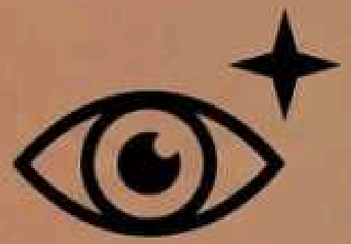
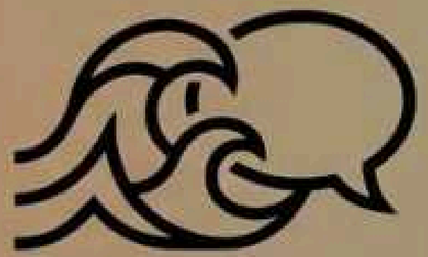
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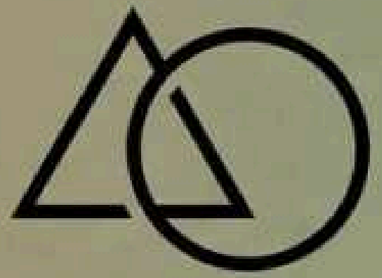
## The Beginning

How did philosophy begin?



## The Milesians

What did the first thinkers of Miletus claim, and how did they defend it?



## The Additions

What did Xenophanes and Pythagoras add?

The ideas established here set the agenda for the entirety of this course.

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1.2

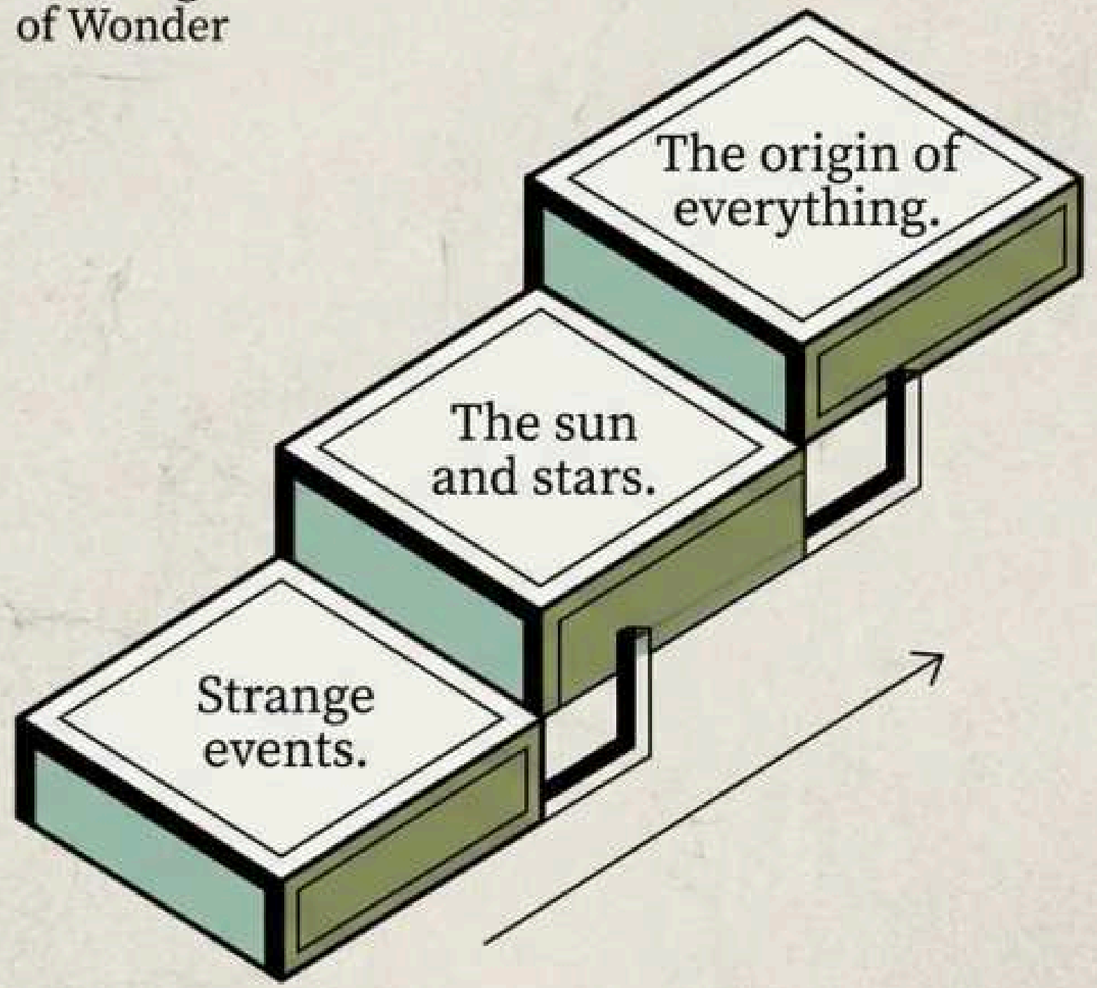
# Philosophy

**Philo**
(Love)

**Sophia**
(Wisdom)

Pythagoras: The first to call himself a lover of wisdom, not a possessor of it.

## The Progression of Wonder




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1.3

# Mythological Narrative

## Hesiod's Theogony (c. 700 BCE)

Chaos → Earth → Gods who fight and marry

Storms, floods, and earthquakes were acts of named gods.

The first philosophers did not abandon the gods at once, but their method of explaining the world shifted.

# Naturalistic Causation

# The Search for Natural Causes

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1.4

## Wealthy Port

Traders exchanged ideas with Egyptians, Babylonians, and Lydians.

## Diverse Stories

Exposure to other cultures proved that other peoples had different narratives.




## No Priestly Caste

The absence of fixed religious doctrine allowed for free thought.

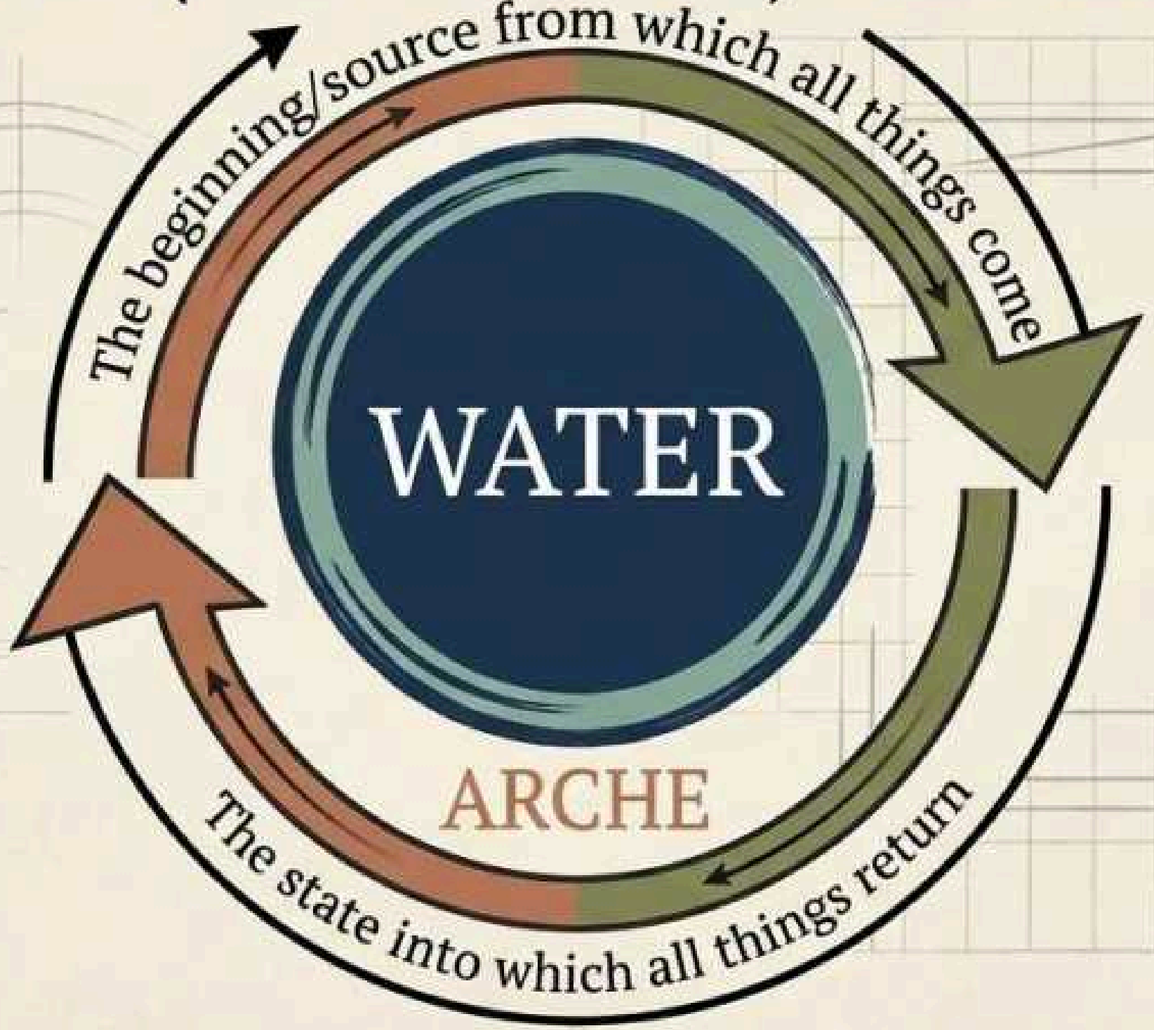
## Spread of Writing

Ideas could be published, scrutinized, and argued in public.

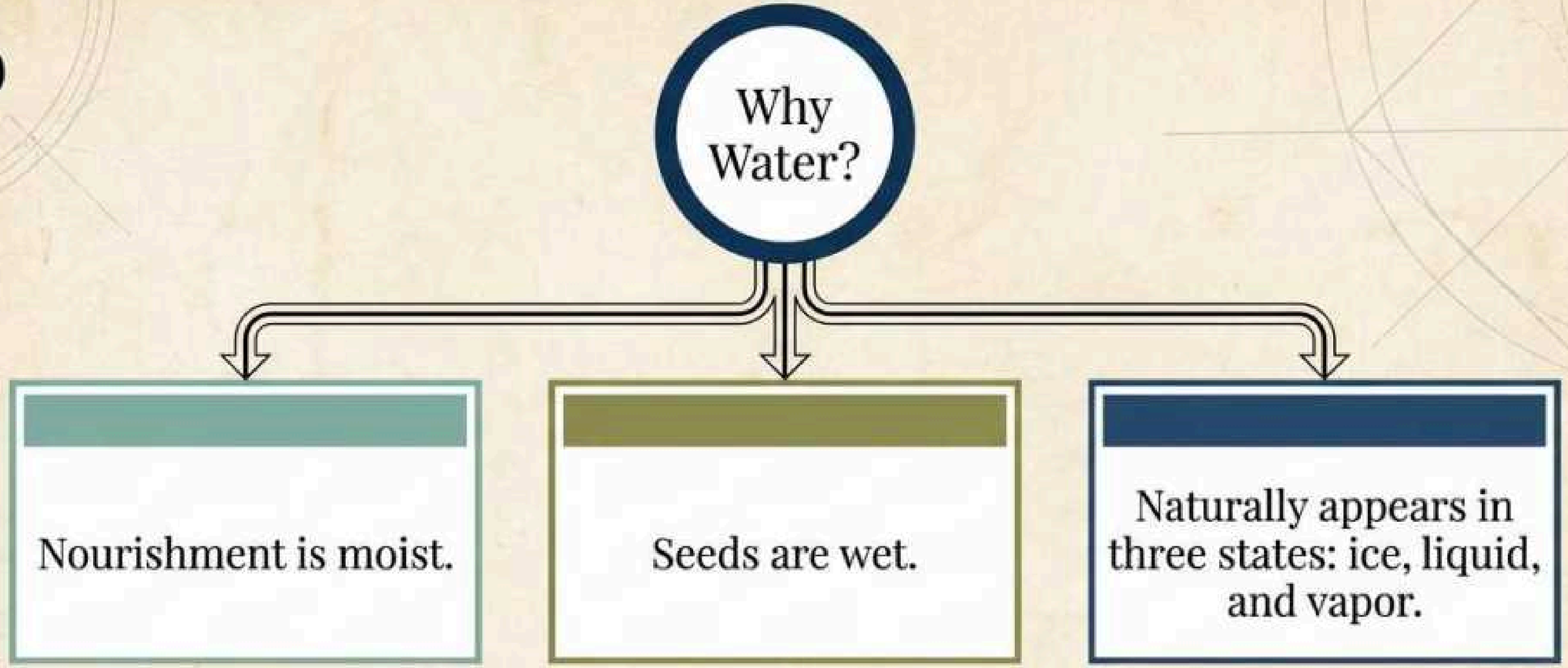
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1.5

# Thales of Miletus (c. 624–546 BCE) - The First Philosopher



# 1.6

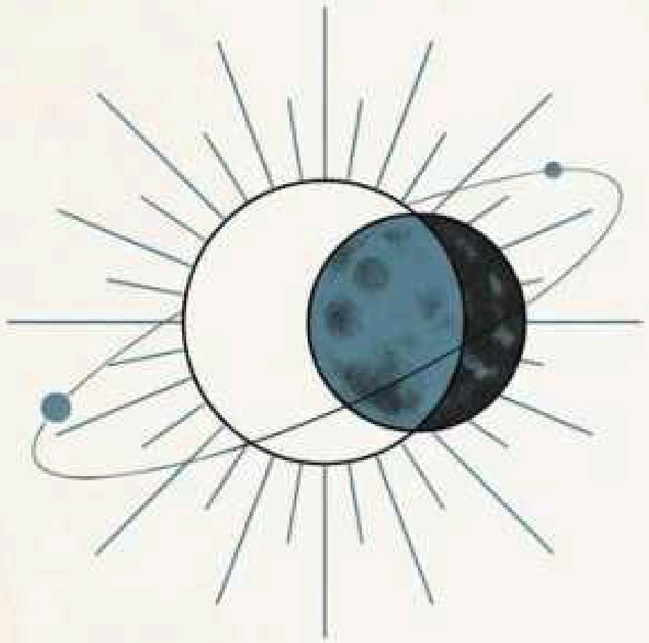



## The Form of the Answer

**Names a single natural substance + Gives reasons + Invites others to disagree.**

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# 1.7 The Legends of Thales



## The Mind

Predicted a solar eclipse (likely 585 BCE).



## The Hazard

Plato's tale: Fell into a well while distracted by stargazing.



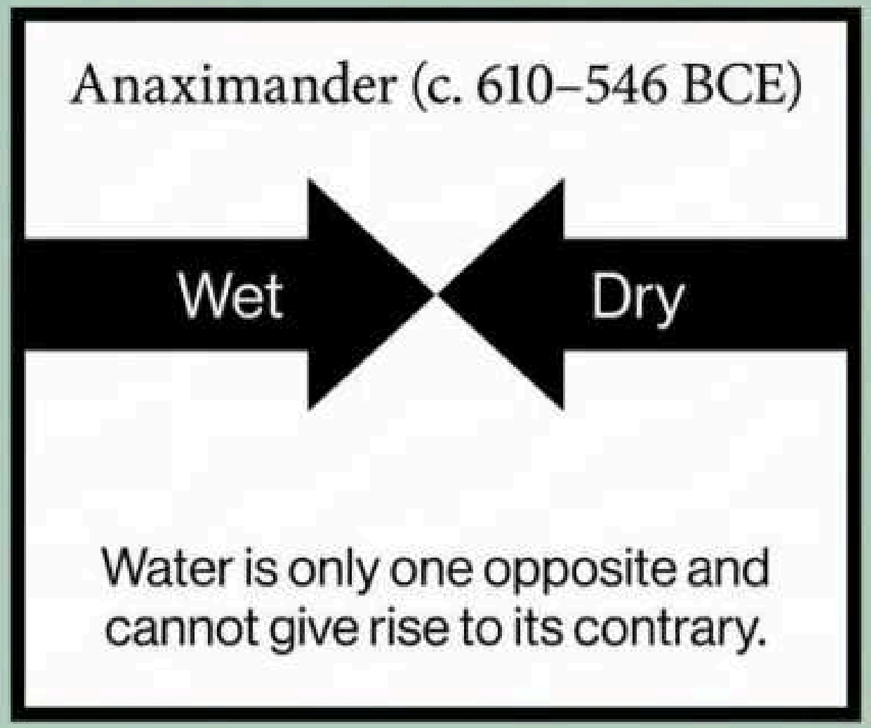
## The Pragmatist

Aristotle's tale: Cornered the market on olive presses to prove philosophers could be wealthy if they wished.

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1.8

Anaximander (c. 610–546 BCE)



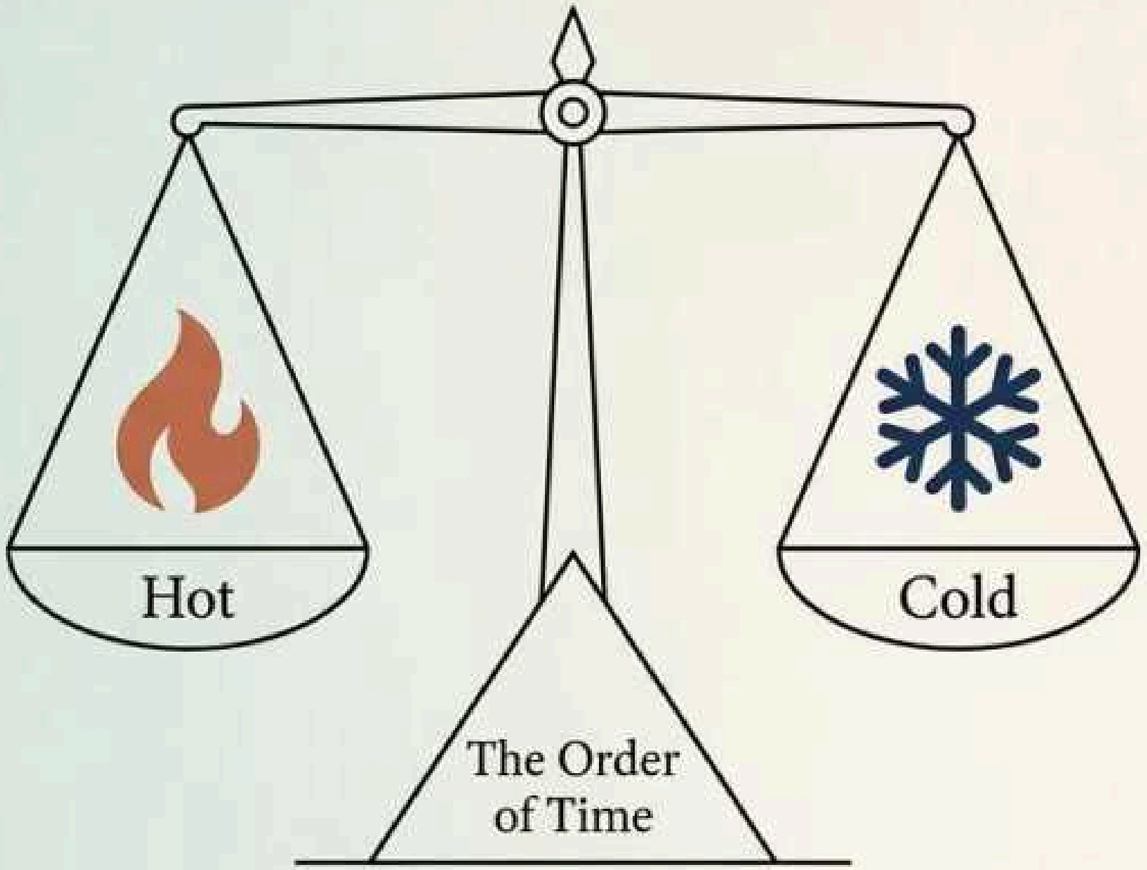

Water is only one opposite and cannot give rise to its contrary.

# APEIRON (The Boundless)

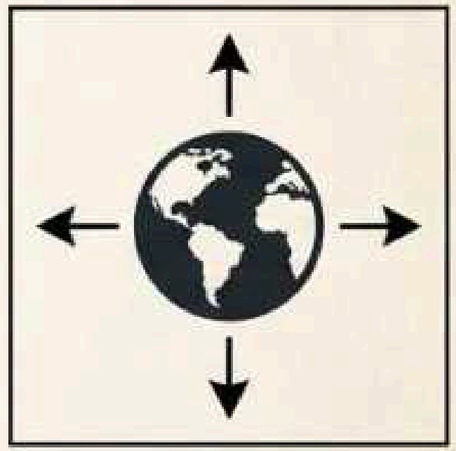
An unlimited and unnamed source of all things.

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# 1.9




"...paying one another back for their encroachments... Nature keeps a kind of justice."



Floats unsupported because it has no reason to move in any direction.

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1.10

# The Hypotheses of Anaximander

## Geography



Created an early map of the known world.

## Timekeeping



Credited with developing a sundial.

## Biology



Theorized that living things first arose in moisture.

## Proto-Evolution

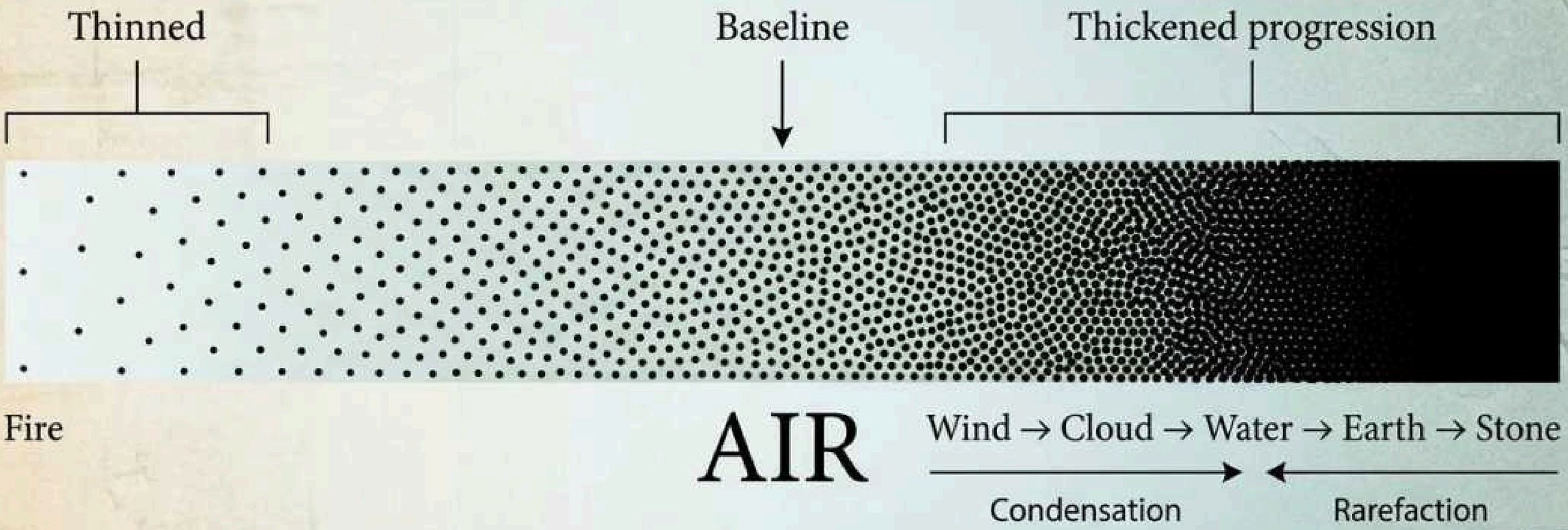


Theorized humans came from another kind of creature, observing that a human infant could not survive alone.

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1.11

# Anaximenes (c. 586–526 BCE)




Different things are one substance in different densities.
Quantitative measurement explains qualitative change.

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1.12

# The Milesian Synthesis

| Thales | Anaximander | Anaximenes |
| --- | --- | --- |
| **Proposed Source:** Water | **Proposed Source:** Apeiron (The Boundless) | **Proposed Source:** Air |
| **Core Reasoning:** Observed moisture in nourishment and seeds. | **Core Reasoning:** Water is just one extreme; source must be neutral. | **Core Reasoning:** Density changes explain all material states. |

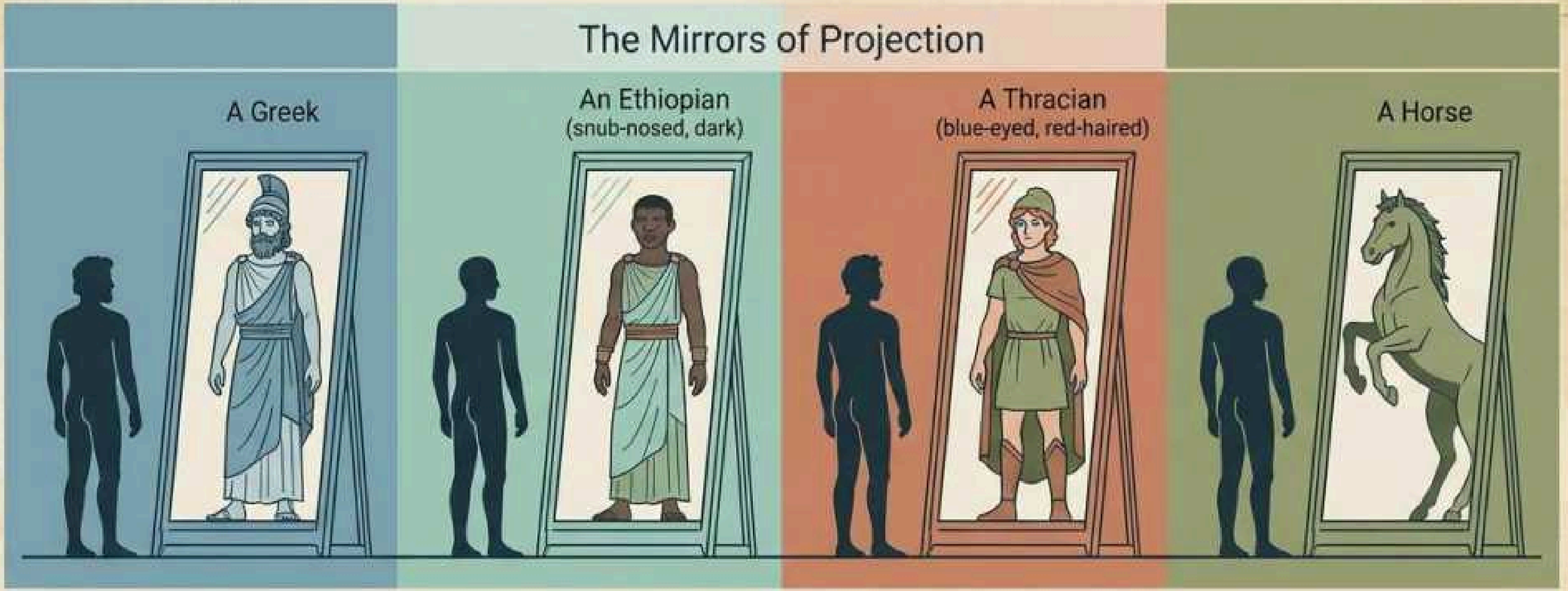
## The Birth of the Dialectic Method

A claim is offered with reasons → Rivals reply with other reasons → The ultimate aim is a better account of nature.

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1.13

# Xenophanes of Colophon (c. 570–475 BCE)




## “If horses could draw, their gods would look like horses.”

Mocked the Homeric gods who steal, lie, and commit adultery, revealing the projection of anthropomorphic religion.

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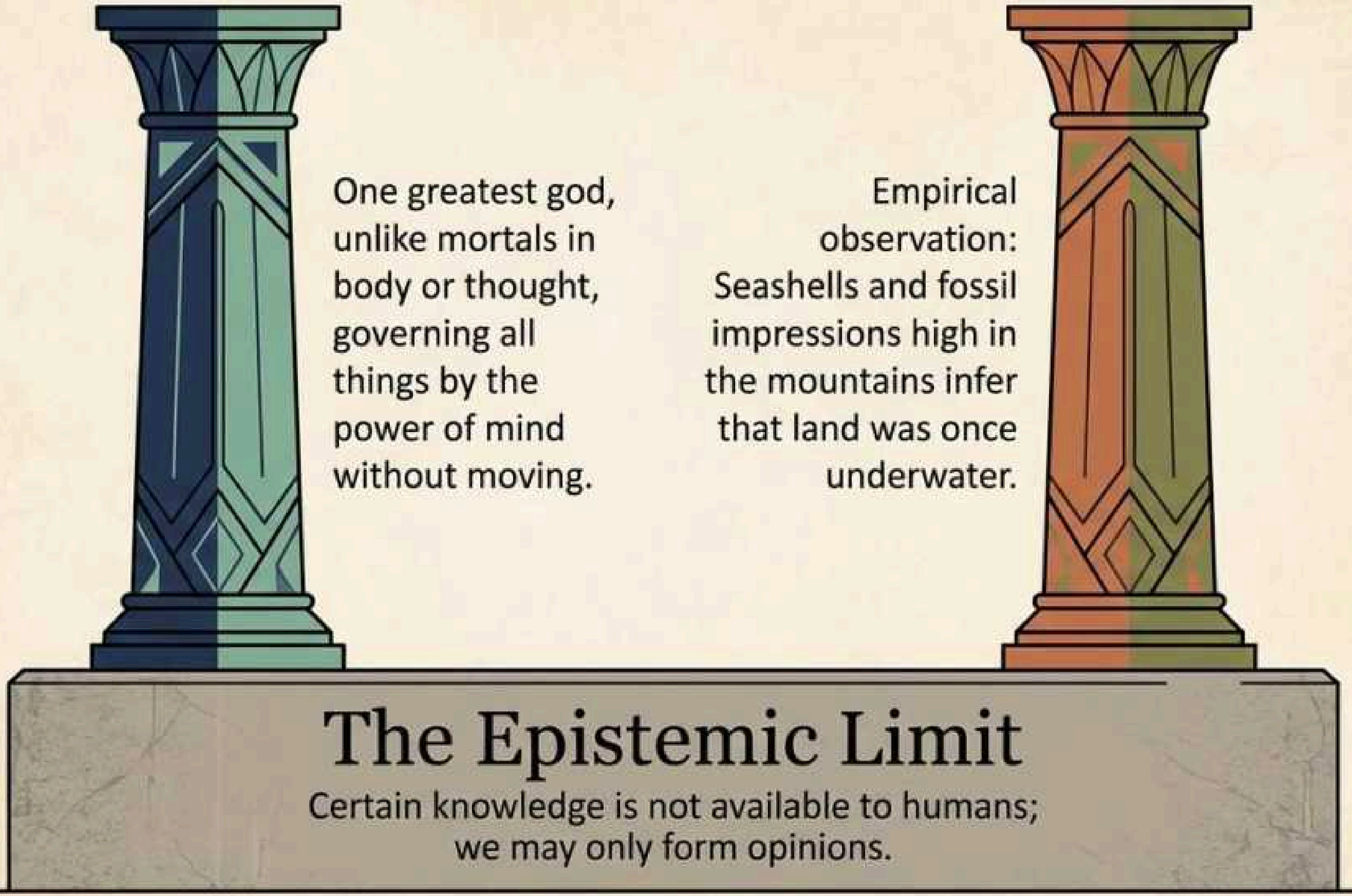
# 1.14

## The Divine

One greatest god, unlike mortals in body or thought, governing all things by the power of mind without moving.

## The Natural

Empirical observation: Seashells and fossil impressions high in the mountains infer that land was once underwater.



## The Epistemic Limit

Certain knowledge is not available to humans; we may only form opinions.

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1.15

# Pythagoras' Migration

Croton, Southern Italy



Island of Samos
(born c. 570 BCE)

## Rules of the Brotherhood

1. The soul is immortal and reborn in other bodies.
2. All property is shared.
3. Teachings are kept secret.
4. Abstain from eating beans.

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# Number is the key to reality. Musical harmony rigorously follows simple mathematical ratios.

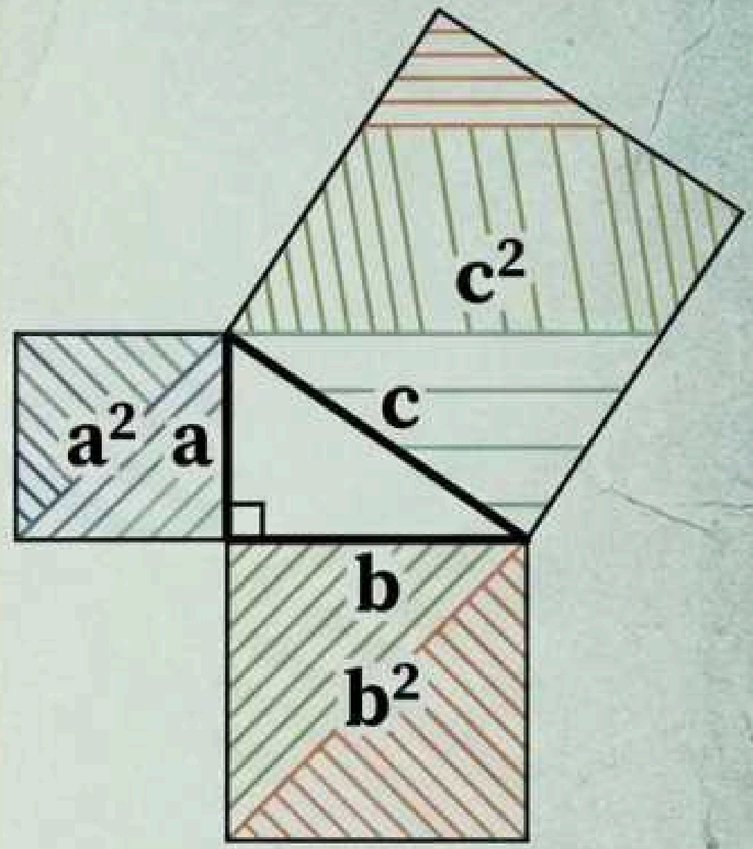
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1.17

# All things are number

## KOSMOS

(An Ordered Whole)



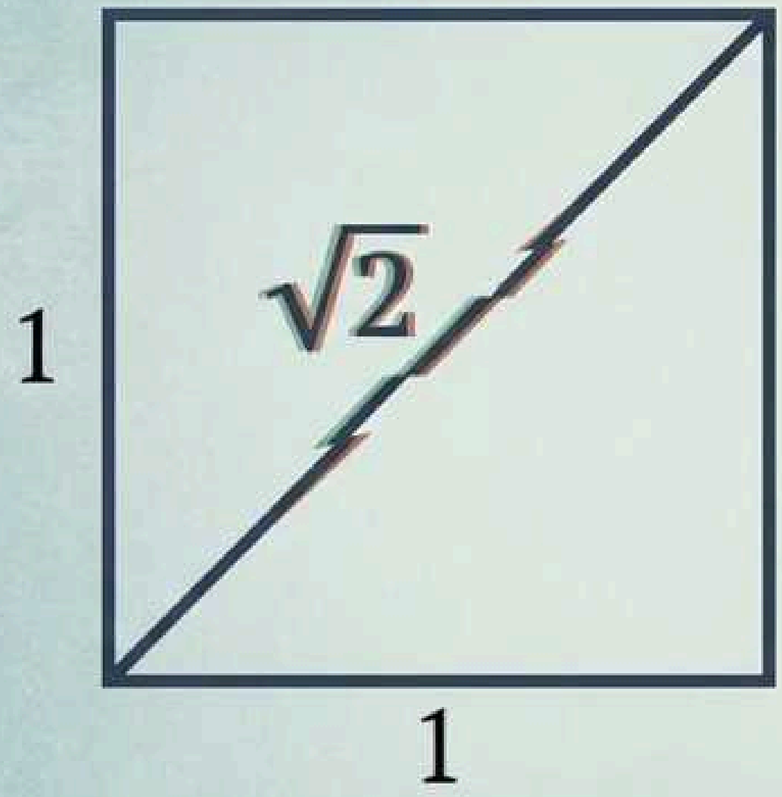

$$a^2 + b^2 = c^2$$

Note: The theorem bearing his name was known to Babylonians centuries earlier. Much credited to Pythagoras was the collective work of his school.

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1.18

# The Break in Reality




The diagonal of a square has no ratio to its side—some lengths are completely irrational.

(The legend of a student being drowned for revealing this secret is unreliable).

**Mathematics can uncover profound truths that the physical senses can never show.**

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# 1.19 | Ultimate Synthesis Matrix

| The Milesians | Xenophanes | Pythagoras |
| --- | --- | --- |
| Sought one natural source for all things; defended views in public argument. | Criticized inherited belief and anthropomorphism; admitted the absolute limits of human knowledge. | Linked mathematics to the physical order of the world and to the care of the immortal soul. |

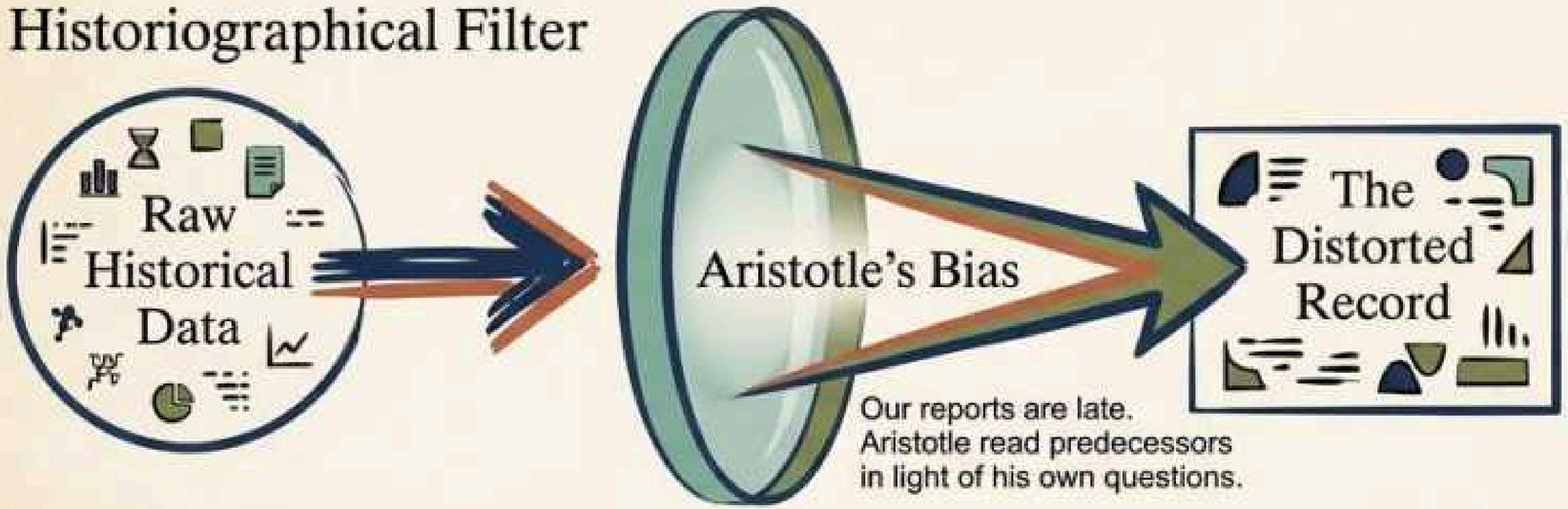
Philosophy, science, and religion begin together.

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*1.20*

# The Distorted Record and the Nature of Early Inquiry

## Historiographical Filter

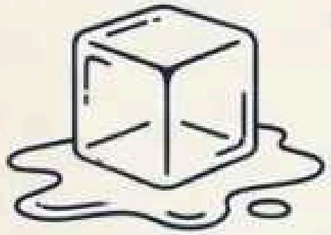



## What Early Science Was

| They Didn't: | They Did: |
|---|---|
| Run experiments like modern scientists. | Ask what the world is made of, and answer by argument. |
| That is the first step. | |

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# 1.21 Exercise: Applying the Milesian Method



## Ice Melting



## Bread Rising

1. Pick one basic substance (as Thales or Anaximenes would).

2. Try to explain the change using only that substance.

3. List what your explanation leaves out.

*Next:* In Lecture 2, we meet thinkers who argue that no such explanation can account for change at all.

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