

# Magic and Medicine in Ancient Egypt

Joey Cross Oriental Institute University of Chicago

La Grange Public Library October 25<sup>th</sup>, 2016





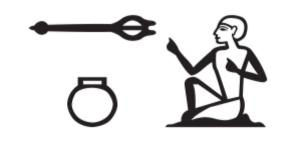
#### Magic and Medicine in Ancient Egypt

Overview of tonight's talk:

- 1. What did the Egyptians believe about each? What is the evidence?
- 2. Why were they so similar?
- 3. Where do we see their influence?

#### The Egyptian Doctor

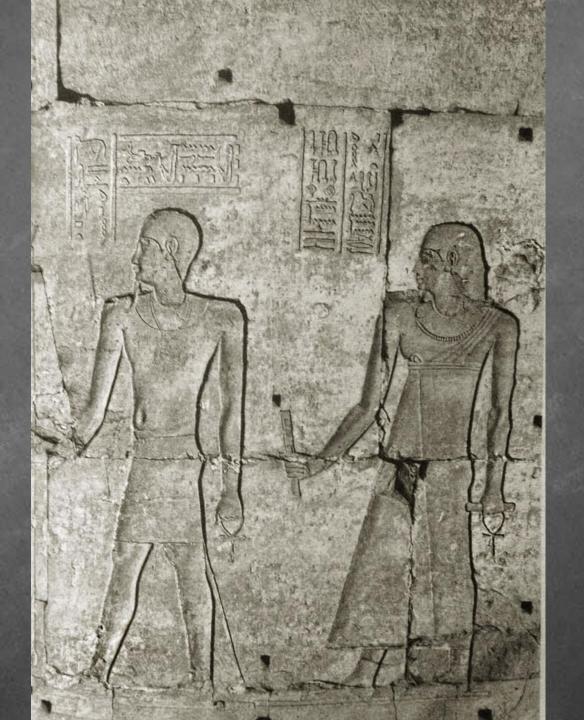
• He was called *sinu* or *sunu*.



• The word perhaps literally means "arrow-wound person."

Legendary doctors: Imhotep (left; lived ca. 2650-2600 BCE) and Amenhotep son of Hapu (right; lived ca. 1450 BCE)

From the Ptah temple at Karnak (ca 600 BCE)



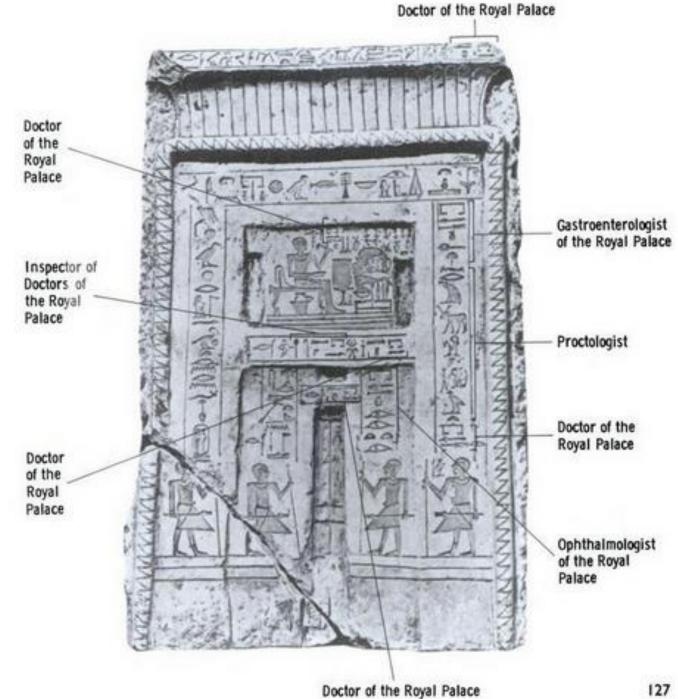




#### Temple of Karnak



#### False door of Irenakhty (First Intermediate Period, ca 2100 BCE)



Picture from Nunn, Ancient Egyptian Medicine

#### The Egyptian Doctor

• Who else was involved?

"There are vessels in him to all his limbs. If any *sunu*, any priest of Sakhmet, or any amulet person places his hands or his fingers on the head, on the back of the head, on the hands, on the place of the heart, on the two arms, or on each of the two legs, he measures the heart because of its vessels in all its limbs."

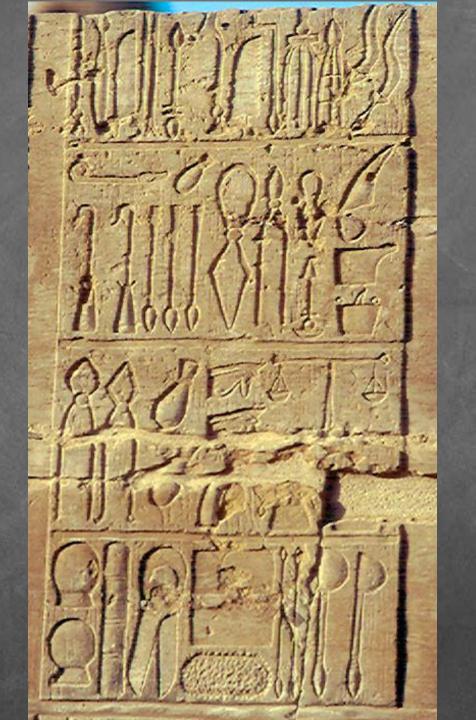


#### Psalm 91:1-7

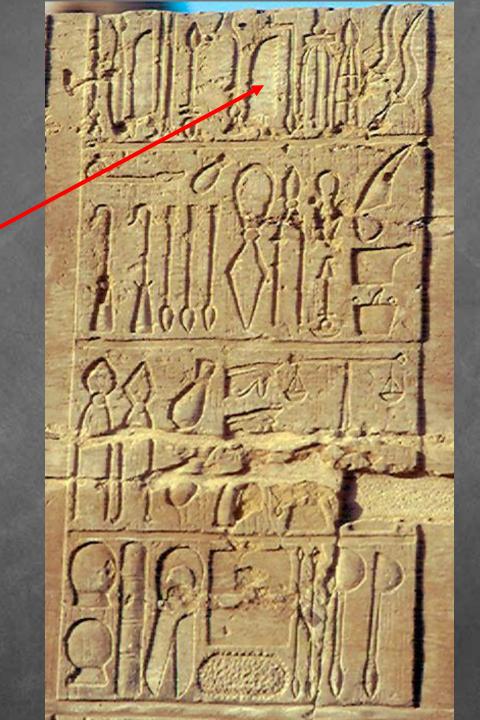
Whoever dwells in the shelter of the Most High will rest in the shadow of the Almighty. I will say of Yahweh: "He is my refuge and my fortress, my God, in whom I trust."

Surely he will save you from the fowler's snare and from the deadly pestilence. He will cover you with his feathers, and under his wings you will find refuge. His faithfulness will be your shield and rampart. You will not fear the terror of night, nor the arrow that flies by day, nor the pestilence that stalks in the darkness, nor the plague that destroys at midday.

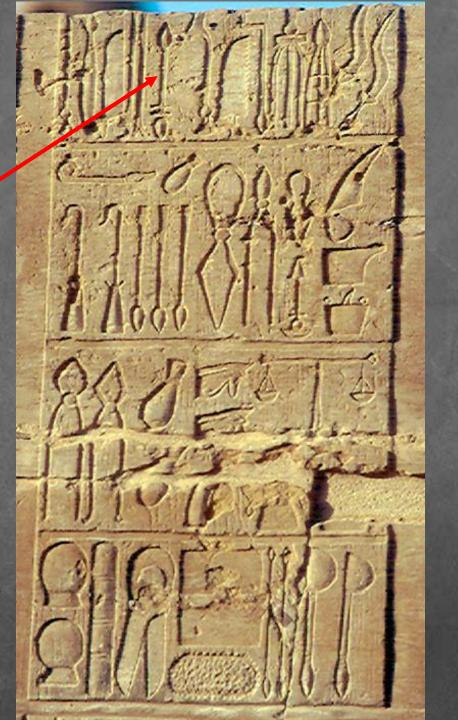
#### What were the tools of the trade?



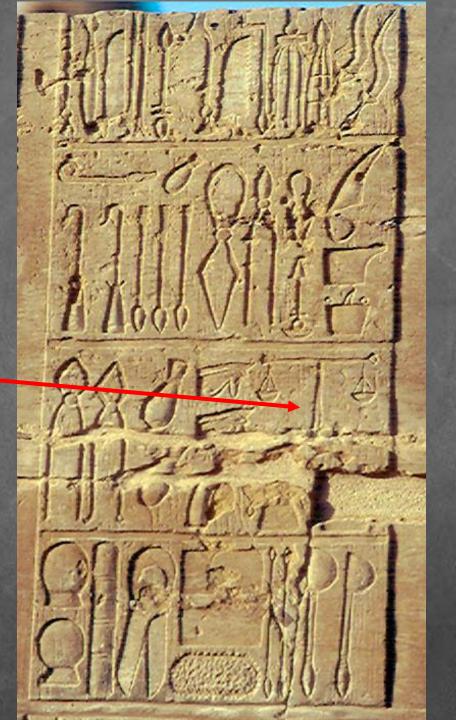
Saw



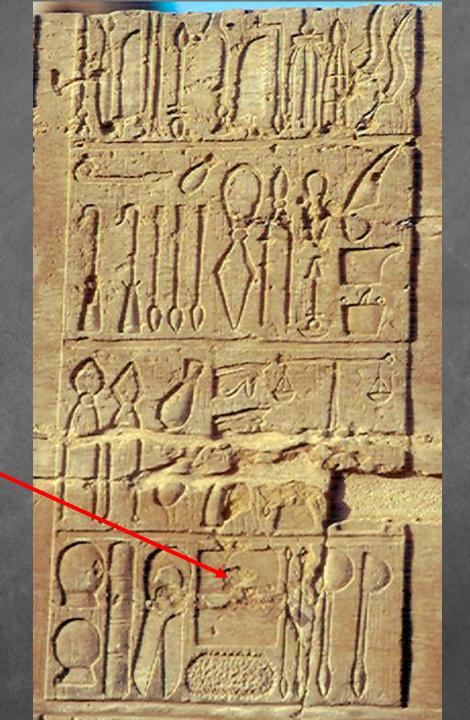




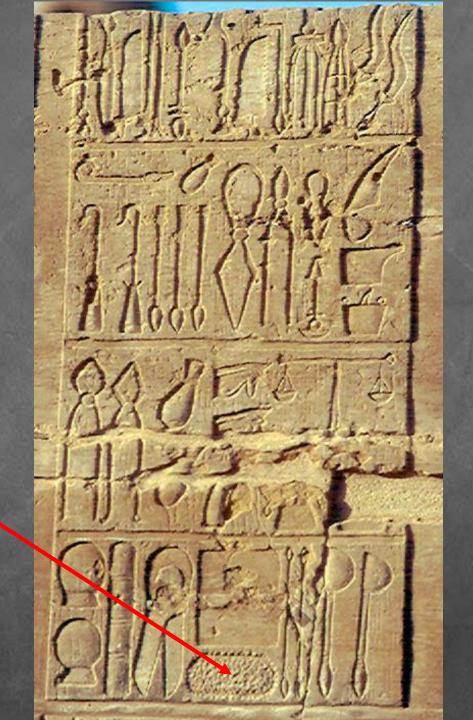




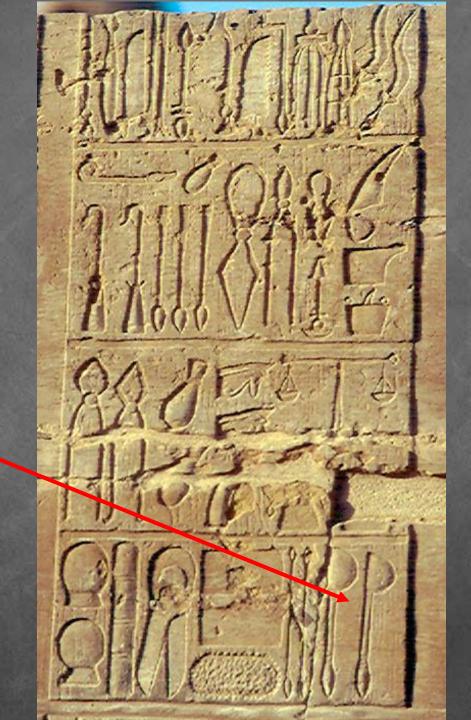
Bandages



Sponge



Scalpels

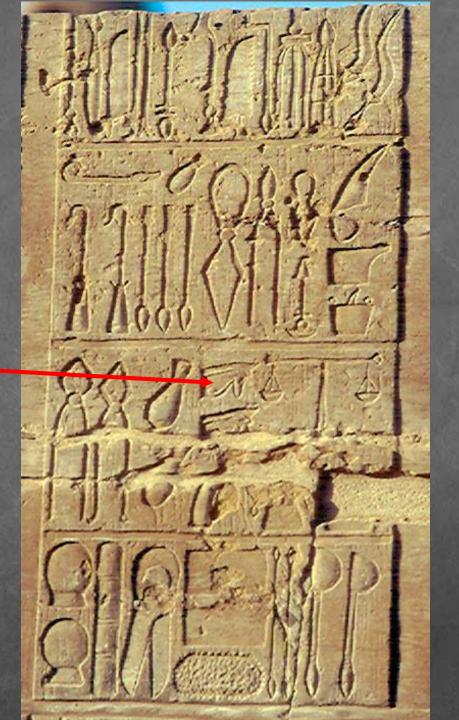


Forceps









#### The Egyptian Doctor's beside manner

- What happens when you see your physician:
  - 1. The doctor examines your injury or condition. This is reflected in lists of diagnoses and remedies: "If you examine a man..."
  - 2. The doctor declares whether the ailment can be treated or not.
  - 3. Treatment is given.

#### The Egyptian Doctor's bedside manner

- The manner of treatment depends on the physician's evaluation of the seriousness of the injury or ailment.
- There were three categories the physician would use:
  - 1. An illness I shall treat
  - 2. An illness with which I shall contend
  - 3. An illness not to be treated

• What did these doctors use in practice? How was medical knowledge gathered and passed down?



T- Tes Harris - ---11 H - M - C - 18 - 2 - 111 תנואיבוובי בומבווים ביווביו 91-12 11 - I ALZE - 493

- Over a dozen manuscripts have been found, ranging over 2,000 years of practice.
- The oldest texts trace their traditions back to the earliest part of Egyptian history (the Old Kingdom).
- These often quote from each other, and quote from long-lost works.

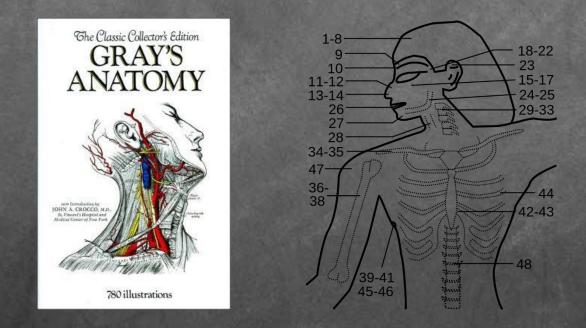
- Areas of medicinal practice reflected in the texts:
  - Trauma
  - Obstetrics
  - Surgery
  - Dentistry
  - Veterinary medicine
  - Animal attacks
  - Gynecology

• The texts themselves are highly structured, containing topical treatises, collections of diagnoses and treatments, as well as spells and hymns.

Edwin Smith Surgical Papyrus (extract)

- 22 - 33 - 122-6milel - Angalaga La Ango A 三到天司13,3 Sunt 1-2-33, 200-31 200-----133 - 135 H = 33 - 2 min = = = = = = 3 しまましいるの1月1915をえいります。「二下スート 「いいいます」「「「い」」「「 WI = # 112 2 42 - 21 A BE - 34 IN שוצוון עלטוביביני נד הנאו נבושובישו THIS VIN TING TO STATISTICS THE STATISTICS S -1233-55- # 2 330-00 9833 -55 وروان المرون ا 11. 2 2 2 - 1 - 2 2 1 - 2 - 1 3 - 1 L 2/20/20 - = u = - = 21 - 21 - 1 20. 11220, 161, 340 super 12.13 #2113 A & A & MI JUZ TO MJ 549-1-33-124: Hard Taria 24 44 416 1. HE Bal 18 18 2 1 2 2 1 2 2 2 1 2 2 2 1 2 2 2 3 2 3 2 2 3 2 3 2 2 3 2 3 2 2 3 2 2 3 2 3 2 2 3 2 3 2 2 3 2 3 2 2 3 2 3 2 2 3 2 3 2 2 3 חבי ביוושי הומדורים ביוויביאו 3,76 -12 -12 - 10 -12 - 10 -1313 27-30233 B=1= == 00, 16 121319 いいはないることをしたしたのうここ ころうにりしとしているころろろろろろろろろろろ للخراجة الدويج والالالي في المان ひみちける1025 - こうなどのうちを このころのとう 「な」」「見れどれる」「し」」「「「「」」」」」」 הביים שלו היצוא הישתבי בייון שמים בייהו 71-Bettessell" Chloater 184 221123 川ろうこうしうしい前にたこうしょういう 91-12/12- [alan = 393

- The Edwin Smith Surgical Papyrus
  - Arranged from the head downwards (like Gray's Anatomy).
  - Contains diagnoses and treatments for wounds and blunt trauma.



#### Example: surgery

• Treating head wounds, from the Edwin Smith Papyrus:

"Instructions concerning a wound on the top of his eyebrow. If you examine a man having a would in the top of his eyebrow penetrating to the bone, you should palpitate his wound and draw together for him his gash with stitching.

## Surgery

• Treating head wounds, from the Edwin Smith Papyrus:

"You should say concerning him: 'One who has a wound in his eyebrow. An ailment which I will treat.'

## Surgery

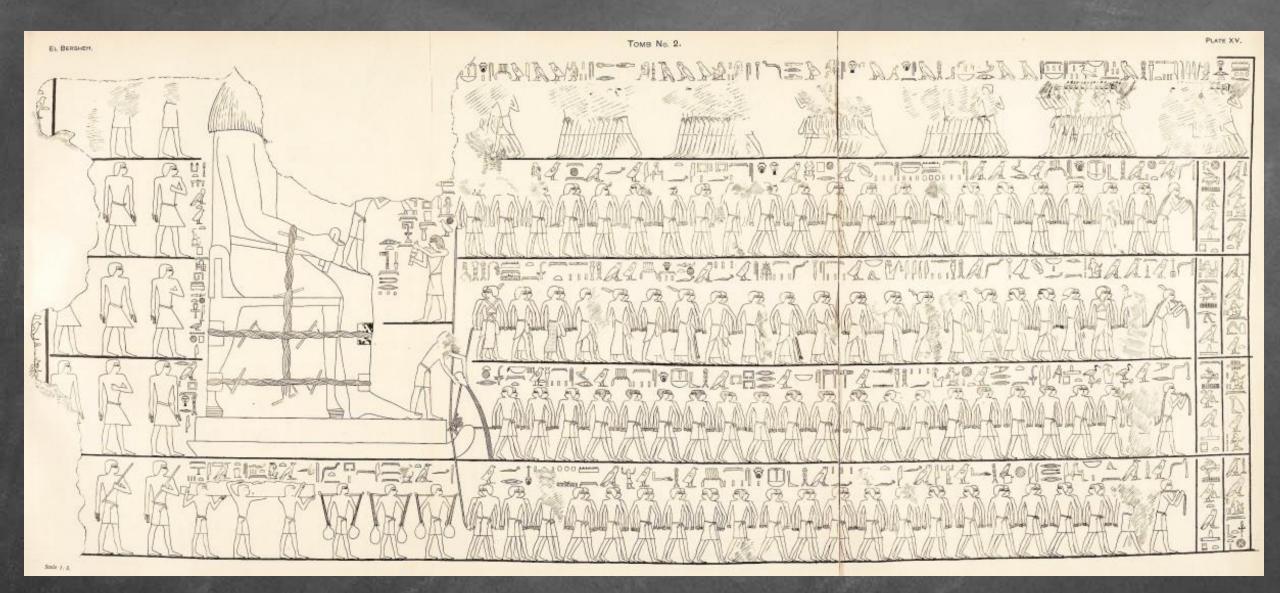
• Treating head wounds, from the Edwin Smith Papyrus:

"After you have stitched it, you should bind fresh meant upon it on the first day. If you find that the stitching of this wound is loose, you should draw it together for him with two strips of plaster, and you should treat it with fat and honey every day until he recovers."



• Who used this book? Why was this kind of knowledge prized and collected?





From the tomb of Thuthotep at Deir el-Bersha (Middle Kingdom)



The Siege of Dapur, after a mural on the temple of Ramesses II at Thebes

Body of Seqenenre Tao (ca 1550 BCE), with ax wounds



Body of Seqenenre Tao (ca 1550 BCE), with ax wounds





- Theoretically different than modern medicine:
  - Treats symptoms and not causes.
  - Lack of systematic verification of effectiveness.
  - Cultivation of plant remedies

- Vehicles for drugs:
  - Honey
  - Wine
  - Beer
  - Milk
  - Water/dew



- Minerals:
  - Natron
  - Salt
  - Malachite
  - Lapis lazuli
  - Gypsum



- Animal products:
  - Blood
  - Excrement
  - Urine
  - Placenta
  - Bile
  - Animal fat
  - Meat
  - Liver
  - Whole mice?
  - Ostrich shell?

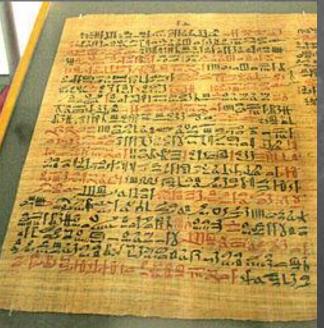


#### • Plants

- Barley
- Castor oil
- Cinnamon
- Coriander
- Fig
- Lotus
- Linseed
- Onion
- Pomegranate
- Papyrus



- Another major text, the Ebers Papyrus, contains a treatise on the blood vessels of the body.
- It was probably composed independently and is extracted in several places in Ebers.



- This treatise implies that the Egyptians had a conception of the circulatory system:
  - A series of vessels in the body called *metu*
  - These *metu* circulate throughout the body.
  - They all emerge from the heart.
  - They conduct air, blood, and water to organs and limbs.
  - They are all described, and some are given names (cp. "jugular").

- It was only with the Greek physician Galen in the 2<sup>nd</sup> century CE that only blood, not air, was believed to be carried by the circulatory system.
  - He opened a dog's artery under water.
- Why would the Egyptians think air was carried?
  - When dissecting a cadaver, the vessels open once pierced due to their elasticity



• An extract:

"There are four *metu* inside his two temples, which are behind it and which give blood to the two eyes. Through them occurs every sickness of the eyes because of the existence of an opening to the eyes. As for the fluid that descends from them, it is the iris of the eyes that gives it. It is otherwise said that sleep in the eyes makes it."

### Egyptian understanding of disease

- The Egyptians believed the *metu* circulated, in addition to blood, water, and air, a disease-causing substance called *wekhedu*.
  - A foreign substance that enters the body through food but does not exit.
  - It accumulates throughout the *metu* system.
  - It caused disease, aging, and death.



### The influence of Egyptian medicine

• The Egyptians discovered the pulse: it was the natural result of their view of the circulatory system.

"There are vessels in him to all his limbs. If any *sunu*, any priest of Sakhmet, or any amulet person places his hands or his fingers on the head, on the back of the head, on the hands, on the place of the heart, on the two arms, or on each of the two legs, he measures the heart because of its vessels in all its limbs."

## The influence of Egyptian medicine

- This not only antedates the "discovery" of the pulse by the Greek physician Herophilus (335-280 BCE):
- Since he worked in Alexandria, he probably studied Egyptian medical texts, and learned the concept from Egyptian priests.



# The influence of Egyptian medicine

- Our word "migraine":
  - From French *migraine*
  - Which is from Greek *hemikrania* "half-headed"
  - Which is a literal translation of the Egyptian term *ges tep* "half-headed"



### How does medicine relate to magic?

#### How does medicine relate to magic?

#### • "Magical" dimensions already discussed:

- The Egyptian word for "doctor"
- Priests and amulet people as physicians' assistants
- Amulets numbered among physicians' instruments
- What about drug therapy?
  - Ostrich shell?

### Magic: a rough definition

- A modern definition:
  - Activity that seeks a goal outside of the normal realm of cause and effect.
  - Non- or even anti-scientific.
  - Compare astronomy to astrology.
- How does this compare to what the Egyptians believed?

#### • Encircling

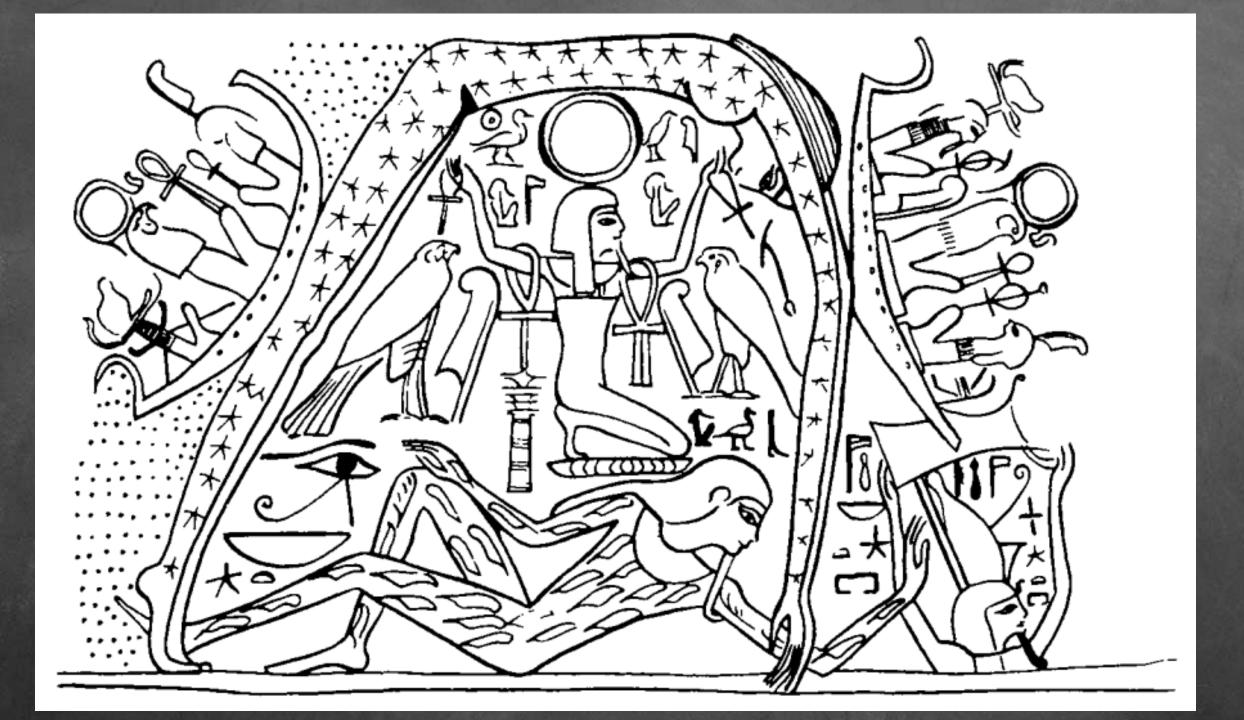
- The word for "spell" means "encircling" (*peheret*).
- The same word can be used for a medicinal remedy.

#### • Encircling

- Rituals often involved circumambulation and circular procession.
- Such activity delimited a sacred space.
- Examples:
  - The procession of a divine statue around a temple
  - A procession around the walls of a palace during a coronation
  - Using a staff to draw a circle in the dirt around the bed of a child

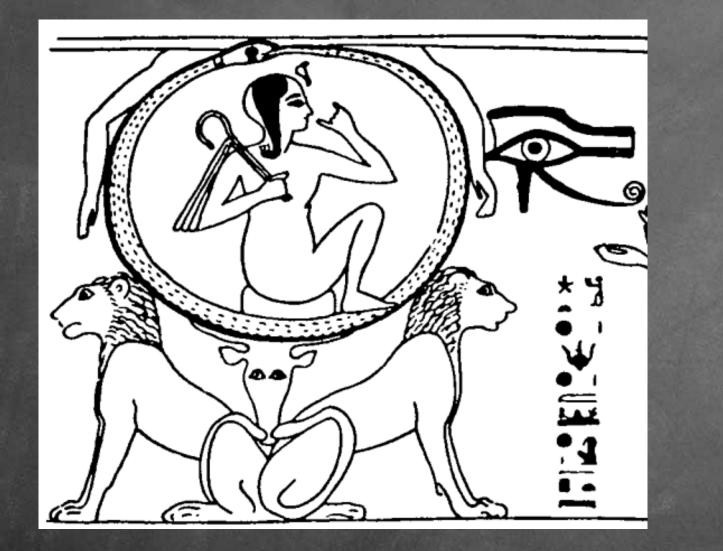
#### • Encircling has cosmological importance.

- The sun circles the earth.
- The deceased king, and later, anybody, would join with the sun after death.



#### • Encircling has cosmological importance.

- An eternal snake eating its own tail surrounds the world.
- This is the "ouroboros."
- His action of surrounding is one of protection and delimitation.





A gnostic amulet with scarab and ouroboros, with *voces magicae* 



"My head, my head," said Horus. "The half of my head, the half of my head," said Thoth. "Act for me, mother Isis and aunt Nephthys! Give me your head in exchange for my head, the half of my head!"

(Isis speaks): "Just as I have seen these people, so I have heard these gods saying to me on behalf of my son Horus: 'Let there be brought to me your head in exchange for my head.'

Let threads be brought from the edge of a garment, having been made into seven knots, placed on the left foot of [NAME] here. What is placed below will cure what is above, for I have elevated what the gods seek.

Adapted from Robert Ritner

Hail to you Lady of Hetepet! There is no restraining Seth when he has set his heart on conquering a heart in that name of his of "Beer," to confuse a heart, to conquer the heart of an enemy...

This spell is said during the drinking of beer; for spitting up. Truly effective, (proved) millions of times!

"The Unique One belongs to me as my servant! The Unique One belongs to me! My bread is in town, my portion of meals is in the field – bone, get right!" A man should say this spell over a cake, to be swallowed by the man in whose throat is the fishbone.

## Magical amulets

- The Egyptian word for amulet is *sa*
- This also means "protection."



### Magical amulets

- The material amulets were made of was often deliberately chosen, due to the symbolism of the material.
  - An amulet made of green stone in the form of a papyrus stalk was related to growth, flourishing, and fertility.
  - One made of a stone with a red streak (hematite) was used for treatments related to blood.
- Most often, the amulets were mini-images relating to their purpose, and were covered with spells that conveyed and effected their purpose.

Ushebti figurines (Oriental Institute)



"O ushebti, allotted to me, if I be summoned or if I be detailed to do any work which has to be done in the God's domain; if indeed obstacles are implanted for you therewith as a man at his duties, you shall detail yourself for me on every occasion of making arable the fields, of flooding the banks, or of conveying sand from east to west; "Here am I" you shall say."

Book of the Dead Spell 6



Heart scarab (Johns Hopkins University)





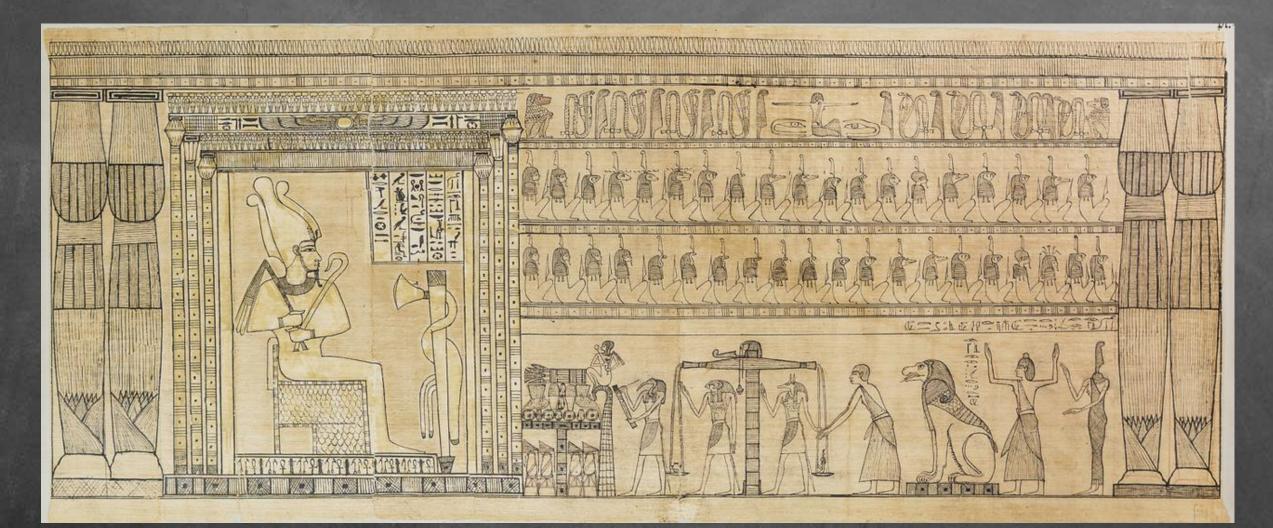
"O heart which I had from my mother, O my heart which I had upon earth, do not rise up against me as a witness in the presence of the Lord of Things; do not speak against me concerning what I have done, do not bring up anything against me in the presence of the Great God, Lord of the West....Not dying in the West, but becoming a spirit in it."

Book of the Dead Spell 30





#### From a Ptolemaic Book of the Dead (Oriental Institute Museum)



#### From a Ptolemaic Book of the Dead (Oriental Institute Museum)

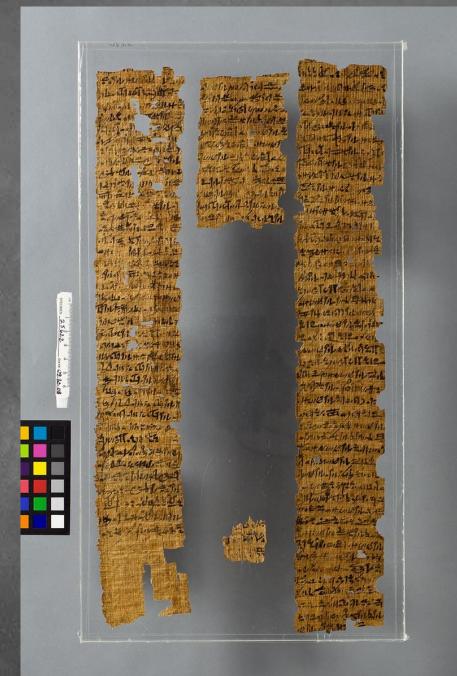


Horus cippus (Oriental Institute)





Oracular amuletic decree (Oriental Institute)

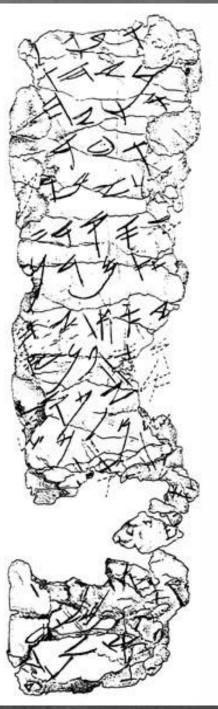


Oracular amuletic decree (Oriental Institute)



Apotropaic silver scroll (one of two) found at Ketef Hinom (SW of Jerusalem), ca. 700-650 BCE.





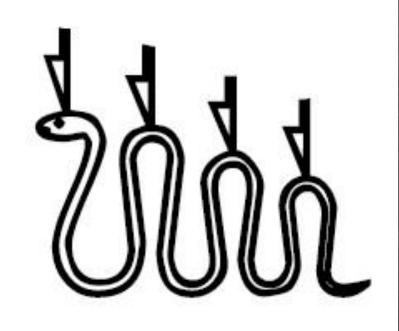
- - הברו (כ) - אניהו ר יה (ו) -- - בעה -- שיברכ יהוה ו (י)שמרכ יאר יה (רה) פניו (אל)יכ וי שמלך ש לו (מ) - -- - - - - -71-

# Magically symbolic acts

- Breaking
- Effacing
- Swallowing
- Making effective images
- Knowing names

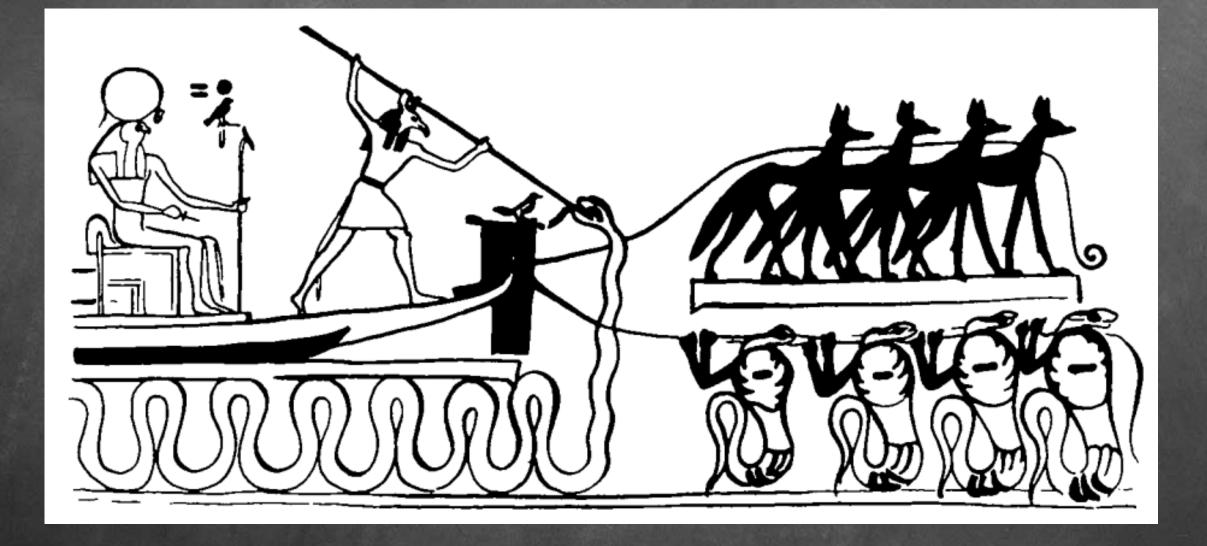


Apophis, The principle of evil





Apophis, The principle of evil





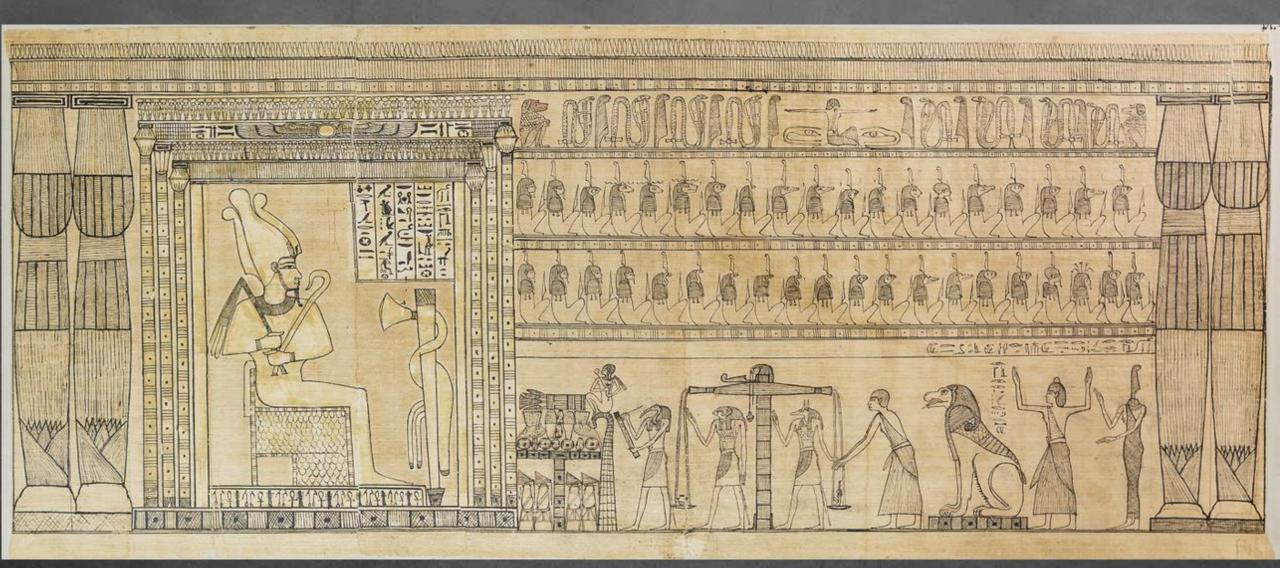
Stele with ears (Oriental Institute)



### The "Negative Confession"

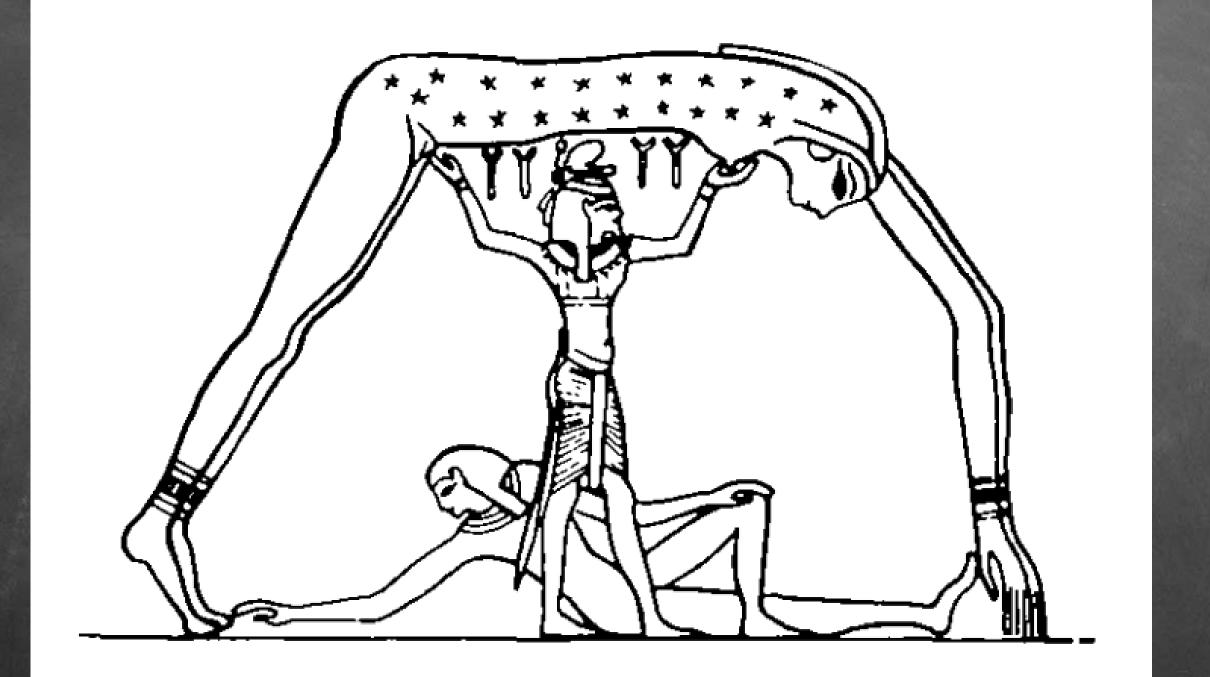
"I have not done crimes against people. I have not mistreated cattle. I have not sinned in the Place of Truth. I have not known what should not be known. I have not done any harm. I have not robbed the poor. I have not caused pain. I have not killed. I have not ordered to kill. I have not cheated in the fields. I have not added to the weight of the balance. I have not taken milk from the mouth of children.

I am pure! I am pure! I am pure! I am as pure as the great heron is pure. No evil shall befall me in this land, in this Hall of the Two Truths; for I know the names of the gods in it, the followers of the great God!" (from Book of the Dead 150)



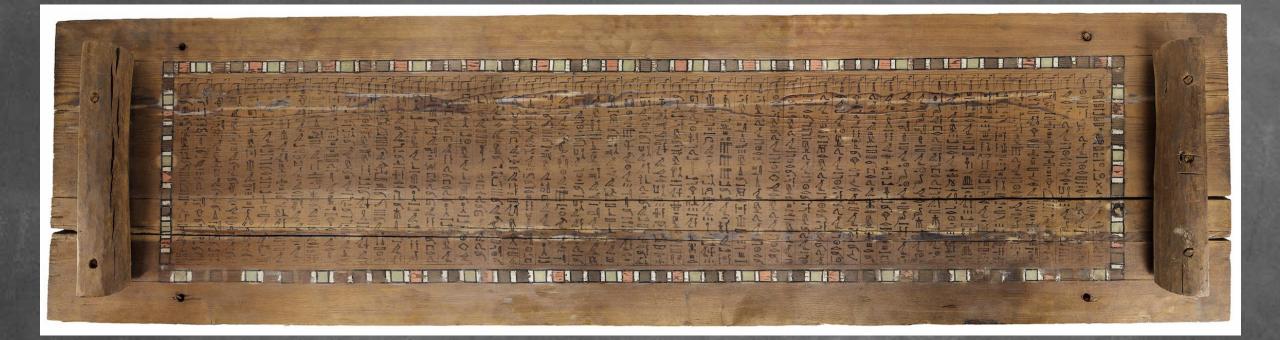
# Heka, the god of magic





## Heka and creation

• Magic "makes the world go round."



#### Coffin Text spells: an important source for the theology of Heka

(not pictured)

#### Heka in Coffin Texts

• Magic is the first thing created, and aided in the creation of everything else.

"His powers put fear into the gods who came into being after him, his myriad of spirits is within his mouth. It was Heka who came into being of himself, at seeing whom the gods rejoiced...who created the mountains and knit the firmament together."

#### Heka in Coffin Texts

- Magic is what allows images to be created, and thus what allows knowledge and understanding.
- Creating "doubles" or "images" is the essence of creation.

"O noble ones who are before the Lord of the Universe: behold, I have come before you. Respect me in accordance with what you know. I am he whom the Unique Lord made before duality had yet come into being in this land...when he put The Word upon his mouth."





## What is Heka?

- Magic is:
  - The animating force of the eternal recurrence of the cosmos.
  - The principle of doubling and source of all images.
  - It is the "energy" that connects the source of existence (the creator) with everything that is created.

## What is Heka?

- If this is what the god Heka is...what is "everyday" magic?
- Essentially: harnessing the "energy" of the universe as embodied in the god Heka. The Greeks called this "theurgy."
- Examples:
  - Image making
  - Effecting cause through spells using the rules of association
  - Invoking mythological precedent for healing

#### What is Heka?

• In sum: magic is the power of repetition and recreation, "the power of effective image making" (Robert Ritner).

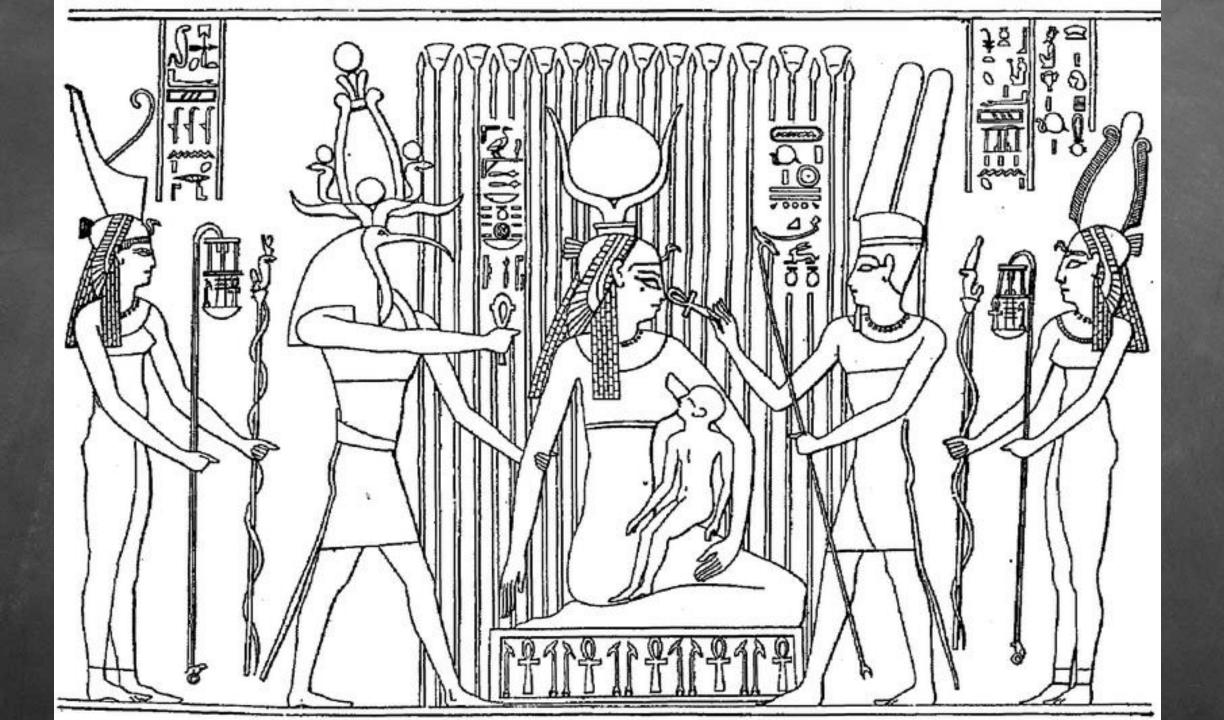
## Compared to our earlier rough definition?

#### • In general:

- Activity that seeks a goal outside of the normal realm of cause and effect.
- Non- or even anti-scientific.
- Compare astronomy to astrology.
- The Egyptians only had **ONE** system of cause and effect, and magic/Heka was used to explain both "natural" and "unnatural" activity.

Isis nursing the infant Horus (Oriental Institute)





"I am Isis, who had conceived her baby and was pregnant with divine Horus. When I had given birth to Horus, Osiris' son, within the nest of Khemmis, I became agitated over it very much...

"When I returned to look for Horus, I found him, young and golden, a helpless and fatherless child, having wet the shores with the waters of his eye and the spittle of his lips, his body inert and his heart languid, and the vessels of his body not beating.

"I let out a wail, saying, 'It is I, it is I!' But the child was too weak to respond. My breasts were engorged and his belly empty, the mouth needing its thing. The well was brimful and the child thirsty, and my intention was to come to his aid, for he was greatly injured, but the child was helpless and refused the milk jug, having been left along too long.

"... When Isis put her nose in his mouth and discovered the smell there as that of one within his sarcophagus, she recognized the illness of the god's heir, having found him to have poison. She embraced him very, very quickly, jumping around like fish thrown on a frying pan: 'Horus has been bitten, Sun. Your son has been bitten...

[Spell:] "Retreat, poison! Look, you are enchanted by the mouth of Isis and the tongue of the great god has barred you. The boat is stopped and will not sail and the sun disk is where it was yesterday, until Horus gets well for his mother Isis, until the afflicted gets well for his mother as well."

#### "Milk of a woman who has borne a male child"

- Frequently used in Egyptian medical remedies.
- Found in Greek medicine: the Hippocratic Corpus, Pliny, Dioscorides.
- Found in British herbal remedies from the 12<sup>th</sup> to the 17<sup>th</sup> centuries.

Post-Egyptian uses can only be understood as relating to the Egyptian origin, which is based on the Isis myth.





