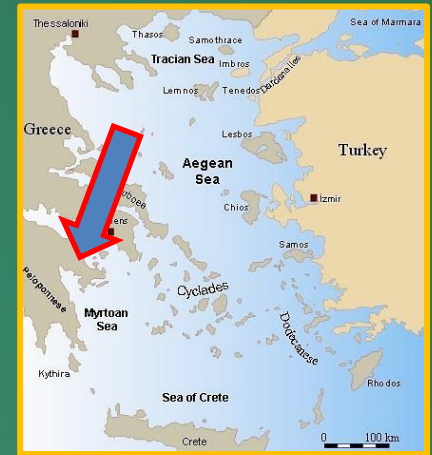


Upper (Late) Paleolithic/Mesolithic

40,000 YA to about 8,000 YA



Franchthi Cave



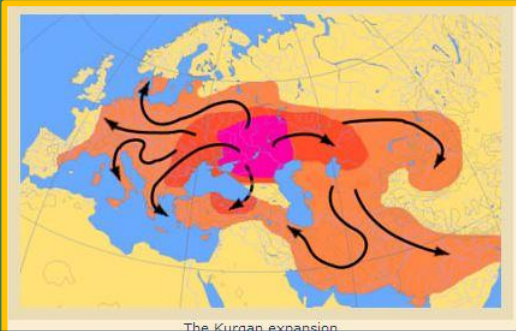
Tuna, a deep sea fish, was a major source of food around 9,000 to 10,000 YA.

Hunter gatherers were moving all around Europe, depending on ice and climate; 40,000 years ago, Europe was still cold. Franchthi Cave is one of many in Greece that were used by Paleolithic/Mesolithic people, principally for processing food/meat. It faces the Argolic Gulf across which is part of the Aegean Sea; in the Mesolithic, the cave was over one mile from the sea, rising sea level has changed that. Occupation continued to 5000 years ago.

There are nearly 36 feet of deposits containing human food and tools. Careful burials were begun at least in the Mesolithic, (around 11,000 to 7,000 YA) and continued until the cave was no longer used.

Obsidian from the Island of Melos or Milos, 116 miles away by sea, is found at the cave as well. Obsidian is found in many human spaces around the Mediterranean, and when seen in large amounts, signals a move into early “urbanism”, widespread trading, and societal changes along with the beginning of agriculture. (E. Frahm et al, 2021, chapter in a book on Sourcing Obsidian.)

How did they Become Greek?



The Kurgan expansion

Kurgan expansion: moving South 6,000 YA.
From the steppes via Conquest. Shares some possible origins with Greek language.



Anatolian Hypothesis: collaboration through agriculture or unrest in Asia Minor pushed migration, as much as 9,000 YA.

The Paleolithic Continuity: Modern Humans migrated out of Africa in Early Paleolithic several times. From perhaps 54,000 YA through 40,000 YA, modern humans eventually had spread through most of Europe. By the end of glaciation (8,000 to 6,000 YA) Neolithic humans were well established farmers, settlements, proto towns, and had already begun to develop unique Indo-European languages.

The very long occupation history of Franchthi Cave is an example of modern humans as hunter-gatherers moving into areas of good hunting and fishing and then returning as they began to settle And move into agriculture.

It is fairly likely that that it was not one human migration or action, but more than one and more than one group, affecting language and culture, making it uniquely Greek by at least 3700 YA.

This singular ancient culture fascinates us because it provided systems of Philosophy, law, literature, science, art and architecture that have permeated nearly every aspect of Western Civilization.

Agriculture and The Island of Imbros

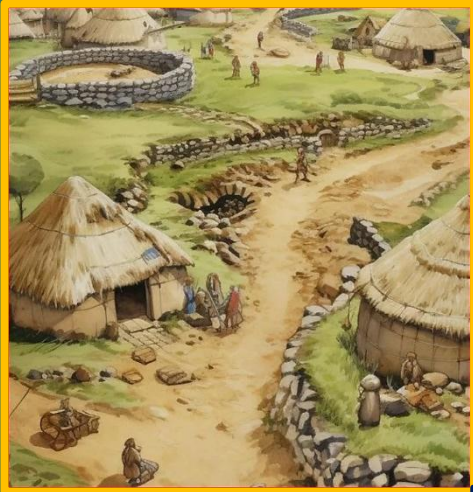


Imbros is a Turkish (once Greek) island in the Aegean; its Turkish name is Gökçeada. Located near the Anatolian peninsula (Turkey), it is believed to be the source of agriculture for the Aegean, Crete, Greece, and Europe either through contact or migration or both.

Reported this month is the discovery of a farming village about 8800 Years old at Imbros; the homes had stone foundations. The farmers cultivated wheat, barley and peas, and had pigs (at the early Point of domestication), sheep, cattle and goats.

Both Crete and Greece may have had agriculture by this time as well, suggesting that it was widespread and being enthusiastically embraced. It had likely originated on a small scale by at least 10,000 years ago in the Middle East in this part of the world. The human world was changing *rapidly*.

Why is agriculture so important to human cultures?



Funerary statue of a dog. Natl Mus. Athens, 2400 YA

Grain growing for this part of the world likely began in the Middle East at least 12,000 YA, then arrived in Greece around 9,000 YA, with domesticated sheep and goats around the same time. Donkeys perhaps 4500 YA. Horses, expensive and highly prized, arrived perhaps 3800 YA. Earliest *verified* presence of dogs was around 5,000 YA. Cats Were present about 2400 to 2500 YA.

Agricultural studies (grains, vegetables, fruits, animals) seem boring to us now, but without it we would not be here as we are, in the present. It was a “profound and dramatic change” to human life. In some fruitful areas around the world, hunter gatherers already had settlements, in other areas people still migrated for a successful hunt and for fruits and vegetables in season. Did the settlements push the need for agriculture? Did women notice that spilling a few grain seeds outside a hut, brought a small crop?

As population grows and people meet, new ideas for art, agriculture, survival, music, healing, religion, new weapons, occur exponentially.

Neolithic Greece: 9,000 to 5,000 YA



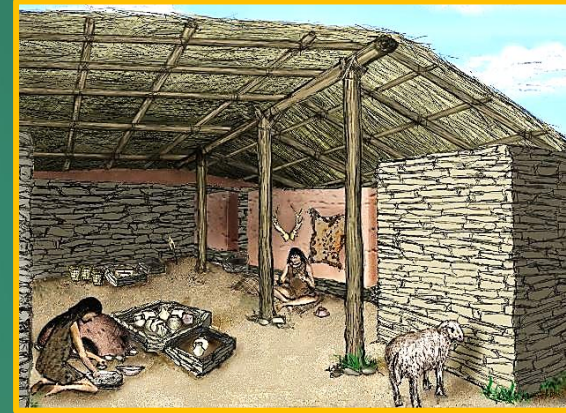
Franchthi Cave
8500 YA



Franchthi Cave
7500 YA (Correct date?)



Archaeological Remnants of Dimini 6,800 to 6,500
YA, about 270 miles north of Franchthi Cave.

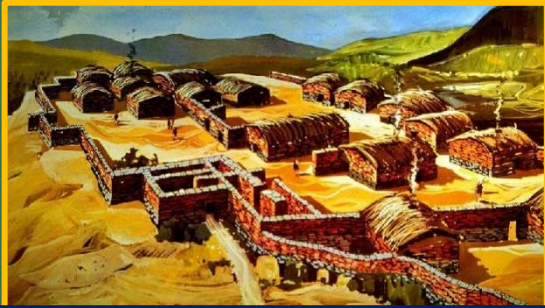


House 33, Dimini

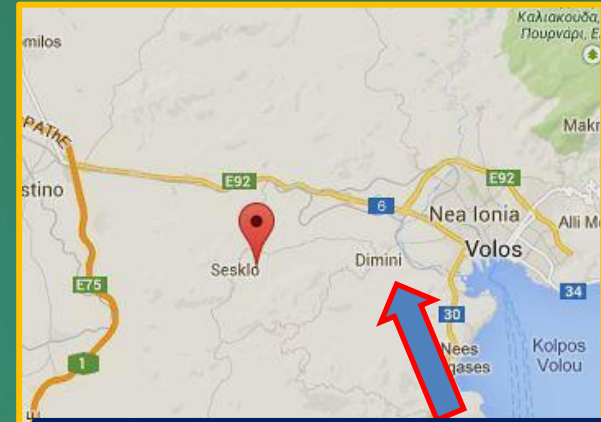
The Neolithic (9,000 to 5,000 YA) was a time of change for humans on the Grecian peninsula. Agriculture, also known as the Neolithic Revolution, may have begun in Greece somewhere around 9000 years ago *and is believed to be the earliest in Europe*; Anatolia seems to have been even earlier in agriculture, did migrants from Asia Minor bring farming or domestic grains? Or was it simple contact between groups in Greece and people in Asia Minor? The weather was warming, and settlement and agriculture was occurring globally.

From this grow settlements, villages, eventually population increases, art and crafts take on importance, and pottery begins. Dimini pottery is found elsewhere in Europe, suggesting many trade connections existed. There were many Neolithic Villages and one may be underwater at Franchthi.

Neolithic Sesklo



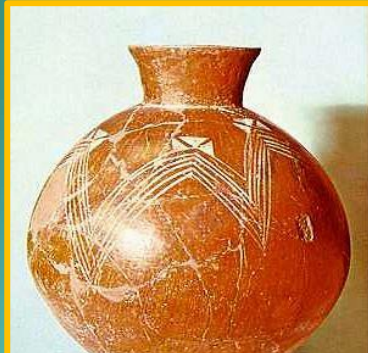
The settlement's inhabitants used a larger number and variety of stone tools than in the early Neolithic, including tools made of obsidian imported from the island of Melos. Barter, contact, idea exchanges.



Dimini at Arrow, Sesklo at red Symbol. Athens far south.



Woman nursing child
5000 to 6500 YA



Sesklo vase, 7300 to 5800 YA
Museum of Volos, Greece



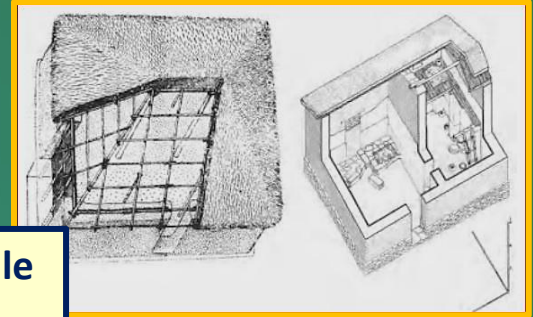
Pottery workshop Sesklo; why
Is it important?

Sesklo was first inhabited about 9,000 years ago; initially preceramic peoples. By about 7000 YA it was flourishing with up to 500-800 homes. Was it the first agricultural center in Europe? First planned town in Europe? Obsidian from Melos Island found. Sesklo is older than Dimini. The pottery of this period is used to date the different phases of the Middle Neolithic period, and demonstrates increasing sophistication over time

Moving into the Neolithic



Peloponnese



Early Neolithic and Middle Neolithic homes; approx. 9500 YA to 7500 YA



Village of Sesklo, 7500 YA to 7,000 YA, stone foundations.

Now that you have been convinced that settled, agrarian life is more stable and productive than just hunting and gathering, where do you find suitable land? Greece has about 14% arable land, somewhat similar to the US, which has around 16%. (the US is about 75 times larger than Greece.) Thessaly (which also includes sea access for fishing), Macedonia, Thrace (NE of Macedonia) and the Peloponnese all have the most arable land and likely already contained settled hunting, fishing and gathering villages. Currently the earliest state level cultures and city states are believed to be those found in the Peloponnese. Note that Greek distances are very small: it is about 132 miles from Athens to Sparta.

Grecian Landscape

Three quarters of Greece is Mountainous, with less arable land than some other regions. Mediterranean Climate, with often low precipitation. Grapes and olives do well, so wine and oil have been exports for millennia. Rugged Mountains and steep valleys made transportation and road building difficult In ancient Greece.

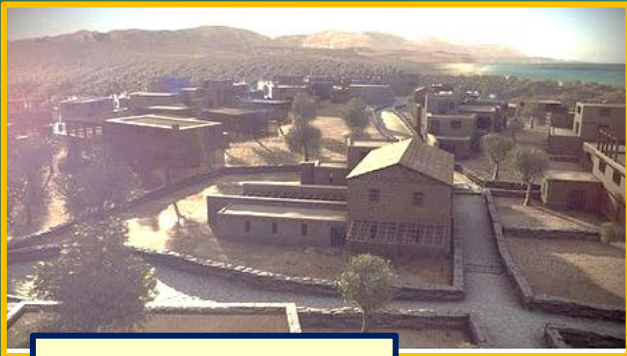
The sea supports Greece, as the Nile had supported Egypt.

Northwestern Greece once had some Post glacial mountain forests, but by 4000 years ago, humans had removed them during Neolithic farming activity, leading to the open grasslands of modern Greece. Forests have been coming back again, but Greece has recently been devastated by widespread wildfires blamed on climate change.

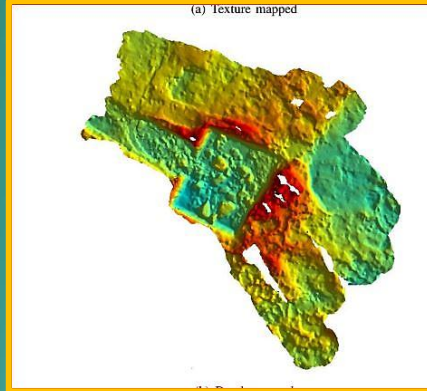


These mountains played a part in some Of the isolation that led to distinctive City states in classical Greece.

Pavlopetri, Greece, end of Neolithic, beginning of Bronze Age



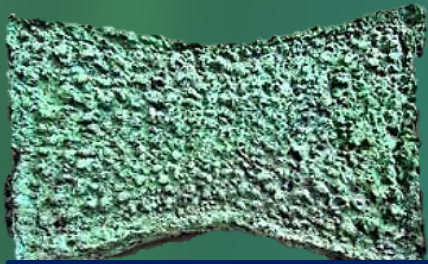
Reconstruction



Remnant of a chamber tomb cut from surrounding rock. (Mahon et al, 2011, Conf. On robotics and Automation)

World's oldest submerged planned town, found so far. Building began by the end of the Neolithic, beginning of the Bronze Age, when people in the area finally learn to manipulate ore and make metal. Established by 5000 YA; about 3000 YA destroyed by earthquake or tsunami or landslide or all three. Not much remains intact, but archaeology has shown it to have once had designed roads, two story houses with gardens, temples, and a cemetery, most likely just before it was destroyed. Examination of the storage jars demonstrate trading with Minoan Crete and the Cycladic Culture. It may also have been a major center for textile making, based on the number of loom weights found.

Use of metal: early technology



Early copper ingot, Crete



Bronze warrior helmet, Met Mus.
Inscription states that Synenitos,
the son of Euklotas, took this object.
2700 YA. Beautiful craftsmanship.



Bronze, ivory and gold sword
from a warrior tomb in Greece,
found 2015 with hundreds of
other valuable items, 3500 YA

As is true of agriculture, this can be a boring subject, so the question to ask is, why do archaeologists care so much about it? It is difficult for us to imagine a time when work took longer and crops, building homes, creating a settlement consumed much of daily life.

A major advance in technology signals a dramatic change occurring in an ancient culture. Here it means the development of kilns, bellows of some kind, furnaces, control of very high temperatures and *the understanding that a metallic ore can be radically changed by heat*. Copper and gold, both relatively soft, were first, just over 5,000 years ago, on Crete and the Cyclades Islands (earlier in the Middle East). As ideas were exchanged, bartering happened, copper mixed with tin became bronze, and a new age of weapons, tools and art was born. Metal tools increased food production and home building, with a corresponding growth in population, sophistication and wealth.

How do you create a fascinating culture, the Helladic people: Mix a tiny bit of Egypt, the culture of Crete and the Cycladic people



The Cyclades. Santorini, the island Volcano that led to the end of the Minoans in Crete, at blue arrow.



**Cyclades Island lute player
4800 to 4700 YA, Early.
Metropolitan Museum,
marble. 11 1/2 inches.**



**Marble, female
4500 YA, small,
To be placed on
Back in the burial.**

The Cycladic Civilization dates from about late Neolithic 5000 YA to about 3000 YA, late Bronze Age. These people traded with all sides of their world, from Crete to Asia Minor To Mainland Greece. Their earlier marble art, found in many sizes and shapes is unique to these islands. Eventually, they were absorbed by the Minoans (Crete) , and finally by the last known Major culture on the islands, the Myceneans. Akrotiri on Santorini, destroyed around 3600 YA by the volcano, Thera, was initially a Cycladic urban center, but eventually heavily Minoan in Character.

Phylakopi, Milos, a Cycladic town



Remnants of Phylakopi; Discovered in late 19th century, Excavation continues. Straight Roads excavated. The town went Through 3 rebuildings: 4300 YA to 3100 YA



On the left is a vase used For multiple offerings.
Met. Mus. Approx 4300 YA
To about 3900 YA.



Archaeo Mus.
Milos

Although the Cycladic Islands never had large populations, they were important stopping points for trade with Greece, Crete, Cyprus, among others. They exported marble (and marble art), iron, copper and silver. They raised meat animals and were expert sea farers known to have large crews. Their land was not particularly fertile, but they traded for what they needed, and grew wheat and barley among other crops.

They flourished from approximately 5200 YA to about 3,100 YA. Both the Minoans of Crete and the Mycenae of Greece eventually submerged this culture into their own.

Minoans

13,000 to 10,000 YA: People from Asia Minor (Anatolia) settled Crete and the Cycladic Islands: About 200 islands including Thera; across the sea sailing occurred early.



Met Mus.

5500 to 3500 YA: Minoans are, by the end of this period, a great sea power. Mainland Greek Bronze age begins around 5200 YA, and is overshadowed by the rise of the Minoans.

3700 to 3450 YA: Palace at Knossos rebuilt several times; multiple cities and palaces; writing, Linear A developed, not yet fully translated.

3600 to 3450 YA(dates disputed): Thera erupts, Akrotiri destroyed, coast of Crete impacted by Tsunamis. *Also 3450 YA: Mycenaeans may have invaded from Greek mainland;* take over palaces, including Knossos. Linear B invented, an early Greek language; partly translated.

3200 to 3100 YA: Fall of the Mycenaeans, collapse of powerful palace and city systems; followed by Greek "Dark Ages".

2365 YA: Major earthquake in Crete, affecting wide area of Europe and the Mediterranean. Classical Greece retains the myths of Crete and King Minos and the minotaur.

Greek Cities become cultural centers

Greek timelines:

Argos: receives the award for oldest city in Greece
also considered the oldest city in Europe, perhaps 7,000 years.

Athens: was settled at least 5,000 years ago, people settling on the hill now occupied by the Acropolis, possibly in the late Neolithic.
Parthenon built about 2450 years ago.

Corinth: was settled in the late Neolithic, but not an important city until 3,000 YA

Sparta settled in the Neolithic, rose to be a Mycenaean kingdom (perhaps King Menelaus), then declined with Mycenaean collapse, rose again as a city state about 3,000 years ago.

Syracuse, Sicily was founded about 2700 YA as a Greek colony

Thebes was founded as a settlement about 5,000 YA, and during the Mycenaean period was a very important city.



Vase, Louvre, about 2575 YA
Cadmus, founder of Thebes,
Slaying the dragon

Timeline for the Minoan culture: approx. 5500 YA to 3450 YA; Greece influenced (and perhaps dominated?) by Minoans. Timeline for the Mycenaean warrior culture of Greece: 3700 YA to 3100 YA. They took over Crete by 3450 YA; language of Linear B followed.

Helladic Greece, about 5200 YA to 3,000 YA



Early Helladic, Athens Museum, 5000 YA to approx. 4000 YA (probably at the later end of this time).



Middle Helladic, approx 4000 to 3700 YA
Onassis Foundation



Glass deer, molded, late Helladic, 3300 to 3200 YA, Ht 2", Metropolitan. Glass was rare and Valuable, molding it allowed the creation of luxury items.

This term references the development of cultures on mainland Greece, such as the Late Helladic when Mycenae (Homeric time) flourished. There are three important cultures of the Greek/Mediterranean region that are either late Neolithic or Bronze age: Cycladic, Helladic and Minoan (Crete), all trading and influencing one another. We know there were influences and ideas impacting these cultures coming from Egypt, Mesopotamia. Influence also came from far North: chariots using spoked wheels originated perhaps near the Urals, as well as baltic amber and is found in Mycenaean burials. *Widespread networks.*

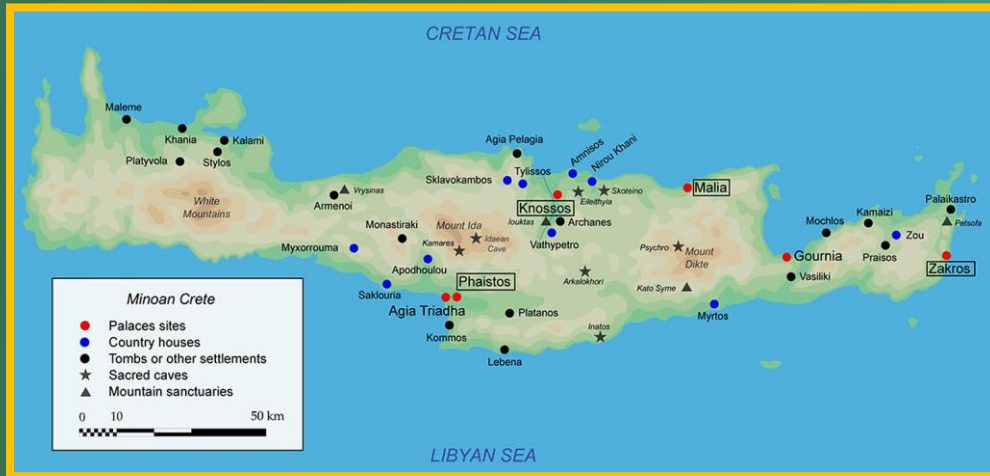
Building style, pottery style and art style are commonly used to differentiate between the Helladic periods.

The Minoan Kingdom, connecting Egypt, Greece and the Middle East



From Athens to Crete is about 250 miles; about 490 miles from Crete to Egypt. The Minoan Kingdom (approx. 4700 YA -3475 YA) had an extensive navy that dominated trade across the Eastern Mediterranean (Including Cyprus) beginning about 4,000 years ago. Its importance In influencing Greece 4,000 years ago and later cannot be overstated.

Who were the Minoans?



Minoan women engraved on a gold ring, found in Greece in 2015, in A Mycenaean warrior's grave; he died Around 3500 YA. 2,000 valuable objects found with him, so Someone important. Aged in his 30s. U. of Cincinnati and Greek archaeologists.

Approx 160 miles long by 37 miles at its widest; 650 miles of coastline. *This small island exercised huge influence On Greece for hundreds of years.*

Except for ancient tales, such as Theseus and Daedalus and Icarus, the Minoans were essentially gone from history. The archaeologist, Sir Arthur Evans, changed all that revealing to an amazed world, what this ancient culture was like. He excavated there from 1900 to 1931, named the culture after the legendary King Minos; based on ancient Greek sources, he believed he was excavating Minos' palace. A DNA study in 2013 suggests they are part of a population that migrated out of Anatolia (Asia Minor; modern Turkey) to Crete in Neolithic times, spreading the idea of agriculture. They are related to modern Cretans and modern Europeans and are probably the same people who have been living on the island since Neolithic times.

Theseus

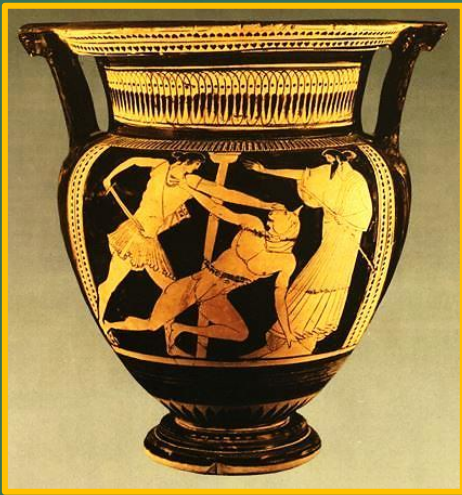
Theseus is credited by ancient Greek historians with making Athens a true city and merging settlements and villages into an important city, along with unifying Attica (a peninsula that includes Athens). Ancient Greeks including Thucydides about 2400 YA and Plutarch, about 1975 YA reported his achievements as if he were a real person, and a King of Athens. He is a Major figure in the growth of Greece influence and solidly, if mythically, connected to Crete. Did he go to Crete to free Greek youngsters taken as tribute?



The Theseus ring, found sometime in the 1950s when the area around the Acropolis museum was being expanded. Its authenticity was initially doubted, but chemical analysis of the gold was convincing. It has been dated to Mycenaean times, about 3500 YA. It is clearly a Minoan scene of bull leaping, along with a lion, an animal symbolic of power to the Mycenaeans.

Modern scholars insist that Athen's unification and growth did not occur in Mycenaean times but about 2700 YA, during archaic times. Perhaps future scholarship will demonstrate that Theseus was a real king of Mycenaean times who started Athens off on its eventual path to glory. Bits of an ancient Mycenaean wall (palace? Fortification?) are still found behind the Acropolis Museum.

Theseus and Crete



Left: 470 BC telling the story of Theseus slaying the minotaur. Versions of Theseus stories are found in modern European sculpture and art, and on hundreds of Greek vases in museums. Above right: Theseus meets Poseidon (his father) under the sea. 480 BC, 5 in tall, Met Museum.

If Theseus existed, he was very likely a Mycenaean leader. He appears in both the *Iliad* and the *Odyssey* by Homer, and he is found everywhere in ancient Greek art. His legend states he was the son of the King of Athens and that he went to Crete to end the annual human tribute the Minoans required of Greece.

19th century historians once thought Troy was a myth, until Heinrich Schliemann found it and dug it up. The Minoans had disappeared from history until Sir Arthur Evans dug up the palace at Knossos. Today, historians still suggest Theseus is a myth, never went to Crete and the human tribute demand is pure myth.

Theseus *may represent* the taking of Crete by the Mycenaeans and his legend permeates Greek art and story telling. Just as there is no proof he was a real person, there is no evidence to suggest that he absolutely was not.

Thera Volcanic Explosion

Santorini before the Minoan Eruption
Pre-Minoan Model by Druitt and
Francaviglia (1990)

Santorini Before

After

Thera explosion has been redated to about 3650 years ago, though arguments about the date continue.

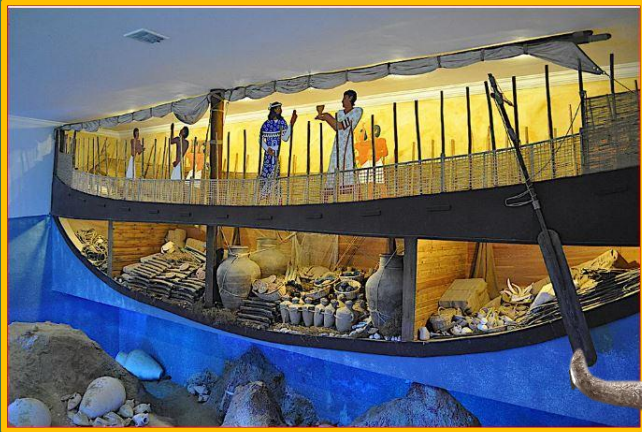
Tsunami direction

Ash direction

Ash from the Minoan eruption

Crete was a major center of culture, agriculture, trade, political connections in the Eastern Mediterranean, with contact with Egypt, Cyprus, the Cyclades and Greece; this Explosion disrupted much of their trade and destroyed some of their coastal towns. 200 years later it was under the thumb of the Myceneans. *Crete had been a significant influence on Greece for over a thousand years, even before the Bronze age.*

Eastern Mediterranean Region: a success story



The Uluburun shipwreck model, in
A museum in Turkey. About 3300 YA

The wreck contained 10 tons of copper from Cyprus
One ton of tin from Turkey and Afghanistan
150 large jars of resin from Israel (known by the pollen)
Olive oil from Cyprus
Baltic amber
Ostrich eggshell vases
Cylinder seals from Mesopotamia
One elephant tusk
Hippo teeth
Scrap gold and silver likely to be used as payment



Hittite deer vessel
Silver with gold inlay,
Approx 3300 to 3200 YA
Metropolitan Museum.

Before about 3200 years ago, cultures around the Mediterranean Sea grew populous, traded with one another across the sea, argued, fought, exchanged ideas, art, inventions. The Hittites, Egypt, the Myceneans in Greece and on Crete, city-states in Canaan and Cyprus and smaller Cultures all wove back and forth across the Mediterranean, trading gold, silver, oil, pomegranates, spices and art. It was a time of great palaces and great wealth.

Collapse of the Eastern Mediterranean Cultures: 3200 YA



Abandoned Hittite capital.

Environmental archaeology looks at the connections between humans, their built surroundings, and the natural world around them. In this far distant time, catastrophes such as lengthy droughts can disrupt interconnected cultures : “An abrupt climate shift seems to have caused, *or hastened*, the fall of the Late Bronze Age world by sparking political and economic turmoil, migrations, and famines”. (Oxford, Kaniewski & Campo, 2017). Not all scholars agree.

The Hittites, Egypt and other Eastern Mediterranean groups including those located in Greece and on Crete, began a slow collapse around 3200 YA. This was “a region that today would stretch from Italy ...to Afghanistan ..., and from Turkey ... to Egypt. ..(E. Cline, George Washington University.”). The collapse was a cascade of events: drought, grain shortages, villages collapse, creating collapse of palace/administrative centers, raiders arise (or take advantage) and burn palaces and citadels. The exact causes are debated, but the drought is thought to have lasted over 300 years.

Greek Iron Age/Dark Age/Archaic Age



A temple erected for a warrior at Lefkandi, isle of Euboea; his ashes found with many grave goods including iron items. This area flourished despite the collapse. Oxford U.

A scarab and Phoenician Seal found in his burial; clearly some trade and connections survived.

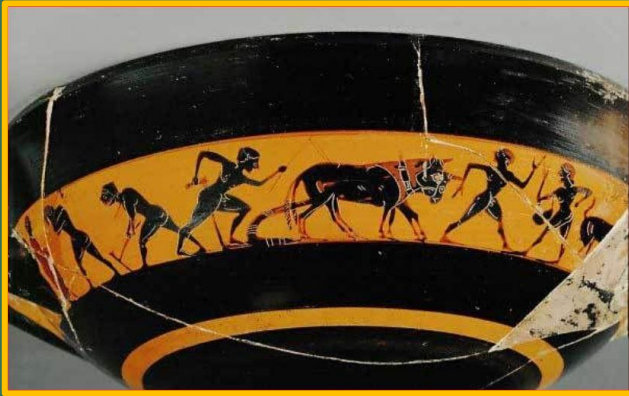
From the female Burial in the temple. Both were 25-30.

At the collapse around 3200 YA, Mycenaean citadels fell all over Greece, Cyprus and Crete, abandoned or raided over time. This resulted in a collapse of trade networks, economic decline, tin (needed to make bronze) declined, population declined, loss of Linear B writing; literacy disappeared until about 2800 YA. The archaic age runs from 2800 YA to about 2500 YA, with the beginning of classical Greece. From palace centered sites the slow move began to city states.

Egypt declined, then rebounded, the Hittites disappeared, Greece broke up into villages, some Greek cities remained, some in decline and poverty, others flourishing.

The Dorians swept down from Northern Greece, and depending on the theory, either raided (old theory) or assimilated. Likely it was both; they brought iron working with them. By about 2800 YA, Greek language grew from the Phoenician language, with some holdovers from Linear B (which did not have individual letters); scholars call Linear B “clunky”.

The Iron Age: Greece Rises Again



Figures tilling, black figure vase
2700 YA; private hands



Tomassos silver-studded iron Sword, Cyprus
burial, 2500 YA; studied with CT scan, 2013



CT scan revealed silver-headed copper alloy rivets with
silver heads holding the carved ivory plates onto the hilt

The move from bronze to iron transformed cultures, economies, as well as Agriculture. Where water was available, crops increased and people were fed once again. Population slowly grew. Imagine moving from a wooden plow share to a bronze plow: deeper furrows, better soil turnover, plow lasts longer. Then from bronze to iron plows: iron tools, initially not as sturdy as bronze, were useful as iron ore is more readily available than the tin needed to make bronze. If you had a tough strong metal that held up, was cheaper and more readily available than bronze, would your crops benefit? Steel, iron ore heated together with carbon for strength, likely was available by 2700 years ago.

How did the slow move from bronze to iron/steel happen....? An accidental discovery, beginning with rare meteorite iron? Iron ore falling in to flames and congealing into something strong? Iron making likely began in Turkey (Anatolia) and moved westward. The migrating Dorians from Northern Greece brought this new metal with them.

Athens in the Dark Ages/Iron Age/Archaic Age 3200 YA to 2500 YA



Iron age house, 2900 YA, 40 miles from Athens, Discovered 2019, research ongoing. University of Göttingen.



Wine mixing krater, by Sophilos, From the Athenian Potters Quarter 2580 YA. Met Mus.

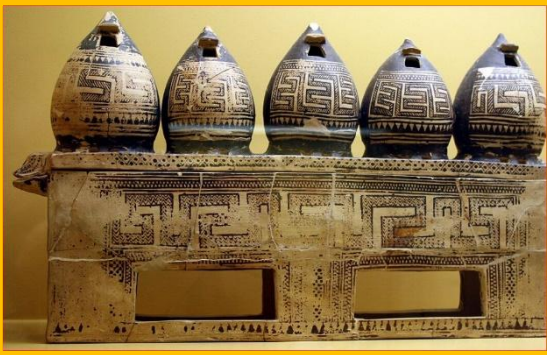


Funerary statue, 2500 YA

The city of Athens is considered the birthplace of Democracy and Western civilization. A trite comment perhaps, but Athens deserves our interest in its survival and rebirth. A Mycenaean citadel, Athens remained inhabited after the collapse of the Mycenaean culture. It served as a center of iron work by about 3100 YA (brought by the Dorians) and material culture and a place of refuge for people leaving the other collapsed cities; unlike other cities, the population of the region, Attica, as well as the city of Athens, increased via immigration.

Its port, Piraeus, actually had three harbors, making it a major source of export and import for Athens, keeping it alive. This allowed Athens to import grain and export its oil and wine, keeping wealth flowing. This large port allowed Myceneans traveling for refuge to use it as a jumping off point to other destinations in the Aegean.

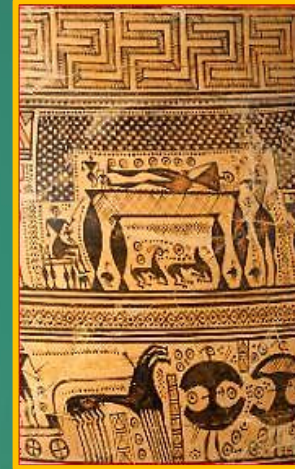
Greek Dark Ages/ Iron Age Art



Tomb of a wealthy pregnant woman, 2850 YA, Ancient Agora Mus., Athens



Terracotta Krater for a death, Central area shows deceased On his bier, mourners alongside. 42 inches, Met Mus. 2700 YA

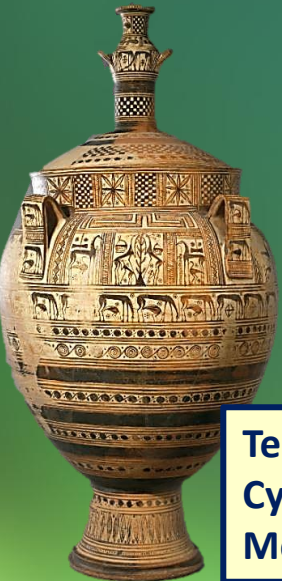


Close up

Lefkandi burial, Centaur, Eretria Arch. Mus. 14 in. 2900 YA



Man battling a centaur, Met Mus.. Centaur has a Weapon in his side. 4.5 in., 2700 YA. Perf. Base makes it a stamp or seal?



Terracotta krater Cyprus, 2700 YA Met Mus. 45 inch

Greece is famous for its beautiful vase art...during the dark ages/iron age, there was a move To geometric art, originating in Athens and spreading throughout Greece and its interconnected cultural sites, and away from figural art on vases.

October 16: Bronze Age Greece



Close up of centerpiece: Apollo

The shield of Achilles as imagined in 1821, to celebrate the coronation of King George IV At his Coronation Banquet. Gilt over silver. 35 inches across. In the Royal Collection Trust, Buckingham Palace. The legend of Troy has resonated to the Western World across millennia.