General Philosophy

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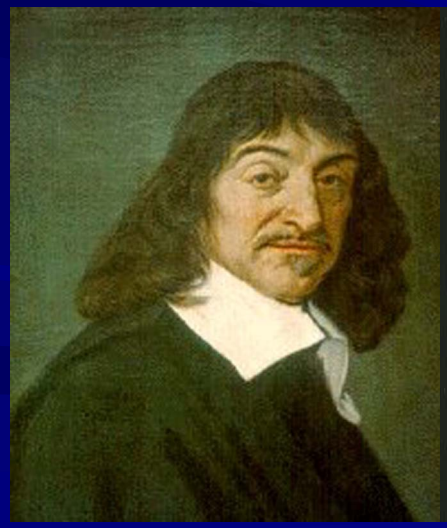
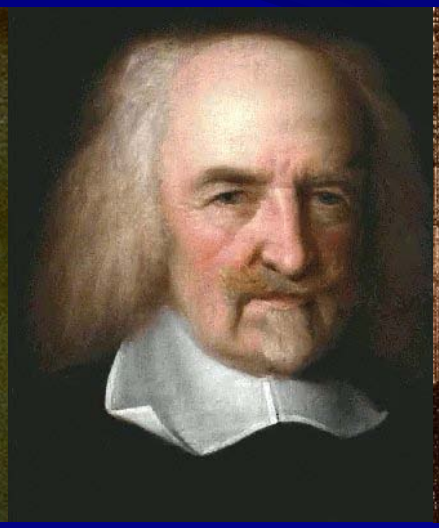
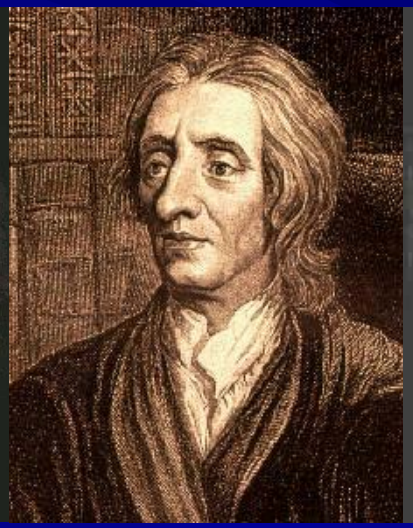
Lecture 1: Historical Background Part 1


What is “General Philosophy”?

- Some central issues of epistemology (“What can we know?”) and metaphysics (“What is the nature of things?”).
- Illustrates how philosophy is done: types of arguments, methods of enquiry etc.
- Historical focus: all but one of the topics (Knowledge) are introduced through the writings of “Classical” philosophers of the 17th and 18th centuries.

Why Study Philosophy Historically?

- How the agenda got set: when and why did these problems become important?
- Learning the labels: “Cartesian dualism”, “Lockean veil of perception”, “Berkeleian idealism”, “Berkeleian instrumentalism”, “Humean compatibilism”, “Cartesian” or “Humean” scepticism etc.
- Great original thinkers, writing for a general audience: so their ideas are profound, and they don’t take too much for granted.

The Value of Historical Perspective

- Philosophical ideas tend to have broad and deep interconnections.
- Studying classic “battles of ideas” enables us to view these interconnections in context and with the perspective of history.
- Many classic themes recur throughout the history of thought, sometimes hidden under the surface of contemporary debate.
- Ignoring the past can make us slaves of fashion, and blinker us to other options.

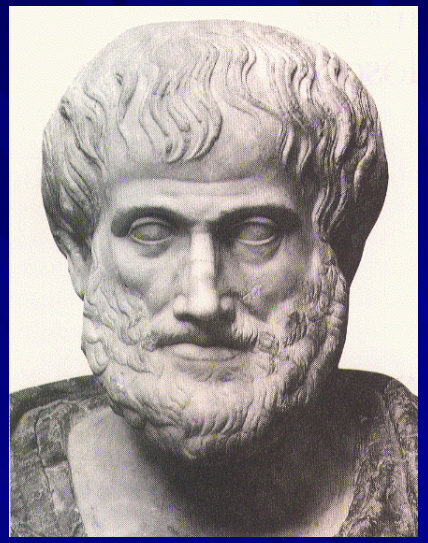
The Topics (1)

- **Scepticism**: Descartes' evil genius, Locke's veil of perception
- **Knowledge:** Responding to scepticism
- **Perception**: Locke's representative theory of perception, Berkeley's criticisms
- **Primary and secondary qualities**: Boyle and Locke's theory, Berkeley's criticisms
- **Induction**: Hume's sceptical argument, and his denial that nature is "intelligible"

The Topics (2)

- **Free Will**: Hobbes' and Hume's compatibilism, and their naturalistic view of man as part of nature
- **Mind and Body**: Descartes' dualism, various philosophers on the limited powers of matter and their religious implications
- **Personal Identity**: Locke's attempt to ground this independently of "spiritual substance"

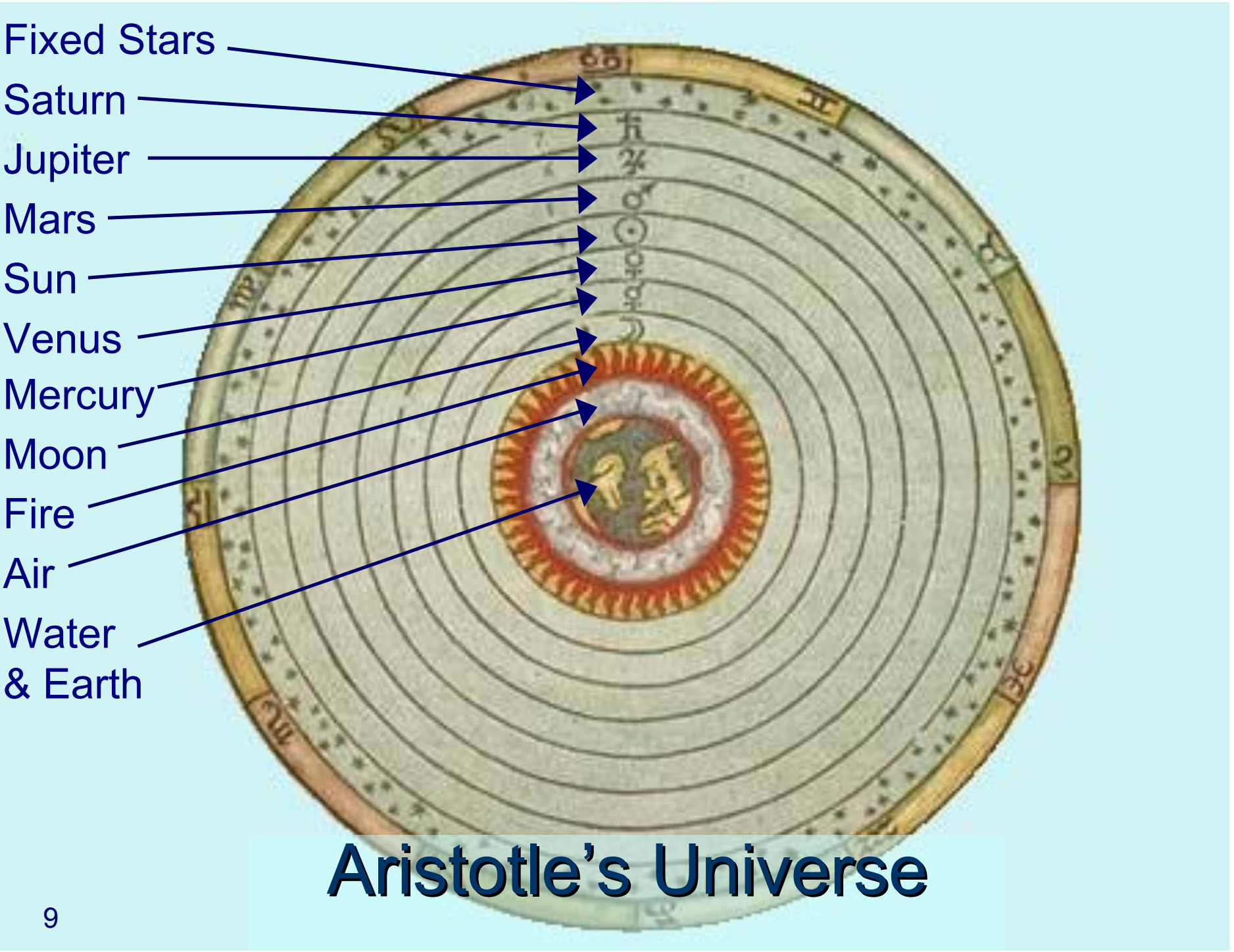
The Birth of Philosophy



- The ancient Greeks, distinctively, aimed for rational understanding independent of religious tradition.
- Many different philosophers and "schools":
  - Various "Pre-Socratics" (c. 600 - 400 BC)
  - Plato and his *Academy* (387 BC -)
  - Aristotle (pictured) and his *Lyceum* (335 BC -)
  - Pyrrhonian sceptics (c. 320 BC -)
  - Epicureans (c. 307 BC -)
  - Stoics (c. 300 BC -)

The Institution of Scholasticism

- Roman Empire became Christianised:
  - Pagan temples and libraries destroyed 391 AD;
  - Non-Christian “schools” closed down 529 AD.
- Plato and Aristotle adopted:
  - Christian Platonism (e.g. Augustine 354-430)
  - Christian Aristotelianism (e.g. Aquinas 1225-74)
- The Christian Aristotelian worldview became dominant in the medieval monastic schools, hence “Scholasticism”.



Aristotle's Universe

Rediscovery of the Classics

- Ancient texts survived in the Byzantine Empire, or in the Arabic world.
  - Manuscripts brought West when the Ottoman Turks attacked, fostered the development of Humanism in Renaissance Italy.
- Printing (invented 1450) gave them much wider circulation, e.g.:
  - Lucretius (rediscovered 1417, printed 1486)
  - Sextus Empiricus (translated into Latin 1562)

Upheaval and Instability

- Many factors contributed to Western instability in the period 1500-1650, e.g.:
  - growth of population and trade;
  - discovery of the New World (America etc.);
  - consequent economic disruption;
  - realisation that ancient maps etc. were wrong;
  - suggestions of cultural relativity;
  - technology of gunpowder and consequent centralisation of power.

The Hereford "Mappa Mundi" (c. 1290)

based on the writings of Orosius, a pupil of Saint Augustine, part of a compendium of knowledge to refute the pagans

The Reformation

- The Reformation added to this crisis:
  - Luther rebelled against the Church of Rome, starting in 1517;
  - Many parts of Europe (especially in the North) became Protestant;
  - Savage wars throughout Europe arising from religious differences (e.g. Thirty Years' War 1618-48, English Civil War 1639-51);
  - Peace "of exhaustion" at Westphalia, 1648 led to greater religious toleration.

The Problem of the Criterion

- A sceptical problem raised by Sextus Empiricus in his *Outlines of Pyrrhonism*:

  How can any criterion of reliable knowledge be chosen, unless we already have some reliable criterion for making that choice?

  – Roman Catholics appeal to tradition (Church, Bible, Aristotle); Protestants appeal to the believer's personal response to the Bible;

  – How to know who is right? (Maybe neither?!)

Aristotelian Science

- Elements and Natural Motions
  - Four elements: fire, air, water, and earth.
  - Fire/air naturally move upwards, water/earth downwards, each seeking its natural place.
  - Heavier things fall faster, in proportion to weight.

(Physics, IV 8)

- A Teleological Physics
  - *S*trivings, horror of a vacuum etc.
  - Everything strives towards the eternal, hence heavenly bodies move in circles, and must be made of a fifth element, *aether*.

Intelligibility, or Empty "Explanation"?

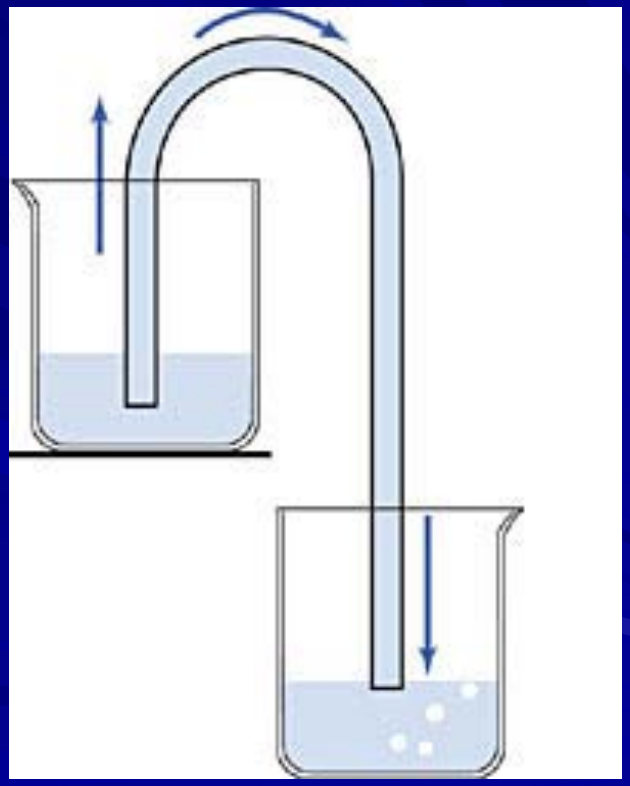
- "Why does water rise up a siphon pipe?"

  "Because Nature abhors a vacuum."

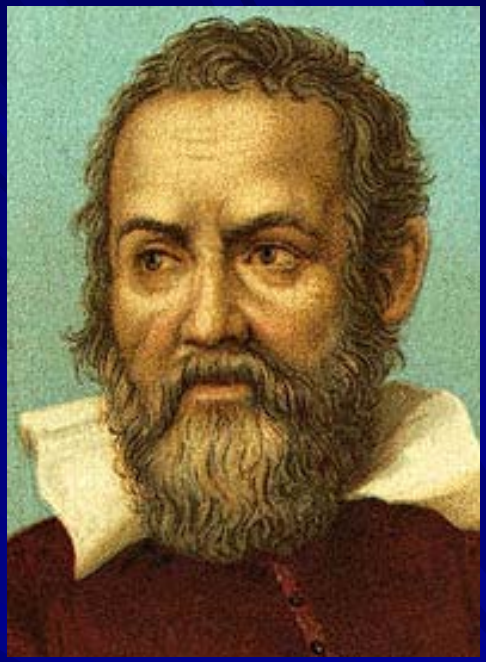
- "Why does opium make one sleep?"

  "Because it contains a *dormitive virtue*, whose nature is to make the senses soporific."

  Molière (1673)



Galileo's Experiments

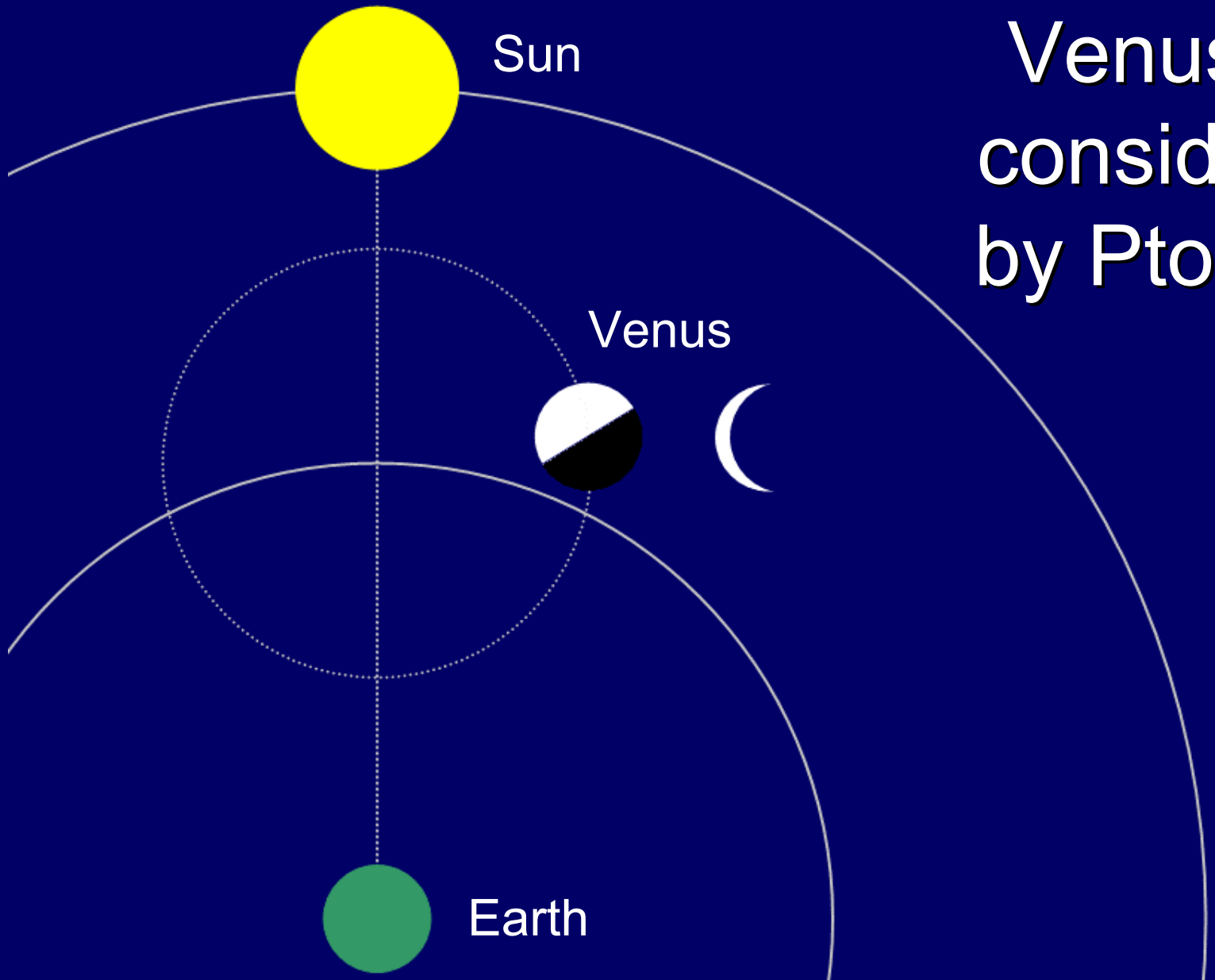


- Aristotle couldn't explain:
  - the flight of a cannonball;
  - a sledge sliding on flat ice;
  - water dripping from a gutter.
- Galileo was reported (by Viviani) to have performed another critical experiment:
  - dropping a large and a small ball together from the Leaning Tower of Pisa. Contrary to Aristotle, they fell at similar speeds.

Galileo's Telescope

- The telescope was invented in Holland in 1608, and Galileo made his own in 1609.
- What he saw with it refuted Aristotle's cosmology:
  - Mountains and valleys on the moon;
  - Four moons orbiting around Jupiter;
  - Innumerable stars too dim for the naked eye;
  - Phases of Venus, sometimes "full" (implying that it is then on the opposite side of the Sun).

Venus as considered by Ptolemy



From Final to Efficient Causes

- Aristotelian science was based on purposes, or "final" causation:
  - Things *strive* to reach their natural place, or to avoid abhorrent situations (e.g. a vacuum);
- Galileo preferred "efficient" causation:
  - The outcome depends on where the causal sequence happens to lead.
  - Matter doesn't *strive*; it is *inert*, remaining in its state of motion or rest unless acted on.

The “Mechanical Philosophy”

- The paradigm of efficient causation is via *mechanical* contact:
  - Interaction between contiguous particles of matter by pressure and impact.
- Compared with pseudo-explanations involving “occult” qualities (horror of a vacuum, dormitive virtue etc.), this seems:
  - genuinely *explanatory*;
  - genuinely *intelligible*.

Inertia and the Orbiting Heavens

- Thus Galileo claimed, against Aristotle:
  - Matter does not “strive”.
  - Left to itself matter is “inert”: it continues in a uniform state of rest or motion until acted upon by a force (e.g. pushed along).
  - The heavenly bodies are not composed of a special “aether”, but of ordinary matter, and therefore subject to the same laws.
- BUT: why then does the Moon orbit the Earth, and the planets orbit the Sun?

The Father of Modern Philosophy

- Attacks Aristotlian tradition

  using the sceptical problem of the criterion;

- Builds on Galileo's mechanical philosophy

  grounding it on a theory of matter's "essence";

- Makes room for mind

  as an "essence" radically distinct from matter.

Descartes – Epistemology

- Seeks reliable anti-sceptical basis for knowledge, not appealing to authority:
  - "I think therefore I am", provides a first example of something known, and reveals what is needed: *clear and distinct perception*.
  - Then prove clearly and distinctly that the idea of God implies a perfect cause: i.e. God.
  - A perfect God cannot deceive, so our faculties must be reliable *if used properly*.
  - Hence the importance of Descartes' *Method*.

Descartes – Science

- Descartes was a major natural philosopher:
  - First to explain the rainbow in detail;
  - Discovered co-ordinate geometry;
  - Suggested circulation of the blood;
  - Concluded that the Earth orbits the Sun.
- His most important intellectual legacy:

  The ideal of a mechanistic science of the world, based on the simple mathematical properties of extended matter.

Descartes and Essences

- The real qualities of matter follow from its essence, simple geometrical *extension*.
  - This essence, known through God-given innate ideas, implies mathematical laws of motion.
  - Bodies are passive, remaining in the same state *(inertia)* until a force is applied.
  - Qualities perceived by the senses (Locke's "secondary qualities") are observer-dependent.
- Mind is a distinct, active *immaterial* substance, whose essence is *thinking*.

Descartes' Physics

- Since matter's essence is *extension*, non-material extension is impossible. Thus:
  - The physical world is a *plenum* (no vacuum);
  - All motion must take the form of *circuits* of matter within the plenum.
  - This can be expected to give rise to *vortices*, circular motions like whirlpools.
  - A vortex can explain why the planets orbit the Sun without shooting off under inertia.