

The Beginnings of Beer in the Ancient World: Greece

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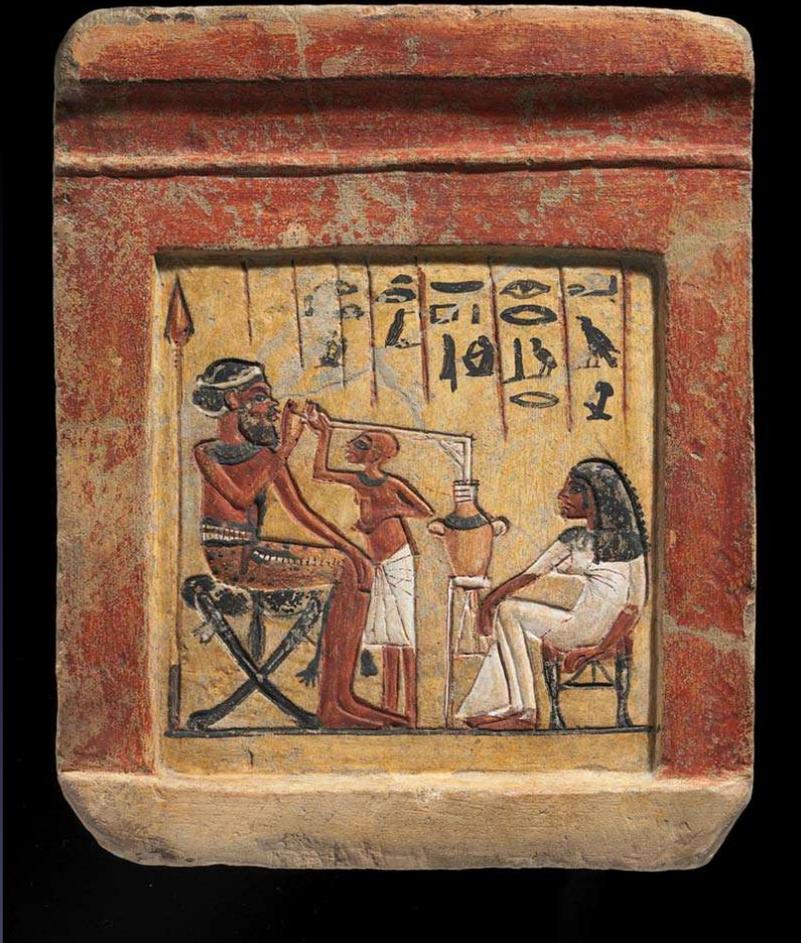
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Barley for Beer

- One of the first alcoholic drinks in the Neolithic Period (c. 6000 BC).
- Barley as currency
- Staple cereal of ancient Egypt
- Residue tests indicate barley beer in Sumeria by 5000 BC
- Sumerian Tablet depicting process c. 4000 BC
- Listed in Egyptian grave goods c. 2650-2575 (Tomb of Hekherebau)
- Oldest recipe, Sumerian poem honoring Ninkasi (1900 BC)
- *Epic of Gilgamesh* (18th century)



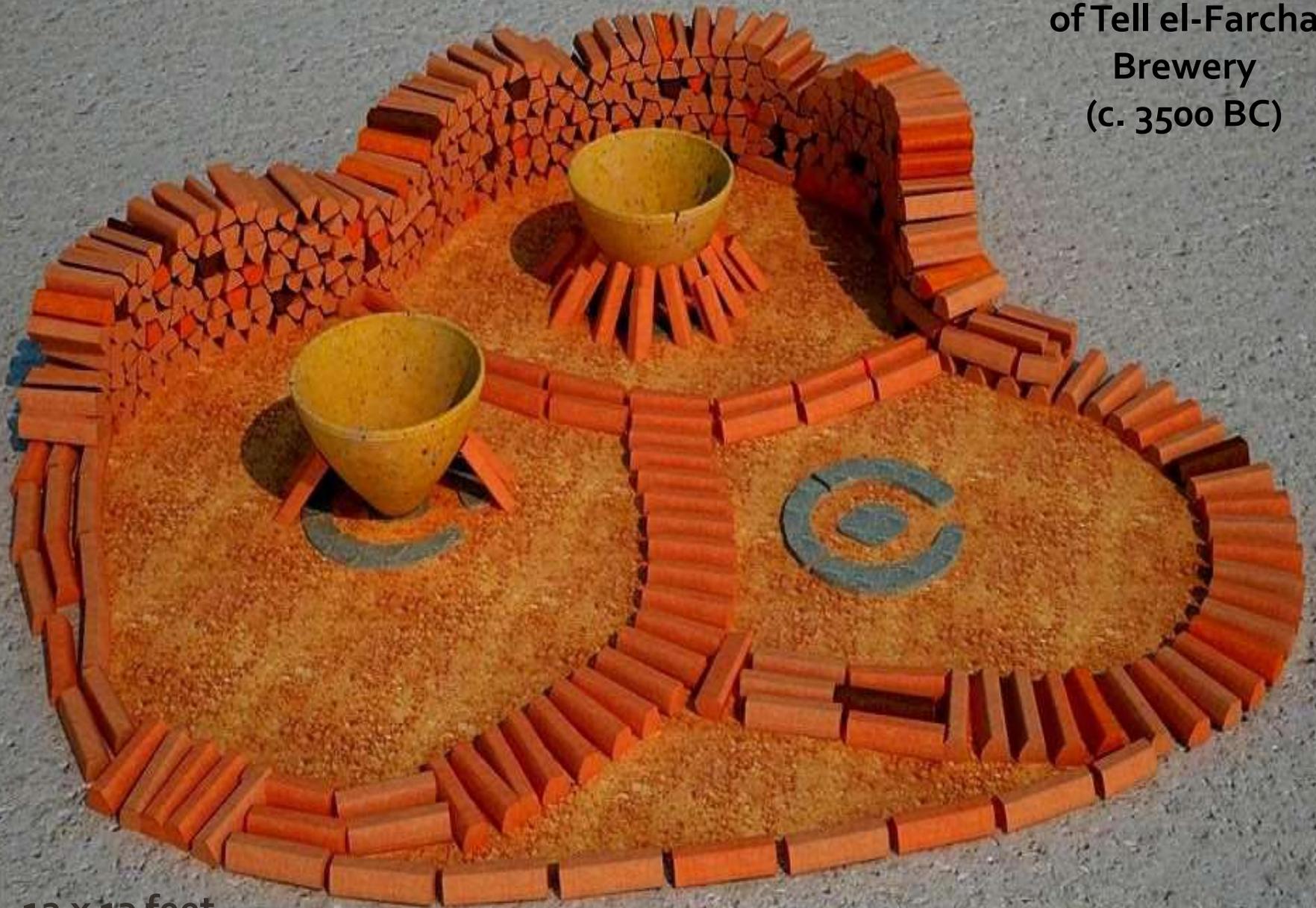
Funerary stele from el-Amarna (c. 1350 BC)

Tell el-Farkha: (3600-2600 BC)



Rise of the Brewing Industry: Egypt

**3D Reconstruction
of Tell el-Farcha
Brewery
(c. 3500 BC)**



12 x 13 feet

Mediterranean Sea

Gaza

Buto

Mendes

Minshat Abu Omar

Kom el-Hisn

Lower Egypt

Avaris (Tell el Daba)

Tell el-Mukdam

SINAI

•Siwa Oasis

Kom W. • Kom K

Upper Egypt

Bahriya Oasis

•Tell el-Amarna

•Badari

Abydos

RED SEA

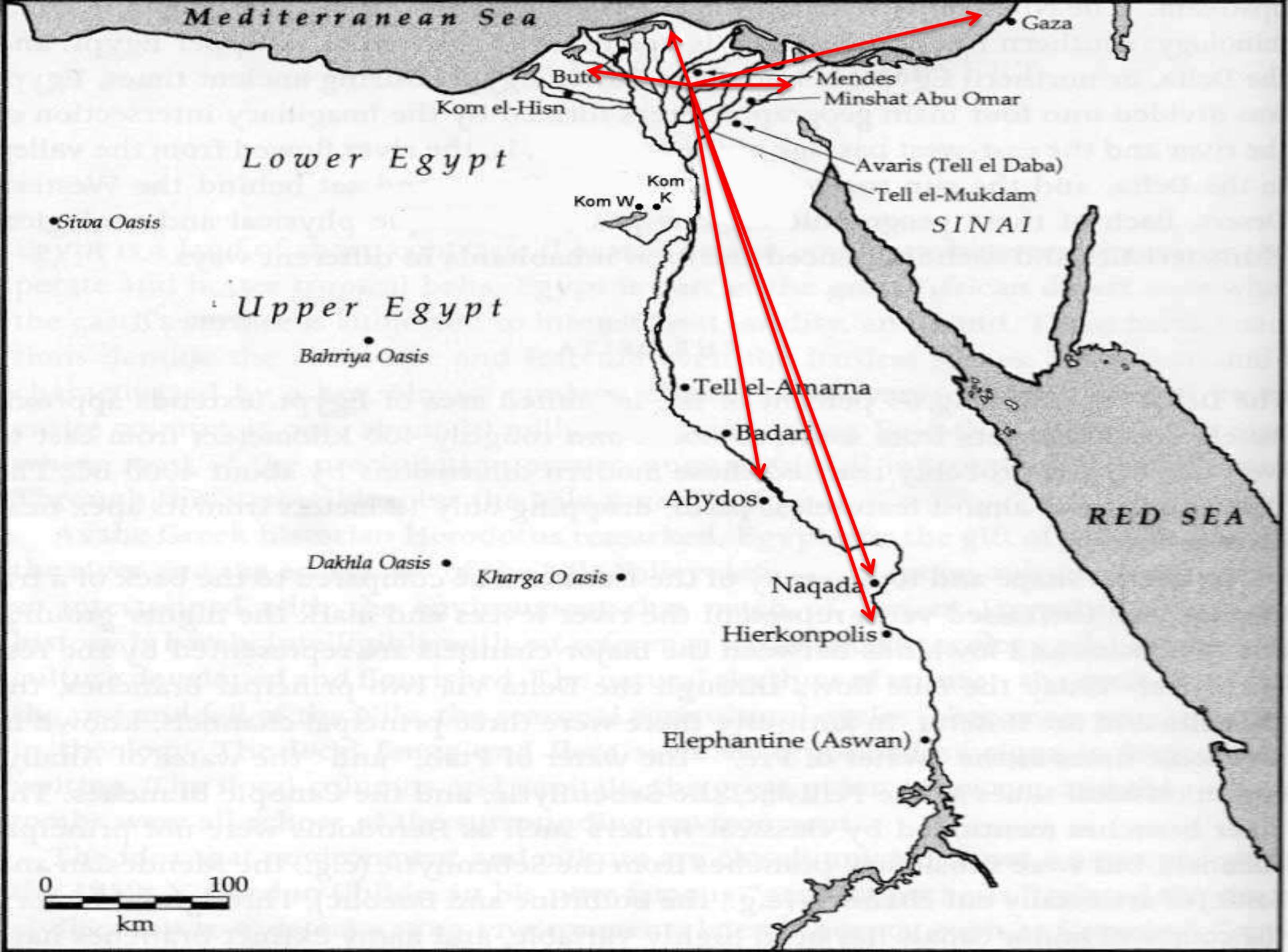
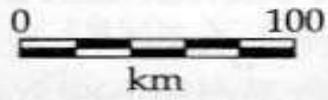
Dakhla Oasis •

Kharga Oasis •

Naqada

Hierkonpolis

Elephantine (Aswan)



ROMAN BREWING?

Pliny the Elder (AD 23-79)

"A particular intoxication..."
(*Nat. Hist.* 14.29.149)

Roman benefits of beer?

*...lactis potus ossa alit, frugum nervos,
aqua carnes (23.22.37).*

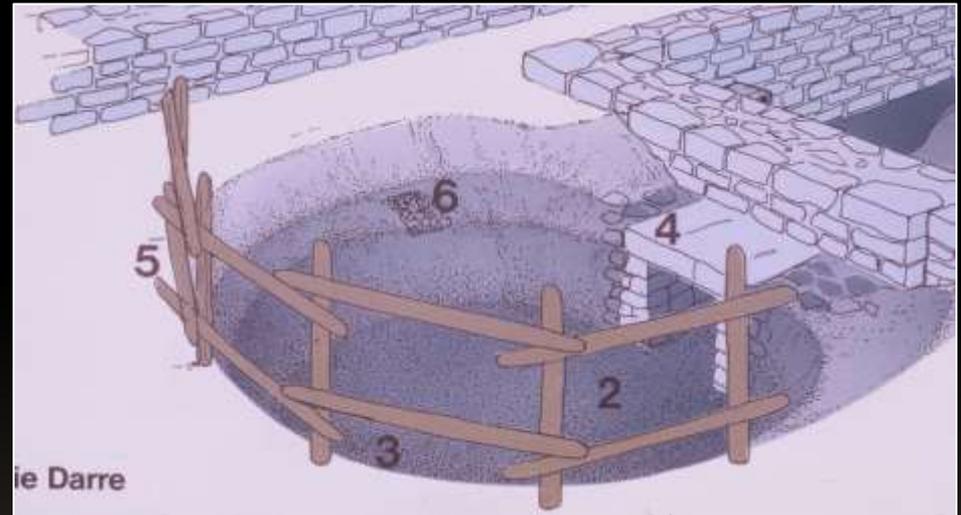
*...quorum omnium spuma cutem
feminarum in facie nutrit (22.82.164).*



Floor Malting Born in Europe – AD 179



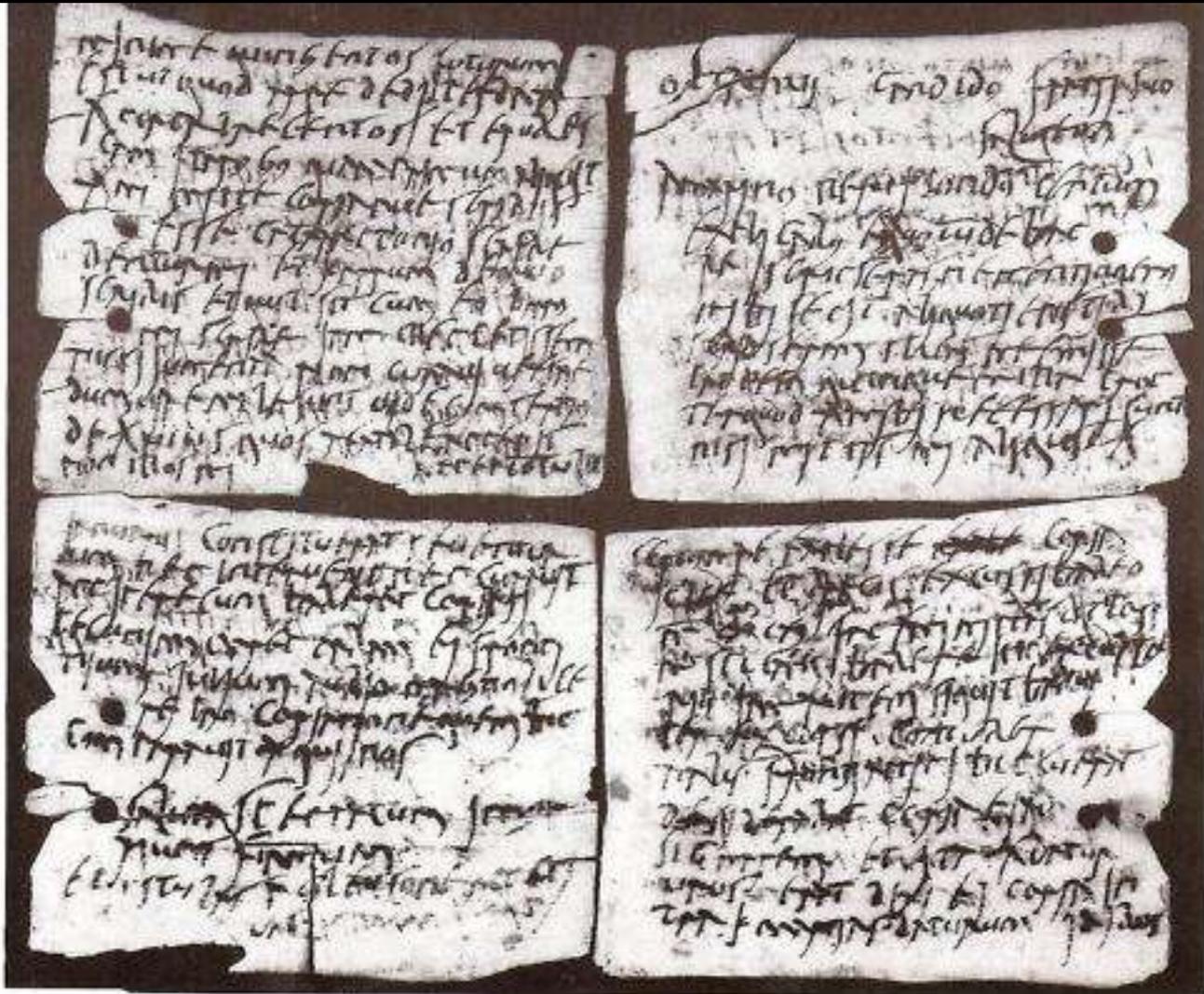
Roman Ruin in Regensburg, Germany: The oldest known Malt House in the world (constructed AD 179)



Above: Reconstruction of the furnace for the kilning floor at Regensburg

Left: reconstruction of a medieval chimney, much like the one that would have covered the furnace pit at Regensburg

Beer Rations for Soldiers



343 182 x 79 mm., 179 x 79 mm.

Letter c. AD 100

Decurion Masculus to
prefect Flavius Cerialis:

*Cervesam commilitones
non habunt quam rogo
iubeas mitti.*

Atrectus the
cervesar[ius]?

Birth of beer styles and the cost of a pint...

Diocletian's Tax Reforms and the Cost of Production (AD 284-305)



*Bust of Diocletian
r. AD 284-305*

- Different terms for different beers?
 - *Cervesia* = Celtic wheat beer
 - *Camum* = Celtic barley beer
 - *Zythum* = Egyptian beer
 - *Sabaia* = Beer of Illyricum

- An Italian *Sextarius* (Pint)
 - Celtic beers = 4 denarii
 - *Zythum* = 2 denarii
 - Cheapest wine = 8 denarii

- 1 Denarius = a skilled laborers daily wage.

Traditional View for the Spread of Beer

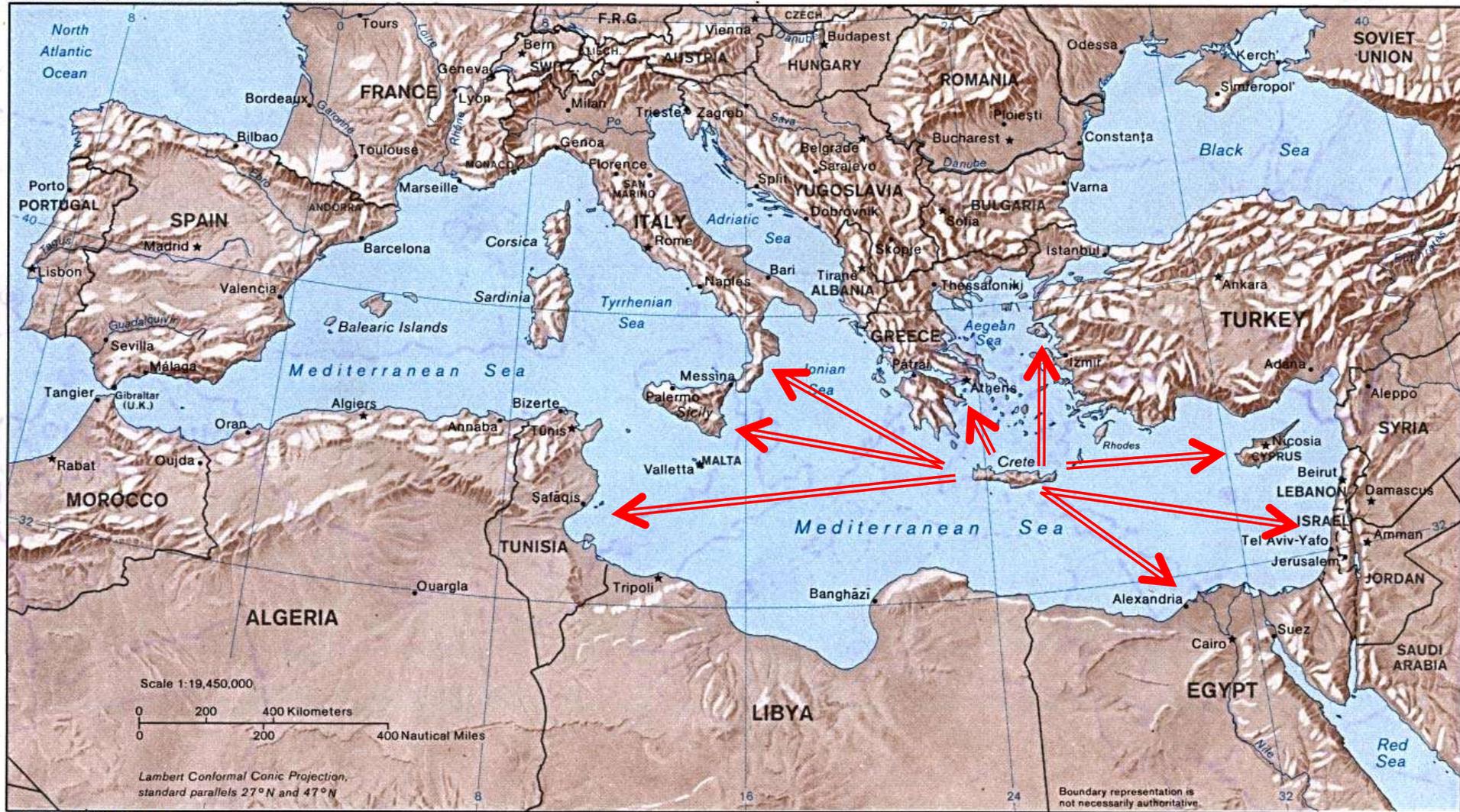
1. Sumerians taught Egyptians
 1. Egyptians taught Greeks
 1. Greeks taught the Romans
 1. Romans taught the “savage tribes” of Britain
- Pliny and Tacitus attribute the development of the “brewing art” to Celtic and Teutonic people of Britain and Central Europe.



Publius Cornelius Tacitus (AD 56-117)

Bronze Age Brewing

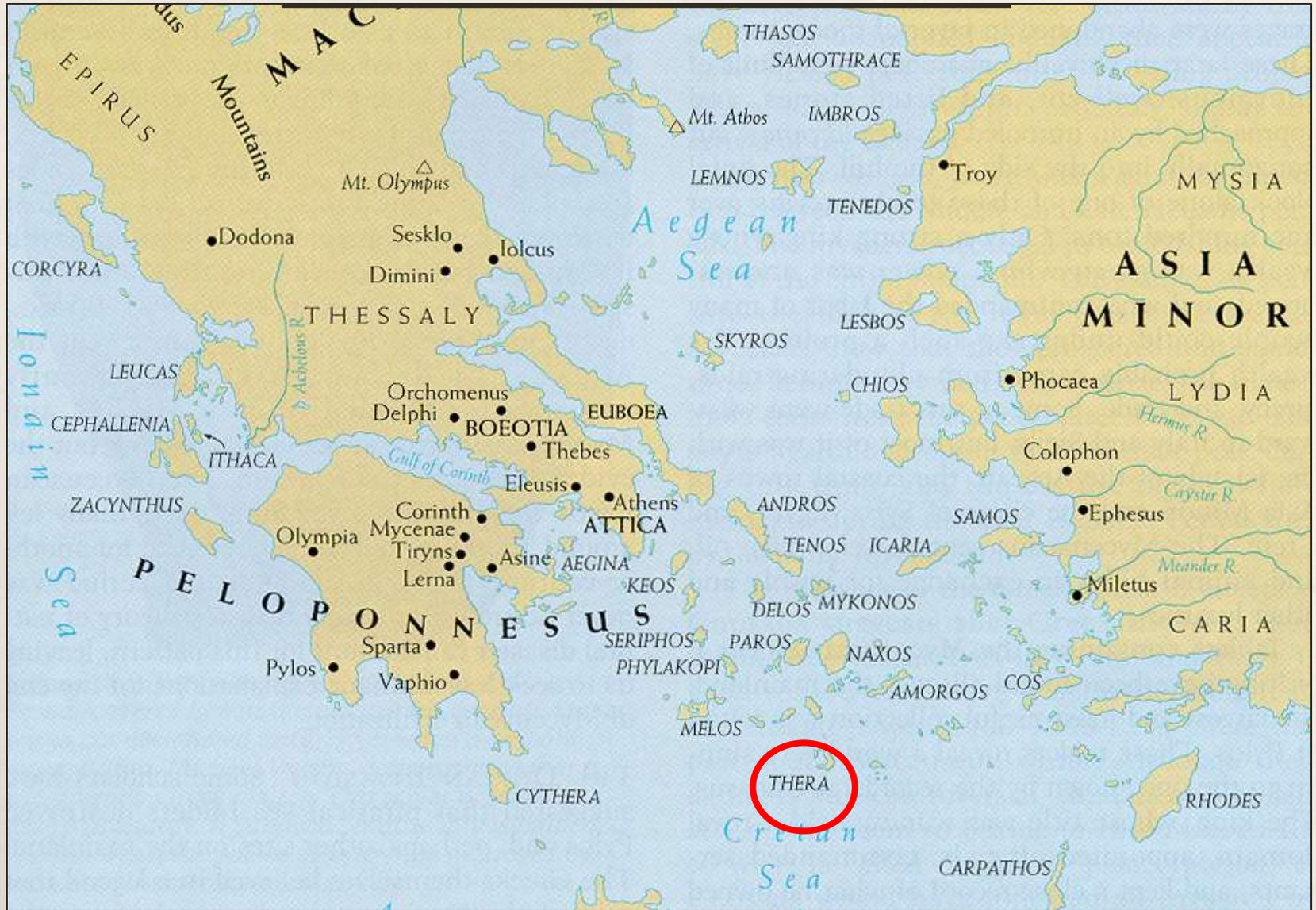
The Mediterranean Basin



505327 (A00849) 11-82

Beer in Minoan & Mycenaean Culture

Thera and Akrotiri



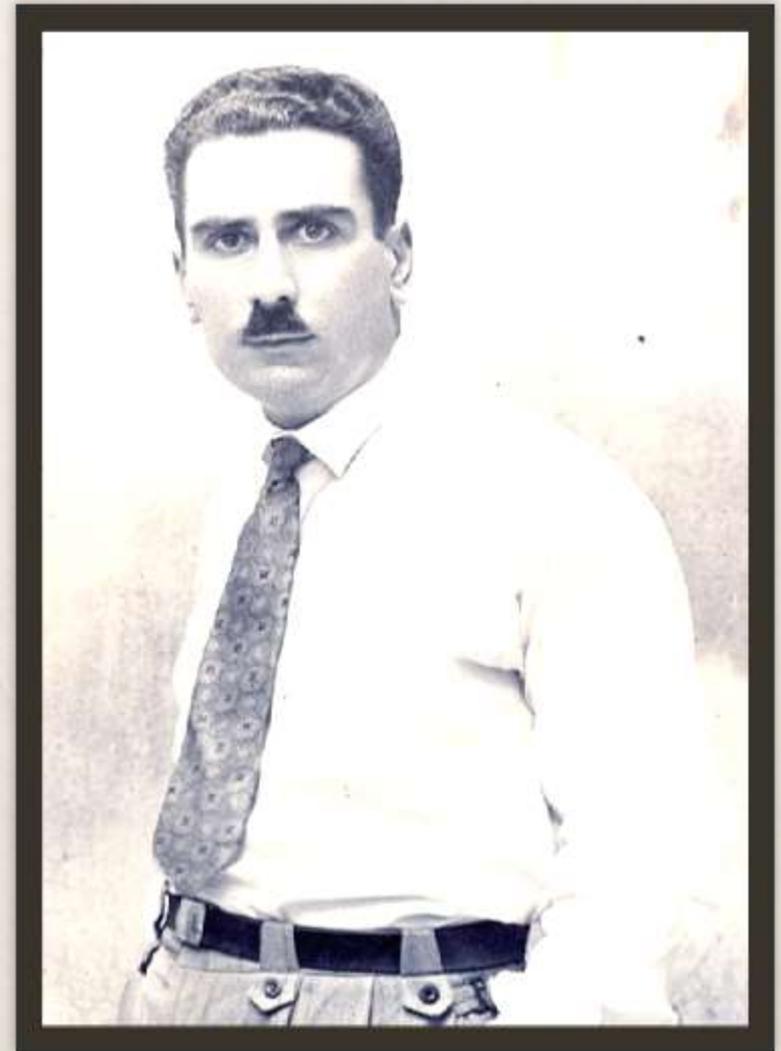
The “Minoan Pompeii” c. 3000-1450 BCE



Spyridon Marinatos

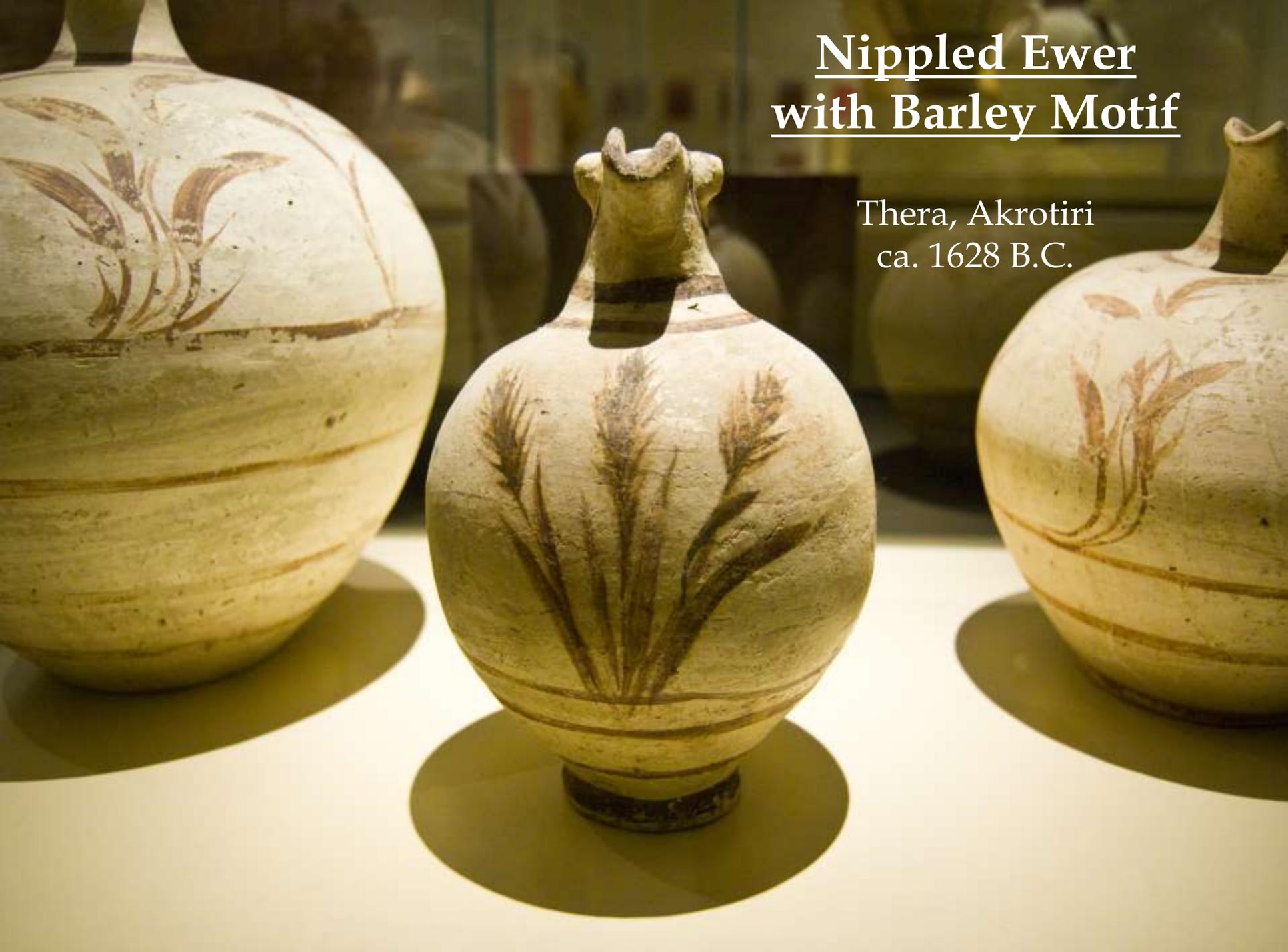
1901-1974

“...we found a small broken pithos in the bottom of which there was found this substance which we arbitrarily called flour. When the vase was found this substance in the bottom, about 5-8cm. thick, was found in shrunken state, and the side walls of the vase did not touch it. Under the influence of heat, dryness, or both, it had lost part of its original mass. Examination under a strong lens showed that the substance was in fact barley flour which had been very imperfectly ground. The farina had disappeared but the bark part of the barley grains could still be seen in the form of thin needles or small straws. Some grains of barley that had slipped through the millstone were found intact. It was evidently not perfect flour, but coarse and something like the homeric *ουλοχραι* employed in the sacrifices.” - 1968



Nippled Ewer
with Barley Motif

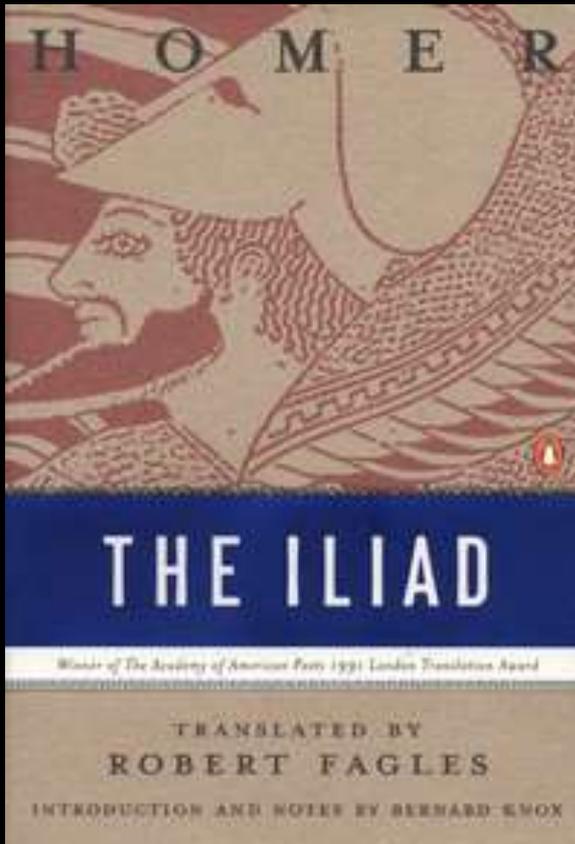
Thera, Akrotiri
ca. 1628 B.C.



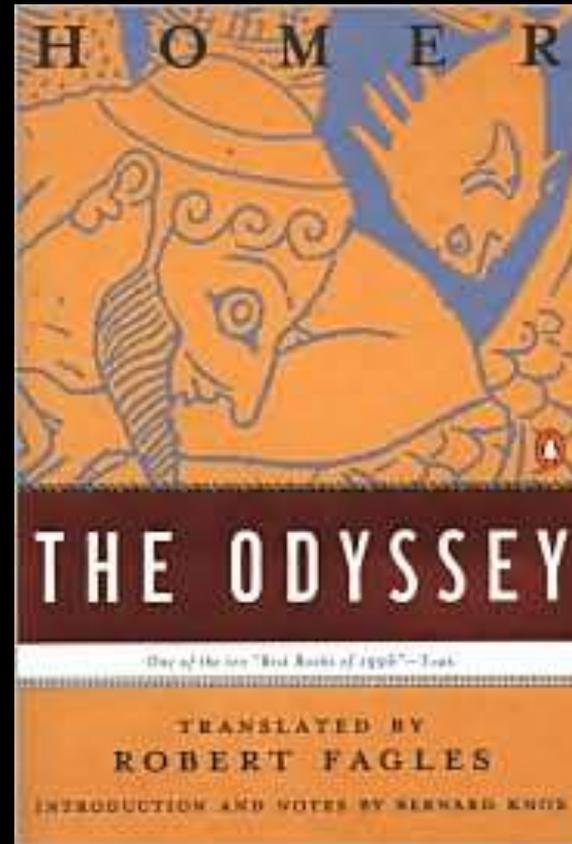


Homeric Beer: κυκέων

c. 8th cent. BC



Iliad - 11.624, 638-41



Odyssey - 10.234-36, 290,
and 316-317

βρῦτος or βρῦτον (7th-4th cent. BC)

- Greek word = “brewed beverage”
- not a Thracian word
- τὰς κριθὰς ἐς τό πῶμα καταλέουσιν
 - *they grind barley for a drink*
- Egypt and Thrace



Mycenaean Beer

Archaeobotanical evidence of Prehistoric Greece – Papathanasiou 2015

Lentils
Peas
Bitter vetch
Emmer
Einkorn
Six-row Barley
Two-row Barley
Grass peas
Horsebeans
Blackberries
Cornelian cherries
Pears
Elderberries
Figs
Almonds
Acorns
Olives
Wild grapes
Domesticated Grapes



Megaron of "Nestor's Palace"
Pylos – c. 1300 BC

Ancient Greece

as early as 1600-1100 BC (Mycenaean Culture)

Homeric Hymn to Demeter

(lines 206-209)

τῇ δὲ δέπας Μετάνειρα δίδου
μελιηδέος οἴνου πλήσασ'· ἢ δ'
ἀνένευσ'· οὐ γὰρ θεμιτόν οἱ ἔφασκε
πίνειν οἶνον ἐρυθρόν· ἄνωγε δ' ἄρ'
ἄλφι καὶ ὕδωρ

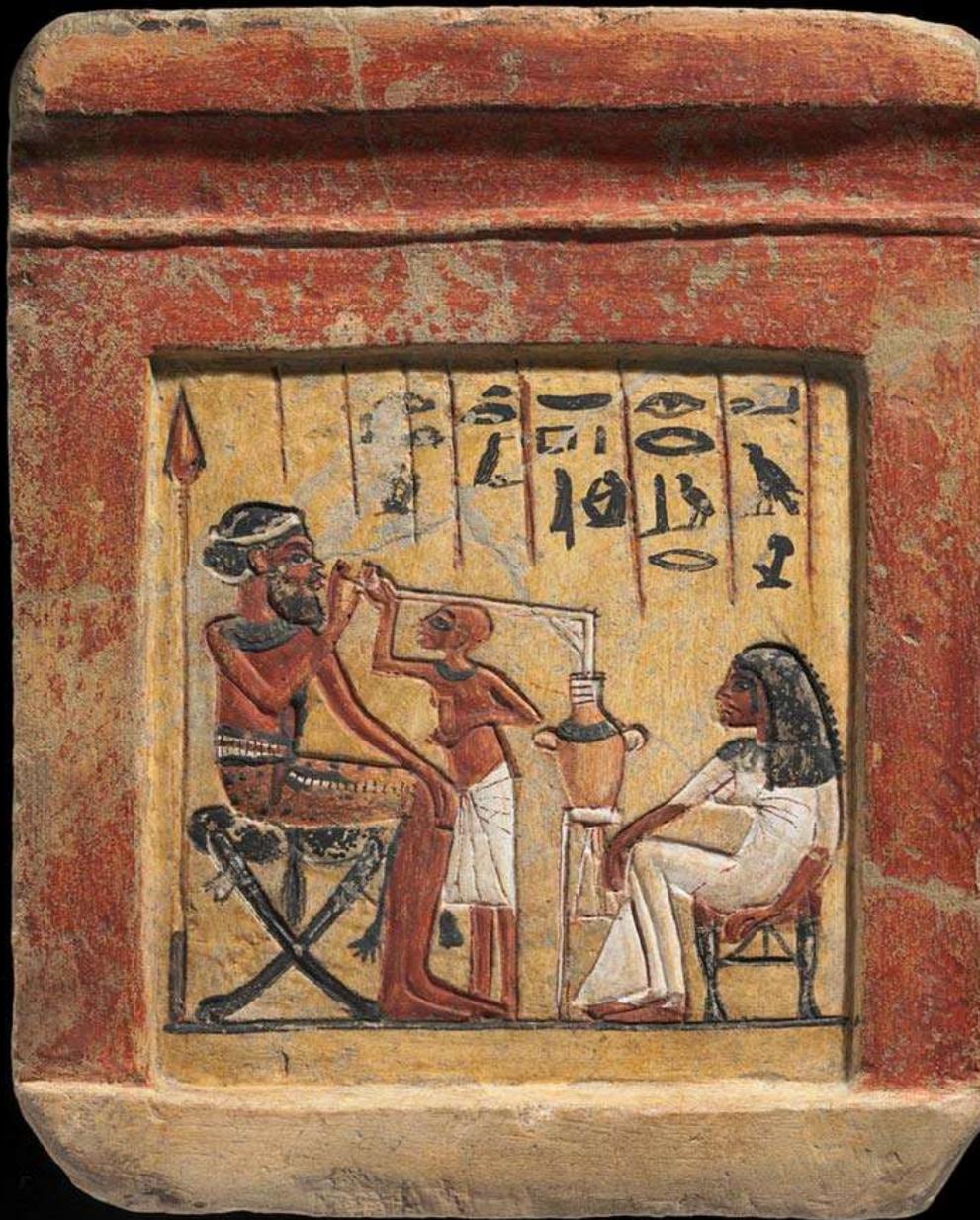
δοῦναι μίξασαν πιέμεν γλήχωνι
τερεῖνῃ.

- Eleusinian Mysteries: *Kykeon* = mixed drink of barley and herbs
- Demeter = “Barley Mother”



Demeter, enthroned and extending her hand in a benediction toward the kneeling Metaneira, who offers the tribute wheat – a reoccurring symbol of the Mysteries (Varesse Painter, Red Figure Hydria, c. 340 BC, Apulia)

He says
“...barle
on top,
larger c
Whene
in his m
one pol
the one



*itself was
ds, some
joints.
ake these
g unless
y good to*

4.5.26-27

Funerary stele from el-Amarna (c. 1350 BC)

Thracian, Phrygian, Egyptian?



Archilochus, Hellanicus, Hecataeus, Aeschylus, Herodotus, Galen (Roman)