

Yx25 – Clerical Quackery 5 – Physics vs. Metaphysics in Ancient Greece – 1

Well, sorry, but after struggling with this post for two weeks, I decided to alter my earlier plans.

This is the 25th in a series of posts dealing with what I call “the God Lie” and the 5th in the subseries of posts dealing with “Clerical Quackery”. In the previous post, I tried to show at least a little about how Persian (or Zoroastrian) ideas seeped into Jewish thoughts, as revealed in the Old Testament (OT, or more accurately, in the Jewish *Tanakh*) as well as in other *apocryphal* (viz., “hidden”) Jewish literature, such as the *Book of Tobit*, and in other Jewish literature, such as the (banned) *Book of Enoch*.

In summary, over a period of about two centuries [from the time that Cyrus the Great (who reigned from 559–530 BCE) permitted the Hebrews to return from Babylon to their homeland until the time when the army of Alexander the Great (who reigned from 336–323 BCE) defeated the Persians], the ruling Hebrew clerics modified their god (Yahweh) from the original, jealous, vengeful, tribal, mountain god into Zarathustra’s universal, omnipotent, omniscient, omnibenevolent... creator god of righteousness and justice. But during those two centuries, the ruling Hebrew clerics (later called the Sadducees, who ruled the Jews on behalf of the Persians) didn’t adopt other aspects of Zoroastrianism, such as life- and judgment-after-death and a speculated, apocalyptic “end of time”, after which one or more saviors (*Saoshants* or *Saoshyants*) would create paradise on earth.

What I advertised that I’d do for this post is at least outline how, during the next two centuries (when the Jews were ruled by the Greeks), the conversion of Judaism into Zoroastrianism was essentially completed, at least among Jewish religious sects such as the Pharisees and the Essenes. Even the ruling Jewish sect (the Sadducees) apparently accepted Zoroastrian ideas of life- and judgment-after-death, and apparently did so for a very practical reason: to try to maintain political (and financial) control over the Jewish people. In fact and to the same end, the Jewish clerics went even further than the Zoroastrians: they mimicked the Greek idea of martyrdom, but modified it, promising eternal life in heaven for those killed defending clerical power.

As we unfortunately know, the idea of martyrdom (dying for “the cause”) was subsequently promoted by Christian and Muslim clerics and, still today, pollutes the world as a horrible, terrorist tactic of religious fundamentalists, especially Muslim fundamentalists. Yet, for those readers discouraged by more than 2,000 years of religious fanaticism, let me insert: “[This too will pass.](#)” That is, history teaches that all religious sects (and all religions) come and go, because all rely on dogma (metaphysical speculations) rather than on scientifically established principles. Therefore, as science continues to strengthen, all organized religions and associated terrorism will disappear.

Meanwhile, my advertised plan for this post also disappeared. I abandoned it not only because the ideas that flowered in ancient Greece have been so important to Western civilization [so important that it seemed “sacrilegious” (!) to try to include them only as an introduction to resulting changes in Judaism] but also because I felt obliged, in these posts dealing with Clerical Quackery, to try to outline how Greek clerics – profiting from superstitions of the Greek rabble – stomped on the flowers of the greatest thoughts of ancient Greece.

Consequently, I’ll delay my advertised plan to show Greek-inspired changes to the religion of the Jews. In this post, I’ll begin to provide an (admittedly) ridiculously brief review of some of the revolutionary ideas that blossomed in ancient Greece, ideas that were subsequently buried for approximately 1500 years (thanks to the efforts of damnable Greek, Jewish, Roman, Christian, and Muslim clerics) until the seeds were regenerated, resulting in the Renaissance, Humanism, and the Scientific Revolution.

POSSIBLE REASONS WHY ANCIENT GREECE FLOURISHED

As I mentioned in an earlier chapter (**Ix9**), many possible reasons (or combinations of reasons) might explain why, as Goethe said,

[Of all peoples, the \[ancient\] Greeks dreamt the dream of life best.](#)

The reasons include:

- 1) As in ancient Sumer, but for a different reason (namely, not that civilization was just starting, but because the mountainous terrain led to relative isolation), essentially independent city-states developed and later competed; thereby, different thoughts, actions, governments, etc. were explored and developed in the different cities; and/or

- 2) The ancient Greeks were seafarers (because, as with the Phoenicians, the limited natural resources of their land and the mountainous terrain forced them to explore, expand, trade, and raid); thereby, they were exposed to many different ideas from many different cultures (including the Minoans, Egyptians, Babylonians, and Persians); and/or
- 3) Until very late in ancient Greece (namely, the time of Alexander of Macedonia), no single ruler became dictator (such as Sargon, Hammurabi, and dozens of other tyrannical rulers, including the kings of Egypt, Assyria, Judea, and Israel); thereby, the competences of the people were better able to blossom and grow; and/or
- 4) Individual Greek raiders, traders, and leaders became wealthy and could afford the luxury of taking time to think and of hiring other-than-clerics to educate their children (the most famous example of which is King Philip of Macedonia, who hired Aristotle to tutor his son, subsequently called “Alexander the Great”); thereby, some children were spared indoctrination in religious balderdash; and/or
- 5) The Greek clerics didn’t become so wealthy and powerful as the clerics in Egypt, Israel, and Mesopotamia (because the Greek clerics couldn’t so easily feed off the wealth of superstitious farmers); thereby, try as the clerics did (e.g., by rousing the rabble and their political leaders to restrict “**dissidents and atheists**”, by burning their books and with arrest, exile, and execution), yet the Greek clerics had more difficulty than Egyptian, Mesopotamian, and Hebrew clerics leeching off the people, and/or
- 6) The Greeks had Homer!

The significance of Homer is that, from the 8th Century BCE until Greece fell to Rome in 146 BCE (and, in fact, even for centuries during Roman rule), the primary “narrative” of the Greeks (and of the Romans!) was the stories attributed to Homer, the most famous of which are contained in the two books that survived, i.e., *The Iliad*¹ and *The Odyssey*², arguably the two greatest stories ever told. As a result, and in contrast to the Hebrews during the same time period who heard, retold, and incorporated into their personalities (“internalized”) the OT tales of Noah, Abraham, Sarah, Lott, Isaac, Jacob, Joseph, Moses, Joshua, Samuel, Ruth, David, Solomon, et al., the Greeks internalized Homer’s tales of Achilles, Agamemnon, Hector, Ulysses, Penelope, Telemachus, et al.

And what astounding differences there were (and are) between the narratives of the ancient Greeks and the ancient Hebrews, differences in depictions of the people, their gods, and their “holy men” – as I’ll outline below.

¹ Available at <http://classics.mit.edu/Homer/iliad.html>.

² Available at <http://classics.mit.edu/Homer/odyssey.html>.

Depicted Hebrew “Heroes”

In the Hebrew tales, the unambiguous hero is their god, Yahweh, the secondary cast of alleged heroes included the [fake] prophets, and the only significant “honorable” feature of the principal people (as depicted by the clerical storytellers) was their obedience to God, i.e., to the clerics.

As a few examples of the claimed, admirable behaviors of the Hebrew “heroes” (as I’ve detailed in earlier chapters and in earlier posts in this series):

- The “heroic” Noah was a drunken lout who had zero concept of justice,
- The “heroic” Abraham pimped his sister-wife, raped his slave girl, and in his deranged religious state, he was willing to murder his son,
- The “heroic” Lot should have been shot (if guns had been available) for offering his two daughters to be raped by a mob,
- The “heroic” Jacob cheated his brother out of his inheritance,
- The “heroic” Joseph enslaved the Egyptians,
- The “heroic” Moses and Joshua were maniacal murders, and so on, including
- The “heroic” king Solomon was a sex maniac, and his father, the despicable, “heroic” king David had a man killed to acquire his wife (Bathsheba), with whom he was having an adulterous affair.

It might be suggested that some Hebrew women (e.g., Sarah, Hagar, Rachel, Ruth...) were depicted as heroines, but it can be argued that their principal “heroism”, also, was their obedience – to their husbands, to their masters, to the clerics, and of course, to Yahweh. All of which are examples of the hideousness that can occur when “the winners” (in this case, the Jewish clerics) get to write, promote, and sanctify their society’s “history”.

Depicted “Heroes” of Ancient Greece

In Homer’s tales, in contrast, people were depicted as heroes for their honesty, for their nascent Humanism, and for their bravery, courage, fortitude, and tenacity – while the clerics are depicted as clueless cowards, the prophets as con men, and the gods as fickle, despicable, tyrants!

The following quotations from Homer are illustrative [in which, however, there is a complication, namely, the quotations are from translations (by Samuel Butler) of Homer's books written in Latin; as a result, the Greek gods are identified with their Roman names, e.g., instead of identifying the chief (Greek) god and his wife as Zeus and Hera, they are identified as Jove (or Jupiter) and Juno, respectively]:

1. *People Depicted as Heroes*

a. Honesty, etc.

“Hateful to me as the gates of Hades is that man who hides one thing in his heart and speaks another.” [*The Iliad*, bk. IX]

“Ill deeds do not prosper, and the weak confound the strong.” [*The Odyssey*, bk. VII]

“Men live but for a little season; if they are hard, and deal hardly, people wish them ill so long as they are alive, and speak contemptuously of them when they are dead, but he that is righteous and deals righteously, the people tell of his praise among all lands, and many shall call him blessed.”

[Said by Ulysses' wife, Penelope, in *The Odyssey*, bk. XIX]

Therefore the fame of her excellence will never perish, and the immortals will fashion among earthly men a gracious song in honor of faithful Penelope.
[*The Odyssey*, bk. XXIV]

b. Bravery, etc.

“Always to be bravest and to be preeminent above others.” [*The Iliad*, bk. V]

“Of men who have a sense of honor, more come through [the battle] alive than are slain, but from those who flee comes neither glory nor any help.” [*The Iliad*, bk. XV]

“I too shall lie in the dust when I am dead, but now, let me win noble renown.”
[*The Iliad*, bk. XVIII]

“There is one omen, and one only – that a man should fight for his country.” [In a speech by Hector, the greatest warrior of the Trojans, *The Iliad*, bk. XII]

c. Nascent Humanism

Then Agamemnon [the most powerful of the Greek kings] spoke, rising in his place, and not going into the middle of the assembly. “Danaan heroes,” said he, “servants of Mars, it is well to listen when a man stands up to speak, and it is not seemly to interrupt him...” [*The Iliad*, bk. XIX]

“Have respect, therefore, to your own consciences and to public opinion...”
[*The Odyssey*, bk. II]

“There is no accounting for luck; Jove [aka Zeus] gives prosperity to rich and poor just as he chooses – so you must take what he has seen fit to send you, and make the best of it.” [*The Odyssey*, bk. VI]

“Moderation is best in all things...” [Menelaus in *The Odyssey*, bk. XV]

2. *Cowardly, clueless clerics and useless seers and prophets*

“Seer of evil, you never yet prophesied smooth things concerning me, but have ever loved to foretell that which was evil.” [Agamemnon’s criticism of the cleric (and alleged “seer”) Calchas, *The Iliad*, bk. I]

“Consider, therefore, whether or no you will protect me.” [The cowardly cleric Calchas’ plea to Achilles to protect him from Agamemnon’s wrath, *The Iliad*, bk. I]

Hector [the Trojan hero] looked fiercely at him [who had interpreted “a sign”, dealing with the flight of a bird] and said, “Polydamas, I like not of your reading [of this ‘portent’]. You can find a better saying than this if you will. If, however, you have spoken in good earnest, then indeed has heaven robbed you of your reason... you bid me be ruled... by the flight of wildfowl. What care I whether they fly towards dawn or dark, and whether they be on my right hand or on my left?” [*The Iliad*, bk. XII]

“My mother [Penelope] does indeed sometimes send for a soothsayer and question him, but I give his prophesying no heed.” [Said by Telemachus, Ulysses’ son, *The Odyssey*, bk. I]

“Go home, old man, and prophesy to your own children... I can read these omens myself much better than you can; birds are always flying about in the sunshine somewhere or other, but they seldom mean anything... You may preach as much as you please, but we shall only hate you the more.” [*The Odyssey*, bk. II]

Ulysses looked sternly at him [the priest] and answered, “If you were their sacrificing priest, you must have prayed many a time that it might be long before I got home again.... Therefore you shall die.” [*The Odyssey*, bk. XXII]

3. *The stumblebum, despicable gods*

Uncontrollable laughter arose among the blessed gods. [*The Iliad*, bk. I, which brings to mind something that the all-powerful Yahweh was apparently powerless to do: laugh!]

“Ofttimes in my father’s house have I [Achilles] heard you glory in that you alone of the immortals saved the son of Saturn [or the son of the Greek god Cronus, viz., the Roman god Jove (aka Zeus)] from ruin, when the others, with Juno, Neptune, and Pallas Minerva would have put him in bonds.” [*The Iliad*, bk. I, describing how the gods fought among themselves, where (again) Juno was the Roman goddess (Greek, Hera) who was Jove’s (i.e., Zeus’) wife – and was among the conspirators who tried to put Jove (Zeus) “in bonds”!]

“My own three favorite cities,” answered Juno [Jove’s wife], “are Argos, Sparta, and Mycenae. Sack them whenever you [Jove] may be displeased with them. I shall not defend them and I shall not care.” [*The Iliad*, bk. IV; showing that the gods didn’t really care about people, even people in their “favorite cities”.]

Asius the son of Hyrtacus in his dismay cried aloud and smote his two thighs. “Father Jove,” he cried, “of a truth you, too, are altogether given to lying.” [*The Iliad*, bk. XII]

Now the other gods and the armed warriors on the plain slept soundly, but Jove was wakeful, for he was thinking how to do honor to Achilles... In the end he deemed it would be best to send a *lying dream* [italics added] to King Agamemnon. [*The Iliad*, bk. II; showing that the gods were liars – just as Yahweh is reported to be, at *1 Kings 22*, 19–23]

Neptune, lord of the earthquake, spoke, saying, “Father Jove, what mortal in the whole world will again take the gods into his counsel? See you not how the Achaeans [the Greeks] have built a wall about their ships and driven a trench all round it, without offering hecatombs [sacrifices] to the gods? The fame of this wall will reach as far as dawn itself, and men will no longer think anything of the one which Phoebus Apollo and myself built...” [*The Iliad*, bk. XIV; showing that the Greek gods were as jealous of human accomplishments as was Yahweh (recall the Tower of Babel myth).]

“Father Jove, of all gods you are the most malicious. We are your own children, yet you show us no mercy in all our misery and afflictions.” [*The Odyssey*, bk. XX]

But although Homer thereby promoted personal honor, individualism, and skepticism (especially of the clerics and their gods), and even nascent Humanism, it’s unfortunately true that Homer’s stories were mired in the supernaturalism of his time, which was centuries before halting progress was made understanding natural processes. In fact, centuries later, the damnable, Greek clerics (who profited from stimulating superstition among Greek cowards and ignoramuses, i.e., “the rabble”) managed to almost destroy the advances made by subsequent honorable skeptics, individualists, and Humanists, contributing to the eventual downfall of Greece.

SUPERNATURAL BALDERDASH IN ANCIENT GREECE

Illustrative of Homer’s promotion of superstition is the following (from *The Iliad*, bk. I), in which Achilles is listening to the imagined goddess Minerva (allegedly his mother) advising him not to challenge Agamemnon:

And Minerva [aka Thetis] said, “I come from heaven, if you [Achilles] will hear me, to bid you stay your anger. Juno [Jove’s (i.e., Zeus’s) wife (aka Hera)] has sent me, who cares for both of you alike. Cease, then, this brawling, and do not draw your sword; rail at him [Agamemnon] if you will, and your railing will not be vain, for I tell you – and it shall surely be – that you shall hereafter receive gifts three times as splendid by reason of this present insult. Hold, therefore, and obey.”

And Achilles’ answer to the imagined Minerva: “Goddess,” answered Achilles, “however angry a man may be, he must do as you command him. This will be best, for the gods ever hear the prayers of him who has obeyed them.”

The above is as bad as similar nonsense in the Bible. Other examples of Homer’s supernatural silliness include:

“All things are in the hand of heaven, and [the god] Folly, eldest of Jove’s [Zeus’] daughters, shuts men’s eyes to their destruction. She walks delicately, not on the solid earth, but hovers over the heads of men to make them stumble or to ensnare them.” [Agamemnon in *The Iliad*, bk. XIX]

“The immortals know no care, yet the lot they spin for man is full of sorrow; on the floor of Jove’s [Zeus’] palace there stand two urns, the one filled with evil gifts, and the other with good ones. He for whom Jove... mixes the gifts he sends, will meet now with good and now with evil fortune; but he to whom Jove sends none but evil gifts will be pointed at by the finger of scorn, the hand of famine will pursue him to the ends of the world, and he will go up and down the face of the earth, respected neither by gods nor men.” [Achilles in *The Iliad*, bk. XXIV]

“All men have need of the gods.” [*The Odyssey*, bk. II]

Yet, Homer, himself, countered some of the superstition with statements such as the following, this one attributed to Zeus, himself:

“See now, how men lay blame upon us gods for what is after all nothing but their own folly.” [The *Odyssey*, bk. I]

Of course, Homer wasn’t the only ancient Greek who promoted supernaturalism. The most famous of the early mystics was Hesiod, who lived at approximately the same time as Homer and who unfortunately wrote “the bible” of the ancient Greeks, *Theogony* (literally, “the genesis of the gods”), with its famous (balderdash!):³

³ From <http://www.sacred-texts.com/cla/hesiod/theogony.htm>.

Verily at the first Chaos came to be, but next wide-bosomed Earth, the ever-sure foundations of all the deathless ones who hold the peaks of snowy Olympus, and dim Tartarus in the depth of the wide-pathed Earth, and Eros (Love), fairest among the deathless gods, who unnerves the limbs and overcomes the mind and wise counsels of all gods and all men within them. From Chaos came forth Erebus and black Night; but of Night were born Aether and Day, whom she conceived and bore from union in love with Erebus. And Earth first bare starry Heaven, equal to herself, to cover her on every side, and to be an ever-sure abiding-place for the blessed gods. And she brought forth long Hills, graceful haunts of the goddess-Nymphs who dwell amongst the glens of the hills. She bore also the fruitless deep with his raging swell, Pontus, without sweet union of love. But afterwards she lay with Heaven and bare deep-swirling Oceanus, Coeus and Crius and Hyperion and Iapetus, Theia and Rhea, Themis and Mnemosyne and gold-crowned Phoebe and lovely Tethys.

And although the above is unadulterated balderdash, it flows more smoothly, speaks more of love, and therefore, I enjoy reading it more than the balderdash of the Bible's *Genesis*!

Moreover, Hesiod took nascent Humanism further than Homer had. In general, Homer's gods (similar to all gods) were (and are) deifications of existing customs, as if looking at one's customs through binoculars – held the wrong way! Thus, Homer's gods reflected his time's warrior-culture (led by chief warriors such as Agamemnon and Achilles), and even above the gods was assumed to be (capricious) Fate.

Hesiod, on the other hand, was apparently not a warrior but a farmer, and he assumed that above the gods was some natural order: not Fate, but Right or Truth or Justice (similar to earlier ideas of the Sumerians' *Mummu*, the Egyptians' *Ma'at*, the Hindus' *Ritam*, and Zarathustra's *Asha*). For example, in his book *Works and Days*, Hesiod wrote:⁴

...lay up these things within your heart and listen now to Right, ceasing altogether to think of violence. For the son of Cronus [Zeus] has ordained this law for men, that fishes and beasts and winged fowls should devour one another, for Right is not in them; but to mankind he gave Right which proves far the best. For whoever knows the Right and is ready to speak it, far-seeing Zeus gives him prosperity; but whoever deliberately lies in his witness and forswears himself, and so hurts Justice and sins beyond repair, that man's generation is left obscure thereafter.

⁴ From <http://old.perseus.tufts.edu/cgi-bin/ptext?doc=Perseus%3Aabo%3AAtlg.0020,002&query=init>.

THE WAR BETWEEN SCIENCE & RELIGION

Between the two of them, Homer and Hesiod thereby defined and enlisted followers in the mystics' side of a war that started in ancient Greece and that has subsequently raged for more than 2500 years. It's the war between realists and mystics, or between naturalists and supernaturalists, or (literally) between physicists [i.e., those who study “natural things” (i.e., Greek, *phusika*, from Greek *phusis*, meaning ‘nature’)] and metaphysicists [i.e., those who study things ‘after’ or ‘beyond’ (*meta-*) ‘nature’ (*phusis*), i.e., those who study the (nonexistent!) “super-natural”], or (equivalently) between scientific-humanists and unscientific-antihumans (aka “theists”), or between facts and faith, or most simply, between science and religion.

In this post, however, I won't try even to outline the war between science and religion. It was well summarized by Robert Ingersoll:

For ages, a deadly conflict has been waged between a few brave men and women of thought and genius upon the one side, and the great ignorant religious mass on the other. This is the war between Science and Faith. The few have appealed to reason, to honor, to law, to freedom, to the known, and to happiness here in this world. The many have appealed to prejudice, to fear, to miracle, to slavery, to the unknown, and to misery hereafter. The few have said “Think.” [Although, for reasons described in early chapters (e.g., Chapter **Ig** and **J2**), I wish Ingersoll had written, instead: “The few have said ‘Evaluate’!”] The many have said “Believe!”

Instead of trying to outline the war, I'll try just to sketch a few of the skirmishes that occurred in ancient Greece, with the goal of showing (in later posts) how the results of those skirmishes impacted Judaism (and subsequently, Christianity and Islam). And for this post, to try to succinctly outline centuries of skirmishes in the resulting war in ancient Greece (a war that countless historians have spent their lifetimes studying!), perhaps most efficacious would be to quote statements by some of the combatants, whom I'll only briefly introduce.

Homer & Hesiod

Little is known about “the blind poet” Homer; in fact and similar to the case of Moses, there's a possibility that he never existed. Instead, his name may have become associated with poems that were maintained orally for centuries (from the time of the Trojan war, which occurred roughly when Moses allegedly lived, ~1200 BCE). If Homer existed, he may have been just one of the most entertaining “balladeers”.

In contrast, there's little doubt that Hesiod existed, and his books⁵ validate that he was an accomplished poet, knowledgeable as he could be (for his time) about astronomy and husbandry, and a great teller of tall tales! In particular, his *Theogony* became the “bible” for superstitious Greeks, defining relations among the gods and their roles. Hesiod, however, was also criticized, rebuked, and ridiculed. For example, from the Seven Sages (i.e., unidentified authors during c.650–c.550 BCE) there is:

Hesiod might as well have kept his breath to cool his pottage [his soup or stew].

Just imagine if a similar saying had developed about Moses, e.g., Moses might as well have saved his threats to scare away the crows. If so, the world might have been saved from 2500 years worth of biblical balderdash!

Xenophanes & Heraclitus

Both Hesiod and Homer were penetratingly criticized by both Xenophanes⁶ (c.570–c.480 BCE) and Heraclitus⁷ (c.535–c.475 BCE), both of whom were Ionians (i.e., living in Greek colonies on the coast of what is now western Turkey). Xenophanes was one of the greatest of the early Greek philosophers, a skeptic and a physicist. Most unfortunately, only fragments of his writings remain. One (Fragment 11) states:

Homer and Hesiod have ascribed to the gods all things that are a shame and a disgrace among mortals – stealings and adulteries and deceivings of one another.

Heraclitus is famous for his idea of the *Logos* (subsequently used in Christianity as “the Word”) and for his amazingly perceptive statements: “All is flux; nothing stays still”, “Nothing endures but change”, and his even more amazing (similar to Daoism’s Yin-Yang),

The opposite is beneficial; from things that differ comes the fairest attunement; all things happen by strife and necessity. People do not know how what is at variance agrees with itself. It is an attunement of opposite tensions, like that of the bow and the lyre.

Heraclitus’ assessments of Homer and Hesiod are similarly famous:

[Homer] should be turned out of the lists and whipped.

⁵ See, e.g., <http://www.perseus.tufts.edu/hopper/collection?collection=Perseus:collection:Greco-Roman>.

⁶ See <http://ablemedia.com/ctcweb/showcase/deyoung1.html>.

⁷ See, e.g., <http://en.wikipedia.org/wiki/Heraclitus>.

Hesiod is most men's teacher. Men are sure he knew very many things,
a man who did not know day or night!

Actually, though (as pointed out by Cedric Whitman in his book *Homer and the Heroic Tradition*), once they accepted the silly idea of gods, Homer and Hesiod (and others, similarly) were essentially forced to depict their gods as “stumblebums”, because of a fundamental, logical inconsistency in the assumed characteristics of all gods. Thus, whereas the gods of ancient Greece were depicted as extrapolations of real, heroic figures (such as Achilles, Agamemnon, et al., who bravely faced death) and whereas the gods were considered immortal, therefore, they couldn't be similarly heroic! Consequently, the depictions of the gods were paradoxical – and the gods were therefore ridiculed. As Ursula DeYoung wrote,⁸ quoting Whitman:

Obviously one of the most salient characteristics of the gods is their immortality. This grants them eternity, invincibility, omniscience, foreknowledge. But it also deprives them of the key to human tragedy: the constant fear and possibility of death. Therefore, when a poignant human drama is played out on the divine level, it simply cannot possess the same gravity as it does for humans. No wound is fatal, and thus there can be no real fear for oneself or others. Through their invincibility, all divine wounds are quickly healed and often laughed at. In the endless seasons on Mount Olympus, all fights are of necessity merely transient, all anger temporary. Because of their eternal existence, all dilemmas are soon solved. As a result, when the actions of men are mirrored by the gods, “what is starkest tragedy on earth is often imaged in heaven as a light and sometimes slapstick comedy.” Many scholars believe that Homer realized this and “as a balance to the tremendous solemnity of his hero... thrust the gods into the ridiculous postures they sometimes assume.”

Similar can be said (and should be said!) about all immortal gods: if any of them ever existed (but, of course, none of them ever have!) all of them would have necessarily been wimps compared with heroic humans who had (and have) the courage to face their own extinction, i.e., those who rejected (and reject) the oxymoronic concept of “life after death”.

Stated differently, all those who adopted (or still adopt), without a single shred of supporting evidence, the delusion – the craziness! – of “an afterlife” (including the Maccabees, the alleged Jesus, the alleged “perfect-man” Muhammad, all religious “martyrs”, and all “modern” fundamentalist Islamic suicide bombers) couldn't (and can't) be heroes. All were (and are) as wimpy as their gods:

⁸ From <http://ablemedia.com/ctcweb/showcase/deyoung1.html>.

If you've been brainwashed into believing in a beneficent afterlife, then following clerical orders, it's logically impossible to risk your life and be a hero.

Xenophanes summarized the silliness of the Greek gods as follows:

If cattle and horses, or lions, had hands, or were able to draw with their feet and produce the words which men do, then horses would draw the forms of gods like horses, and cattle like cattle, and they would make the gods' bodies the same shape as their own.

Although Xenophanes thereby rejected the anthropomorphic gods of Homer and Hesiod (i.e., the gods of the Greek rabble and their clerics), he unfortunately postulated a god similar to Zarathustra's (and, therefore, similar to the revised Yahweh of the Jews) and a god similar to the god that Aristotle adopted approximately two centuries later. Fragmentary descriptions of Xenophanes' god include the following:⁹

God is one, the greatest of gods and men... resembling mortals neither in body or mind... By effortless thought He controls all things with his mind... With all of his being, He sees and thinks and hears... He always remains in the same place, motionless; it is not fitting for him to chase now here, now there.

But in spite of such nonsense as the above, Xenophanes had the brilliance to add a statement (translated by the 20th century philosopher Karl Popper and to which I've added the italics) that's as powerful today as it was more than 2500 years ago:

But as for certain truth, no man has known it, nor will he know it – neither of the gods nor yet of all the things of which I speak. And even if by chance he were to utter the final truth, he would himself not know it, *for all is but a woven web of guesses.*

In modern terms, the critically important concept that Xenophanes apparently realized (a concept that, once realized, exposes all organized religions as the shams that they are) can be expressed as follows.¹⁰

For closed systems (such as games, all religions, and pure mathematics), 'truth' is whatever it's defined to be (for example, in poker it's true that a flush always beats a straight, in all religions their dogma is taken as true, and in propositional math, it's true that, e.g., $1 + 1 = 2$).

⁹ From <http://ablemedia.com/ctcweb/showcase/deyoung4.html>.

¹⁰ For details, see http://zenofzero.net/docs/T1_Truth_&_Knowledge.pdf.

On the other hand, for open systems (including all of reality!), truth can be approached only asymptotically (e.g., the principles of mechanics, evolution, thermodynamics, etc., may be true – but then again, someone may yet show how such principles need to be corrected, to get closer to “the truth”). In fact, in reality, even $1 + 1 = 2$ needn't be true; e.g., one black hole plus another black hole yields how many black holes?!

Therefore, in reality, all religions are just closed-system word-games.

Thales, Anaximander, & Democritus

Actually, in ancient Greece even before Xenophanes' time, the “web of guesses” about “the truth” began to be woven to try to understand not only the gods but also “natural things”. The first to do so seems to have been Thales (c.624–c.545 BCE), born approximately 50 years earlier than Xenophanes, and the founder of the Ionian school (subsequently attended by Anaximander, Xenophanes, Heraclitus, Anaxagoras, and others). Thales is commonly called the first Greek philosopher, even “the first philosopher”, but one should be skeptical about such attributions, since anyone who “loves wisdom” is by definition a philosopher, and as illustrated in earlier posts in this series, there are written records of Egyptian and Mesopotamian “wisdom literature” from more than 2,000 years before Thales.

Thales is also credited with founding geometry and predicting an eclipse, but more likely (I suspect) is that he learned about both from the Mesopotamians or Egyptians. Thus, the Babylonians had been using, for example, what is commonly called “Pythagoras' theorem” for more than 1,000 years before Thales (and before Pythagoras!). Also, without benefit of Newton's laws, predicting eclipses (a capability achieved by both the Egyptians and Mesopotamians approximately 1,000 years earlier than Thales) required amassing huge databases from centuries of observations, which Thales certainly couldn't have done on his own. That Thales could have traveled to Mesopotamia, for example, to learn about when the next eclipse would occur, seems quite likely, since such travel was common: witness that in the year before Thales died, Persia conquered all the Greek cities in Asia Minor (in 546 BCE).

In any case, Aristotle's description of Thales as the first Greek physicist seems appropriate. Prior to Thales, brilliant people were obviously extremely successful studying, understanding, and manipulating “natural things” (to control fire, forge metals, make tools, use wheels, and build homes, temples, sailing ships, etc.), but the metaphysicists of the world (that

is, the mystics of the world) were the only ones who claimed knowledge of how all the pieces of the world (and even of the universe!) fit together and evolved. [Mystics claim the luxury of not requiring that their speculations be constrained by data!] In general, for thousands of years within each culture, generation after generation retold the metaphysicists' resulting myths, no doubt adding refinements to satisfy changing tastes and customs. Thales, in contrast, proposed what, at least to the ancient Greeks, seemed to be a totally new idea; according to Aristotle (who lived about 250 years later), Thales proposed: “**Water is the cause of all things...**”

The historical record shows that the ancient Greeks were, if not startled, then at least greatly stimulated by Thales' proposal that “water is the cause of all things...” Thereby, he gained the reputation as the first Greek physicist. But just as Thales' reputations as a mathematician and philosopher seem to be exaggerations, his contributions to physics should probably be similarly discounted, because for at least the previous 2,000 years, both Egyptian and Mesopotamian mystics had proposed that “**In the beginning... water**”. Therefore, it's possible that Thales was doing little more than what the Hebrews were doing at the same time (e.g., in the construction of their genesis myths), i.e., borrowing ideas from Egyptians and/or Mesopotamians.

Now, granted that a modern person's first reaction to the speculation that “water is the cause of all things” is probably something similar to “**Get real!**” or “**Ya gotta be kidding!**” (demonstrating criticism, skepticism, and even cynicism), but second thoughts should include at least the following.

- First, because no original writings by Thales have been found, it's difficult to know what he meant. But if he's given the benefit of doubt, it's clear that water is the “cause” of much (clouds, rains, rivers, erosion, filling of the seas) and certainly water is essential for much (including essentially all life on Earth).
- Second, modern minds shouldn't hastily judge Thales without considering the “mind set” of his time: today, the speculation “water is the cause of all things” doesn't pass “the snicker test”, but in his day, when essentially everyone in every community was certain that the gods caused everything, it would take a courageous genius to say:

No, I don't think so; I see no justification for the speculation that the gods cause everything; instead, I propose that water is the cause of all things.

Further, though, Aristotle reported that Thales' more complete speculation was: “**Water is the cause of all things, and all things are filled with gods.**”

It's easy to imagine an ancient Greek's reaction to such a proposal by Thales, e.g., "**How could Zeus and Hera and the rest of the gods be inside everything? They're up on Mt. Olympus!**" As to what Thales might have meant, that, too, seems unknown. Yet, if he's again given the benefit of doubt, his proposal appears to deal not only with the fundamental "stuff" of the universe (i.e., water) and the fundamental process of the universe (i.e., "water is the cause of all things") but possibly also contains a new concept about "the gods". Thus, prior to Thales, all gods had "personalities" (Zeus was a tyrant, Yahweh was vengeful, etc.); in contrast, Thales proposed that the gods were in everything, from the stars, to the grass, to cow dung! Thus, rather than accept the views of Hesiod or Homer that the various gods controlled everything, Thales might have been proposing that all things contain their own causal relationships, i.e., that processes evolve of their own "nature" rather than because of the "will" of the external, eternal gods.

Support for the possibility that, with his statement "all things are filled with gods", Thales was proposing an entirely different perspective of "the gods" can be found from subsequent events. Thus, if the above was Thales' idea and if this idea is coupled with the already referenced dissatisfaction with the gods as described by Homer and Hesiod, then perhaps the following statements can be seen as consequences of Thales' proposal:

Xenophanes (c.570–c.475 BCE): "**She that they call Iris** [the goddess of the rainbow] **is likewise a cloud**" [where the significance of 'likewise', according to the historian John Burnet, was that Xenophanes had been listing other phenomena, pointing out that they are natural processes, having nothing to do with the mystics' gods],

Heraclitus (c.540–c.480 BCE): "**God is day and night, winter and summer, war and peace, surfeit and hunger**", and

Pindar (c.518–c.438 BCE): "**What is God? Everything.**"

And then, jumping ahead approximately 2,000 years (!), there is from Baruch Spinoza (1632–1677), "**Besides God, no substance can be granted or conceived**" (a conclusion for which he was expelled from Judaism) and from the philosopher George Santayana (1863–1952, of "Those who cannot remember the past are condemned to repeat it" fame):

My atheism, like that of Spinoza, is true piety towards the universe and denies only gods fashioned by men in their own image to be servants of their human interests.

But questioning such descriptions, one can ask: Why use the word ‘God’ to describe ‘everything’? We already have perfectly good descriptions of ‘everything’ (viz., “nature” or “the universe”), and to communicate with Nature, we needn’t pay surcharges to power-mongering con artists, posing as supernatural shaman and pretending to know the unknown!

Yet, beyond what Thales may have meant by “all things are filled with gods”, of much greater importance for humanity is what he started. Thus, what happened next in ancient Greece (perhaps because the mystics didn’t realize what was going on, failing to perceive the threat to their con games) was that other physicists began to express their skepticism with criticism of his proposal.

Now, granted that it wasn’t particularly significant that Thales proposed an alternative to the then-current ideas about gods and that his idea was met with skepticism and criticism. Many others (both before and after him) proposed alternatives that were similarly met with criticism and skepticism. As examples:

- Approximately 600 years earlier than Thales, the Egyptian pharaoh Akhenaten proposed that there was only one God – an idea that the still-powerful, old-guard of Egyptian clerics eventually squelched.
- Approximately 600 years after Thales, perhaps there was a Jewish fellow by the name of Jesus (ben Pandera?) who seems to have promoted the Gnostics’ idea that the Jewish god, Yahweh, was the “evil god” who made matter and not the “good god” who made light, an idea that was met with so much skepticism and criticism by the ruling Jewish clerics that they approved his execution (rather than point out to him that $E = mc^2$ and, therefore, that matter and light are the same!).

But such speculations about “the supernatural” (by Akhenaten, Zarathustra, Homer, Hesiod, Ezra, Jesus, Muhammad...) are of no value to humanity (save for those who use such speculations as a part of religious con games), not only because they contain no information but also because they can’t be tested.

On the other hand, Thales’ idea that “water is the cause of all things” had the potential to be tested. Now, competent engineers had (of course) been testing their theories (about how to control fire, smelt metal, construct shelters, boats, etc.) for at least the prior 10,000 years (!), but how to test proposals such as “water is the cause of all things” was apparently unclear.

During the next few centuries after Thales, methods of testing speculations such as his began to be developed, by such brilliant ancient Greek scientists as Thales' student Anaximander (c.610–c.546 BCE, one of whose students seems to have been Pythagoras), Anaxagoras (c.500–428 BCE), and the “father of modern medicine”, Hippocrates (c.460–377 BCE). Unfortunately, however, such budding scientists introduced wild speculations of their own. For example, Anaximander criticized Thales' proposal, not because of new experimental results, but because of the proposal's illogic: he pointed out that water was wet and therefore couldn't explain its opposite, i.e., dryness. Then (as described in the Wikipedia article on Anaximander), he introduced his own speculation that the “fundamental stuff” of which everything is made is *apeiron*, something that [conveniently (!)] “explained” opposites but that was proposed to be imperceptible [and therefore extremely difficult to study experimentally (!)].

Others proposed that the “physics” of everything was “air” or “fire” or some other “thing”, that there was more than one “fundamental thing” (such as earth, air, fire, and water), and that there were various fundamental processes controlling interactions among these “things” (such as circular motions, various whirling motions, mind or *nous*, and even love). If readers desire further information, they might want to search on the internet for ideas proposed by Anaximander, Anaximenes, Heraclitus, Parmenides, Pythagoras, Empedocles, Anaxagoras, and others, all of whom lived during the next two centuries after Thales.

Actually, among all such speculations in ancient Greece, some amazingly perceptive ideas were “hit upon” – consistent with the principle that, if you throw enough darts, eventually a few may hit the dartboard! For example, Anaximander (c.610–c.545 BCE) came close to proposing a theory of evolution, approximately 2300 years before Darwin! He stated that humans were: “[like another animal, namely a fish, in the beginning.](#)” Also, Democritus [c.460–c.370 BCE, who is generally credited with the idea of atoms (where *a* is a negating prefix, similar to the English ‘un’ or ‘in’, and *tomb* is to ‘cut’ or ‘divide’, so ‘atom’ literally means ‘un-cuttable’ or ‘in-divisible’)] stated: “[by convention there is color, by convention sweetness, by convention bitterness, but in reality there are atoms and space.](#)” In general, though, most of the speculations were totally bizarre, such as those by Pythagoras, who was a real “nut case”.

Pythagoras

Although I haven't explored the following in depth, I get the impression that the religion Pythagoras started in a Greek colony in southern Italy was an early version of Christianity, promising immortality for his followers. Before his time, the Greeks had Homer's tales about immortality (as described in *The Odyssey*), but such immortality wasn't a state to be desired. For example, when Ulysses found Achilles among the dead, Achilles described his immortality as follows: “Rather would I live on ground as the hireling of another... than bear sway among all the dead that be departed.” That is, “the Homeric tradition” among the Greeks – even among Greek “nobility” – was that life (even as a slave) was far better than “life after death”. Pythagoras' vision of “life-after-death” was much more appealing.

Relatively little is known about Pythagoras (c.580–c.500 BCE), because he left no written record – apparently because recording his ideas was “against his religion”. As can be found on the internet, indications are that he met with Thales, studied under Thales' student Anaximander (Darwin's forerunner!), traveled to Egypt (and while there, possibly became a priest and essentially certainly was exposed to Egyptian speculations about “the immortal soul”), then traveled (possibly as a prisoner) to Babylon (where he probably learned what we call “Pythagoras' theorem”!), and then returned to southern Italy, where he led a group that used mathematics to “purify the soul” (so they could reunite with their idea of God).

Apparently it's unknown where Pythagoras got his wild ideas about “purifying his soul” for the sake of its “immortality”, but similar ideas were prevalent in Egypt for ~2,000 years. In addition, perhaps in Persia he became aware of Zarathustra's ideas. Thus, the second century (CE) Roman satirist Apuleius in *The Defense*, Section 1, Part 1 (translated by H. E. Butler) wrote:

Many hold Pythagoras to have been a pupil of Zoroaster, and, like him, to have been skilled in magic.

Alternatively (or maybe “as well”), perhaps Pythagoras learned about “transmigration of the soul” (through various life-forms) from the Hindus (or from hearing about them). Illustrative of Pythagoras' ideas about the “transmigration of the soul” are the report by Xenophanes (his contemporary, of “woven-web-of-guesses” fame) that Pythagoras “once heard a dog howling and appealed to its master not to beat it, as he

recognized the voice of a departed friend.” On the other hand, though, rather than obtain his ideas from the Hindus, perhaps Pythagoras improvised on some ideas of other Greek religious “cults”.

In particular, at about the same time as Pythagoras (and for approximately 1,000 years earlier!) the Dionysus cult [worshippers of “the god of wine and revelry”, Dionysus (Greek) or Bacchus (Roman), who similar to Jesus was the alleged son of the “father god” Zeus and a mortal woman (Semele)] reportedly worked themselves into frenzy until they felt that Dionysus entered their bodies, sharing his immortality with them. Thereby, for little more than the price of a few jugs of wine, the masses of poor and simple people (“the rabble”) could gain immortality and “oneness” with their god.¹¹ Meanwhile, in contrast to preaching in both contemporary Dionysus and subsequent Christian cults, Pythagoras apparently preached that the route to immortality was through leading an ascetic life, enriched with music and (his idea of) science, a route later followed by some Christian monks.

Presumably, it was Pythagoras’ experience with music (he might have played the lyre since he was a boy) that sent him off on his “numbers kick”. At first, his hypotheses were firmly rooted in experimental results: he found musical harmony when there were certain whole-number relations between lengths of musical strings. But from those sound (☺) results, he leapt into wild speculations, first about relationships between numbers and human concepts [such as justice and marriage – leading him and/or his followers (including Plato) to conclude, for example, that justice is the number four and that marriage is the number seven!] and then into numerical and geometrical relationships for essentially everything, e.g.,

... fire is composed of twenty-four right-angled triangles surrounded by four equilaterals, [and] air is composed of forty-eight triangles surrounded by eight equilaterals.

Whatever! Such ideas are nothing but wild speculations, of course, but just-as-crazy stuff abounds (and is considered to be “the Truth”!) in all religions.

¹¹ Such ideas not too dissimilar to methods pursued by members of most Christian sects (seeking “oneness” with Jesus, the alleged son of Yahweh), although most Christians pursue the goal more solemnly, e.g., rather than drink wine, they drink their god’s blood (!), eat his body (!), sing their songs – and, of course, pay their tithes.

There are hints that Pythagoras abandoned his craziness in “pure math” by a result found in “applied math”. By “numbers”, he and his followers meant whole numbers and their ratios, and it was the “rational numbers” that, according to their speculations, were the foundation of the universe. But when he or one of his followers evaluated the length of the hypotenuse of the simplest imaginable right-angle triangle (or the diagonal of a square), of base and height of unit length, then according to “Pythagoras’ theorem” (discovered ~2,000 years earlier by the Mesopotamians!), the length is the square root of two, an irrational number approximately equal to 1.414213562... where “...” means the digits never end, which probably blew “the faithful” away!

The consequences of the discovery of irrational numbers seem to be unknown. Stories persist that Pythagoras had the discoverer (the destroyer of his “number theory”) killed; what is known is that Pythagoras’ ideas continued to be promoted for more than a century in the school he founded. For example, Plato visited Pythagoras’ school in about 390 BCE – and was mentally infected by Pythagoras’ numerology. Yet, although Pythagoras was a “nut case” (as was Plato), he did make some useful contributions: I suspect that he “shook up” the clerics of other cults with his frequently repeated saying, “Reason is immortal; all else [is] mortal”, he deserves credit for his attempt to explain “things” using numbers (which can be said to be the beginning of theoretical physics), and even I agree with his statement: “The most momentous thing in human life is the art of winning the soul to good or to evil” – if only one has the wisdom to distinguish good from evil (a challenge later taken up by Socrates, Plato, and Aristotle).

Anaxagoras & Protagoras

Now, although I certainly don’t claim much knowledge about the ancient Greeks (my career was in the physical sciences, not history!), yet from the sources that I have looked at (mostly on the internet), it appears that clashes between the critics and the mystics developed roughly as follows.

In the main, the new speculations about nature (i.e., about ‘physics’), proposed during the approximately 100 years between Thales and Anaxagoras, developed first in Greek colonies in what is now Turkey (by followers of Thales), mostly during the time when those Greek colonies were ruled by Persia. The Persians conquered the “Ionian” Greek colonies in 546 BCE (about the time of Thales’ death) and ruled during the next 50 years, until the Athenians helped the Ionians revolt in 498 BCE. That

overthrow was, however, only temporary: the Persians regained control in 496 BCE, and during the next seventeen years, political control of Asia Minor vacillated between the warring Persians and Athenians, until the Athenians finally defeated the Persians in 479 BCE.

With the defeat of the Persians, when he was about 20 years old, Anaxagoras moved from Asia Minor (where the ideas of the physicists were developed) to Athens (where the ideas of the mystics were still entrenched), he began to teach the new ideas (probably one of his students was Socrates), and thereby, he became the pioneer Athenian philosopher (after whom followed Protagoras, Socrates, Plato, Aristotle, Epicurus, and many others). Sometime during this fifth century BCE, the Athenian clerics began to see the dangers of the cats that had been let out of the Greek colonial bags, namely, criticism and skepticism. That is, the mystics saw that criticism and skepticism, when applied to the mystics' speculation about the gods, threatened the privileged positions that the con-artist clerics had grabbed: such "authorities" (in balderdash!) sometimes tolerate a few questions, but rarely tolerate questions that might undermine their financial well-being!

Some appreciation for why the clerics might have reacted negatively to the physicists can be gained from Part 30 of Aristotle's (history) book *The Athenian Constitution*,¹² which describes how ancient Athens was ruled. In particular, with the following (to which I've added the italics) Aristotle describes how the Athenians were governed in about 400 BCE:

These were the recommendations of the committee; and when they had been ratified, the Five Thousand elected from their own number a hundred commissioners to draw up the [revised] constitution. They, on their appointment, drew up and produced the following recommendations. There should be a Council, holding office for a year, consisting of men over thirty years of age, serving without pay. To this body should belong the Generals, the nine Archons, the Amphictyonic Registrar (Hieromnemon), the Taxiarchs, the Hipparchs, the Phylarch, the commanders of garrisons, the *Treasurers of Athena and the other gods, ten in number*, the Hellenic Treasurers (Hellenotamiae), the Treasurers of the other non-sacred moneys, to the number of twenty, *the ten Commissioners of Sacrifices (Hieropoei)*, and *the ten Superintendents of the mysteries*.

I'd be willing to bet my paycheck (if I had one!) that all those "Treasurers... of the gods", "Commissioners of Sacrifices", and "Superintendents of the

¹² Available at http://classics.mit.edu/Aristotle/athenian_const.mb.txt.

mysteries” didn’t want to risk losing their paychecks by gambling with the upstart physicists!

One of the most important examples of the metaphysicists’ (or mystics’) reactions to the physicists occurred in the case of the fellow who brought teachings of Thales’ school to Athens, i.e., Anaxagoras. He wrote a book entitled *On Nature*, but only fragments of it have been found (copies were probably destroyed by the clerics). He taught that sun was a “red-hot stone... larger than the Peloponnesse [the southern peninsula of Greece]”, that the moon merely reflected the sun’s light, and solar eclipses were caused by the moon.

Understandably, such teachings were received poorly by those in power in Athens, who “believed” that the sun and moon belonged to “the dominion of the gods”. Therefore, in about 450 BCE, the Athenian legislature made it illegal to teach new theories about “the things on high”, and Anaxagoras was imprisoned. [From about 500 BCE onward, the democratic Athenian legislature was controlled by “the rabble” (who, in turn, were manipulated by clerics and oligarchs) – just as most democracies were controlled for centuries in most Western countries and just as today the legislatures are similarly controlled (to varying degrees) in India, Pakistan, Israel, Turkey, and the United States by “the rabble”, who in turn are manipulated by clerics and the press (both, in turn, controlled by those with money)!]

No doubt such censorship wasn’t the world’s first battle in the war between science and religion (surely similar censorship was practiced for thousands of years in Egypt, Mesopotamia, Persia, and India), but the censorship of Anaxagoras appears to be the first serious constraint on freedom of speech that occurred in ancient Greece. Subsequent to his arrest, Anaxagoras was pardoned by his friend (and perhaps his former student) Pericles, who was a military and political leader in Athens and who became the first Athenian commander in the Peloponnesian War between Athens and Sparta, which started in 431 BCE – and continued for 27 years! And as Anaxagoras and after him Protagoras (c.485–c.415 BCE) and Socrates (469–399 BCE) learned, during or near wartime is an inauspicious time to criticize core beliefs of citizens indoctrinated in clerical balderdash.

Protagoras (an agnostic and the first of the Sophists, i.e., “teachers of virtue”) is most famous for his statement:

Man is the measure of all things, of the things that are, that they are,
and of the things that are not, that they are not.

His agnostic statement that got him into even more trouble with the rabble and their ruling clerics is from his book *On The Gods*:

Concerning the gods, I have no means of knowing whether they exist or not or what sort they may be, because of the obscurity of the subject and the brevity of human life.

The result was the first known instance of official “book burning”. Further, according to DeYoung:¹³

Protagoras... was put on a trial as a result of statements similar to those of Xenophanes, managed to escape, and then ironically drowned in doing so.

Socrates

Subsequently there was Socrates, who is still considered by some to have been the wisest person who ever lived (although I question if such people have considered the wisdom of Confucius, the Buddha, Heraclitus, Epicurus, and many others, including Bacon, Spinoza, Goethe, and many more, including even Thomas Jefferson and Robert Ingersoll). Socrates got into even more trouble with the Greek rabble and their clerical taskmasters than Anaxagoras and Protagoras; in the end, they had him executed for “treason”.

Unfortunately, there’s no record of anything Socrates wrote; therefore, what we know about his thoughts is contained in reports by others, and most of these reports are from his student Plato. The problem with Plato’s reports, however, is that he had his own “axe to grind”; so, it’s hard to know which ideas reported to be Socrates’ are actually Plato’s. Yet, if the editors of *Bartlett’s Familiar Quotations* confirmed all their references (an assumption I’ll never check!), then the few statements attributed to Socrates do reveal astonishing ideas, as appropriate today as 2500 years ago.

For example, about 500 years after Socrates, the Roman philosopher Diogenes Laertius wrote:

Often when looking at a mass of things for sale, he [Socrates] would say to himself, “How many things I have no need of!”

¹³ From <http://ablemedia.com/ctcweb/showcase/deyoung4.html>.

Also, about 400 years after Socrates, the Roman philosopher Plutarch gave the following as statements by Socrates:

I am not an Athenian or a Greek, but a citizen of the world.

There is only one good, knowledge, and one evil, ignorance.

I know nothing except the fact of my ignorance.

And approximately 600 years after Socrates, the Roman writer Apuleius wrote:

Is not Socrates said actually to have urged his followers frequently to consider their image in a glass, that so those of them that prided themselves on their appearance might above all else take care that they did no dishonor to the splendor of their body by the blackness of their hearts; while those who regarded themselves as less than handsome in personal appearance might take especial pains to conceal the meanness of their body by the glory of their virtue? You see; the wisest man of his day actually went so far as to use the mirror as an instrument of moral discipline.

I don't know if this last quotation accurately reflects what Socrates said; I have seen, however, that the same idea is contained in one of the fables attributed to Aesop (6th Century BCE).

Plato (c.428–c.348 BCE) provides the following information about Socrates, as if Plato were quoting Socrates. And even if these ideas aren't from Socrates, the quotation provides an interesting look at what it must have been to be an "intellectual" ~2500 years ago in Greece.

When I [Socrates, according to Plato] was young... I was tremendously eager for the kind of wisdom which they call the investigation of nature. I thought it a glorious thing to know the causes of everything, why each thing comes into being and why it perishes and why it exists... [I was] always agitating myself with such questions as these: Do heat and cold, by a sort of decay, bring about the growth of animals, as some people say? Is it the blood, or air, or fire by which we think? Or is it none of these, and does the brain furnish the perceptions of hearing and sight and smell, and do memory and opinion arise from these, and does knowledge come from memory and opinion when they have attained fixity? And then I tried to find out how these things perish, and I investigated the phenomena of heaven and earth until finally I made up my mind I was by nature totally unfitted for this kind of investigation...

Then one day I heard a man reading from a book, as he said, by Anaxagoras, that it is the mind [*nous* or "God"] that arranges and causes all things. I was pleased with this theory of cause, and it seemed to me to be somehow right that the mind should be

the cause of all things, and I thought, “If this is so, the mind in arranging things arranges everything and establishes each thing as it is best for it to be. So, if anyone wishes to find the cause of the generation or destruction or existence of a particular thing, he must find out what sort of existence, or passive state of any kind, or activity is best for it. And therefore in respect to that particular thing, and other things too, a man need examine nothing but what is best and most excellent; for then he will necessarily know also what is inferior, since the science of both is the same.”

As I considered these things I was delighted to think that I had found in Anaxagoras a teacher of the cause of things quite to my mind, and I thought he would tell me whether the earth is flat or round, and when he had told me that, would go on to explain the cause and the necessity of it, and would tell me the nature of the best and why it is best for the earth to be as it is; and if he said the earth was in the center, he would proceed to show that it is best for it to be in the center; and I had made up my mind that if he made those things clear to me, I would not yearn for any other kind of cause.

And I had determined that I would find out in the same way about the sun and the moon and the stars, their relative speed, their revolutions, and their other changes, and why the active or passive condition of each of them is for the best. For I never imagined that, when he said they were ordered by intelligence, he would introduce any other cause for these things than it is best for them to be as they are. So I thought when he assigned the cause of each thing of all things in common he would go on and explain what is best for each and what is good for all in common. I would not have given up these hopes for much money, and I seized the books very eagerly and read them as fast as I could, that I might know as fast as I could about the best and the worst.

My glorious hope... was quickly snatched away from me. As I went on with my reading I saw that the man made no use of intelligence, and did not assign any real causes to the ordering things, but mentioned as causes: air and ether and water and many other absurdities... But it is most absurd to call things of that sort causes... Whoever talks in that way is unable to make a distinction and to see that in reality a cause is one thing, and the thing without which the cause could never be a cause is quite another thing. And so it seems to me that most people, when they give the name of cause to the latter, are groping in the dark, as it were, and are giving it a name that does not belong to it. And so one man makes the earth stay below heavens by putting a vortex about it, and another regards the earth as a flat trough supported on a foundation of air; but they do not look for the power which causes things to be placed as it is best for them to be placed, nor do they think it has any divine force, but they think they can find a new Atlas more powerful and more immortal and more all-embracing than this, and in truth they give no thought to the good, which must embrace and hold together all things.

It's doubtful if we'll ever learn if the above is an accurate reflection of Socrates' thoughts or if they are Plato's way to try to give more authority to

his own ideas, deceiving readers into thinking that they originated from Socrates. In any event, the ideas glaringly demonstrate an error that we should always try to avoid but to which most of us succumb [I may be doing it in this post!]: seeking only information that supports our preconceptions.

Such an error seems especially embarrassing if made by Socrates (or even by Plato), because Plato's description of how Socrates probed issues with questions, questioning people to uncover their assumptions, is still known as "the Socratic method", and such questioning has (unfortunately) become identified as the most important characteristic of "critical thought". I added the adverb "unfortunately", because the most important characteristic of critical thought is not to probe assumptions (and especially, not to probe definitions) but to rely on evidence, which was a critically important failure of essentially all of even the best of the ancient Greeks – save "the father of modern medicine", Hippocrates, (somewhat) and (certainly) save "the father of mechanics", Archimedes. In contrast to them, as shown in the above quotation, Socrates (or Plato) sought, not what knowledge might be gained from data (from the universe around them), but only support for the preconception that everything was "for the good".

Further, beyond the fundamental failure of essentially all Greek philosophers to evaluate their thoughts against evidence, the above quotation demonstrates Socrates' (or Plato's) failure to check even his definitions and premisses. Thus, behind the goal of seeking "**the good, which must embrace and hold all things together**" is the glaringly unsubstantiated premiss that there is "**a purpose**" behind natural processes. What evidence supports such an assumption? What was the purpose behind, for example, the death of so many Minoans by the tsunami that followed the eruption of the island of Thera in about 1600 BCE?¹⁴ Was "the purpose" (see Chapter **Y19**) to kill all the homosexuals?!

Besides, what definition is adopted for "**the good**"? I hope Plato wouldn't have minded too much if I had vehemently disagreed with his definition of "**the good**", which he provides elsewhere in his writings and which includes the ideas that philosophers (such as he) should be the rulers (!) and that those who didn't "believe" in his god should, first, be imprisoned and, if they still didn't "believe" after a "re-education" program, then such "atheists" should be executed – horrible ideas later adopted by Christian and Muslim clerics.

¹⁴ See, e.g., http://en.wikipedia.org/wiki/Thera_eruption.

Actually, though, I'm skeptical that the above illustration (of seeking confirmations for preconceptions) accurately reflects Socrates' method of seeking knowledge, because it's not the method that he apparently used in other inquiries. Apparently, his other inquiries were not attempts to understand the rest of nature (viz., physics) but attempts to understand human nature, in general, and in particular, ideas about justice, bravery, beauty, and similar. He did this by talking to people (apparently to essentially everyone he could), thus trying to understand human thoughts by seeking data from all available sources. In a sense, then, Socrates wasn't a physicist but a psychoanalyst or psychiatrist.

Many examples of his inquiries are available in the many "Socratic Dialogues" (available on the internet), written by Plato (and therefore probably reflecting Plato's opinions). Socrates' fundamental concept seems to have been, that the best that anyone can do is to pursue truth, even while he apparently recognized Xenophanes' point that, in reality, truth can never be attained.

As a result of Socrates' many inquiries of many people, he was considered a "trouble maker" and eventually indicted with the charge:

Socrates is guilty of not believing in the gods in which the state believes, but brings in other new divinities; he also wrongs by corrupting the youth.

He was found guilty and sentenced to death (by drinking a poison made from hemlock) – not just for what he thought, but for how he stimulated others to think.

The famous 1787 painting by Jacques-Louis David (1748–1825) of Socrates reaching for the poison while still holding discussions is shown below.



In a Chapter **Ix11**, I reviewed some details about Socrates' trial; in a subsequent post, I plan to comment more about his (in my opinion, unwise) choice of "martyrdom". In the next post, continuing to explore physics and metaphysics in ancient Greece, I'll address influences of Socrates' death on Plato and influences of Socrates' ideas on Aristotle. In later posts, I'll turn to the influences of Aristotle on the two greatest philosophical groups in ancient Greece (the Epicureans and the Stoics) and to the (unfortunate) influence of Plato's ideas on subsequent religions, including Judaism, Christianity, and Islam.

[To be continued...]