



1



- <u>The Bronze Age (3000 1200 and the Dark</u> <u>Age (1200 - 700 BCE)</u>
- kings were great warriors
- warrior values physical strength, male bonding, individual glory, immortality won through battle
- Despised self interest
- *Arete* (virtue) = living honourably by warrior code, not available to women, lower classes, cripples etc.
- Later: achieve fame through debate
- Fear of *Tyche* (fate)





- Rise of the *polis* (pl. poleis) city state ruled by citizens (male aristocrats)
- *Iliad & Odyssey* written by Homer
- Bronze Age warriors fought as individuals

 successful warriors gained riches & had chariots
- *Phalanx*: lightly armoured soldiers (*hoplites*) fought as unit. Soldiers fought on foot, not from chariots
- Soldiers were ordinary people, not aristocrats



Beginnings of Philosophy, Physics & Psychology

- Closed vs. open systems of thought
- Thales of Miletus (around 585 BCE) encouraged systematic criticism of ideas, discussion lead to improvement
- Separate quality of ideas from quality of person. All citizens equal.
- Leahey: Founding a critical tradition of thought was the major achievement of the Greek inventors of philosophy. (p. 41)



Beginnings of Physics

- Thales of Miletus (585 BCE) *phusis* (basic element of all matter) was water
- World understandable made of ordinary matter not affected by actions of gods or other supernatural beings or forces
- Thale's student, Aniximander, proposed that phusis was not a recognizable substance, but was something different that could take on many forms
- → movement towards naturalistic explanations not supernatural



Pythagoras

- Pythagoras of Samos (530 BCE)
- Mathematician notion of proof based on reason, not divine revelation or authority
- Pythagoras dualist, founded a cult
 - Dualism: Soul could exist without body.
 Body was prison which held the soul.
 Punish the body to help soul attain truth.
 - Teacher of Plato



Being and Becoming: Parmenides & Heraclitus - 2

- Heraclitus of Ephesus: only constant is change.
 - phusis was fire, not water
 - moral values change with society
 - useful truths, no eternal Truth
 - change regulated by universal harmony that maintains equilibrium





- Physician-philosophers who inquired into perception & thought (protopsychologists)
 - physiological basis for mental activity (not the immaterial soul)
- Alcmaeon of Croton (500 BC) dissected the eye, traced optic nerve to brain, thought occurred in brain
- Empedocles of Acragas theory of perception effluences: modality specific copies of objects which enter the body through the sense organs
 Thought occurred in the heart
- \rightarrow purely physical basic for perception & cognition



The Last Physicists - 2

- Free will is an illusion; everything happens out of necessity. Natural laws govern the world.
- *Tyche* (fate) \rightarrow determinism
- Democritus: objects emit *eidola* (copies) which we perceive through our senses (see Descartes)
 - Perception of the world is indirect



The Sophists

- Greek citizens participated in political discussions, argued lawsuits, served on juries etc.
- *Sophists* = teachers of rhetoric
- humanists: interested in human nature & "best way to live"
 - Compare to naturalists interested in world around us
- *Humanism* philosophy that stresses value & dignity of individual & human fulfillment through reason





- Should focus on useful practical information, not speculation about Truth, ultimate reality
- Differentiated *phusis* (natural laws) & *nomos* (human laws)
- Greeks assumed human nature was fixed & Athenian way best
- Sophists human beings flexible & adaptable. Human laws could be different for different societies.
- Note: assumptions about human nature determine political views



Socrates

- Modest background, son of stone-mason
- Moral philosopher: sought true nature of virtue, sought to understand abstract concepts (justice, beauty etc.)
- goal: challenge Athenian hubris & values
- *elenchus*: questioning technique, counter examples
- Everyone possesses moral truth (nativism) Questioning brings out truth.
- *aporia* enlightened ignorance







Plato: The Quest for Perfect Knowledge

- Born between 429 & 423 BCE
- Peloponnesian Wars: 431 404 BC
- student of Socrates, Aristocrat
- Some aristocrats rebelled unsuccessfully against the democratic government of Athens
 - Socrates questioned Athenian values & was seen by aristocrats as being dangerous
- Disenchanted with politics & war; disillusioned after execution of Socrates



Plato - 3

- Like Socrates, Plato believed that knowledge must be justified
- Believed that true knowledge was possible, but...
- Sense perception not the path to knowledge, world in Heraclitean state of becoming.
 Phusis was fire (always changing)
- True knowledge not to be found in material world but in realm of Being
- Studied mathematics with Pythagorians -> logic & reason led to Truth
 - ascetism



Metaphors for the Forms

Simile of the Sun

- In vision, eye needed to see object, but sun also needed; sun = 3rd thing
- In knowledge, reason can understand Forms; need 3rd thing: divine illumination or Form of the Good

Metaphor of the Line

• Line divided into unequal segments: (1) smaller section: world of appearances - images & perceptions; (2) larger section: world of true knowledge - mathematics, moral truths, Form of the Good

	Metaph	or of the Line	
Faculty (within the soul)		Object (out there)	
KNOWL EDGE	Reason (Dialectic)	Higher Forms (Beauty, Justice, Truth, etc.	Intelligible World Lit by the Form of the Good
	Understanding (based on assumptions)	Forms of Math and Science	
OPINION	Perception, Belief	Particular Things - Living and Artificial	Visible or Sensible Work Lit by the Sun
	Conjecture, Imagining	Shadows, Images, Reflections, Copies	



- Prisoners look at back of cave. Fire behind prisoners casts shadows of objects onto wall of cave. Reality = shadows on wall
- Soul imprisoned in body, perceives imperfect images of objects through senses (= shadows)
- Cave is culture restricts beliefs & perceptions









- The Ladder of Love comes from Diotima, a woman & teacher of Socrates.
- (1) Appreciation of beautiful bodies (lust) -> (2) love of one person ->
 (3) love of all beautiful bodies & souls (male citizens) →(4) beautiful soul -> abstract beauty (mathematics, philosophy)
 Lust must be abandoned by learning
 - Lust must be abandoned by learning philosophy



Learning as Remembering

- Reincarnation souls born in heaven & see Forms.
 - At death, souls brought to judgement
 - knowledge of forms innate, but forgotten when soul entered body
- *Nativism* innate knowledge of virtue, but education needed to develop knowledge.
- Knowledge of Forms recoverable through reason.







Motivation

- Three classes of citizens: Guardians, Auxiliaries (soldiers, magistrates, like civil servants), & Productive class (tradesmen)
- Three types of soul in each person:
 - (1) Rational immortal soul,
 - Dominates in the Guardians
 - Located in the head
 - (2) Spirited motivated by glory & fame, feels shame & guilt located in the chest
 - Dominates in Auxiliaries
 - (3) Desiring governed by self interest, unfit to rule because put self-interest first

 - · dominates in productive class





- <u>Dualism</u>: distinction between material world and spiritual world (Forms, soul, heaven). Socrates' *eudaemonia* was a virtuous life on earth. <u>Elitism</u> education only for the elite (rational souls)
- <u>Nativism</u> knowledge innate, quality of soul determined before birth
- Reason vs. emotion
 - Romantics trusted intuition & emotion
- Theoria vs metis:
 - *Theoria:* contemplation of the abstract (math & philosophy)
 - Metis: development of practical knowledge or technology.



Aristotle (384 -322 BCE)

- Father was physician to Philip of Macedon, who conquered Greece 338 BCE
- Plato's student, then did zoological research, tutored Alexander the Great
- Observer of nature, natural philosopher (scientist), not metaphysical like Plato
 – Did not do experiments
- No division between *phusis* and *nomos* Human laws (*nomos*) should be based on human nature
- Unlike Socrates & Plato, Aristotle developed a systematic philosophy





- Aristotle rejected <u>Separability of the</u> <u>Forms</u> (Dualism)
 - could have n statues, don't need
 - (n + 1)th statue which is immaterial, heavenly, idealized statue.
 - Forms don't explain anything.
- No "heavenly" or spiritual world of Forms
- Not a complete materialist believed in existence of soul



















Aristotle: Sensory Perception

- Acquiring knowledge begins with perception & ends with knowledge of universals
- Perception = mind receiving form of object, but not matter
- 5 special(ized) senses: vision, hearing, touch, taste, smell
- Senses passive & unerring; e.g. eye jelly turned green when perceiving green object
- Perceptual realist:
 - senses detected real properties (special sensibles) of objects
 - No distinction between primary and secondary properties
- Allowed for cognitive errors in misinterpreting sensations



Interior Senses - 2

- <u>Memory</u> = storehouse of images created by common sense & imagination (episodic memory)
- based on association of ideas: laws of similarity, contiguity, contrast & causality
 - Separated memory from knowledge (semantic memory)
 - Knowledge function of the soul



Aristotle: Mind - 2

- Active mind = pure thought (processor)

 acts on contents of passive mind to achieve rational knowledge of universals
 - Unchangeable, pure actuality (no potentiality) survived death
- Active mind >< personality, essence of the individual
 - Same in all people
- Passive mind = abstract knowledge, pure potentiality LTM storage ???)





- Humans are naturally social; *eudaemonia* requires properly run state.
- Ideal state = 'aristocratic' democracy, wealthy citizens who didn' t need to work should rule
 - Guardians independently wealthy who could spend time on politics & not need to make living. Disinterested (but not uninterested).
- Leisure necessary for development of virtue & performance of political duties.

Hellenistic (323 - 31 BCE) & Roman (31 BCE - 476 CE) Worlds

- After Alexander died (323 BCE) -> Hellenistic period – wars between Alexander's generals & their heirs
- Disturbing social change -> governors ruled like kings, people avoided political life & turned inwards
- Fear of *Tyche* (fate)
- Turned away from philosophy & science
- Turned inward to find peace at home & within themselves
- Attracted to mysticism, divine revelation



Therapeutic Philosophies - 2

Cynicism

- Live naturally & simply, reject society & social conventions
 - "hippies of Hellenism"
- Disregard for pleasure or pain, personal possessions etc in pursuit of virtue
- Suffering caused by false values (material goods, fame etc.)

Skepticism

- Distrusted sense perception
- Truth not knowable. Goal is *aporia* (enlightened ignornance)



Religion

- Turned to divine revelation rather than use of reason & observation of nature to obtain Truth
- <u>Gnosticism</u> (Gnostics were Christians)
- *Gnosis* = knowledge of secret teachings & rituals, secret interpretations of sacred texts
- Gnostic Gospels writings from time of Christ or shortly afterwards
- Gnostic gospels discovered mid 20th century (Da Vinci Code mentions these)
- <u>Hermeticism</u> writings of Hermes Trismegitus, shortly after Christ









- St. Augustine (345 430 CE) combined Neoplatonism, Stoicism & teachings of Jesus Christ (See Chapter 3)
- Discouraged philosophy & inquiry into the nature of things; faith was sufficient
 Curiosity = "lust of the eyes"
- "It is not necessary to probe into the nature of things.... It is enough for the Christian to believe that the only cause of all created things ... is the One True God."



Quiz

- 1. What is the Greek concept of *psyche* and how does it differ from the Christian idea of the soul?
- 2. How did military life and values influence the political system in ancient Greece?
- 3. Describe the speculations of the Greek philosophers which anticipated later scientific ideas.







