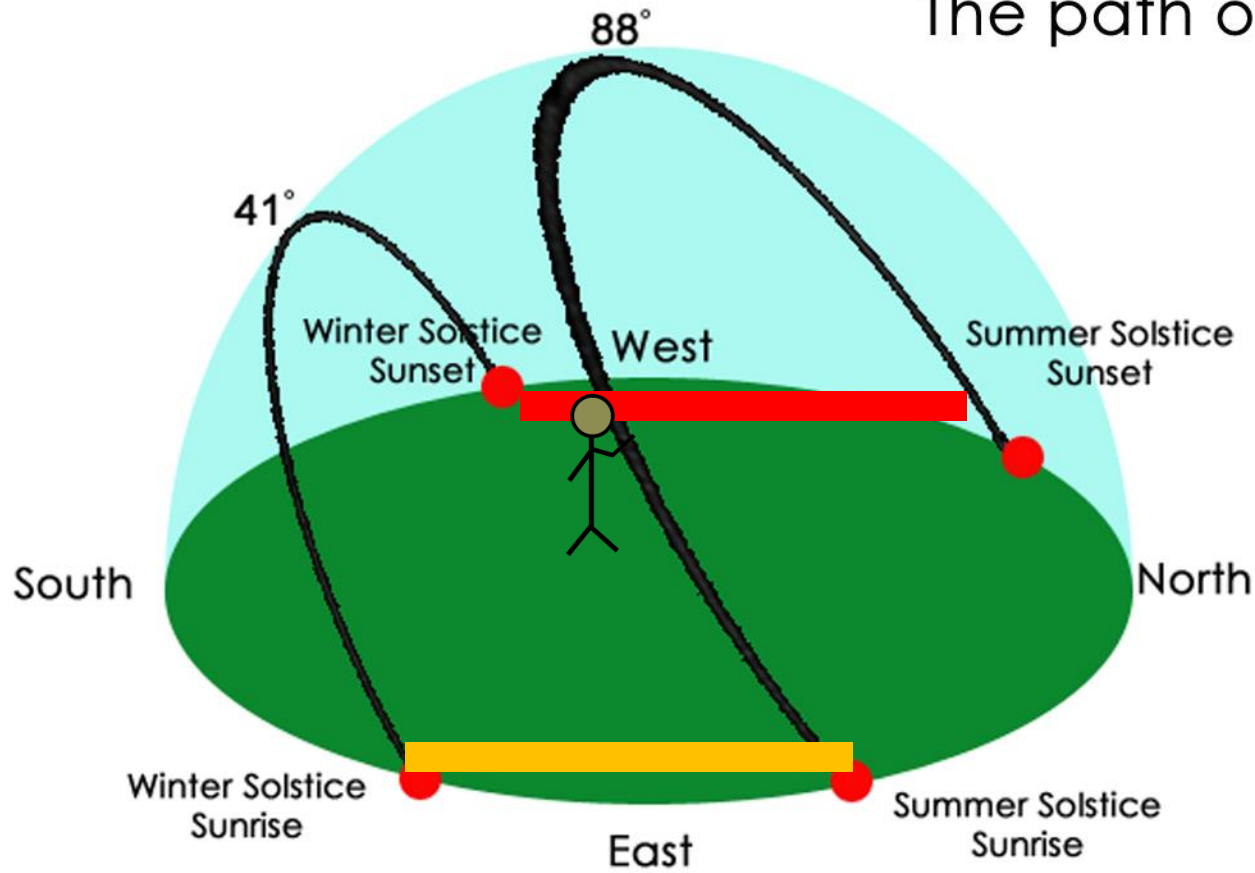
Nut swallows the sun in the evening, in the west, then gives birth to it in the morning. Her body is the path of the sun by day and by night.

In the cenotaph of Seti I, Nut is said to divide the stars into two groups.

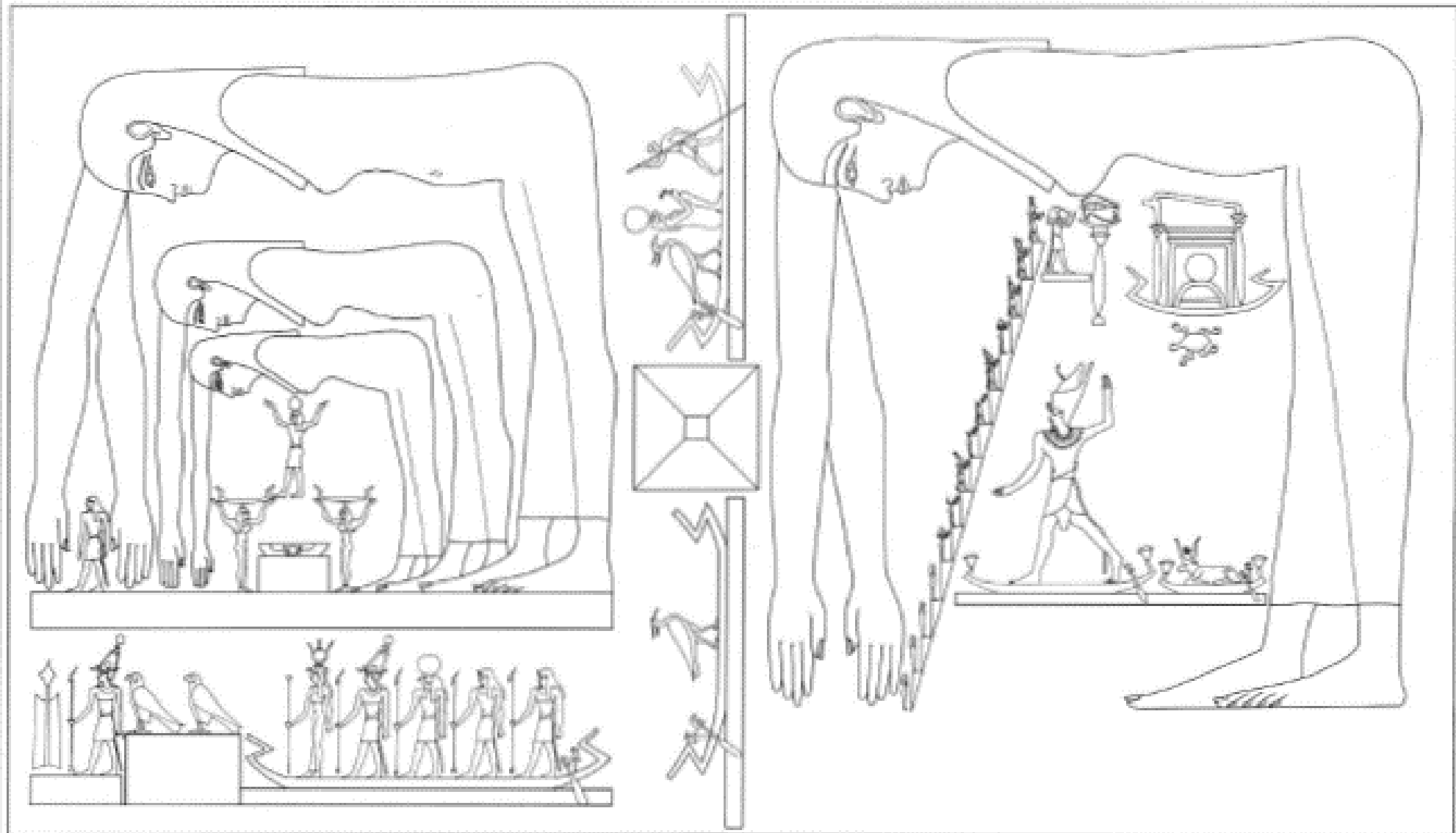
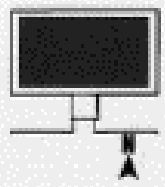
This division of stars is a feature of the **ecliptic** – the apparent path of the sun during the course of the year.

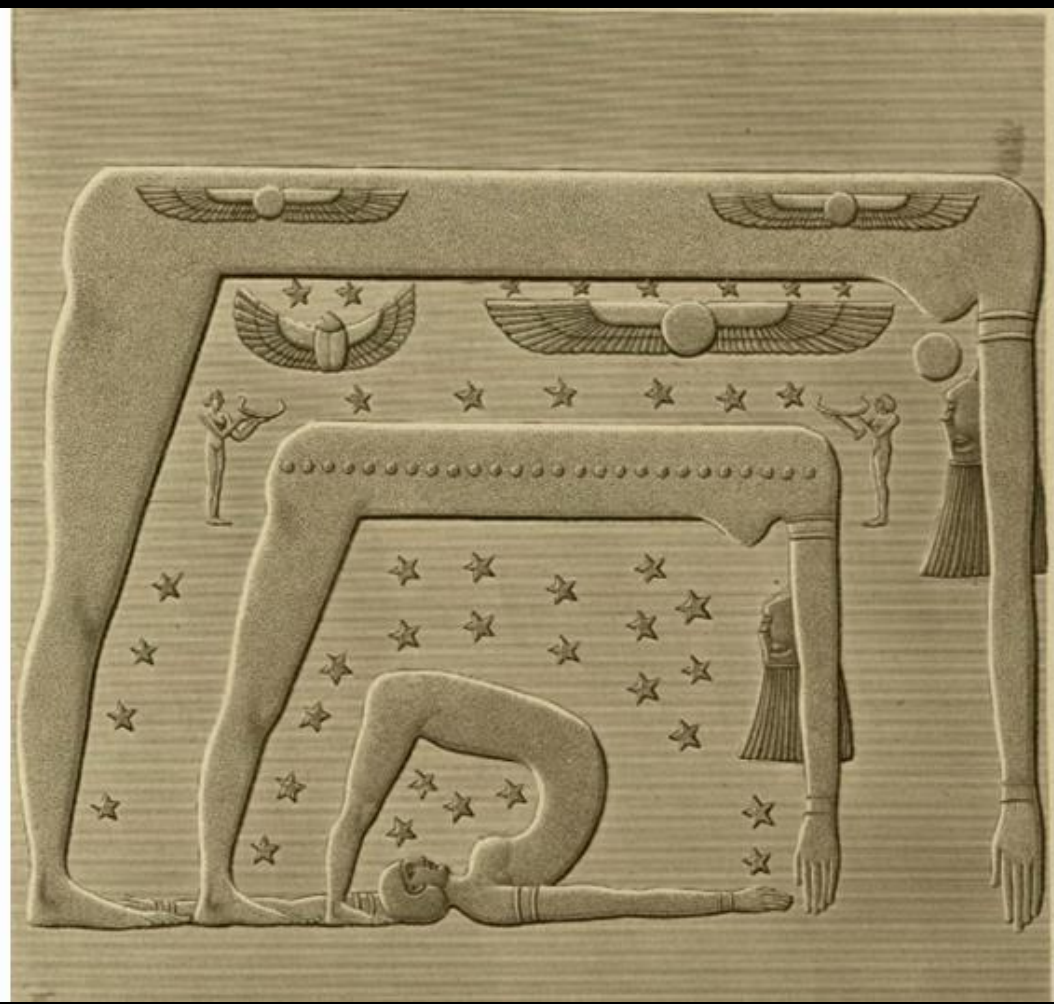


Luxor 26° North The path of the sun



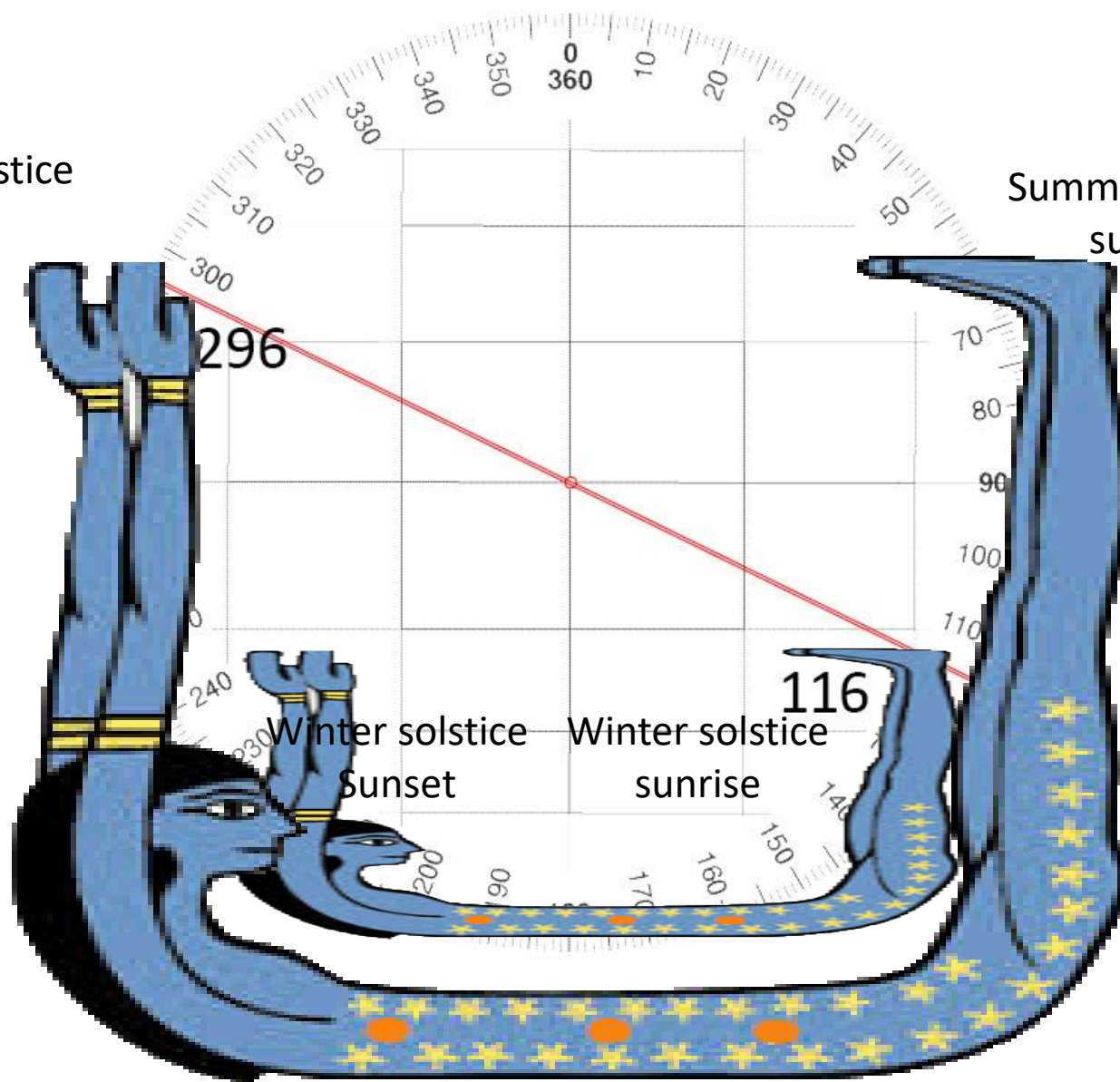
The sun rises and sets in a consistent pattern for a given location





Summer solstice
Sunset

Summer solstice
sunrise





Winter Solstice
Sunset



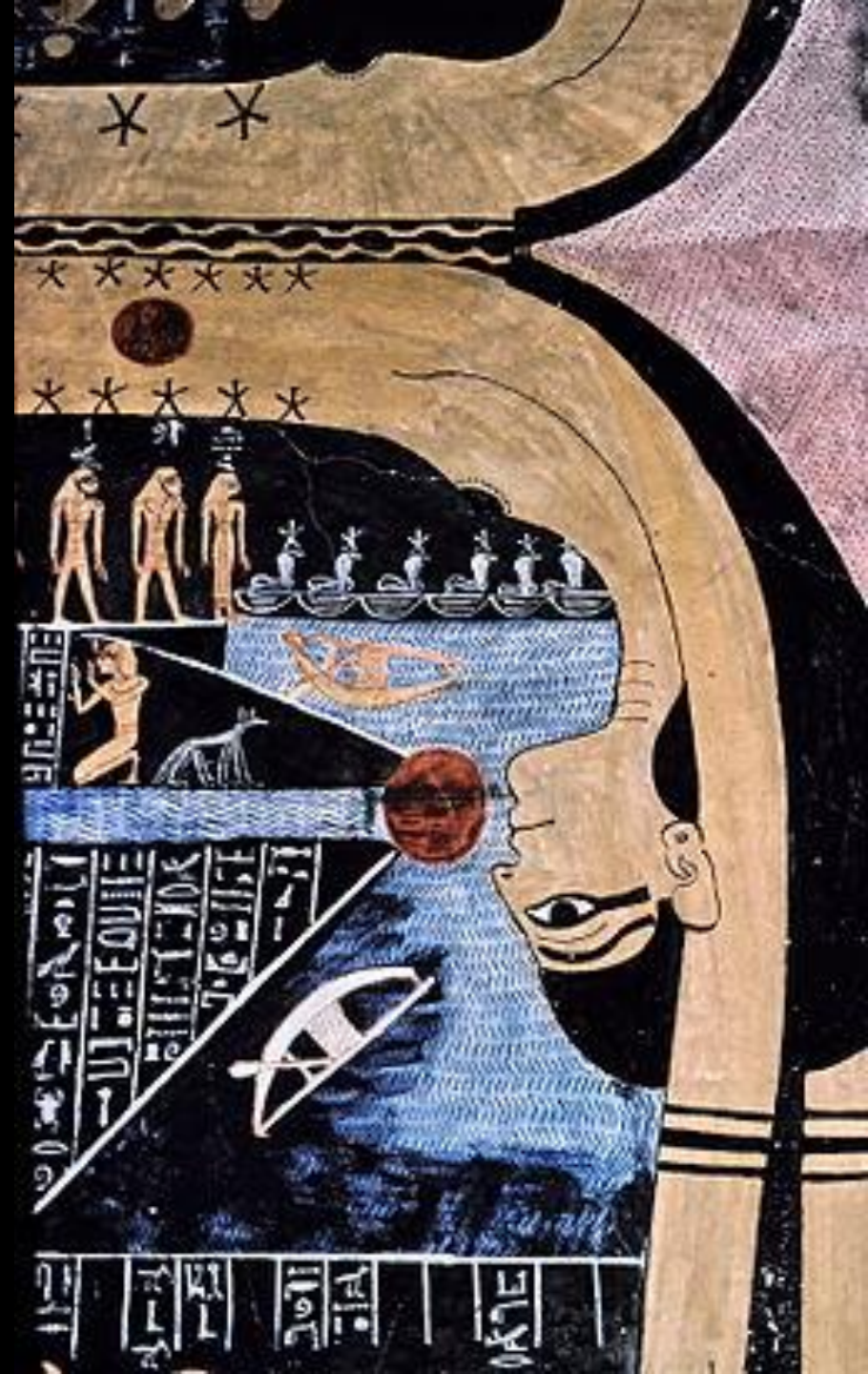
Summer Solstice
Sunset



The inundation happens when Nut reaches this point. She then turns around, as the world is remade.

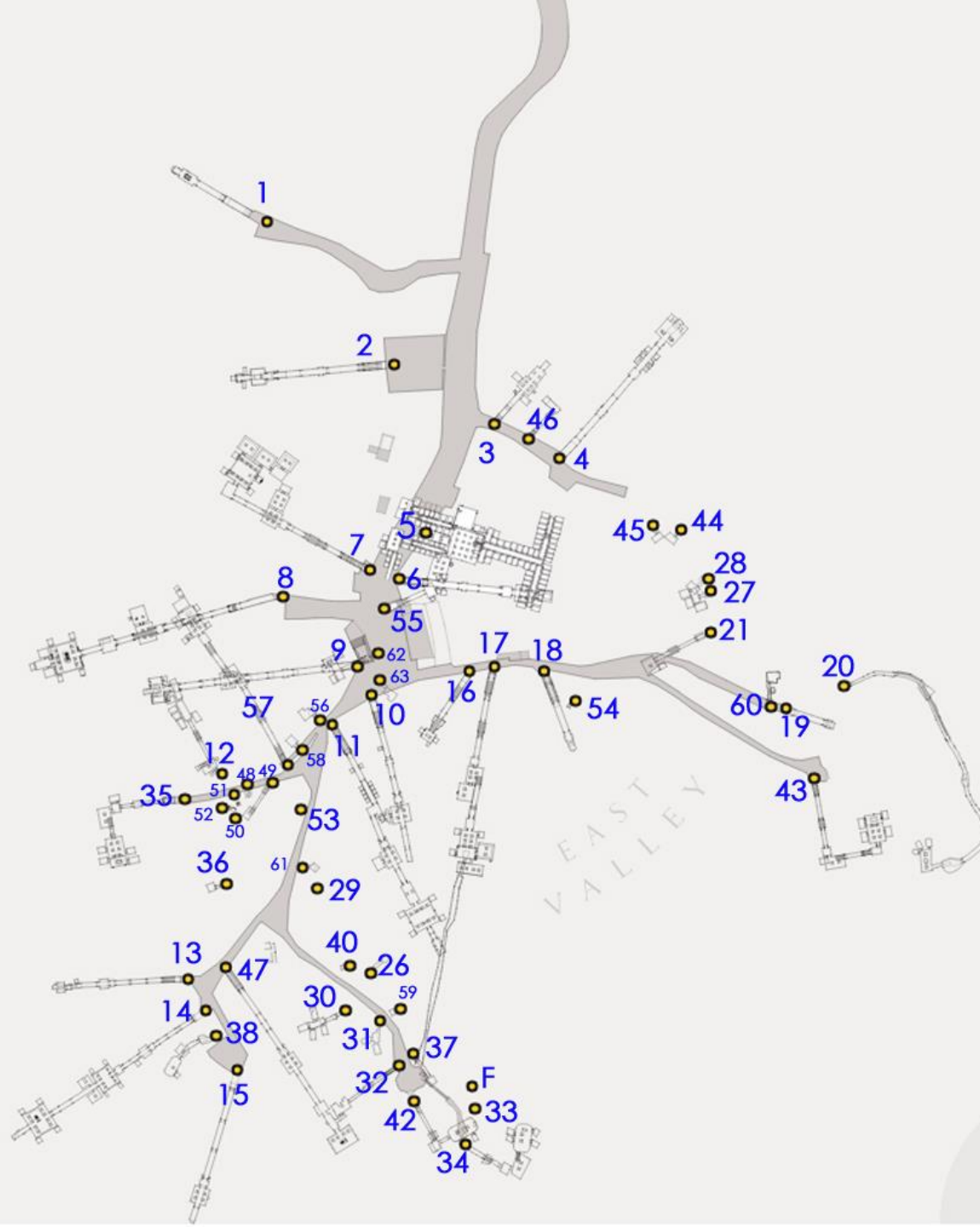
At the time of the flood,
Nut will swallow the sun
at the place on the
horizon of the Summer
Solstice

Ramses VI

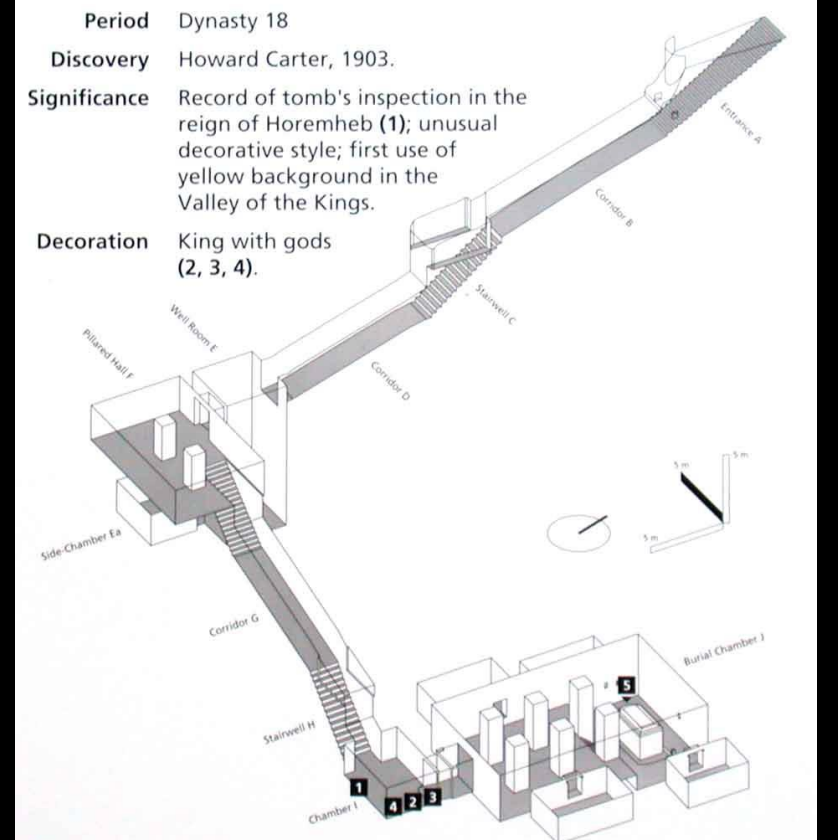
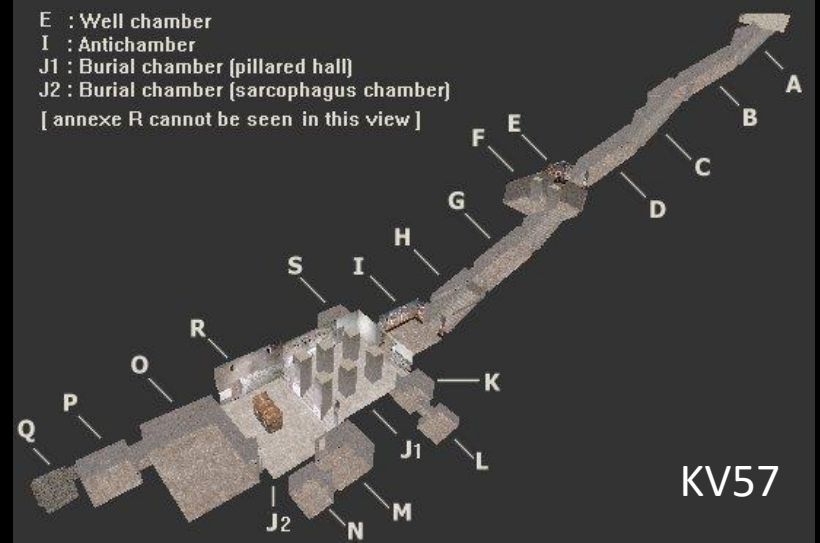
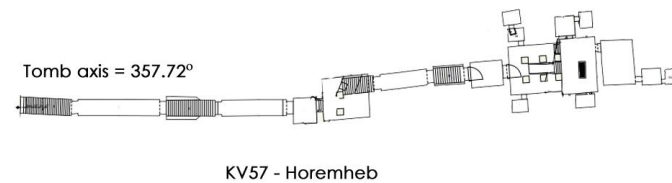
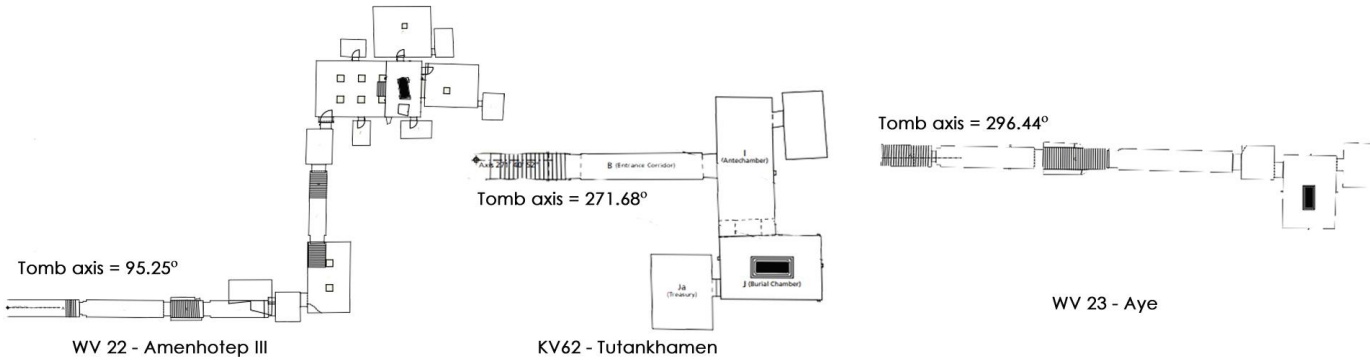
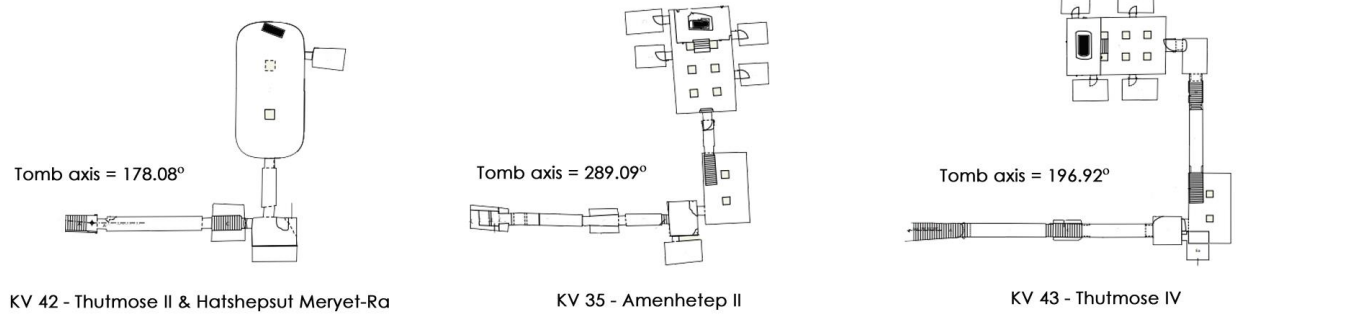
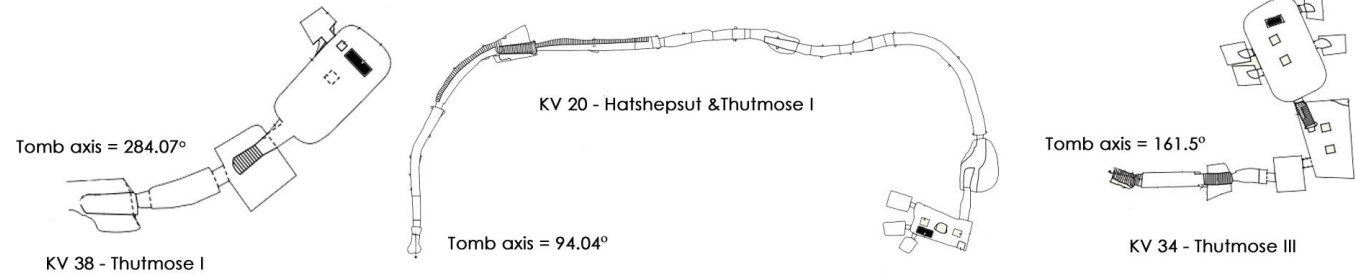








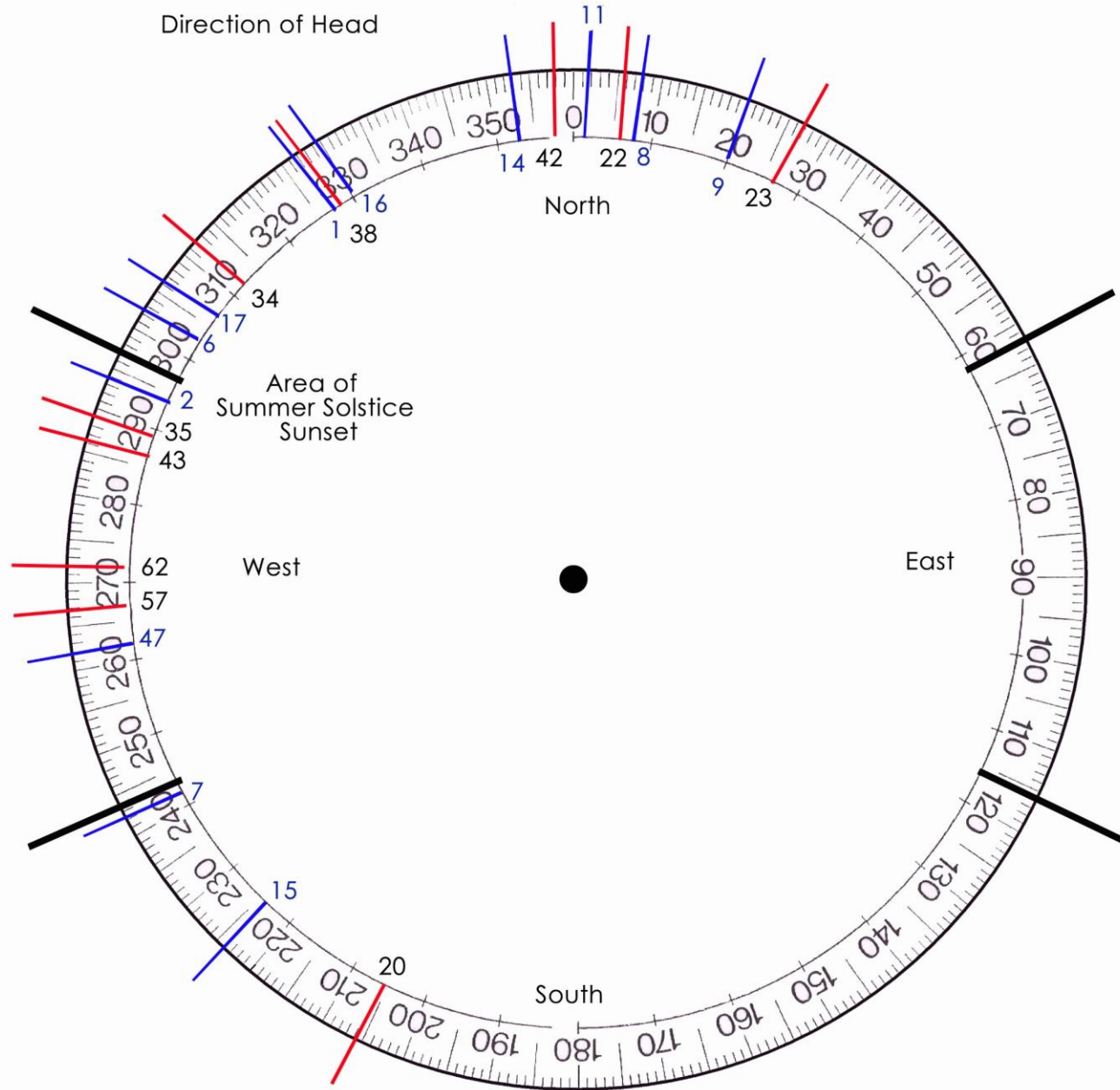
18th Dynasty Tombs - Valley of the Kings



KV43

Royal Sarcophagi Azimuth - Valley of the Kings

Direction of Head



18 Dynasty - Red
19 & 20 Dynasty - Blue

	King	Sarcophagus orientation – Head end
KV42	Thutmoses II or Merytre Hatshepsut	358°
KV20	Thutmoses I & Hatshepsut	206°
KV34	Thutmoses III	311°
KV38	Thutmoses I	328°
KV35	Amenhotep II	289°
KV43	Thutmoses IV	287°
KV22	Amenhotep III	5°
KV62	Tutankhamun	272°
KV23	Aye	26°
KV57	Horemheb	268°

Table 1: The azimuths of the Eighteenth Dynasty sarcophagi

	King	Sarcophagus orientation
19th Dynasty		
KV16	Ramesses I	330°
KV17	*Seti I	307°
KV7	*Ramesses II	243°
KV8	Merenptah	9°
KV15	Seti II	224°
KV47	Siptah	262°
KV14	Sethnakhtre / Tausret	353°
20th Dynasty		
KV11	Ramesses III	268°
KV2	Ramesses IV	294°
KV9	Ramesses V & VI	20°
KV1	Ramesses VII	327°
KV6	*Ramesses IX	303°

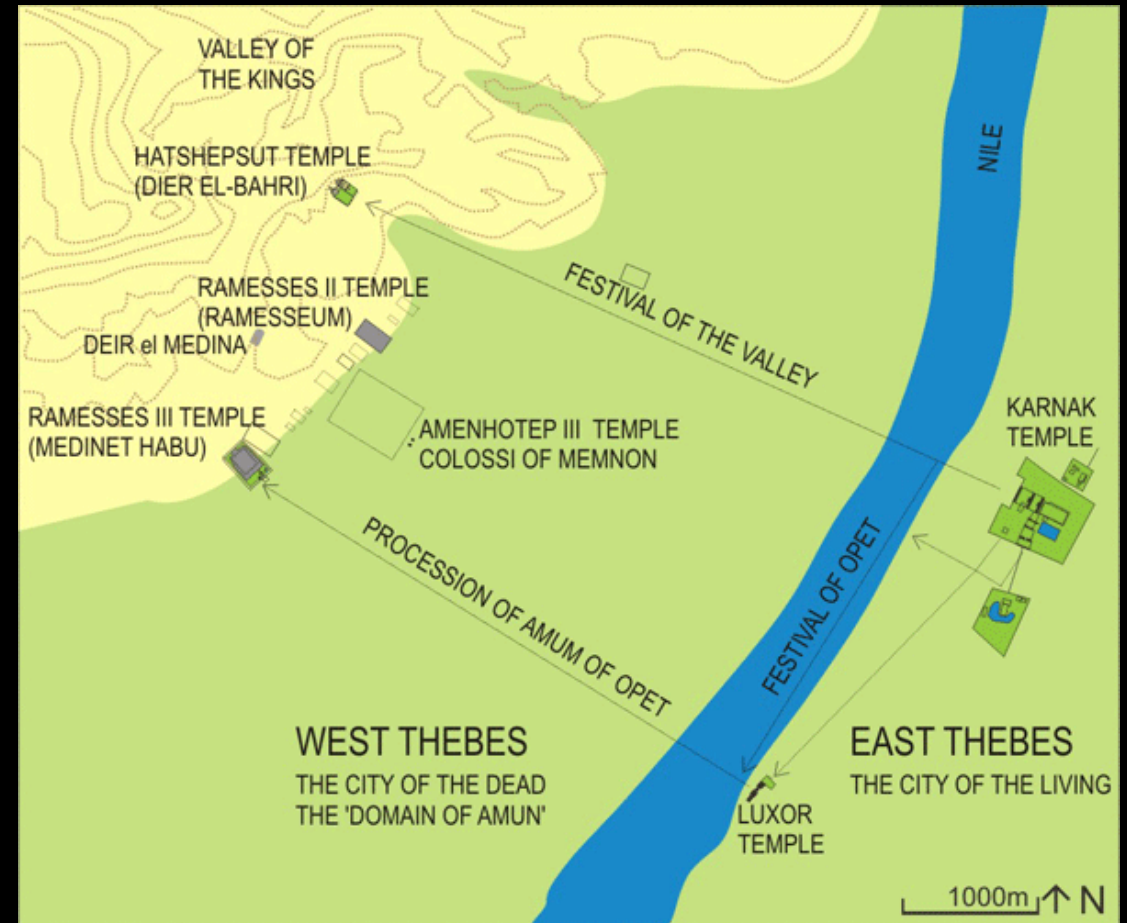
The Winter Solstice alignment is more than probably an alignment to the Summer Solstice sunset of the Temple of Amun as this meant the temple pointed to the place where the sun (Nut) stood as the flood began.

Hatshepsut built her temple to be on this axis and then instigated the Valley of the Kings on the same bearing from the Temple of Amun.

The kings of the 18 – 20 dynasty then favoured, when possible, aligning their heads to the place where Nut reached down and touched the earth at the time of the flood.



Nut and the horizon astronomy of western Thebes was a vital part of the sacred geography of the Estate of Amun.



References

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Theban Mapping Project <https://thebanmappingproject.com/>