



Physics: Its Birth in Greek Ionia

GRESHAM LECTURE

Harbour Monument at Landlocked Miletus



Before the Maeander estuary silted up



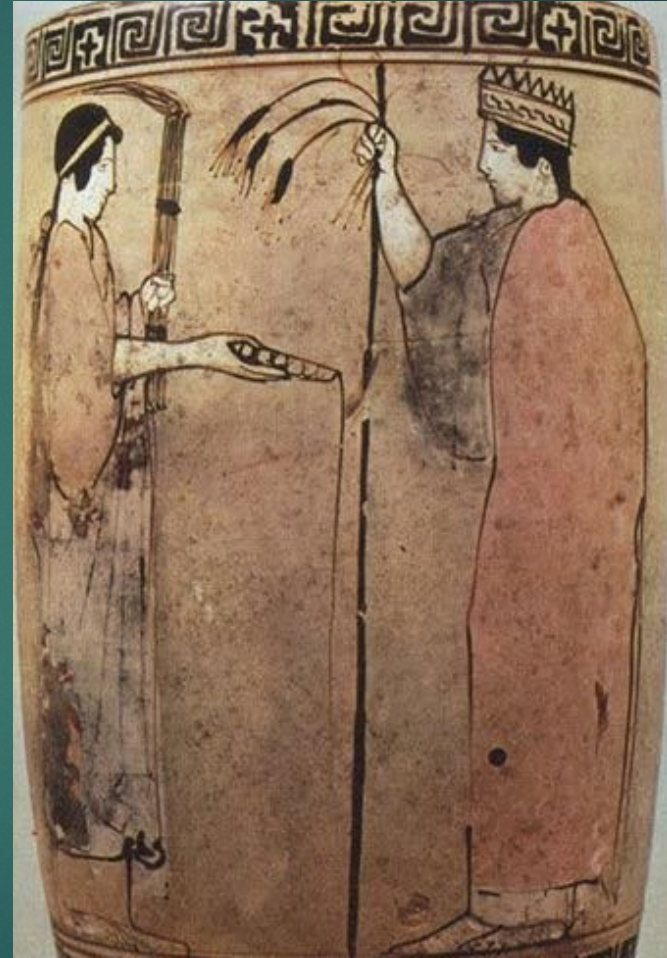
Hesiod's *Mythical Version of Creation*; primordial Chaos and divine manufacture of humans by immortals.



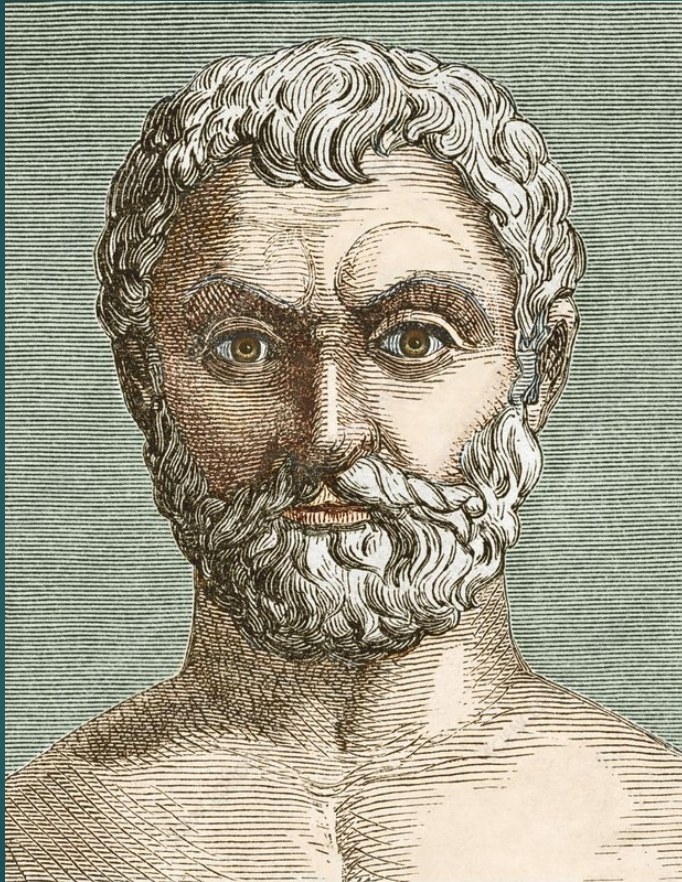
Poseidon of earthquakes



Demeter of arable farming



Thales, brilliant Greco-Phoenician thinker and his eclipse



The first monopoly, Thales' olive press conglomerate, made possible by observing natural phenomena



Pyramid-measuring



Navigation



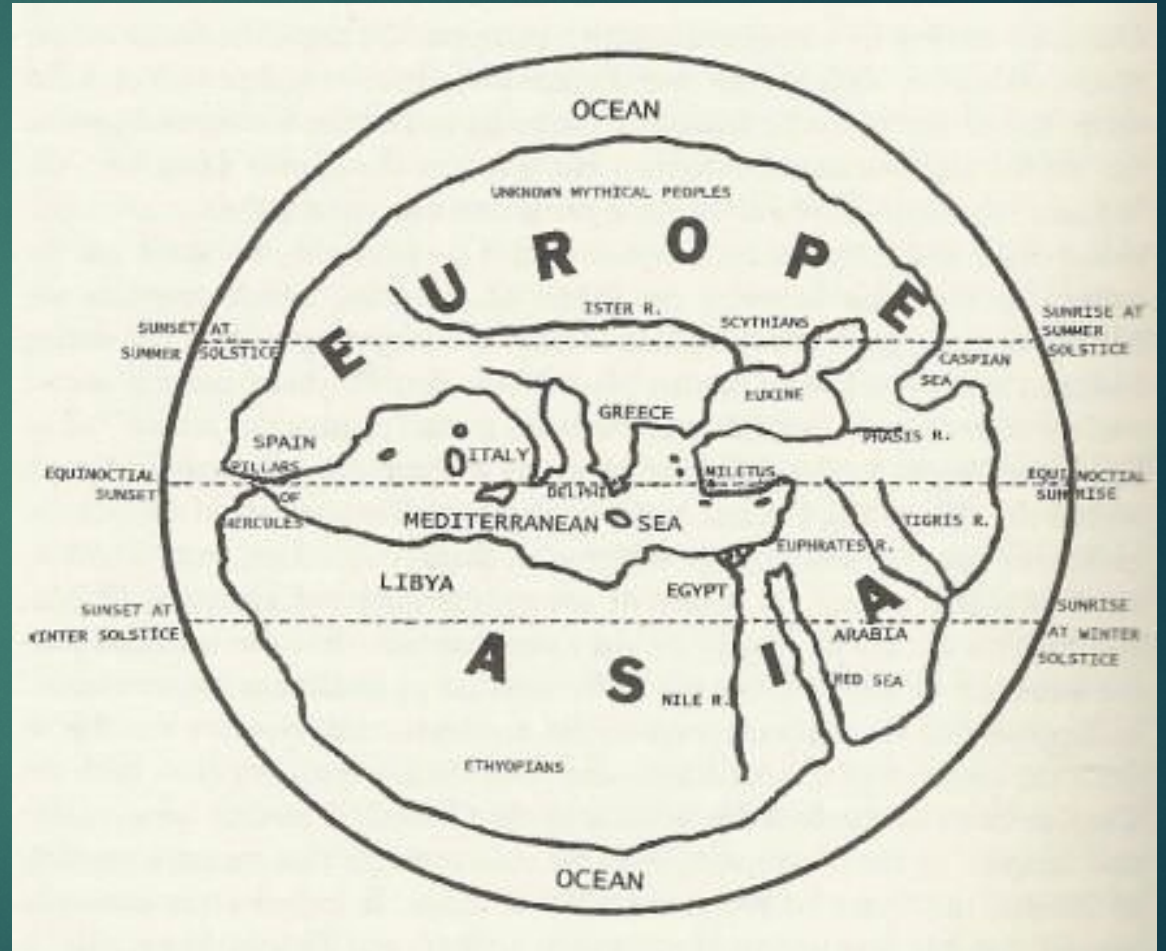
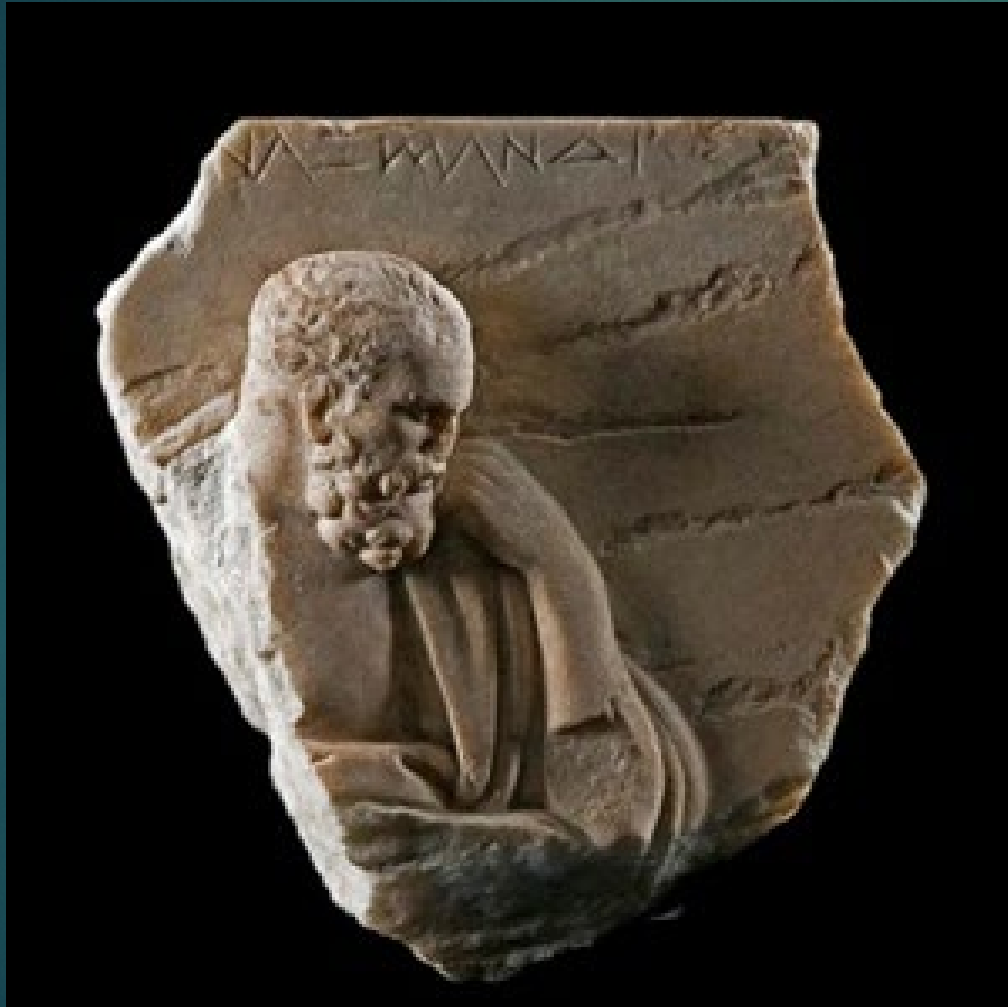
Ionian Apollo



Heavenly Aphrodite



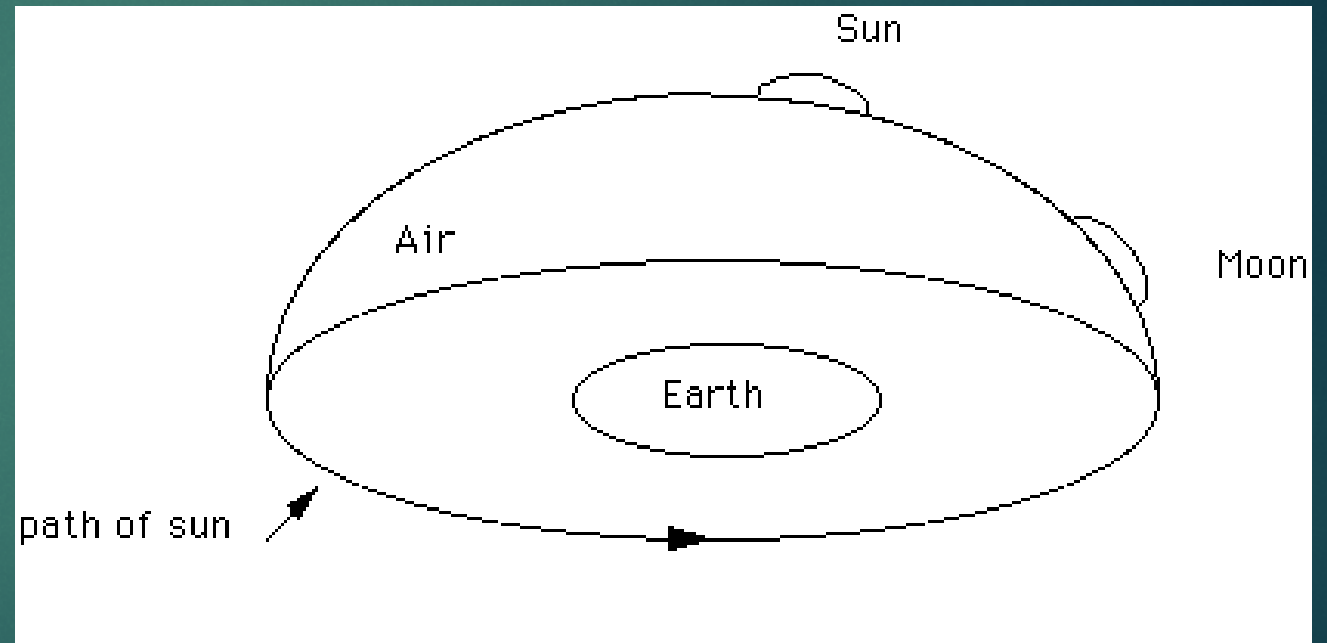
Anaximander and his Map



Lydians, inventors of coins, which allowed physicists to conceive abstractions such as infinity



Anaximenes and his Air



“

Everything flows,
nothing stands
still.

Heracclitus

(QUOTED BY PLATO IN CRATYLUS)



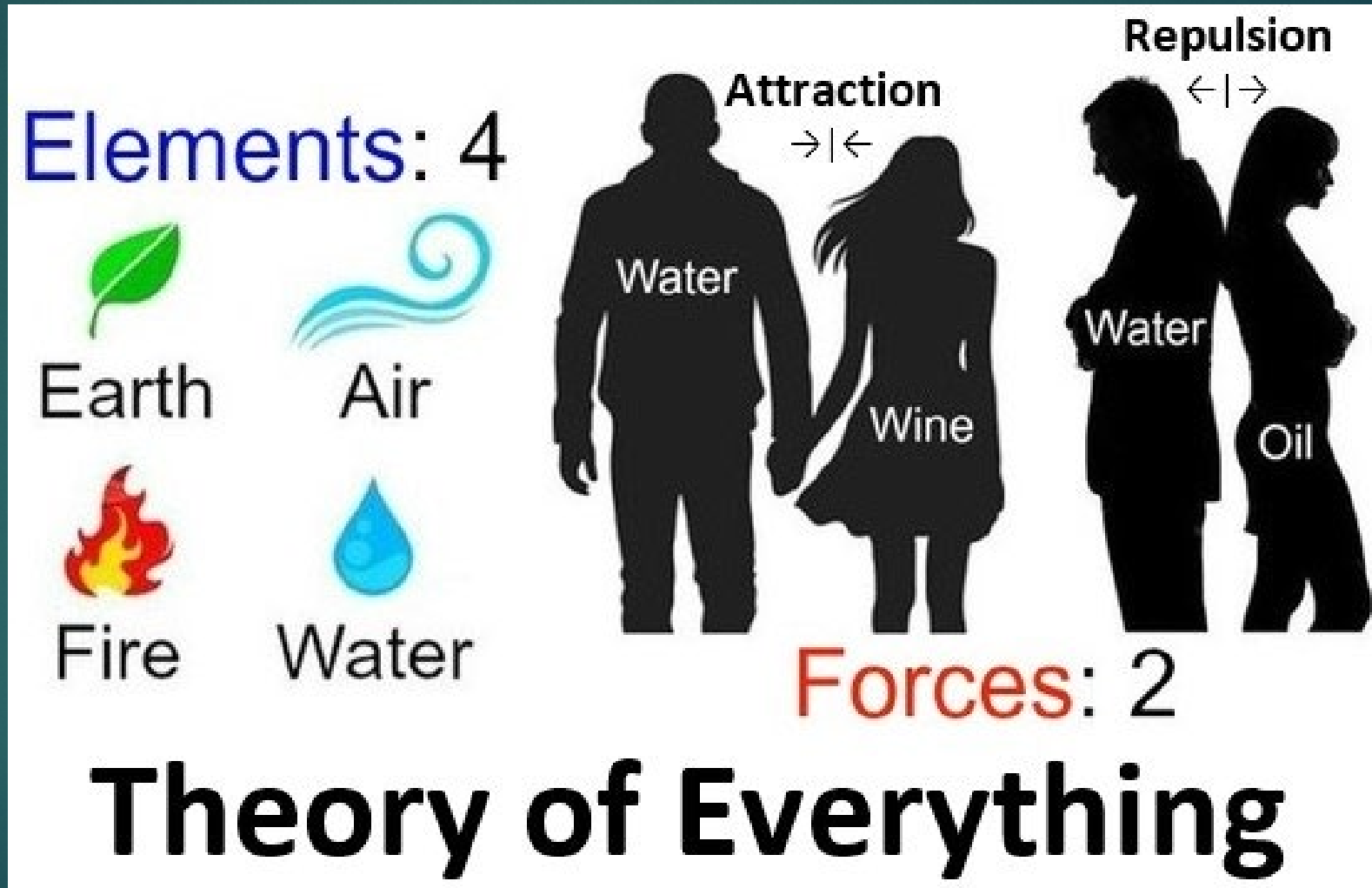
Zoroastrian Fire Temple



Pythagoras' female-friendly school at Croton

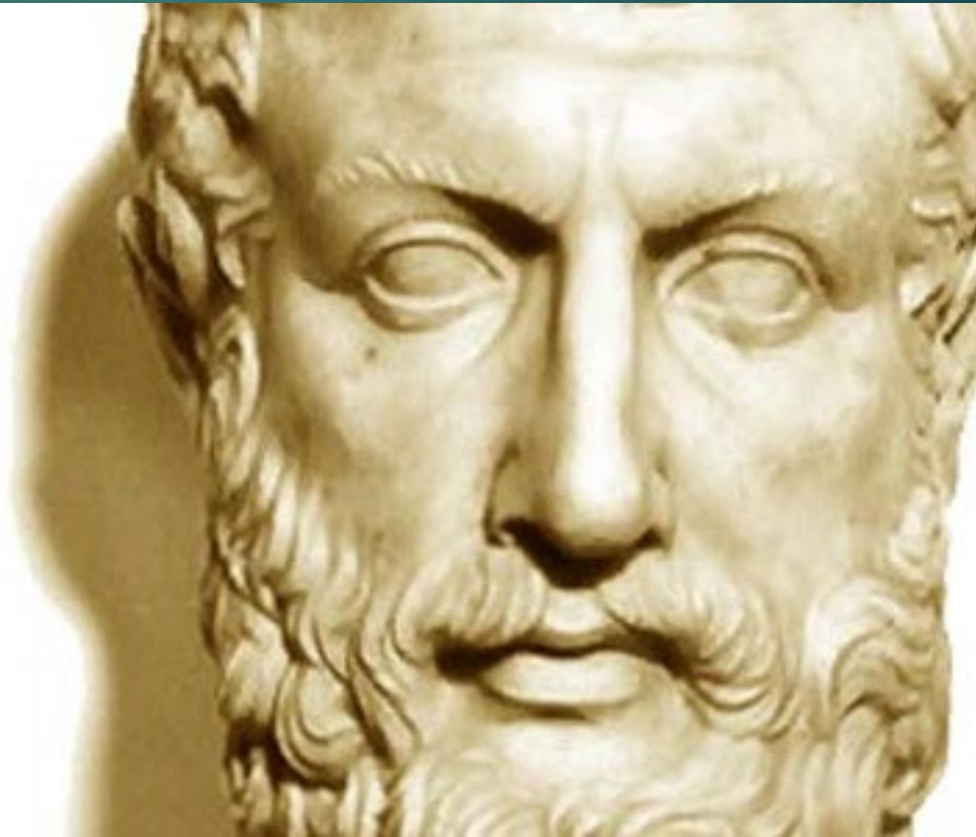


Empedocles: Love v. Strife (Attraction v. Repulsion)
constantly remixing his four elements



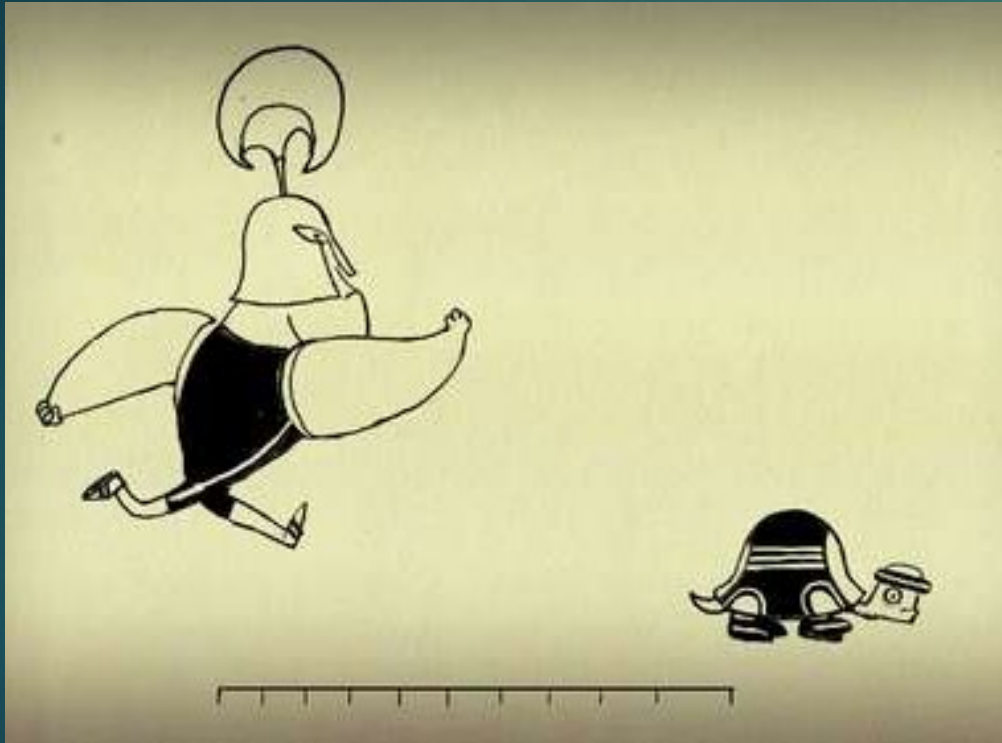
Parmenides: ontology

What is
"is"?

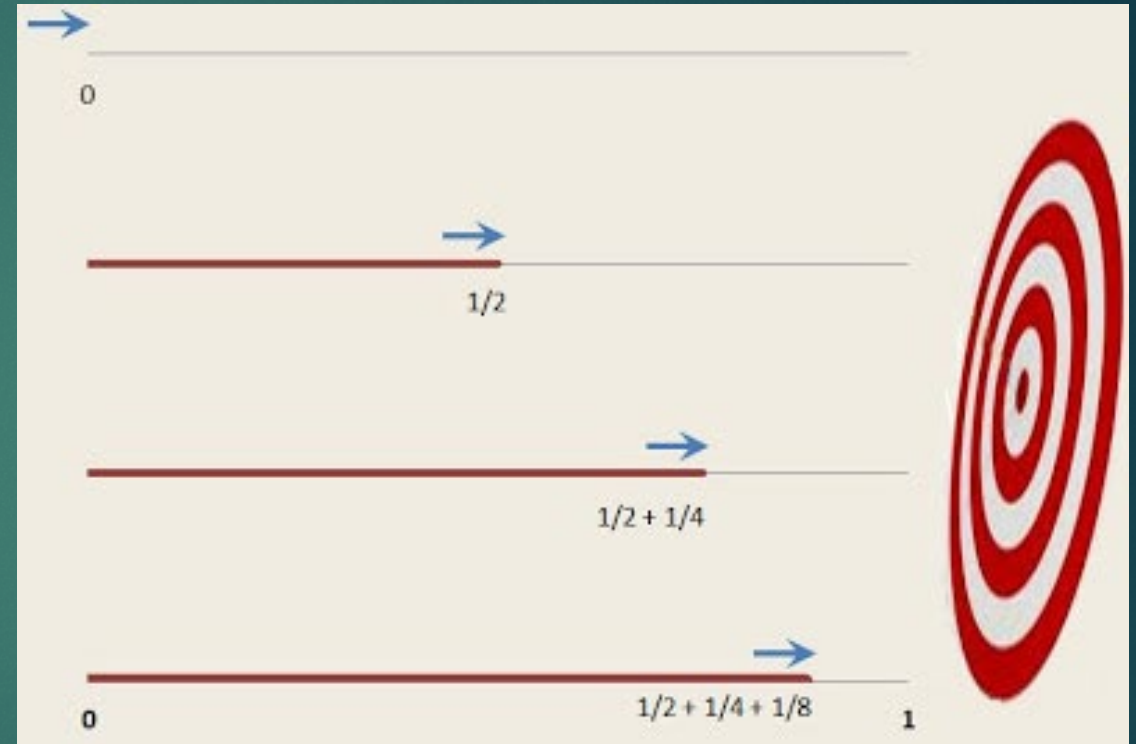


Zeno's Paradoxes:

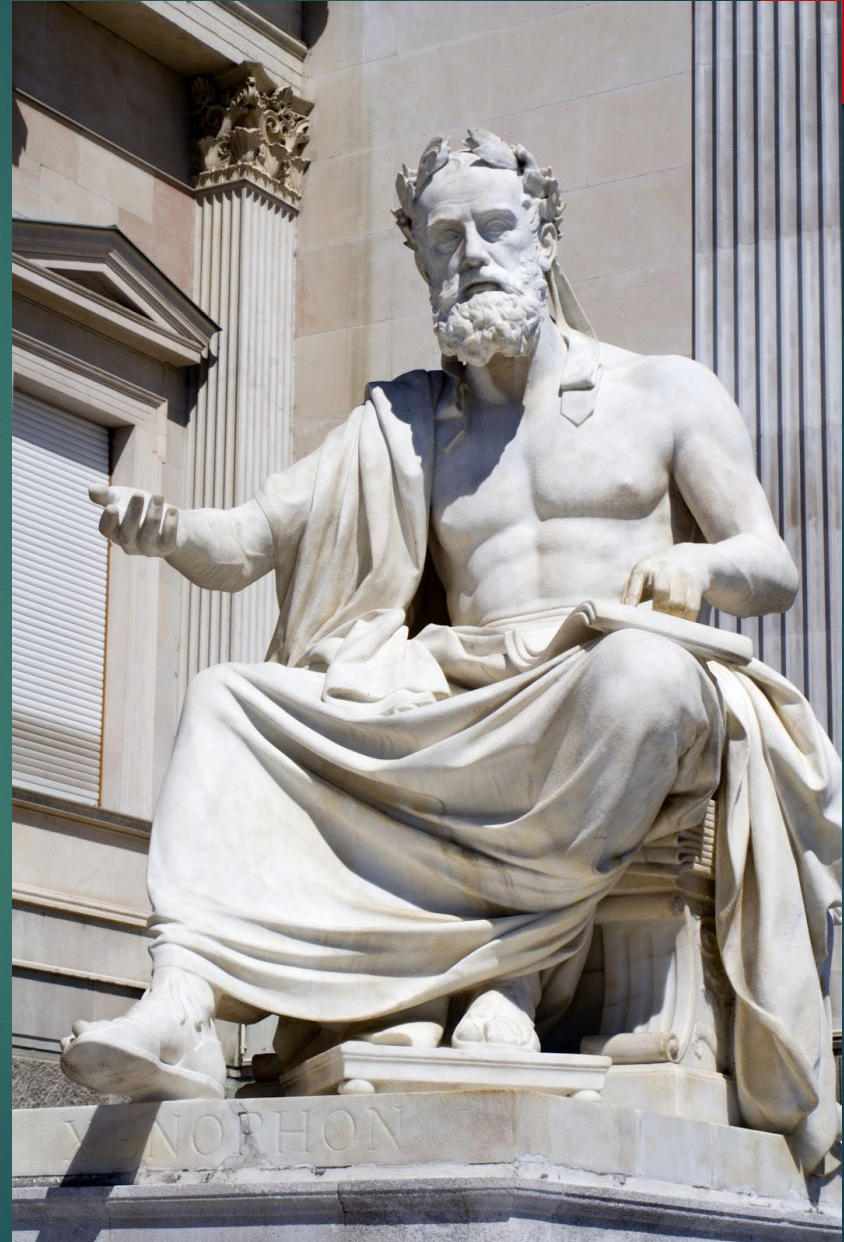
Achilles + Tortoise



Arrow in Flight



Xenophanes of Colophon:
beliefs are relative



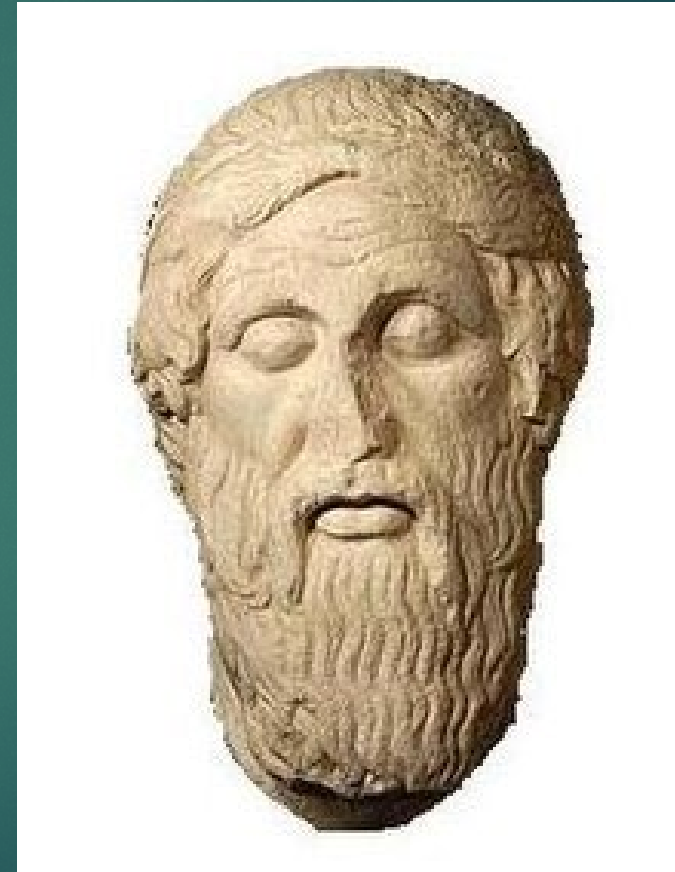
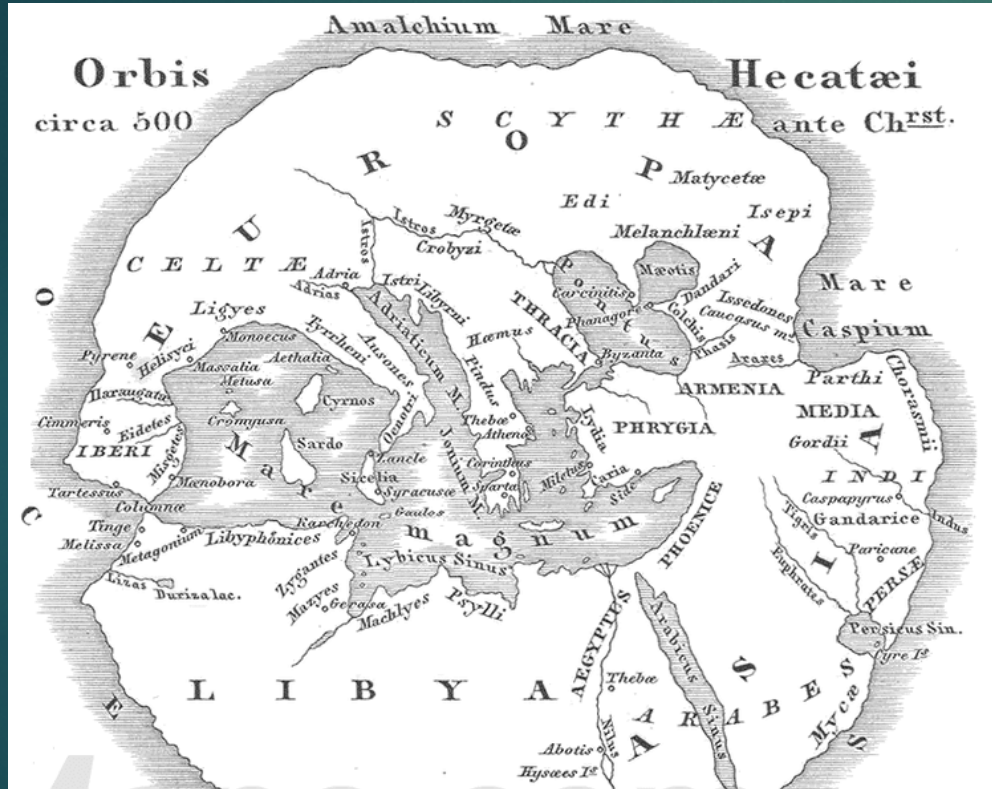
Material not divine causes: rainbows



St Elmo's Fire not caused by Castor and Pollux



Ethnographer Hecataeus of Miletus and his Map



Anaxagoras: Mind (Nous) as moving principle



Atomists: Leucippus and Democritus



Hippocrates of Cos and his Medical School

