

## Pre-Socratic Greek Philosophers

### I. Why did philosophy start in Miletus?

A. Prior to philosophy most natural phenomena were “explained” by myths.

B. Miletus was a Greek colony in Asia Minor, now Turkey.

1. The city was a trading center and like all Greek cities it was open to the influence of foreign ideas.

a. Basic geometry and math was learned from the Egyptians.

b. Star lore and calendar skills came from Asia Minor.

c. Exposure to many religion’s myths may have spurred a quest for certainty (which philosophy ultimately couldn’t provide!).

d. All these ideas made the Greeks acutely aware of change and the transitory nature of life which in turn bred a certain pessimism which also spurred the quest for an explanation.

2. Greeks had inherited a risk taking seafaring life from the Minoans and were developing the idea of democracy.

3. The Greeks valued imagination and attention to detail in literature.

4. The Greeks had a basic assumption that “nature would play fair” in other words nature was consistent and if closely examined would reveal its secrets.

5. Early Greek poets like Homer and especially Hesiod had suggest that complex matter had arisen from a primitive state of water, air, fire, and earth through successive interactions of opposing forces. The ideas of elements and underlying forces would be the starting point of later philosophy.

C. Something was in the air. From 800 B.C. to 200 B.C. the world had Confucius and Lao-Tse in China, the writing of the Hindu Upanishads and the Buddha in India, Zoroaster in Persia, the Hebrew prophets in Israel, and Homer, the Philosophers, and the birth of drama in Greece. All ideas that still influence us daily even while we surf the ‘Net.

### II. The Little Three from Miletus: Thales, Anaximander, and Anaximenes (for those that can’t wait the Big Three are Socrates, Plato, and Aristotle.)

A. In Greek, philosophy means “love of wisdom” and at the beginning philosophers were generally polymaths who had wide ranging interests.

B. Philosophy began as a quest to find out what the universe was made of

and replace myths with facts.

### **C. Thales the Wise**

#### **1. Background**

- a. Was born around 640 B.C. in the Greek city of Miletus. One account of his life gives his dates as 624 B.C. to 546 B.C.
- b. Tried to use reason and observation to answer questions about the nature of the universe without reference to divine powers. This is called logos in Greek, a kind of logical analysis that tries to explain things with pure force of thought. He is generally considered to be the first philosopher.
- c. Using scientific knowledge borrowed from the Babylonians, he predicted that a solar eclipse would occur in a given year.
  - i. Current astronomers indicate that the only eclipse in Asia Minor in Thales lifetime occurred on May 28, 585 B.C.. A battle between the Lydians and Medes was stopped due to fear of the eclipse and became the first historical event that can be dated to an exact day.
  - ii. On the other hand Thales did not predict the exact day himself, something Babylonian astronomers had been able to do 200 years before. His belief that the moon shone by reflected light was a Babylonian idea also.
- d. Thales converted Egyptian geometry to an abstract study of imaginary lines of zero thickness instead of a field used to solve engineering problems. He was apparently the first person to prove mathematical statements by a regular series of arguments just as geometry students still do today. He also is said to have measured the height of an Egyptian pyramid by comparing the length of its shadow to the length of a shadow of a stick-a trigonometric principle.
- e. He was the first person we know to study magnetism.
- f. Thales was politically involved as well he proposed that the Greek city states of Asia Minor should form a political union against the non-Greek State of Lydia. He also diverted the flow of a large river so an army he favored could cross.

g. Plato said that once, while walking along studying the stars, Thales fell into a well. The old woman who rescued him noted, “Here is a man who would study the stars and cannot see what lies at his feet.”

h. Another ancient historian noted that Thales was so intent on studying philosophy that he became quite poor. When criticized for his poverty, he used “astrology” to accurately forecast a bumper crop of olives and then leased all the olive presses in Miletus, making himself a fortune.

## 2. The Nature of the Universe—The BIG question for the Little Three

a. Thales sought a unity behind the plurality of things in the universe and was dissatisfied with the myth-makers suggestion that all was made up of four elements: air, fire, water, and earth.

b. Thales came to believe that the basic building block of the universe was water because water could easily be observed in solid, liquid and gaseous forms.

c. He said everything was made up of water and eventually returned to a watery state.

## 3. Man’s Place in the Universe

a. Thales said mankind was made of the same watery element as everything else in the universe. Should we give him a C for being 70% right?

b. Since at death mankind turned back into water, nature was supreme and mankind a mere part of the universe.

c. This humble view of humankind was characteristic of most of the Pre-Socratics and has been reawakened by modern environmental philosophers.

## 4. Importance of Thales

a. Yes, Thales was wrong about water being the cornerstone of the universe, but he used reason to get to the mistake. That’s forgivable if you were the first to use it.

b. Second, the theory was correct. There is ultimate stuff behind appearances that explains change while remaining unchanged: atoms and energy.

#### **D. Anaximander**

1. Born in Miletus about 610 B.C. and died about 545 B.C.
2. Considered to be the pupil and successor of Thales whose philosophy he disagreed with, but whose science he continued.
3. Made the first Greek world and star maps, taught the world was a cylinder hanging in space along with many other worlds and that the heavens revolved around the pole star, perfected the sundial and the first model of the universe (with the stars closer to earth than the moon, but nobody's perfect)
4. The Nature of the Universe
  - a. Anaximander believed that living things came from water and that other things came from fire, air, and earth but something he called "the infinite" or "the boundless" underlay everything and filled the entire universe.
  - b. Originally, the infinite was a whole, but motion within it caused it to break into smaller pieces (the four elements that formed everything else).
  - c. He believed that eventually all the pieces would fit back together and the infinite would be whole again.
  - d. He also believed that there was a natural law in the universe that kept things in balance. A flood of water, for instance, would eventually be balanced by dry air.
  - e. He did not tie his idea of the infinite into popular ideas of the gods
  - f. His idea of an invisible infinite underlaying the visible world may have influenced Plato.
  - g. His separation of mass and an invisible force was a cool scientific idea. Too bad an apple didn't hit him on the head-we might have warp drives by now.
5. Man's Place in the Universe
  - a. He believed that man evolved from fish.
  - b. Like Thales he believed that man was a part of nature.

#### **E. Anaximines**

1. The third Milesian philosopher died around 528 B. C. Although some

give his dates as circa 570 B.C. to about 500 B. C.. He was the first Greek to clearly distinguish planets from stars and held that the rainbow was a natural phenomenon not a goddess.

## 2. Nature of the Universe

- a. He was not satisfied with “the infinite” as an explanation. How could something that wasn’t anything specific create stuff that was.
- b. Anaximenes believed that everything was made of air because air was essential to life.
- c. Hard stuff, according to him, was just more air crammed into a smaller space. We know this is the principle that explains the differences between the states of matter.

## 3. Man’s Place in the Universe

- a. The soul was extremely thin or pure air which held the body together.
- b. When the soul left the body, it died and disintegrated.

F. The Milesian school of philosophy came to an end when the colony was overrun by the Persian empire.

# III. A Pre-Socratic Philosopher Who Doesn’t Fit In!

## A. **Xenophanes**

1. Born in Colophon, Greece in 570 B.C. He left home at age 25 to wander around composing and reciting poems. He spent at least 75 years in show business and died in 475 B.C. Unlike most philosophers he wrote in poetry rather than prose. (Incidentally, no philosopher to date has used the limerick form to express their philosophy.)
2. Unlike the typical Pre-Socratic philosopher, he could rhyme and was not interested in the nature of the universe. He was a religious philosopher who felt the ribald tales of the gods told by Homer and Hesiod were corrupting morality. (Remember Zeus and Bill Clinton had similar off-duty interests.)
  - a. He is called the father of satire for his attacks on traditional religion.
3. Philosophically, he is known for two major beliefs
  - a. God is One. The belief that all the universe is or partakes in

godness is called pantheism.

- i. Xenophanes was the first Greek to reject polytheism and promote monotheism.
  - ii. His god was omnipotent, omniscient, and morally good. His view of god was very intellectual with little religious feeling.
- b. Xenophanes denied the possibility of absolute and objective knowledge. In essence, human opinions are a guess that in some way resembles reality.
- i. This belief is much more characteristic of the next school of philosophers, the sophists, then the Pre-Socratics who generally placed a strong reliance on human reason.

#### IV. Pythagoras and the Pythagoreans

##### A. Pythagoras

1. Born on the Greek Island of Samos about 580 B. C.. Moved to southern Italy about 529 where he formed a secret society. He died around 497 B.C. in Metapontum, Italy.
  - a. Pythagoras is credited with inventing the word philosopher.
  - b. He was the first Greek to recognize that the morning star and the evening star were one and the same planet which he called Aphrodite. Aphrodite now goes by her Roman name of Venus.
  - c. He was the first person to state that the world was spherical.
  - d. His work on the orbit of the sun, moon, and planets led him to believe that they each travelled in separate rings ("spheres") around the earth. This became the dominant theory until the work of Kepler in modern times.
2. Pythagoreans like the Milesian philosophers took change for granted and didn't study it, but he introduced a new problem for philosophy- how is the stuff of the universe related to each other.
3. The Nature of the Universe
  - a. Pythagoras and the Pythagoreans observed that many things in the universe were related in ways that could be expressed in numbers like the notes in the musical scale.
  - b. Thus, numbers were the ultimate stuff of the universe. And

somehow the dodecahedron embodied or at least symbolized the entire universe!

c. While the Pythagoreans discovered a number of interesting mathematical truths and applied deductive reasoning, they tended to devolve into numerology. The number eight which formed a harmonious octave represented friendship for example.

#### 4. Man's Place in the Universe

a. Like Anaximenes the Pythagoreans accepted the idea of a soul.

b. They believed that this was immortal and transformed into other living beings after death.

c. They established elaborate rules to follow in order to come back to the best possible life.

#### 5. Fate vs. Free Will

a. There was not much room for free will in the Pythagorean philosophy.

b. They believed that the nature of the universe determines a man's fate and that the secrets of fate were locked up in numbers. Belief that free will does not exist is called determinism.

c. If you worked out the numbers, you knew what was going to happen (an idea that would reappear in classical physics around the time of Newton).

#### 6. Man and the State

a. Pythagoreans taught that individuals should at all times subordinate themselves to the good of the state. Respect for authority, laws, and the ideal of sacrificing for the good of the whole were key.

b. While these ideals are promoted by cult leaders everywhere, it wasn't a bad idea in a southern Italy dominated by cities ruled by tyrants especially if you ran the risk of being reincarnated as a fruit fly if you were killed.

### **Is Your Math Teacher a Member of the Secret Order of Pythagoreans?**

Despite the idea that philosophers are supposed to be rational, the secret society founded by Pythagoras had many strange rules. For instance:

a. Don't eat beans. (Hard to believe for such a musically oriented

group!)

- b. Never eat from a whole loaf of bread
- c. Don't sit on a quart measure
- d. Don't poke a fire with an iron poker.

While strange rules and an unyielding regard for them are possible signs, the quickest way to test your math teacher's secret society quotient is to ask what is the hypotenuse of a right triangle with two sides of one unit each. The answer can't be written as a ratio of whole numbers. Hippasos, a Pythagorean, was kicked out (or even executed) when he revealed this secret to an ordinary mortal. So your math teacher is probably not a Pythagorean if they actually teach you math!

By the way, the bean rule is a way to prevent cannibalism-the little shape inside the bean was thought to be a reincarnated soul.

#### V. The Times They are a Changing

A. Despite a high degree of weirditude, the Pythagorean's interest in the relations of things, kicked off a new philosophical question-What is change and is it real?

B. It should be noted that the average Greek and even many philosophers had a hard time believing that the universe itself had been created and not always existent. With that in mind let's look at the last wave of Pre-Socratic Philosophers.

#### C. Heraclitus

1. From Ephesus in Asia Minor. Lived from about 535 B.C. to about 475 B.C.. Heraclitus died of congestive heart failure which caused fluid to build up in his body. True to his philosophical theories, it is said, he buried himself in a manure pile in hopes that the "fire" of the rotting manure would expel the water from his body.

2. Was the first philosopher who studied change itself.

3. The Nature of the Universe

- a. Heraclitus believed the basic stuff of the universe was fire, but this was at least partly metaphoric because fire was forever changing. Fire, to him, symbolizes both a physical element and a force or law that is the basic principle of the universe. He calls this fire principle both "Fate" and "Justice."



- b. He believed that everything in the world was in a constant state of flux and that nothing was permanent.
- c. His most famous quote “ You could not step twice into the same river, for other and yet other waters are ever flowing on.
- d. Reality, he believed, is composed not of things, but a process of continual creation and destruction. The universe, he claimed, was ruled by “strife” the force that causes change.
- e. Heraclitus’ insistence on impermanence raises interesting issues of identity-if all things are constantly changing, are you the same person you were yesterday?
- f. Heraclitus believed that this every changing fire had existed forever and had not been created.

#### 4. Man’s Place in the Universe

- a. Heraclitus like Thales asserted that mankind was made of the same element as everything else in the universe and would eventually go back to that element. Thus, man was part of nature. The universe was supreme in power over mankind, a mere part of the universe.

#### 5. What are Good and Evil?

- a. Heraclitus believed that good and evil were two necessary notes in a harmony. Humans see on the opposites, a more god-like perspective sees the harmony. All things are fair and parts of the universal harmony.
- b. A good life for people was to live in harmony with universal reason, the law which flows through all things.

#### 6. The Nature of God

- a. Heraclitus had a deep contempt for the popular religion and its myths.

#### 7. Fate Versus Free Will

- a. All change is according to the unalterable principle of “Fate” or “Justice.”
- b. All things including man are subject to this principle.
- c. Man must not rebel against fate, but accept it as inevitable.

#### 8. The Soul and Immortality

- a. Heraclitus taught that the soul was the finest and most rarefied form of the universal fire. This, like all fire, was ever-changing but never destroyed.
- b. Some soul fires are hotter and drier than others and thus closer to the great cosmic soul, the soul of the universe , the purest fire.

#### 9. Man and the State

- a. Born to an aristocratic family, Heraclitus was contemptuous of the democracies he saw rising around him.

#### 10. Ideas and Thinking

- a. Heraclitus was one of the few early philosophers to write about thinking.
- b. Reason, he believed, was a better source of knowledge than sense perception because it is closest to the underlying principle of fire, a sort of divine spark in man.

#### 11. Impact of Heraclitus

- a. Heraclitus was called “the Dark One” because Greeks interpreted his ideas pessimistically-after all philosophy was supposed to be looking for certainty and his philosophy said everything was changing!
- b. However, his belief was that there was an underlying, unobservable logos (logic) governing change that made it a rational rather than a chaotic and arbitrary phenomenon.
- c. This idea of the logos influenced Plato and eventually became one basis for the notion of natural law.
- d. By the way, the gospel of St. John actually begins “ In the beginning was the Logos, and the Logos was with God, and the Logos was God.”

### **D. Parmenides**

1. He was born about 515 B.C. in a wealthy family in Elea. He and other philosophers from his town opposed the ideas of Heraclitus.
2. The Nature of the Universe
  - a. Parmenides believed that our perception of change was an illusion. All change is inconceivable.
  - b. He began with a self-evident truth: IT IS. This is not based on

observation, but is a truth of reason because it can't be denied without contradiction.

- i. Huh?
  - ii. If you say "IT IS NOT" then you've proved IT IS because if NOT IS IT then NOT is something not nothing!
  - iii. Since nothing cannot be thought except as something, then there is no nothing only Being (ISING?)
  - iv. Huh? Wait, it gets stranger.
- c. Therefore, by pure reason alone and with no recourse to facts in the world, he had proved that Being was uncreated, indestructible, eternal, universal, indivisible, and equally real in all directions.
- d. Oh, by the way, since there is no place where Being is not, real motion and change is impossible. (Try getting your being or even your behind out of the way so your being or behind can sit in exactly the same place. Golly, it's already THERE!).
- e. He also argued real change was impossible because if you followed the string of changes back to the beginning something would have to come from nothing and there was no nothing only Being.

### 3. Mind and Matter

- a. Parmenides argued that being and thought were one and the same. What cannot be thought, cannot be and what cannot be, cannot be thought.
- b. All reality is endowed with mind, and, Parmenides believed, mind creates matter.
- c. Although he doesn't follow up all the implications, Parmenides anticipates one of the two major positions in Western philosophy called idealism, the belief that mind is actually all that exists. Matter is a creation of mind for its own purposes.
- d. His instance that reason alone is sufficient to explain everything is the basis for the philosophical school of rationalism which is opposed to empiricism which says that knowledge can only be gained through observing things in the world.

## **Paradoxes of Zeno**

Zeno, another Elean philosopher, attempted to prove that change was impossible with a series of cunning logical paradoxes. Here are two:

### The Racetrack Paradox

In order for you to walk a mile, you first have to walk a half mile, but before that you have to walk a quarter mile, and before that an eighth, etc., etc. so real motion is impossible. Try this excuse with a homework assignment!

### Achilles and the Tortoise

The hero and the reptile decide to race, but, recognizing that the tortoise is slower, he is given a head start. The first thing Achilles has to do is get to the place where the tortoise started, but by then the tortoise has moved. Achilles then has to move to the spot the tortoise was in when he got to his starting spot, but the tortoise has moved again. No matter how fast Achilles runs, there will always be a gap to be filled. All the tortoise has to do to not be beaten is to keep moving, no matter how slow he is! No wonder the tortoise was so confident when he later raced the hare!

## VI. The Pluralists

A. The next school of philosophers are called the Pluralists because they believed that the universe was made of more than one thing.

### **B. Empedocles**

1. He was a poet and prophet as well as a philosopher
2. Born in a Greek city in Sicily; he died sometime after 444 B. C.
3. Elaborated the four element theory which was the basis of medicine through the Renaissance.
4. The Nature of the Universe
  - a. Empedocles and the Pre-Socratic philosophers that followed after him thought that the argument between Heraclitus and the Eleans like Parmenides was rather cool and tried to find a way to reconcile the two opposite views.
  - b. Empedocles adopted the traditional view that the universe was made up of four elements: air, fire, earth and water. (Ancient Chinese philosophers independently invented a five element theory including metal as a fifth element.)

- c. He argued that there were millions and millions of bits of each element and that each bit was unchanging. Here he agreed with the Eleans like Parmenides.
- d. However, the forces of “Eros” (Love) and “Thanatos” (Strife) caused a mingling and separation of the elements producing growth and decay in things. Here he supported Heraclitus’ ideas of constant change.
  - i. Freud adopted Empedocles view in his psychological theory calling them the life instinct and the death instinct.
- e. Originally, these four elements coalesced in random ways creating monsters: heads without bodies, arms attached to legs, hairy toenails growing out of livers with smily faces, but eventually through the operation of Love and Strife the world as we know it emerged as the fittest beings survived.
  - i. Empedocles thus anticipates Darwin’s Theory of Evolution.

### **How to be a Humorous Doctor**

Empedocles suggested that the universe was made from air, water, earth, and fire. Later scientists turned this into a system of medicine. Each element was associated with a particular bodily fluid. Blood was the fluid for air; yellow bile (stomach acid) was the fluid for fire, phlegm was the fluid of water, and something called black bile was the fluid for earth. People had general tendencies, called humors, to have more of one fluid than another which created their basic personality (remember that astrology divides the zodiac into earth, air, water, and fire signs): A melancholy humour had extra black bile; sanguine had too much blood; choleric had too much yellow bile; and phlegmatic had too much water. A person would get sick if his fluids got too out of balance. If a normally choleric person started to act phlegmatic his doctor would prescribe herbs that drew water from the body. If a person was too sanguine, blood would be drawn out of a cut made in the arm. Some historians believe that George Washington was killed by his doctors who drew too much blood while he was suffering from a fever!

### **5. Man’s Place in the Universe**

- a. Empedocles believed that man was made of the same stuff as the rest of the universe and that everything in the universe was alive, had some divine spark and had some power of thought. Man differed from all else because he had the most power of thought.
- b. Empedocles did scientific experiments like earlier philosophers. He worked on a brass water clock, taught the earth was a ball, and allegedly did an experiment that actually proved there was air.
- c. He also believed that plants had sex and that he was God.
- d. His neighbors apparently bought the plant sex stuff, but asked him to prove he was God. He allegedly jumped into the mouth of the Mt. Etna volcano giving rise to the following verse:

“When called upon to prove his deity,  
He sneered at all the laity.  
Great Empedocles, that ardent soul  
Leapt into Etna, and was roasted whole.”

## **B. Anaxagoras**

- 1. Born about 500 B.C. and moved to Athens. He died in 428 B.C.
- 2. Openly contemptuous of the Olympian gods, he was kicked out of Athens on charges of impiety when he claimed the sun was a fiery rock and not the god Apollo.
- 3. He is actually an older contemporary of Socrates, but is still considered Pre-Socratic due to the things he studied.
- 4. The Nature of the Universe
  - a. Anaxagoras liked Empedocles' ideas on change, but wasn't satisfied with just four elements.
  - b. He argued, for instance, that a human body is made up of a combination of millions of flesh elements combined with millions of hair elements and millions of bone elements, etc.
  - c. Anaxagoras replaced Empedocles "Love" and "Strife" with a mental force called "Nous" (Mind). The world was ordered in an intelligent, rational way by the operation of Nous.
  - d. The inanimate world is shaped by Nous from the outside while living matter contains Nous as a self-ordering principle.

- i. Nous is the same in every body, but its abilities are determined by the type of body it's in.
  - ii. You are not any more Nous-full than a tomato, but you can do more with your Nous because of your hands, tongue, and legs.
- e. This was the first time an explanation of what separates organic and inorganic things had been suggested.
- f. Most Greeks felt that Anaxagoras used Nous whenever he couldn't come up with a better explanation. This led the next group of philosophers to seek a Nous-less solution.

### **C. Democritus**

1. Democritus lived from about 460 B.C. to about 370 B. C. He was born in the Greek city of Abdera in Thrace.
2. The first Greek to propose that the world was made of atoms was Leucippus, but Democritus worked out the details and implications of the theory.
3. The Nature of the Universe
  - a. Democritus believed the universe was made up of atoms and empty space.
  - b. He agreed with Empedocles that change came about through the mixture of tiny unchanging things, but both Empedocles and Anaxagoras taught these unchanging things were different in qualities.
  - c. Democritus believed in atoms (from the Greek for uncuttable) that were similar in quality except for varying weights and that some had hooks, others eyeholes, others humps and still others depressions.
  - d. Each atom was minutely small but had motion inside it, and when the proper atoms bumped up against each other they stuck together to make complex things that seemed to change although the atoms never changed.
  - e. As you can see, Democritus very nearly came up with the idea for velcro, but he was content to be worshipped by chemists 2000 years after his death for the invention of atoms.

#### 4. Man's Place in the Universe

- a. Democritus believed that man was made from atoms like everything else, but possessed a superabundance of "soul atoms" which were breathed in and out throughout life.
- b. One soul atom was stuck between every two regular atoms and gave mankind the power of reason.
- c. The loss of a few soul atoms during the course of a busy day caused sleep. A more severe loss of soul atoms caused death.

#### 5. The Nature of God and Immortality

- a. Since everything could be explained by atoms and their motions, gods were unnecessary to explain how the world worked.
- b. Personal immortality is impossible in this philosophy.
- c. While, like Parmenides, Democritus didn't fully work out the implications of his system., he had reached the other main position of Western philosophy called materialism, the belief that existence is entirely physical and that thinking are effects produced by physical processes. Like the Pythagoreans he was also a determinist who believed free will did not exist and that everything could be explained through the motion of atoms.

#### 6. What are Good and Evil?

- a. Democritus taught that people seek enjoyment and try to avoid pain.
- b. True happiness was moderate pleasures and inner tranquility based on reflection and reason not material things.

#### 7. Man and the State

- a. Democritus believed human culture gradually evolved through chance discoveries and imitations of things in nature.
- b. He believed democracy was the best system of government.

#### 8. Influence

- a. Democritus wrote many philosophical works, but all have been lost and are known only from fragments quoted by others.
- b. A century after his death the important philosophy of Epicureanism was based on his atomic theory.



## **Democritus-The only Post Socratic, Pre-Socratic Philosopher**

Democritus outlived Socrates by almost thirty years, so how come he is considered “Pre-Socratic?” What happened was that that grand old show, Philosophy 101, was going so well, the networks decided to create a spinoff called Science 101. The folks who enjoyed sitting around thinking (and drinking) stayed with the old show while those that actually had a job doing things moved to the new one. It was sort of like Frasier spinning off from Cheers. Over the millennia whenever a philosopher came up with an answer that actually worked in the real world, a new discipline was started. One wonders what will happen if the artificial intelligence philosophers ever come up with a true thinking machine, but then again some philosophers have always made a career out of claiming philosophy is dead!

Sadly, the Greek Science Show got to the point of inventing a steam engine and realized that the millions of slaves that would be put out of work would create a tremendous social problem. The steam engine and other later Greek science were not put to practical use, and technological development flagged.

Seriously, what had the Pre-Socratics achieved? From our view we can trace a direct line from the Pre-Socratics to Kant, Darwin, and Einstein. The resolution of the split between rationalism and empiricism was the basis for Kant’s philosophy in the Eighteenth century. Empedocles anticipated Darwin’s Theory of Evolution from the Nineteenth Century, and Pythagora’s numbers and Democritus atoms paved the way for Einstein in the Twentieth Century.

By the time of Socrates, however, philosophers had left a legacy of confusion that had undermined traditional values and beliefs in the gods, but had left nothing conclusive in their place. As Aristophanes wrote: “When Zeus is toppled, chaos succeeds him, and whirlwind rules.”

Philosophy suddenly turned away from the world of science and turned instead to explaining the world of politics and ethics.