The political and social upheaval caused by the Persian Wars as well as continued strife between Athens and Sparta (see Lecture 7) had at least one unintended consequence. In the 5th century, a flood of new ideas poured into Athens. In general, these new ideas came as a result of an influx of Ionian thinkers into the Attic peninsula. Athens had become the intellectual and artistic center of the Greek world. Furthermore, by the mid-5th century, it had become more common for advanced thinkers to reject traditional explanations of the world of nature. As a result of the experience of a century of war, religious beliefs declined. Gods and goddesses were no longer held in the same regard as they had been a century earlier. I suppose we could generalize and say that the Persian and Peloponnesian Wars taught that the actions of men and women determine their own destiny, and not "Moira." Meanwhile, more traditional notions of right and wrong were called into question, and all of this was expressed in Hellenic tragedy and comedy.

The Greeks used their creative energies to explain experience by recourse to history, tragedy, comedy, art and architecture. But their creative energies were also used to "invent" philosophy, defined as "the love of wisdom." In general, philosophy came into existence when the Greeks discovered their dissatisfaction with supernatural and mythical explanations of reality. Over time, Greek thinkers began to suspect that there was a rational or logical order to the universe.

The Pre-Socratic Philosophers
The PRE-SOCRATIC philosophers came from the city of Miletus in the region of Ionia. Miletus was a prominent trading depot and its people had direct contact with the ideas of the Near East. Around 600 B.C., Milesian thinkers "discovered" speculation after asking a simple but profound question: "what exists?" It was the Ionian natural philosopher, Thales of Miletus (c.624-548 B.C.), who answered that everything in the universe was made of water and resolves itself into water. What was so revolutionary about Thales was that he omitted the gods from his account of the origins of nature. It is also necessary to point out that Thales committed none of his views to writing. Anaximander of Miletus (c.611-c.547 B.C.), another Milesian thinker, rejected Thales, and argued instead that an indefinite substance -- the Boundless -- was the source of all things. According to Anaximander, the cold and wet condensed to form the earth while the hot and dry formed the moon, sun and stars.
The heat from the fire in the skies dried the earth and shrank the seas. It's a rather fantastic scheme, but at least Anaximander sought natural explanations for the origin of the natural world.

Thales and Anaximander were "matter" philosophers -- they believed that everything had its origin in a material substance. Pythagoras of Samos (c.580-507 B.C.) did not find that nature of things in material substances but in mathematical relationships. The Pythagoreans, who lived in Greek cities in southern Italy, discovered that the intervals in the musical scale could be expressed mathematically and that this principle could be extended to the universe. In other words, the universe contained an inherent mathematical order. What we witness in the Pythagoreans is the emphasis on form rather than matter, and here we move from sense perception to the logic of mathematics.

Parmenides of Elea (c.515-450 B.C.), also challenged the fundamental views of the Ionian philosophers that all things emerged from one substance. What Parmenides did was to apply logic to the arguments of the Pythagoreans, thus setting the groundwork of formal logic. He argued that reality is one, eternal and unchanging. We "know" reality not by the senses, which are capable of deception, but through the human mind, not through experience, but through reason. As we shall see, this concept shall become central to the philosophic thought of Plato.

Perhaps the most important of all the Pre-Socratic philosophers was Heraclitus of Ephesus (fl. 500 B.C.). Known as "the weeping philosopher" because of his pessimistic view of human nature and "the dark one" because of the mystical obscurity of his thought, Heraclitus wrote On Nature, fragments of which we still possess. Whereas the Pythagoreans had emphasized harmony, Heraclitus suggested that life was maintained by a tension of opposites, fighting a continuous battle in which neither side could win a final victory. Movement and the flux of change were unceasing for individuals, but the structure of the cosmos constant. This law of individual flux within a permanent universal framework was guaranteed by the Logos, an intelligent governing principle materially embodied as fire, and identified with soul or life.

Fire is the primordial element out of which all else has arisen -- change (becoming) is the first principle of the universe. Cratylus, a follower of Heraclitus, once made the remark that "You cannot step twice into the same river." The water will be different water the second time, and if we call the river the same, it is because we see its reality in its form. The logical conclusion of this is the opposite of flux, that is, a belief in an absolute, unchanging reality of which the world of change and movement is only a quasi-existing phantom, phenomenal, not real.

Democritus of Abdera (c.460-370 B.C.) argued that knowledge was derived through sense perception - the senses illustrate to us that change does occur in nature. However, Democritus also retained Parmenides' confidence in human reason. His universe consisted of empty space and an infinite number of atoms (a-tomos, the "uncuttable"). Eternal and indivisible, these atoms moved in the void of space. An atomic theory to the core, Democritus saw all matter constructed of atoms which accounted for all change in the natural world.

What the Pre-Socratic thinkers from Thales to Democritus had done was nothing less than amazing -- they had given to nature a rational and non-mythical foundation. This new approach allowed a critical analysis of theories, whereas mythical explanations relied on blind faith alone. Such a spirit even found its way into medicine, where the Greek physician Hippocrates of Cos (c.460-c.377 B.C.) was able to distinguish between magic and medicine. Physicians observed ill patients, classified symptoms and then made predictions about the course of a disease. For instance, of epilepsy, he wrote: "It is not, in
my opinion, any more divine or more scared than other diseases, but has a natural cause, and its supposed divine origin is due to men's inexperience, and to their wonder at its peculiar character."

The Sophists

Into such an atmosphere of change came the traveling teachers, the Sophists. The Sophists were a motley bunch – some hailed from the Athenian polis or other city-states, but the majority came from Ionia, in Asia Minor. The Sophists were men whose responsibility it was to train and educate the sons of Athenian citizens. There were no formal school as we know them today. Instead, these were peripatetic schools, meaning that the instructor would walk with students and talk with them – for a fee, of course. The Sophists taught the skills (sophia) of rhetoric and oratory. Both of these arts were essential for the education of the Athenian citizenry. After all, it was the sons of the citizens who would eventually find themselves debating important issues in the Assembly and the Council of Five Hundred. Rhetoric can be described as the art of composition, while oratory was the art of public speaking.

The Sophists abandoned science, philosophy, mathematics and ethics. What they taught was the subtle art of persuasion. A Sophist was a person who could argue eloquently – and could prove a position whether that position was correct or incorrect. In other words, what mattered was persuasion and not truth. The Sophists were also relativists. They believed that there was no such thing as a universal or absolute truth, valid at all times. According to Protagoras (c.485–c.411 B.C.), "Man is the measure of all things." Everything is relative and there are no values because man, individual man, is the measure of all things. Nothing is good or bad since everything depends on the individual. Gorgias of Leontini (c.485–c.380 B.C.), who visited Athens in 427, was a well-paid teacher of rhetoric and famous for his saying that a man could not know anything. And if he could, he could not describe it and if he could describe it, no one would understand him.

The Sophistic movement of the fifth century B.C. has been the subject of much discussion and there is no single view about their significance. Plato's treatment of the Sophists in his late dialogue, the Sophist, is hardly flattering. He does not treat them as real seekers after truth but as men whose only concern was making money and teaching their students success in argument by whatever means. Aristotle said that a Sophist was "one who made money by sham wisdom."

At their very best, the Sophists challenged the accepted values of the fifth century. They wanted the freedom to sweep away old conventions as a way of finding a better understanding of the universe, the gods and man. The Sophists have been compared with the philosophes of the 18th century Enlightenment who also used criticism and reason to wipe out anything they deemed was contrary to human reason. Regardless of what we think of the Sophists as a group or individually, they certainly did have the cumulative effect of further degrading a mythical understanding of the universe and of man.

Socrates

From the ranks of the Sophists came Socrates (c.469-399 B.C.), perhaps the most noble and wisest Athenian to have ever lived. He was born sometime in 469, we don't know for sure. What we do know is that his father was Sophroniscus, a stone cutter, and his mother, Phaenarete, was a midwife. Sophroniscus was a close friend of the son of Aristides the Just (c.550-468 B.C.), and the young Socrates was familiar with
members of the circle of Pericles. In his youth he fought as a hoplite at Potidaea (432-429), Delium (424) and Amphipolis (422) during the Peloponnesian Wars. To be sure, his later absorption in philosophy made him neglect his private affairs and he eventually fell to a level of comparative poverty. He was perhaps more in love with the study of philosophy than with his family -- that his wife Xanthippe was shrew is a later tale. In Plato's dialogue, the Crito, we meet a Socrates concerned with the future of his three sons. Just the same, his entire life was subordinated to "the supreme art of philosophy." He was a good citizen but held political office only once -- he was elected to the Council of Five Hundred in 406 B.C. In Plato's Apology, Socrates remarks that:

_The true champion if justice, if he intends to survive even for a short time, must necessarily confine himself to private life and leave politics alone._

What we can be sure about Socrates was that he was remarkable for living the life he preached. Taking no fees, Socrates started and dominated an argument wherever the young and intelligent would listen, and people asked his advice on matters of practical conduct and educational problems.

Socrates was not an attractive man -- he was snub-nosed, prematurely bald, and overweight. But, he was strong in body and the intellectual master of every one with whom he came into contact. The Athenian youth flocked to his side as he walked the paths of the agora. They clung to his every word and gesture. He was not a Sophist himself, but a philosopher, a lover of wisdom.

In 399 B.C., Socrates was charged with impiety by a jury of five hundred of his fellow citizens. His most famous student, Plato, tells us, that he was charged "as an evil-doer and curious person, searching into things under the earth and above the heavens; and making the worse appear the better cause, and teaching all this to others." He was convicted to death by a margin of six votes. Oddly enough, the jury offered Socrates the chance to pay a small fine for his impiety. He rejected it. He also rejected the pleas of Plato and other students who had a boat waiting for him at Piraeus that would take him to freedom. But Socrates refused to break the law. What kind of citizen would he be if he refused to accept the judgment of the jury? No citizen at all. He spent his last days with his friends before he drank the fatal dose of hemlock.

The charge made against Socrates -- disbelief in the state's gods -- implied un-Athenian activities which would corrupt the young and the state if preached publicly. Meletus, the citizen who brought the indictment, sought precedents in the impiety trials of Pericles' friends. Although Socrates was neither a heretic nor an agnostic, there was prejudice against him. He also managed to provoke hostility. For instance, the Delphic oracle is said to have told Chaerephon that no man was wiser than Socrates. During his trial Socrates had the audacity to use this as a justification of his examination of the conduct of all Athenians, claiming that in exposing their falsehoods, he had proved the god right -- he at least knew that he knew nothing. Although this episode smacks of Socrates' well-known irony, he clearly did believe that his mission was divinely inspired.

Socrates has been described as a gadfly -- a first-class pain. The reason why this charge is somewhat justified is that he challenged his students to think for themselves – to use their minds to answer questions. He did not reveal answers. He did not reveal truth. Many of his questions were, on the surface, quite simple: what is courage? what is virtue? what is duty? But what Socrates discovered,
and what he taught his students to discover, was that most people could not answer these fundamental questions to his satisfaction, yet all of them claimed to be courageous, virtuous and dutiful. So, what Socrates knew, was that he knew nothing, upon this sole fact lay the source of his wisdom. Socrates was not necessarily an intelligent man – but he was a wise man. And there is a difference between the two.

**Plato**

Socrates wrote nothing himself. What we know of him comes from the writings of two of his closest friends, Xenophon and Plato. Although Xenophon (c.430-c.354 B.C.) did write four short portraits of Socrates, it is almost to Plato alone that we know anything of Socrates. *Plato* (c.427-347 B.C.) came from a family of *aristoi*, served in the Peloponnesian War, and was perhaps Socrates' most famous student. He was twenty-eight years old when Socrates was put to death. At the age of forty, Plato established a school at Athens for the education of Athenian youth. The Academy, as it was called, remained in existence from 387 B.C. to A.D. 529, when it was closed by Justinian, the Byzantine emperor.

Our knowledge of Socrates comes to us from numerous dialogues which Plato wrote after 399. In nearly every dialogue – and there are more than thirty that we know about – Socrates is the main speaker. The style of the Plato's dialogue is important – it is the Socratic style that he employs throughout. A Socratic dialogue takes the form of question-answer, question-answer, question-answer. It is a dialectical style as well. Socrates would argue both sides of a question in order to arrive at a conclusion. Then that conclusion is argued against another assumption and so on. Perhaps it is not that difficult to understand why Socrates was considered a gadfly!

There is a reason why Socrates employed this style, as well as why Plato recorded his experience with Socrates in the form of a dialogue. Socrates taught Plato a great many things, but one of the things Plato more or less discovered on his own was that mankind is born with knowledge. That is, knowledge is present in the human mind at birth. It is not so much that we "learn" things in our daily experience, but that we "recollect" them. In other words, this knowledge is already there. This may explain why Socrates did not give his students answers, but only questions. His job was not to teach truth but to show his students how they could "pull" truth out of their own minds (it is for this reason that Socrates often considered himself a midwife in the labor of knowledge). And this is the point of the dialogues. For only in conversation, only in dialogue, can truth and wisdom come to the surface.

Plato's greatest and most enduring work was his lengthy dialogue, *The Republic*. This dialogue has often been regarded as Plato's blueprint for a future society of perfection. I do not accept this opinion. Instead, I would like to suggest that *The Republic* is not a blueprint for a future society, but rather, is a dialogue which discusses the education necessary to produce such a society. It is an education of a strange sort – he called it *paideia*. Nearly impossible to translate into modern idiom, *paideia* refers to the process whereby the physical, mental and spiritual development of the individual is of paramount importance. It is the education of the total individual.

*The Republic* discusses a number of topics including the nature of justice, statesmanship, ethics and the nature of politics. It is in *The Republic* that Plato suggests that democracy was little more than a
"charming form of government." And this he is writing less than one hundred years after the brilliant age of Periclean democracy. So much for democracy. After all, it was Athenian democracy that convicted Socrates. For Plato, the citizens are the least desirable participants in government. Instead, a philosopher-king or guardian should hold the reigns of power. An aristocracy if you will – an aristocracy of the very best – the best of the *aristoi*.

Plato's *Republic* also embodies one of the clearest expressions of his theory of knowledge. In *The Republic*, Plato asks what is knowledge? what is illusion? what is reality? how do we know? what makes a thing, a thing? what can we know? These are epistemological questions – that is, they are questions about knowledge itself. He distinguishes between the reality presented to us by our senses – sight, touch, taste, sound and smell – and the essence or Form of that reality. In other words, reality is always changing – knowledge of reality is individual, it is particular, it is knowledge only to the individual knower, it is not universal.

Building upon the wisdom of Socrates and Parmenides, Plato argued that reality is known only through the mind. There is a higher world, independent of the world we may experience through our senses. Because the senses may deceive us, it is necessary that this higher world exist, a world of Ideas or Forms -- of what is unchanging, absolute and universal. In other words, although there may be something from the phenomenal world which we consider beautiful or good or just, Plato postulates that there is a higher unchanging reality of the beautiful, goodness or justice. To live in accordance with these universal standards is the good life -- to grasp the Forms is to grasp ultimate truth.

The unphilosophical man – that is, all of us – is at the mercy of sense impressions and unfortunately, our sense impressions oftentimes fail us. Our senses deceive us. But because we trust our senses, we are like prisoners in a cave – we mistake shadows on a wall for reality. This is the central argument of Plato's *ALLEGORY OF THE CAVE* which appears in Book VII of *The Republic*.

Plato realized that the Athenian state, and along with it, Athenian direct democracy, had failed to realize its lofty ideals. Instead, the citizens sent Socrates to his death and direct democracy had failed. The purpose of *The Republic* was something of a warning to all Athenians that without respect for law, leadership and a sound education for the young, their city would continue to decay. Plato wanted to rescue Athens from degeneration by reviving that sense of community that had at one time made the polis great. The only way to do this, Plato argued, was to give control over to the Philosopher-Kings, men who had philosophical knowledge, and to give little more than "noble lies" to everyone else. The problem as Plato saw it was that power and wisdom had traveled divergent paths -- his solution was to unite them in the guise of the Philosopher-King.

**Aristotle**

Plato's most famous student was **ARISTOTLE** (384-322 B.C.). His father was the personal physician to Philip of Macedon and Aristotle was, for a time at least, the personal tutor of Alexander the Great. Aristotle styled himself a biologist – he is said to have spent his honeymoon collecting specimens at the seashore. He too was charged with impiety, but fled rather than face the charges – I suppose that tells you something about Aristotle.

At the age of eighteen, Aristotle became the student at the Academy of Plato (who was then sixty years of age). Aristotle also started his own school, the Lyceum in 335 B.C. It too was closed by Justinian in A.D. 529.
Aristotle was a "polymath" – he knew a great deal about nearly everything. Very little of Aristotle's writings remain extant. But his students recorded nearly everything he discussed at the Lyceum. In fact, the books to which Aristotle's name is attributed are really little more than student notebooks. This may account for the fact that Aristotle's philosophy is one of the more difficult to digest. Regardless, Aristotle lectured on astronomy, physics, logic, aesthetics, music, drama, tragedy, poetry, zoology, ethics and politics. The one field in which he did not excel was mathematics. Plato, on the other hand, was a master of geometry.

As a scientist, Aristotle's epistemology is perhaps closer to our own. For Aristotle did not agree with Plato that there is an essence or Form or Absolute behind every object in the phenomenal world. I suppose you could argue that Aristotle came from the Jack Webb school of epistemology – "nothing but the facts, Mam." Or, as one historian has put it: "The point is, that an elephant, when present, is noticed." In other words, whereas Plato suggested that man was born with knowledge, Aristotle argued that knowledge comes from experience. And there, in the space of just a few decades, we have the essence of those two philosophical traditions which have occupied the western intellectual tradition for the past 2500 years. Rationalism – knowledge is a priori (comes before experience) and Empiricism – knowledge is a posteriori (comes after experience).

It is almost fitting that one of Plato's greatest students ought to have also been his greatest critics. Like Democritus, Aristotle had confidence in sense perception. As a result, he had little patience with Plato's higher world of the Forms. However, Aristotle argued that there were universal principles but that they are derived from experience. He could not accept, as had Plato, that there was a world of Forms beyond space and time. Aristotle argued that that there were Forms and Absolutes, but that they resided in the thing itself. From our experience with horses, for instance, we can deduce the essence of "horseness." This universal, as it had been for Plato, was the true object of human knowledge.

It perhaps goes without saying that the western intellectual tradition, as well as the history of western philosophy, must begin with an investigation of ancient Greek thought. From Thales and the matter philosophers to the empiricism of Aristotle, the Greeks passed on to the west a spirit of rational inquiry that is very much our own intellectual property. And while we may never think of Plato or Aristotle as we carry on in our daily lives, it was their inquiry into knowledge that has served as the foundation for all subsequent inquiries. Indeed, many have argued with W. H. Auden that "had Greek civilization never existed we would never have become fully conscious, which is to say that we would never have become, for better or worse, fully human."