

Arabic Musical Cultures

Explorations Term 2022



Background

Athens and Jerusalem

- Reason
 - Inquiry
 - (reason)
 - (philosophy)
 - (*logos*)
 - (science)
 - Revelation
 - Belief
 - (faith)
 - (poetry < rhetoric)
 - (*mythos*)
 - (religion)
- Cf. Tertulian, *On Prescriptions Against Heretics* 7)



Music and Philosophy

- The greatest musicians are philosophers
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- What is music?
 - Art of the muses
- What is philosophy?
 - Love of wisdom
 - What is the theory?
 - Way of seeing
- What is the connection of between these?

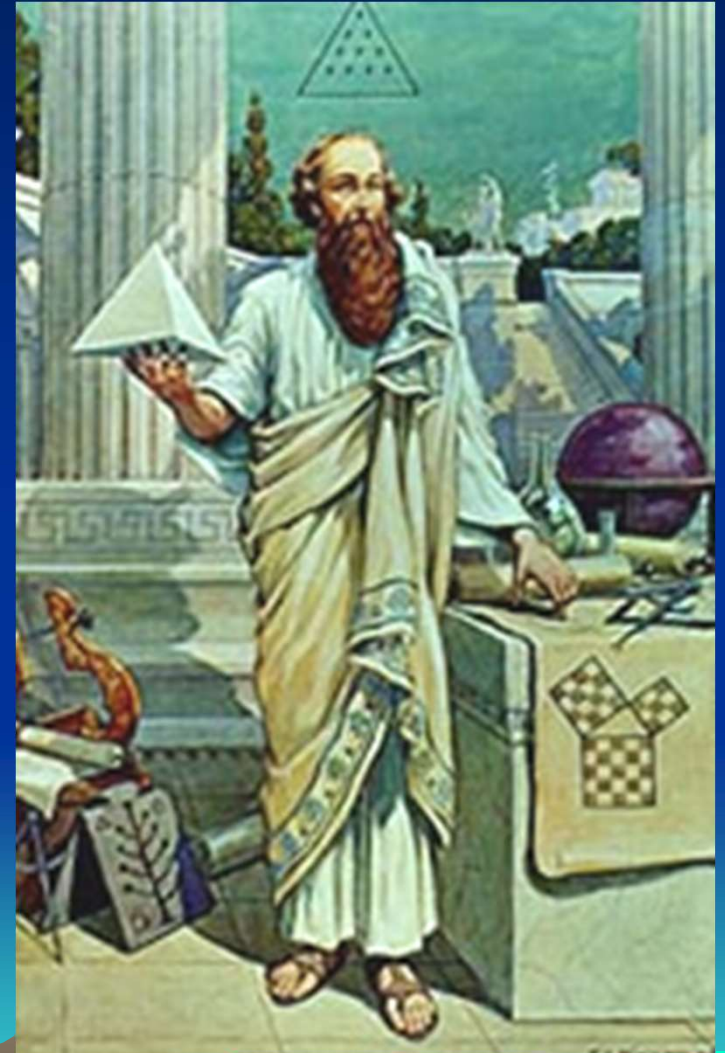


Fyodor Bronnikov's Pythagoreans Celebrate Sunrise (1869)

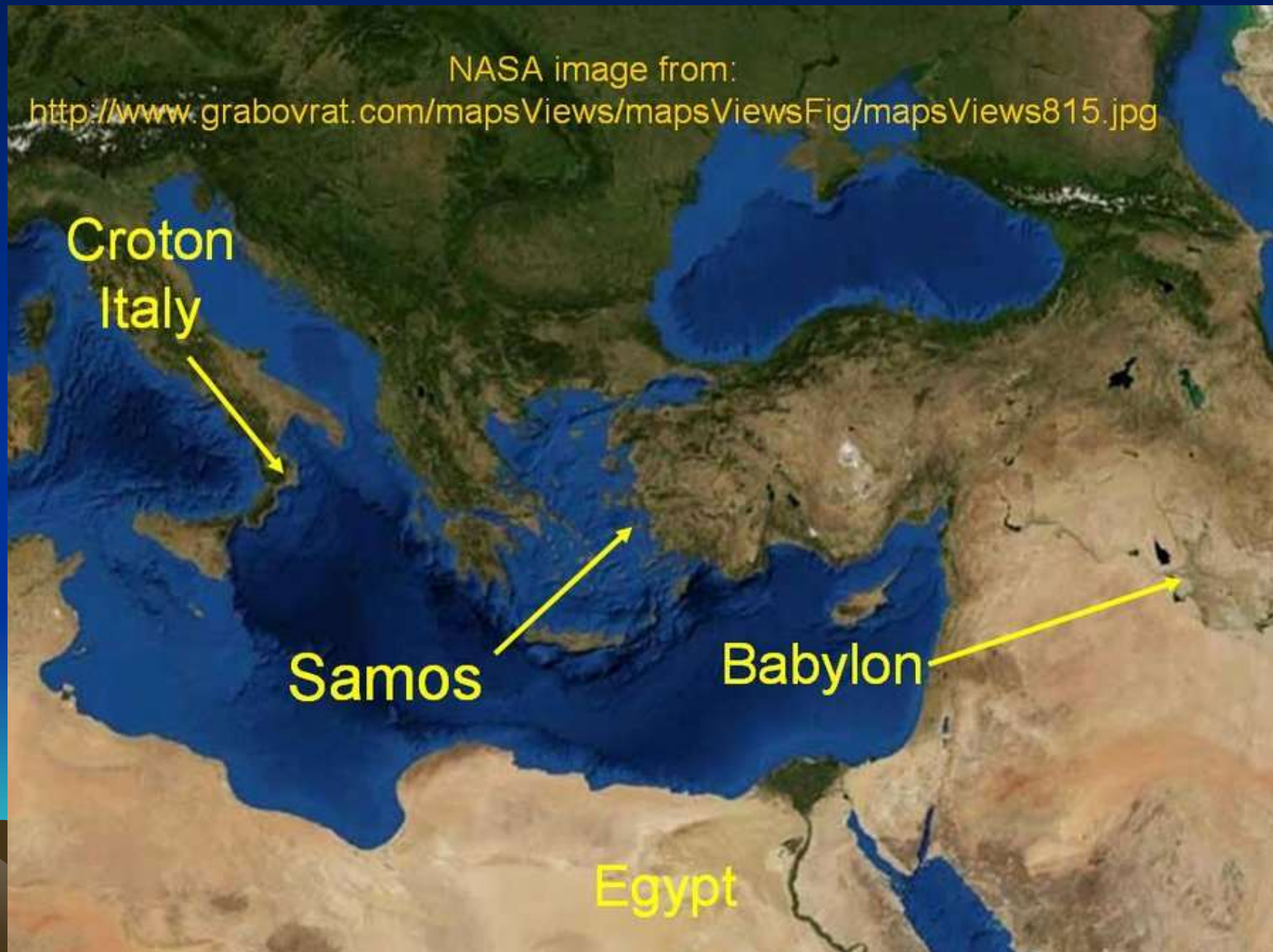


Pythagoras (of Samos, ca. 580? - ca. 500? B.C.E.)

- Traditionally
 - Initiated in Egypt
 - the first to use the word *philosophia*, and the first to call himself a *philosophos*.
 - Understands philosophy as a religious “way of life”—care and training of the soul < (soul/body dualism)



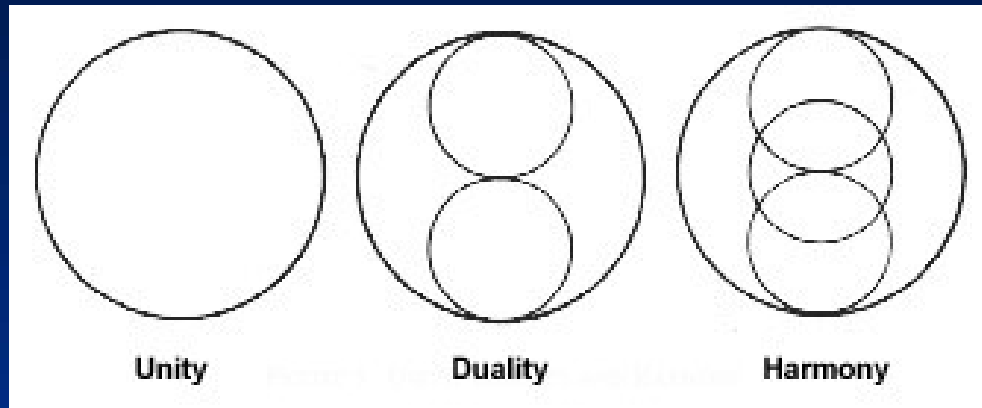
Life of Pythagoras



Enduring Ideas (and words) from the Pythagoreans

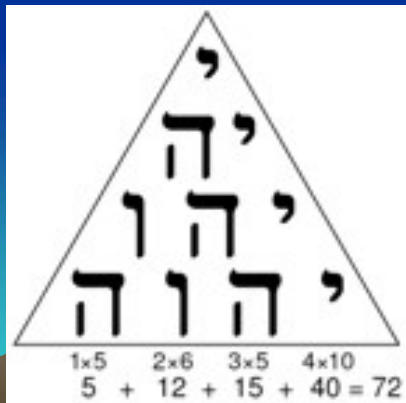
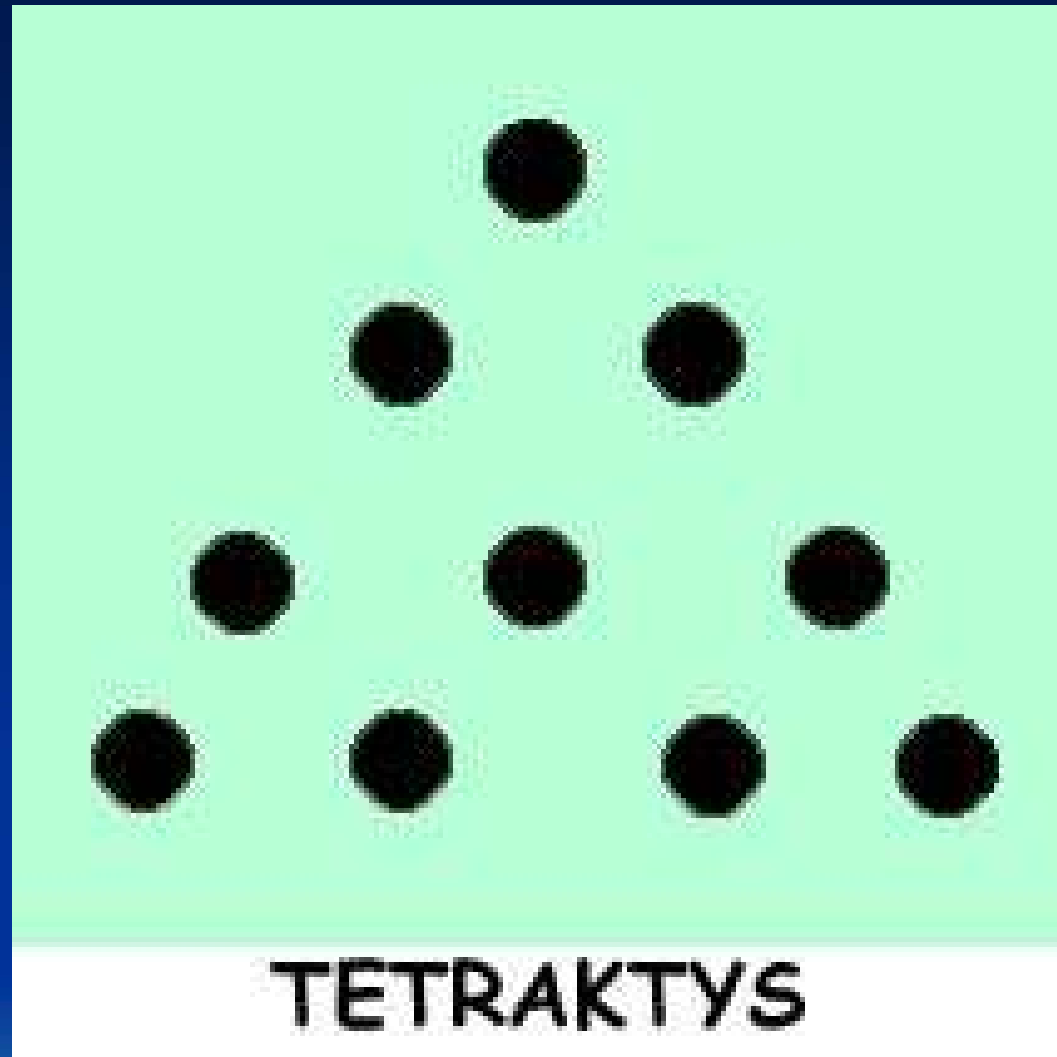
- *Philosophia*
 - a religious and communal “*way of life*”; “loving wisdom” distinguished from a presumed attainment of “wisdom” (*sophia*) itself.
- Rebirth (*palingenesis*)
 - (cf. “born again” - ◀ Orphic **Mysteries**)
- Number (*arithmos*)
 - Aristotle says that the Pythagoreans hold that “mathematical numbers” (*arithmoi mathematikoi*) are in sensible things as their “*arche*” (*Met.* 987b; 1090a) → “numerology” & “*gematria*” [+ “data science”?]
- *Kosmos*
 - understood as an “ordered whole”
- *Harmonia*
 - + Sound-number relations → harmonics
- *Theoria*
 - Contemplation assimilates us to the divine (*theos*)
 - *Women Philosophers*
 - Among Pythagoras’s followers were “the first women philosophers.”

Divine Number



- One, the principle of Unity; the Dyad, strife and relation; the Triad, bridges opposites.
- Four branches of Number: **Arithmetic** solely consists of Number; **Geometry**, Number and Space, **Music**, Number and Time; **Astronomy**, Number, Space, and Time.

The Tetraktys



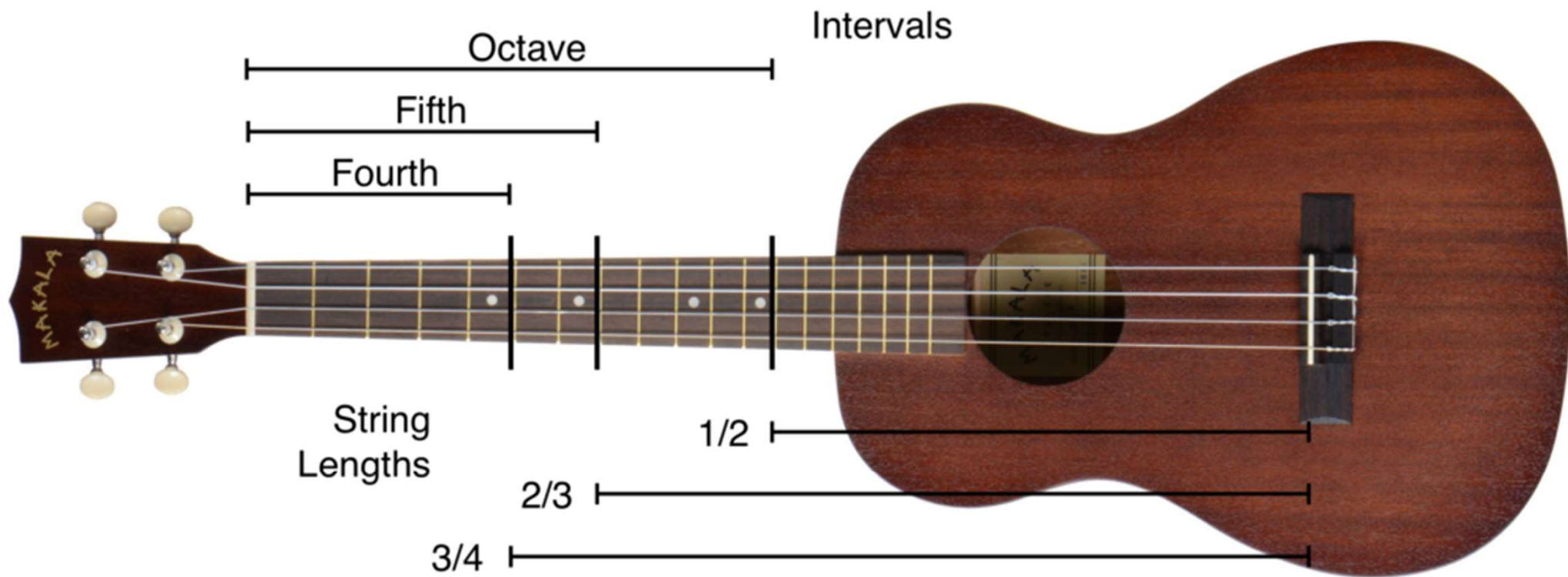
The *Tetraktys*

- $1+2+3+4 = 10$
 - also geometrical figures: point, line, plane, and 3-dimensional surface.
 - musical scales: 1:2 ratio is an octave, 2:3 the perfect fifth, and 3:4 the perfect fourth.
- encompasses both Odd and Even, Square and Oblong, etc. Thus the Tetraktys (or Decad) is often called the *Kosmos* (world-order), Ouranos (Heaven), or *to pan* (the All.)

Number and Harmonia

- All things resemble numbers.
- Pythagoras handed down the *tetraktys*, which contains the “fount and root of ever-flowing nature” and produces the most perfect number, 10.
 - $1+2+3+4 = 10$ [2nd Unity]
- The *kosmos* is arranged according to *harmonia* (attunement), which is a system of three concords: the octave→1:2 ratio [or $\frac{1}{2}$], the [perfect] fifth→2:3 [or $\frac{2}{3}$], the fourth→3:4 [or $\frac{3}{4}$].

from Sextus Empiricus KRS 279



Relationship between today's intervals and Pythagoras's harmonic ratios

Al-Kindi (b. Basra, Kūfah, Iraq, ca. 800-873)

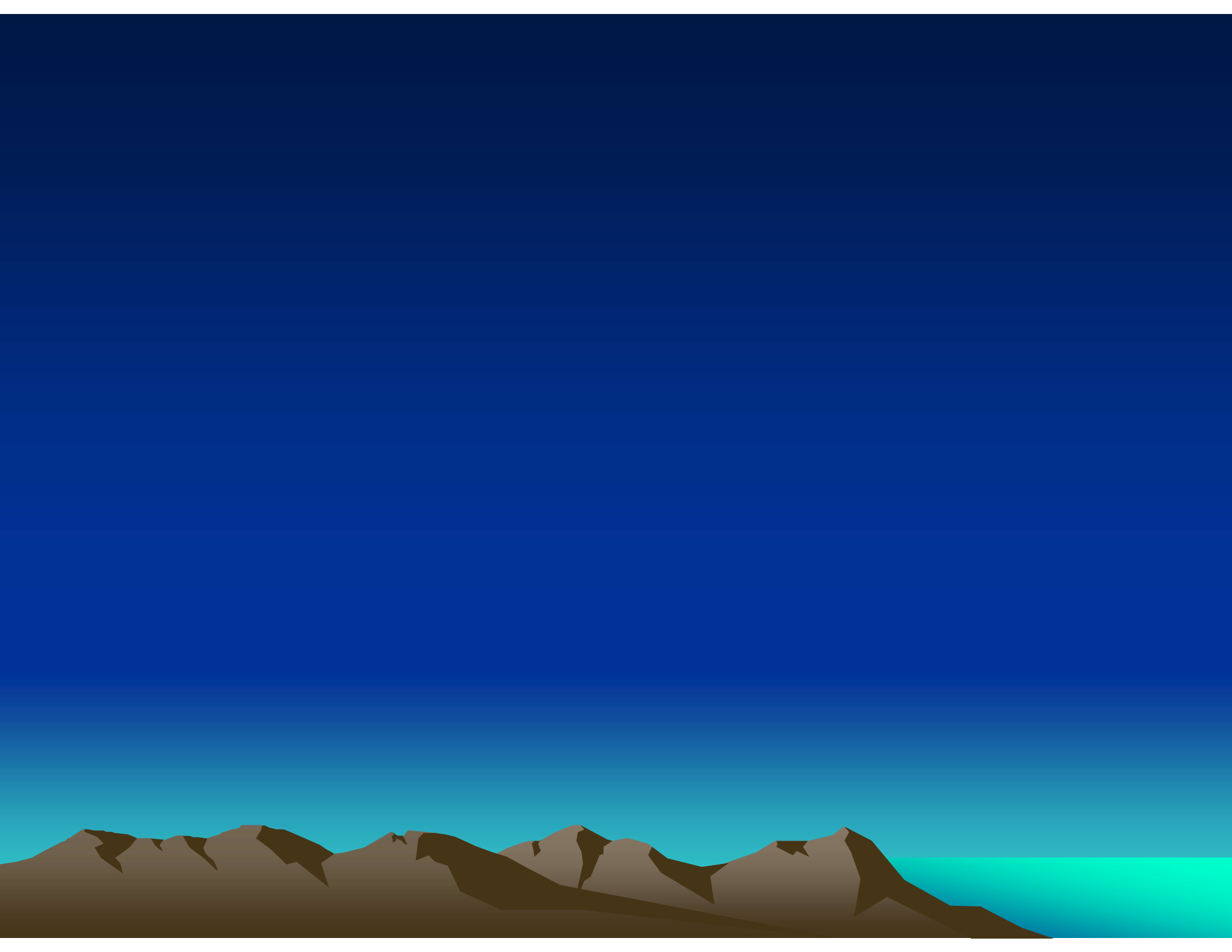
- First great theoretician of music in the Arab-Islamic world
- First to provide a mathematical account of the “Pythagorean comma”—see his ‘ud tuning, which distinguishes between the apotome [C#], ratio $2187/2048$, and the limma [Db], ratio $256/243$
- <https://www.youtube.com/watch?v=6-qoQ0Lqcx8>



Al-Farabi

- forthcoming





From Greek to Arabic Philosophy

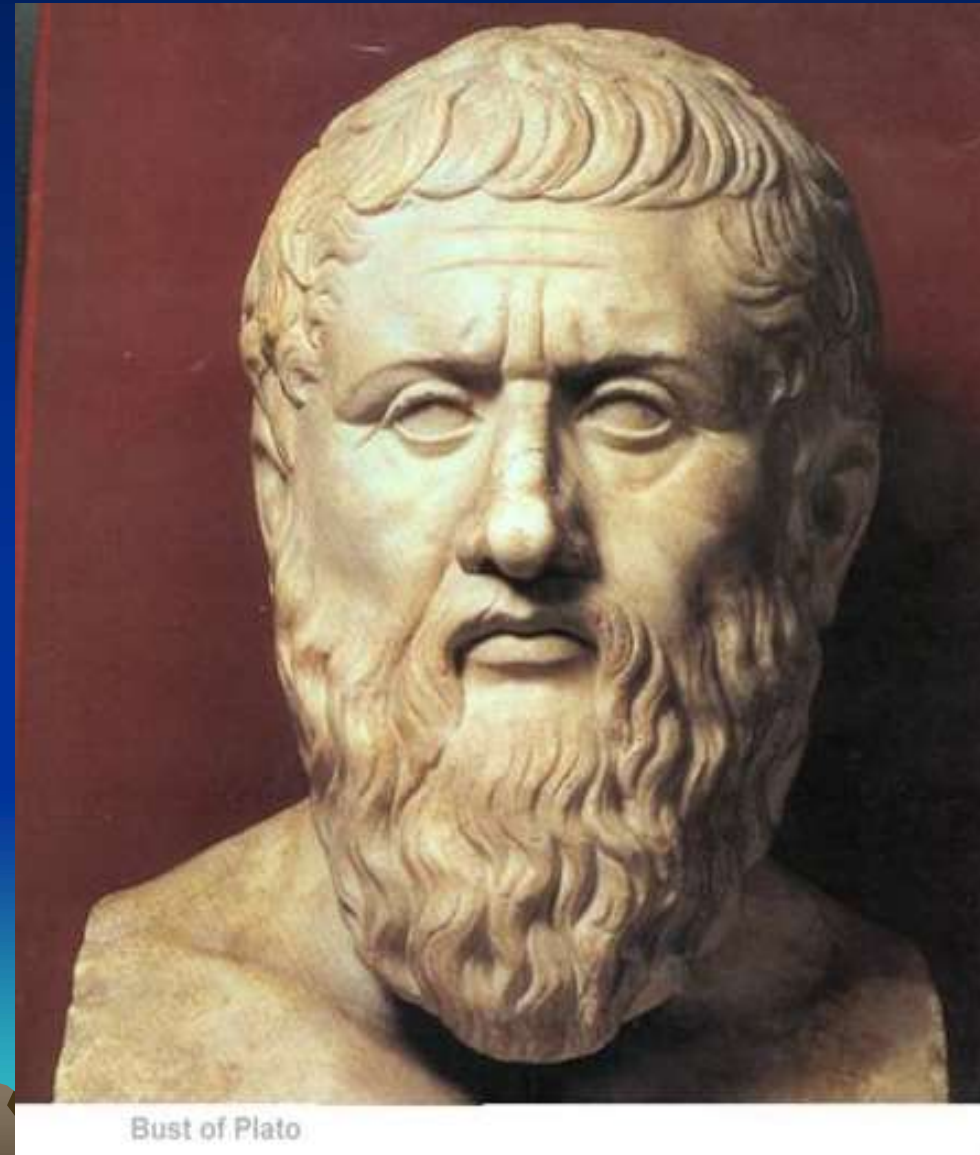


“The School of Athens”



Plato

- “The safest general characterization of the European philosophical tradition is that it consists of a series of footnotes to Plato.” -- Alfred North Whitehead
- “*Christentum ist Platonismus fur's 'Volk.'*” -- Nietzsche
- “Of all the ancients there are none so close to us Christians as the Platonists.”
– St. Augustine



What is Platonism?

- → Dualistic Metaphysics

- → World

- Divine
char
know
sens

- → Good

- Plato coins the word *theology*.

Aristotle (384-322 B.C.E.)

- Plato is said to have called him "The reader" - he was "the Mind (*nous*) of the school"



le world.

visible-
vs. body;
nality vs.

God as described in the *Qur'an*

- Both *transcendent* and *immanent*
- Unique
 - (but “closer to man than man’s jugular vein” 50:16)
- intervenes in human history to reveal himself to man
- creates *ex nihilo*
 - The Qur’anic God as creator *ex nihilo* links to his creation by the sheer power of creativity. This contrast with (1) the Aristotelian God as Unmoved First Mover, who links, though apathetically, with that which moved; and (2) the Neoplatonic God as eternal emanator, who bridges, or attempts to bridge, the huge gulf between transcendence and corporeal reality by the device of emanation

– Netton 1998



Neoplatonic Influence

The earliest “philosophy” transmitted into Islamic Culture was Neoplatonic. The Islamic strain of Neoplatonism tended to agree with Aristotle that:

- the world is eternal
- there is a hierarchy of being with the intellect at the summit and the world of generation and corruption at the bottom—>recommends a rather ascetic system of ethics
- Problem: philosophers based their criterion of truth on “reason,” rather than “revelation.”



Falsafa (transliteration of *philosophia*)

- Important Philosophers (*falasifa*) include:
 - Socrates and Plato
 - < Personality and Spirituality
 - Aristotle – “the first teacher”
 - < Logic and Metaphysics

Falsafa is sometimes distinguished from *Hikma* (“wisdom”).

- Examples of *hikma* are:
 - *Kalam* – “Islamic theology” (metaphysical contingency) closely associated with the rise of the Mu’tazila’s rationalistic accounts of Islamic beliefs (9th century CE)
 - Sufism –



Al-Kindi

- The “father of Islamic philosophy” Combines reason and revelation.
- No basic inconsistency between Islam and philosophy, just as there is no basic inconsistency between Plato and Aristotle. “Truth is truth,” “philosophy is the highest art.” Aristotle should take precedence due to his appreciation of the truth.
- Philosophy helps the Muslim to understand the truth using different techniques from those directly provided through Islam.
- Rejects the Greek idea that the world is “eternal.”
- Adds “creation” to Aristotle.
- Integrates Neoplatonism—God creates through a series of “emanations.”
- Interprets Aristotle’s “Active intellect” as the divine source of our knowledge.



Al-Farabi (Turkish, ca. 870-950)

- Logician, theorist of language and politics—the “second teacher.”
- Champions the harmony between Plato and Aristotle
 - Sought “logic” as the science of the universal laws of regulated thought, not just rules of abstract Greek Grammar
 - Lays foundations for philosophic synthesis
 - Sees *Qur'an* as poetic expression of philosophical truths
 - *Falsafa* is universally true [and demonstrable], but accessible only to an elite (through *reason*). Contrast: *Religion* is true, but culturally specific (through *revelation*)—religions are imaginative projections out of the supernal hypostasis/divine Active Intellect [symbolic imitations are objectionable].
 - Develops Neoplatonic emanationist hierarchies



Kalam

- *Kalam* - metaphysics of (radical) contingency where all determinant being is absolutely dependent on God.
- “atomist occasionalism” - no substance endures beyond the point event, save through the power of God → atoms exist in discrete quanta of time and continue only by re-occurring from moment to moment; atoms never change, they only re-occur. All being is vertically caused, created *ex nihilo*, and absolutely dependent on God. “Substance” is simply a collocation of atoms whose existence depends on whether God decides to re-create or not. The only necessity is God, and every moment of existence is contingent on Him; so all events are miracles. There is no teleological causation of events, only occasions. In effect, Necessity is no longer an attribute of being.
- Think of a “movie” → a series of discrete images.
- Sharply contrasts with Aristotle's metaphysics of necessity
 - In which “being” or “substance” is characterized by: continuity, constancy, and self-sufficiency
- Decline of *Kalam*: Reacted to by traditionalists and later the Ash’ariyya (10th c.) who valued revelation over reason

Soul in Islamic philosophy

- “According to the version of Aristotle which was generally used by the Islamic philosophers, the soul is an integral part of the person as its form, and once the individual dies the soul disappears also. This appears to contravene the notion of an afterlife which is so important a part of Islam. Even Platonic views of the soul seem to insist on its spirituality, as compared with the very physical accounts of the Islamic afterlife. Many of the philosophers tried to get around this by arguing that the religious language discussing the soul is only allegorical, and is intended to impress upon the community at large that there is a wider context within which their lives take place, which extends further than those lives themselves. They could argue in this way because of theories which presented a sophisticated view of different types of meaning that a statement may have in order to appeal to different audiences and carry out a number of different functions. Only the philosopher really has the ability to understand this range of meanings, and those who work in the Islamic sciences do not know how to deal with these issues which come outside of their area of expertise.” (*“Islamic Philosophy” Routledge Encyclopedia of Philosophy*)



