[1975, In Zondervan Pictorial Encyclopedia of the Bible. Merrill C. Tenney, ed. Grand Rapids, MI: Zondervan Publishing House.]

GREEK RELIGION AND PHILOSOPHY

- A. Greek religion
 - 1. Homeric religion
 - 2. Primitive religions
 - 3. Mystery religions
 - 4. Forms of worship
- B. Greek Philosophy
 - 1. The Pre-Socratics
 - 2. The age of Plato and Aristotle
- 3. The Hellenistic age

A. Greek religion. This account of Gr. Religion is divine into three parts: the classical Homeric religion of the Olympic deities; an earlier religion of fear, some practices of which continued into the classical period; and the mystery religions that later displaced belief in Zeus.

1. *Homeric religion.* Classical Homeric religion acknowledge Zeus as its chief god. Zeus was not in any sense the creator of heaven and earth. Neither was he the prime mover, the *ens perfectissumum*, nor the eternal self-existing being; he was the son of a previous god.

Originally there was Chaos, the came Gaea (Earth) who married Uranus (Heaven), and in addition to several monsters this pair produced the Titan gods Kronos, his sister Rhea—whom he married—Tethys, and Oceanus, and others.

When Uranus imprisoned his monster offspring, Gaea persuaded Kronos to castrate Uranus, and from his blood the Giants and the fearsome Furies, pursuers of evildoers, came into being.

Kronos and Rhea gave birth to Zeus. Fearing that one of his sons might unseat him, Kronos wished to devour Zeus as he had devoured some of his other children; but Rhea hid Zeus and saved his life. When of age Zeus overthrew Kronos and the race of Titan. Zeus thus became the chief diety, the god of the sky; his brother Poseidon became god of the sea, and another brother, Hades, became lord of the underworld.

Zeus, by his sister-wife Hera, was the father of Ares, god of war; but Athena, goddess of

wisdom, sprang full grown from her father's forehead. Zeus seduced Leto, his niece, who gave birth to Apollo and Artemis. He also seduced Dione, the daughter of Tethys and Oceanus, to beget Aphrodite, the goddess of love. Zeus's main occupation, pausing only occasionally to hurl a thunderbolt, seems to have been seducing both goddesses and moral women. Zeus also set the example, so frequently followed by his worshipers, of unnatural vice with boys.

Other gods are: the crippled smithy Hephaestus who married Aphrodite (who also became the mother of Aeneas by Anchises of Troy); orgiastic Dionysus, the god of drunken revelry; Demeter, goddess of agriculture, sister of Zeus, by whom she had a daughter Persephone, who was abducted by Hades, but was finally compelled to live in the underworld for only three months a year—an arrangement that produced winter. In addition to these main gods and goddesses were innumerable local spirits of caves, springs, trees, mountains; there were the evil demons, gorgons, and sirens; the lovely nymphs, and the half-man, half-horse centaurs.

The mythology, the stories, the dealings between gods and men are told chiefly by Homer in his Iliad and Odyssey. Hesiod and the other sources sometimes give variations on the Homeric accounts. For the present purpose, these will be omitted and attention centered on the Gr. Concept of the future life.

Little did the concept of the future lie encourage morality, as in the conduct of Zeus. All men, good and bad alike, met the same fate in Hades. The only exceptions were a few heroes who were changed into demigods, and a few exceptionally wicked men who had perpetrated special crimes against the gods. For example, Tantalus killed his son Pelops, roasted the body, and served it to Zeus for dinner. For this crime, Tantalus had to stand forever in water, which, when he was thirsty and stooped down to drink, would receded and disappear; and when he reached up to pick fruit from branches near his head, a wind tantalizingly blew the branches out of reach. Another example is Sisyphus. Zeus had abducted Aegina, daughter of Asopus. Sisyphus told Asopus what had happened and where Zeus had taken his daughter. For this "crime" against Zeus, Sisyphus was condemned to roll a heavy stone up a hill; every time he got it near the top, it rolled down again. All other men descend at death to Hades.

Hades, however, is not a place of punishment. It is simply the abode of the dead, where, as Homer describes, "flit the shades of worn-out men." Memory remains, but reason is extinct. No information about those still living trickles down. The dead do not even know whether their friends and family have died. Dismal darkness replaces the sunlight and joy of the upper world. Achilles, himself a king, remarked, after he arrived in Hades, that a menial position on earth was superior to that of a king in the underworld.

The Homeric religion is often pictured as one of happy enthusiasm in the vigorous game of life. The Greeks admired athletes and warriors; they lusted and reveled in drunken feasts; they admired beauty and produced triumphs of sculpture and architecture; and they celebrated their interests in song and story. They could be happy, however, only through deliberate thoughtlessness, for their religion gave them no hope. Death ended it all, and utter dreariness was their uniform fate.

2. Primitive religions. Earlier religion were not any better. In the Homeric religion there was no fear of the gods. It is true that one had to make proper sacrifices to have a prosperous voyage or to receive some gift; one had to treat them with due respect and attend the public rites—but with ordinary precaution no one was going to get hurt. Contrariwise, the gods of the earlier religion, which lasted perhaps into the 6th cent., were malevolent spirits to be appeased. The practices of this religion continued on through antiquity even though their significance, with certain gruesome details altered, had been forgotten.

The Anthesteria, a three day spring festival in honor of Dionysius, during which everyone got drunk, preserves elements of a placation of ghosts. One of the sacrifices of this festival is not offered to Dionysus at all; nor, unlike the usual Gr. sacrifices, is it eaten by the people. Eating symbolizes either communion or identification with the god. The refusal to eat seems to indicate that the god, ghost, or spirit is being sent away. On the second day of this festival they chewed buckthorn, presumably to get rid of spirits; and a vase painting of the feast shows ghosts emerging from a $\pi i \theta o \varsigma$, which was ostensibly a win jar, but it could have been a casket for the dead.

In the autumn the Eleusinian rites were celebrated. In connection with Hades' rape of Persephone, her mother Demeter in remote antiquity established her temple and worship in Eleusis (a town about fifteen m. W of Athens). These rites became immensely popular, waning only upon the advent of Christianity, but briefly revived by Julian the Apostate.

It was a mystery religion, a secret society, forerunner of many similar secret religions of later times; and so well were the secrets guarded, by severe punishment and by devotion to Demeter, that very little is known of the secret details. A large part of the rites had to do with the purification of women. They washed suckling pigs in the ocean and threw them into a chasm. Sometimes later the women dug up the decayed flesh, put it on the altar, and served it as a fertility charm. It is thought that in earlier days, the women used their own babies instead of baby pigs.

Another evidence of an earlier savage religion is in the worship of Isis, which the Greeks took up at the beginning of the Christian era. Although a late importation into Greece, this Egyp. religion seems to have incorporated a much earlier, purely Gr. Ritual, in which the initiates stood under a slain bull on a scaffold, and were baptized in its blood. After this baptism they ate the bull's flesh. Vase paintings seem to hint its origin in human sacrifice.

3. *Mystery religions*. Later history brought other forms of religion. With the defeat of the Persians at Salamis, a great victory for the Olympian deities, Homeric religion became more and more a purely civic and patriotic exercise. The gain in patriotism was a loss in religion. Classic worship did not stimulate morality, it had never held out the hope of eternal life, and personal interest and devotion were still further minimized.

At the same time, philosophy and science undermined belief in myths: it was the clouds and not Zeus that produced rain; the sun was not a god, but a hot stone; and so. Sophism, though refuted by Plato and Aristotle in the 4th cent., made that century an age of secular individualism. In the 3rd cent., credulity seemed to triumph.

Pure secularism could not satisfy the majority of the people. They were economically prosperous, but this prosperity came through Alexander's destruction of the Gr. city-states. Rome later absorbed the whole territory. This development eradicated Zeus and patriotism, and left the individual in the hands of capricious Luck, Tyche, now deified. The situation stimulated the need for a more personal religion, and in such a climate mystery religions developed. Some of them may have been continuous with the early rites of fear, but they were so altered as to become religions of hope. Such mysteries existed as early as 400 B.C.; Orphism and the Eleusinian mysteries existed in some form even earlier; but they proliferated in the cent. before and the cent. after Christ.

In general, the mysteries were secret societies whose secrets or mysteries would guarantee a happy future life to their initiates. None of the mysteries included any concept of a resurrection of the body, but in opposition to the idea of Hades they asserted the possibility of a blessed immortality.

Some were more moral than the usual Gr. religion. Orphism, with its theory of the transmigration of souls, taught that wrongdoing is punished in this life, but if not, then in the future life. The Pythagoreans were a philosophic school and a religious brotherhood. One of their more moral principles was that of friendship, out of which came the story of Damon and Pythias. They also enforced a set of rules or taboos: members were not to eat beans, for earth spirits came up from below

through the hollow stalks and resides in the beans: linen clothing, not woolen, was required; and they would not sit with the left leg crossed over the right. Chiefly, they held that salvation comes by knowledge; this principle motivated their serious and principal work in mathematics.

4. Forms of worship. After the Apostle Paul looked around Athens, he remarked that the city was "very religious"; it even had an altar to an unknown god. Strabo agreed with the apostle, for his description of one locality is, "All the region is full of shrines of Artemis, Aphrodite, and the nymphs There are also many shrines of Hermes on the roads, and of Poseidon on the sea shore."

There were more than 200 shrines in Athens. Besides the great temples—triumphs of architecture, many shrines were of modest construction, some without any roofed building, just stone altars in the open, or a post with the head of Hermes on it.

Parenthetically, in Acts 14:12, the people did not call Barnabas Jupiter and Paul Mercury, as in the KJV, but they called Barnabas Zeus and Paul hermes. In Acts 19:28 the goddess is Artemis, not Diana.

There was no central religious authority, and the ritual at any one shrine had no definite connection with the others. One god had many local shrines, and he was worshiped under such different aspects of his nature and with such different traditions that he was hardly the same god.

The large temples were staffed with priests to care for them, to manage their wealth, and to regulate the dense traffic of state occasions. There were priests for lesser places; but there was no organized priesthood No particular moral or educational qualifications were required of the priests; rather the qualification was a handsome physique. The office, at least in the larger temples, brought them honor and respect such that they could serve as ambassadors and emissaries in time of war.

The term of office was usually one year; sometimes it was held for life; sometimes, hereditary; sometimes the priest was selected by lot; sometimes the office was sold to the highest bidder. For many of the lesser shrines there was no priest at all; anyone, esp. the father of a family, could offer his sacrifice by himself. Sacrifices were even offered at home: parts of the animal were burned on the hearth and the family ate the rest.

Even in the slaughter houses and butcher shops, such sacrifices were burned before the gods. For this reason, immature Christians refused to eat meat at banquets, suspecting it had been offered to idols. In 1 Corinthians 8, the apostle tells the church that such scruples are foolish, for "food will not commend us to God." At the same time, the mature Christian must avoid wounding the weak

conscience of these ignorant Christians. Later, they may learn that all food is clean.

Before the sacrifices were burned, the worshipers examine the pieces, liver, and entrails; if they were firm and of good color, it was a propitious omen. Divination was one of the most frequent features of Gr. worship. In addition to the parts of the sacrificed animals, signs of the future were seen in the flight of birds, lightning from Zeus, eclipses, meteors, etc. That Troy would be captured in the tenth year was indicated by a serpent devouring a sparrow and her eight young.

The use of natural events as signs declined from 400 B.C. on, and reliance was put on oracles, sacrifice, and astrology.

B. *Greek philosophy.* Greek philosophy in general had little interest in Gr. religion. The philosophic development, a minority movement in any age, is divided into three stages: the Pre-Socratics, whose chief interest was science, Plato and Aristotle, who attacked the problem of epistemology; and the Hel. age with its largely ethical emphasis.

1. *The pre-Socratics.* Pre-Socratic philosophy began with Thales, a resident of Miletus in Ionia, who predicted the solar eclipse of 28 May 585 B.C., and so imposed scientific law on hitherto unorganized observations.

He and his fellow Milesians Anaximander and Anaximenes, though the differed on minor details agreed on the following five universal principles: (1) all things have emerged from a single underlying substance (because unity needs no explanation whereas it would be necessary to give a reason why there were ninety-three instead of merely fifty-four elements and no such reason can be found); (2) this substance is eternal: it never came into being and will never cease to be; (3) the substance is inexhaustible, prob. Infinitely extended in space; (4) our immediate world or cosmos is limited in space and in duration, but other worlds preceded it and will follow upon its dissolution (it is doubtful that the Milesians asserted the existence of many worlds at one time); (5) motion, the process of nature, the constant change in all things, is spontaneous—the substance is not dead, but alive, and the impetus to change is immanent in it rather than the effect of an extraneous cause.

The assertion of one substance leads to a problem that plagued antiquity and has not been satisfactorily answered to this day. If all things originate from one substance, each thing must or at least can turn into anything else. Observation shows that the bread we eat becomes both hair and fingernails, or, more generally, wheat can become man, dog, and donkey. Water can become fire—the wood of a tree has come from water, and wood burns—and earth can become air. For example, lead comes from uranium, whose properties are far different. How can the existence of qualitative differences be explained, esp. if basically everything is the same stuff?

Thales seems to have appealed merely to observation: water becomes steam or air as it changes into fire, and the fire in the lightning turns to rain. This really leaves little basis for Thales' view that water is the cosmic substance and that fire, air, and earth are derivatives. Anaximander made all four derivatives from an unobservable "boundless" substance. It was a stuff in which the qualities of earth, air, fire, and water were so mingled that it had no quality of its own. The process by which the ordinary "elements" with their qualities came from the boundless was a whirling motions, somewhat similar to that of a cream separator.

Anaximenes, the last of the Milesians, identified air as the original substance (because water and earth fall, but air supports itself), and explained the emergence of qualities by condensation and rarefaction. Thus the concept of a natural, mechanical law is the contribution these first philosophers made to civilization.

Heraclitus (c. 525-475 B.C.) lived near Miletus in Ephesus. His attention was not focused on the generation of qualities, as in later philosophies, but on the fundamental problem of motion itself. If the cosmic substance change spontaneously, the change in universal: "all things flow" and "no man can step into the same river twice." On the second stepping the river would not be the same because the water would not be the same, and even the bed and banks would have eroded somewhat. Since the river is its bed, banks, and water, therefore nothing remains the same.

This applies to persons too. A man cannot step twice because it is not the same man: "In the same rivers we step and we do not step; we are and we are not." Thus persons and things do not exist; for when we say that something exists, we mean that it does not change, it stands still, remains what it is and does not become something else. If it is blue and two inches wide, it stays blue and two inches wide. But if everything is in motion, then blue must change, and every quality and dimension is becoming different. Therefore nothing exists.

However, although everything changes, there is one thing that does not change—only it is not a "thing." There is a *law* of change that does not change. Heraclitus called it the Logos. The Gr. words bear two meanings, so that Heraclitus' sentence can be translated either as "This theory, always true, men to not understand," or as "This Logos, always existing, men do not understand."

If a law be considered a reality, what becomes of the view that the only reality is a single,

physical, cosmic stuff? Can *corporeal monism* admit the reality of an incorporeal law? This question Heraclitus in his own day could not understand. He identified the basic substance as fire and at the same time gave it the characteristics of a directing intelligence: "Wisdom is one thing: to understand the mind that governs all things through all"; and "the thunderbolt directs the course of all things"; and "this cosmos, the same for all, none of the gods or men has made, but it always was and is and ever shall be an everliving fire, kindled in measures and extinguished in measures." Unable to distinguish, Heraclitus confused physical fire with a mechanical law of measurement, and body with a directing mind, which men today would say is neither a law nor a body. Thus problems multiplied and philosophy developed.

The Pythagoreans (alluded to in the section on Gr. religion) formed a school in southern Italy about this time and continued all through antiquity. They were mathematicians. Pythagoras himself, a contemporary of Heraclitus, is said to have discovered the Pythagorean theorem: the square of the hypotenuse of a right-angled triangle equals the sum of the squares of the other two sides. Without their geometry, astronomy would not have been able to make much headway. Their headway was considerable, for Eratosthenes about 300 B.C. measured the circumference of the earth with an accuracy about just one per cent off modern estimates. Still, people think antiquity believed the earth to be flat.

The next philosopher, Parmenides (c. 475 B.C.), the chief member of the Eleatic school in Elea, southern Italy, addressed himself directly to the difficulties in Heraclitus and corporeal monism. Parmenides had been preceded by the poet Xenophanes (c. 590-500 B.C.?), who attacked the stupidity and impiety of Gr. polytheism. He insisted that there was but one God. Parmenides, no so religious, asserted merely that there is One.

He was troubled by a contradiction and therefore an absurdity in previous philosophy. How can a true monist assert a pluralism? How can one thing be another? How can a rational theory be irrational?

Thales had said fire is water, and Heraclitus said water is actually fire, but "pure" logic shows clearly that fire means and can only be fire, nothing else. To say that fire is water is like saying a square is a circle.

No only so, but worse, Parmenides denied that water is water. Undoubtedly the two instances of water have the same meaning, but the word *is* denotes existence. Therefore the sentence means water is an existence. If fire cannot be water because the two words do not have the same meaning, water

cannot *exist* because the two words mean different things It is false that water is water, because it is false that water is. Water does not exists.

What, then, exists? Only that which can be asserted without contradiction or absurdity. Therefore only the existent is existent, or Being is.

Being cannot have originated or come into being. It cannot have come from nonbeing, for nonbeing never has existed for anything to come from it. Nor can Being have come from Being, for Being is Being without any coming. Therefore origination is impossible and Being is eternal, immutable, and changeless.

If Being is changeless, there can be no motion. The earlier philosophies contradicted themselves by asserting both unity and motion, both one body and many differences, both identity and change.

Parmenides could not divest himself of the common notion that reality is corporeal. His one Being therefore was a solid, spherical homogenous body. Admittedly men see fire, water, and their differences; men see motion and change—but when men *see* rabbits jumping out of a ht or a man climbing a rope hanging from nothing, the *know* it is not so. Sensation must submit to reason. Absurdities cannot be true.

The Pluralists, however, could not repudiate sensation. There is a world of many different things; and if corporeal monism is absurd, let us retain motion, rejection monism, and assert corporeal pluralism. This can be done in three ways.

Empedocles (c. 490-430 B.C.) asserted that there were four elements: earth, air, fire and water. Their basic qualitative differences are eternal, and the problem of their origination—either from a boundless or from one of them considered as original—is side-stepped. Other differences were somehow to be explained by chemical combinations; for example, bone is W2F4E2. The theory of a finite number of qualitatively different elements was much later adopted by 19th cent. chemistry.

Empedocles could not, however, totally ignore the threat of Parmenides. Each element and each atom must be eternal and unchangeable like Parmenidean Being. If so, motion is no longer spontaneous; matter, no longer alive, in inherently inert, and extraneous moving forces are necessarytwo force, Love and Hate, one to cause mixture and combination, the other to cause dissolution.

Anaxagoras immediately saw that one moving force was sufficient, for every mixing is a separation from previous combinations. Then too, whereas Empedocles was clumsy in clarifying the distinction between inert, corporeal elements and the newly assumed principles of motion, Anaxagoras described his single principle as mind, totally separate from mater, the wise director fo the cosmos.

After all, if men's minds direct their bodies, why should not a universal mind direct the Universe? As Socrates complained later on, however, Anaxagoras had difficulty in carrying through this part of his theory and never really transcended the mechanistic position.

Empedocles also had made a second mistake that Anaxagoras corrected. It may be good to assume four original qualitative differences, but four are not enough. Since Parmenides had shown that origination is irrational, a philosopher to be a pluralists must assume that every quality is original and eternal. Hence, instead of earth, air, fire, and water, the elements are hair, blood, fingernails, wood, bone, and so on to infinity.

If an infinite number of original qualities seems awkward, and if four are not enough, there is only one other possibility for atomistic pluralism: an infinite number of atoms, of all shapes and sizes, but without any qualities at all.

Democritus (c. 460-370 B.C.), a native of Abdera in Thrace, with Leucipus, produced the classic theory of atomism. Each atom is impenetrable an indivisible, the characteristics are purely mechanical or geometrical. Qualities, such as hot and cold, wet and dry, do not exist in reality: they are subjective effects of mechanical action in the organs of sensation. For example, if in a compound body the smooth surfaces of the atoms are on the exterior, we receive a sensation of coolness when we touch it; but if the points and sharp edges of the atoms are on the surface, our sensation is one of heat. The atoms themselves are neither cold nor hot, blue nor red, bitter nor sweet, and so on.

Democritus found it unnecessary to posit a moving principle. Each atom move when and because another atom hits it. There is no point asking what started the first atom on its first motion. There is no first atom and there never was a first motion.

However, whereas neither mind nor spontaneity is needed, Democritus, to explain motion, had to invent the concept of empty space. If all space were completely filled with solid atoms, none of them could budge. The Ionians did not need empty space, for their cosmic stuff was alive and nonatomic. Parmenides, too, had virtually equated empty space with nothing, for only body is real. Empedocles and Anaxagoras had not yet seem the implications of pluralism. So the credit for this concept belongs to Democritus, although the later philosophers did not regard it as much of a credit.

First, the clever story of Achilles and the tortoise proves that motion is impossible. Reduced to its bare, essential mathematics, it argues that for an atom to move to a far point, it must first traverse half the distance; before it can get half way, it must go a quarter way; and before it arrives at the quarter mark, it must arrive at the eighth mark. To start at all, it must exhaust this inexhaustible infinite series;

therefore it cannot start. And therefore motion is impossible.

Similarly, at any moment of an arrow's alleged flight, it is at rest because its extremities coincide with two points in empty space. But since the flight takes place wholly within a series of moments, the arrow is always at rest and never moves.

Also, sensation is impossible. When an ocean wave "thunders" against the rocks, no atom produces an audible sensation; but the wave is nothing but atoms, therefore it produces no sound.

Finally, if there must be space for an atom to exist in, there must be a superspace for space to exist in, and a super-superspace. It would be better never to start such a useless series. Pluralism is refuted.

2. *The age of Plato and Aristotle* was introduced by the Sophists. The reaction of these men to the failure of atomism explains why science receded in importance and epistemology became the pressing problem.

The early pre-Socratic attempt to give a rational account of the universe failed because Parmenides had shown that corporeal monism is absurd. Zeno had shown that corporeal pluralism is absurd, but if one body cannot furnish an explanation, and if many bodies cannot, and since there must be either one body or many, it follows that the universe cannot be explained at all. Knowledge is impossible.

This skeptical conclusion is supported by the Pythagorean theorem. Further study of this early triumph in geometry revealed the existence of irrational numbers, such as the square root of two. If irrationality is embedded in pure mathematics, surely any further knowledge is impossible.

Ordinary Greeks had always acknowledge certain moral truths as well. The murder of parents was wrong—everyone knew that; and so was the neglect of funeral rites, and so on. But the Pers. wars had acquainted the Greeks with a foreign code of conduct, the old Gr. morality began to break down, and soon no one could know any ethical truth. All knowledge is impossible.

If knowledge is impossible, there is no use wasting time on mathematics, astronomy, or ethical principles. A wise man must renounce the life of the intellect and exercise his volition. The problem is to set a goal and achieve it.

The more ordinary Sophists therefore gave lectures in vocational education. They taught navigation or wrestling. The name Sophist, with its evil connotation of making the worse appear the better argument, got its reputation because most ambitious young men wanted to be instructed in politics. Therefore the Sophists taught the devices of oratory, the knack of swaying audiences and gaining votes. Neither the personal aim nor the political policy is subject to intellectual ethical principles. Simply willing it, or, better, achieving it, makes it right.

Two outstanding Sophists, who, though they may have taught oratory to young politicians, also reflected on the more profound philosophical aspects of their practice. Gorgias, with an Eleatic background, taught that (1) nothing exists; (2) if anything existed, no one could know it; and (3), if anyone could know it, he could not teach it to someone else.

Protagoras, with a Heraclitean background, accepted the proposition (1) all things constantly change; (2) knowledge, since men do not wish to discard the word, is perception; and (3) "Man is the measure of all things, of the existence of things that are not and the non-existence of the things that are not."

The Man-measure theory meant that everything is as it appears, no matter to whom. A wind is chilling to a man with a fever; the "same" wind feels exhilarating to a man in good health. It is not the same wind because a wind is an appearance due to the combination of certain external motions and one's sensory organs. The wind is the perception. Since two people cannot have the same sensation, for my toothache is not yours, two people never sense the same thing. Each person lives in a separate world of his own perceptions. Therefore whatever a man thinks is true, that is true for him, and no one else can judge. This is the theory of relativism, the denial of fixed, eternal truth.

This theory was resurrected by William James and John Dewey and pushed to incredible extremes by French existentialism in this day, and it has become widely accepted in American education. If Plato can make a pertinent reply, his usefulness cannot be said to have ended in antiquity.

Plato, interested in mathematics, science, and very particularly in ethics and politics, was obliged therefore to defend, first of all, the possibility of knowledge. HIs preliminary answer to Sophism was that it is self-contradictory. Since Protgoras holds that all beliefs are true, and since many people believe that Protagoras' theory is false, their belief must be true and Protagoras must admit the falsity of his own position.

Or, again, if everything is constantly changing and nothing remains fixed, then, as blue does not remain blue and chilling does not remain chilling, neither can seeing remain seeing nor perception perception; from which it follows that if perception is knowledge, it immediately changes into "notknowledge."

The key to the situation and the great absurdity is that in this view everything is relative *except*

relativism. There is no fixed truth except the fixed truth that nothing is fixed. Relativism is always asserted absolutely.

Finally, Protagoras had located sensation in the sense organ, so that one eye could sense and know, when the other was closed and could not know. But, replies Plato, this reduces man to a wooden horse of Troy: one soldier sees out of one ye, another does not see out of the opposite ear. Man, however, is not such an aggregate of separate senses. It is the man who senses, not the eye or the ear. The senses unite in one power, the soul or the mind, and it is this power that uses the organs.

The eye cannot see a sound and the ear cannot hear a color; but the man perceives both the color and the sound, compares them, and judges that they are different. This is what the horse of Troy could never do.

At this stage of the argument, Plato makes his great, constructive contribution. When corporeal monism met its fate the hands of Parmenides, the pluralists thought that the fault lay in the monism. When Zeno exploded pluralism, the Sophists gave up hope of rationality. Plato's genius saw another possibility. If neither corporeal monism nor corporeal pluralism can explain the universe, the fault must lie in corporealism. Reality cannot be material. Or, conversely, if knowledge is to be possible, there must be a noncorporeal reality.

In the refutation of Protagoras, Plato had asserted the existence of a soul or mind, necessary to judge disparate sensations. This soul is, of course, incorporeal. Knowledge also requires incorporeal objects for the soul to know. Plato calls these objects Ideas, and his early dialogues explain at length why such objects must exist.

The easiest argument to understand is the one based on the occurrence of common qualities. There is a very small steel cube; here are two ivory dice; here are some blocks that children play with. We call them all cubes. What then is *cube*? If it were one of the physical objects, the others would not be cubes because the others are not that one. If *cube* were the aggregate of all of them, none of them would be a cube because none is the aggregate. Furthermore, all these cubes could be destroyed, but Cube would remain. Hence Cube cannot be a physical thing; it is an eternal, unchangeable, supersensible object of though. It is a single, unique Ideas. Whereas the physical objects are a plurality.

So it is with all common qualities. When two or more objects are similar, the similarity is real. It is something that exists: there *is* such a similarity, but these realities are not bodies.

A second argument is that thought and science require such an object. A geometer does not study this one triangle drawn on the blackboard. A physician does not study this one case of measles.

The object of geometry is Triangle, and the object of medicine is Health. There are many drawn triangles, of all sizes, equilateral, isosceles, and scalene; but there is one one, definite Idea of triangularity. If a particular triangle drawn on a blackboard were the Idea of triangle and the object of knowledge, the knowledge would disappear when it was erased, for knowledge cannot be knowledge of the nonexistent. To knew mean to know something. To know nothing means not to know. Hence Ideas exists.

Since Ideas are not sensory objects that can be seen with the eyes, Plato must answer the inescapable question how they can be known. His example is the Idea of equality. When a man sees two peas in a pod or two pebbles on a beach, he carelessly says they are equal. Stopping ot think, he knows well enough that they are not exactly equal. It would be better to say they are approximate equality. This example shows, first, that the concept of equality cannot be abstracted from experience because equality is never found in experience; and second, that men actually know equality before they have ever seen two pebbles. They must have known equality before their first experience because at that time they are ready to use the concept in judging that the two pebbles are not equal but approximate equality. Men have to have the concept before they can use it as a norm in judging.

True enough, as youngsters, men may never have consciously thought of equality until the moment they saw the pebbles. At the moment the pebbles remind them of an equality they know without ever having sensed it. Since sensation begins at birth, it follows that before birth men's souls must have existed in the Ideal world where they were in contact with all the Ideas. What is ordinarily called learning is therefore reminiscence. As the lyre of Simmias reminded men of Simmias, although it does not look like him, so the two pebbles, though not strictly equal, remind men of the absolute equality they previously knew but had as youngsters forgotten.

The soul therefore is immortal. It existed before birth and continues to live after death. Because of the soul's immortality and because the Ideas—Ideas of Justice, Temperance, Piety—are immutable, one can reject the relativistic ethics of the Sophists. Knowledge is possible; ethical knowledge can be taught as well as geometry; and both are valid at all time and in all places.

Since intellect and truth have displaced Sophism's unbridled will, the good life is not a life of pleasure, but of knowledge. Pleasures rivet the soul tot he body and the body is a tomb ($\sigma\omega\mu\alpha \sigma\eta\mu\alpha$, an old Orphic adage of ascetic tendency). The philosopher detaches himself from sensation as much as possible and prepares for pure communion with the Ideas after death. In the *Phaedo*, a relatively early or middle dialogue, Plato is moderately ascetic. In the late dialogue *Philebus*, he recognizes that some

pleasures are harmless and even necessary to life. Their admission into the good life, however, is strictly controlled by intellect, knowledge, and truth.

Having thus solved the problem of knowledge and ethics, Plato returned to cosmology. His mathematical physics, his astronomy in the *Timaeus*, and his invention of the eight-note scale, cannot be reproduced here, nor his adoption of a heliocentric theory later perfected by Aristarchus; but the relation he envisaged between God and the world needs mention.

The supreme Being, to which nothing is superior or equal, is the world of Ideas. These ideas of Equality, Courage, Man, and so on—are not merely an ordered series of concepts. They are indeed an ordered system, with the Idea of Good in the highest position, on which all other Ideas depend for existence in whose light alone men can know them. Beyond the status of ordered concepts, the world of Ideas is a living mind. The relatively late dialogue *Sophist* gives the arguments, and the conclusions are further worked out by the Neo-platonists.

Modern students, who have been taught to believe that the world is basically an aggregate of inanimate atoms, must be reminded that in ancient times and even in modern times this has been the minority view. Most philosophers—Hegel and Leibniz, Stoics and Plato—have held that the universe is a living being. It is all the more natural to conceive of the world of Ideas as a mind.

Independently and eternally existing, yet lower in rank than the Ideas, is "God," or the Demiurge, the personal Maker of heaven and earth.

The Demiurge is confronted with another independent and eternal being, or, rather, non-being; viz. Chaotic space. Since the Demiurge is good and devoid of envy, he wishes to make space good too. To this end he fashions a world-soul and through it produces the visible world here below by using the world of Ideas as a model, or a blueprint, and imposing its order on space or matter.

The visible world therefore, like the world of Ideas, is a living being. Note also that it is not created, as the Hebrew-Christian view has it, but is made out of pre-existing stuff. Whereas a particular fashioning may occur at a definite time, the process, as explained below, is without beginning or end.

Unfortunately space is inherently recalcitrant. It cannot be made perfect; that is, neither Equality nor Justice, not even Horse and Man, can be perfectly exemplified here below. What is still worse, in a sort of rebellion, the world collapses at intervals and needs to be remade.

Thus cosmological history is cyclical as all natural processes are. World follows world, reincarnation follows reincarnation, as day follows night, forever. For the relation of Platonic philosophy to Christian theology, *see the articles on* PHILO JUDAEUS, AUGUSTINE, and latter part

of ETHICS.

Aristotle (384-322 B.C.) was Plato's student but not Plato's disciple. The great difference was carried over into Christian theology, for as Augustine's tendencies, dominant until A.C. 1250 were Platonic, so Thomas Aquinas eventually succeeded in making Aristotelianism the official philosophy of Roman Catholicism.

The intricate detail of Aristotle's work is enormous and in many way admirable. His theory of the syllogism, with perhaps only one alteration in the Middle Ages, was not carried further until A.D. 1850. He wrote several volumes of zoological observations. The eight books on *Physics* define motion and its several species, discuss time, place, and infinity, and propose a theory of a finite universe. The work concludes with the ponderous cosmological proof of the existence of the Prime Mover, or God, who sits on the circumference of the heavens, blissfully ignorant of the world below.

Aristotle was as greatly opposed to skepticism and sophism as Plato was; but he thought that a world of Ideas beyond the visible world was redundant, that reminiscence of a previous life contradicted the testimony of man's consciousness, and that sensation was a satisfactory basis for higher forms of knowledge.

Therefore he asserted that the primary realities are physical individuals, such as Socrates and Mt. Olympus. These primary realities are objects of perception, and all learning comes through sensation.

Strictly speaking, men neither see, hear, nor touch other men. Men see colors, hear sounds, and touch the hard or the soft. These are the special senses and the special sensible. Some sensations come through two senses: men see and touch magnitude, shape, number, rest, and motion. Beyond the special senses is a *common sense*, common at least to sight and touch, and five common sensibles. By this common sense, men also compare disparate sensations, for comparison requires the two objects to be presented to a single judge; and as these objects are perceived by sense, the judge must be a sense—not any special sense, but the common sense.

There is also perception *per accidens*: A man does not perceive another man because he is a man but because he is a white object. Thus the perception of the primary realities is "accidental."

Higher forms of knowledge, however, transcend sensation and primary realities. There are secondary realities, viz., species or concepts. Socrates is only one of several men seen, and there are other mountains besides Mt. Olympus. The common quality in all men or all mountains is the species or concept. It is as unchangeable as a Platonic Idea, but it is not learned in the Platonic manner.

Briefly, the learning process begins in sensation, upon which follow memory images. From these images, the intellect by a process of abstraction detaches the concept, the secondary reality, the definition of the species. This concept or form can be abstracted because it is embedded in the sensory matter, rather than existing independently in an Ideal world.

The intellect that does the abstracting is really two intellects. First, there is the passive intellect. As the sense organ requires the stimulation of a sense object before there is any sensation, so there must first be an object of thought before there can be any thinking. Unlike the sense organ, however, which has various corporeal qualities of its own, the mind before it thinks is actually nothing. If it had qualities, these, like colored glasses, would distort the objects of thought, in which case man could never have accurate knowledge. When the mind thinks it receives the qualities, or, better it receives the object it thinks and thus becomes the object it thinks.

Corresponding to this passive intellect which becomes all things, is the active intellect that makes all things. One might suppose that the intellectual objets themselves would stimulate the mind and raise it from possibility to actuality—but no: as color must be actualized by light before it can be sensed, so the active intellect must disengage the concepts or forms from their corporeal matrix and thus actualize them for reception into the passive intellect.

Aristotle further says that

it is this [active] intellect which is separable and impassive and unmixed, being in its essential nature an activity. . . . This intellect has not intermittence in its thought. It is, however, only when separated that it is its true self; and this, its essential nature, is alone immortal and eternal. But we do not remember [the activity of this intellect before our birth] because this [active intellect] is impassive, while the intellect which can be affected is perishable and without this does not think at all (*de Anima*, III 5, 430 a 17-25)

When Aristotle in another place asserts that the active intellect enters a human being "from without," commentators wonder whether or not the eternal, active intellect is God. In the Middle Ages the Mohammedan philosopher Averroes identified the active intellect as God and therefore denied individual immortality. Thomas Aquinas had an individual intellect for each person and so tried to support belief in a future life. In any case, Aristotle's theory hardly fits into Christian doctrine, for even on Thomas's interpretation his active intellect is eternal, not merely immortal, and has therefore existed

as long as God Himself.

Something more must be said about abstraction. So far only the concepts of man and mountain have been actualized. People who lived their life on great plains might never get the concept of mountain; but there are other concepts so basic that without them a person could not think at all. These concepts are called the categories.

The word "category," in Gr. as well as in ordinary Eng., means simply a classification. In philosophy, however, it means the fundamental, inescapable classifications. Whereas Parmenides identified the verbs "is" with the meaning of "exists," Aristotle insisted that there are ten different meanings of the verb "to be."

The nine categories are: substance, quantity, quality, relation, and five others that are not discussed at much length.

Substance or reality, primary and secondary, has already been mentioned. Quantity, quality, and relation are supposed to be quite distinct, though Aristotle's arguments do not seem conclusive, and if not, the system is seriously defective. At any rate these concepts are the result of further abstraction, and therefore, unlike the Kantian categories, are empirically based.

Beyond this Aristotle must establish the fundamental principles of the various sciences. First of all, the law of contradiction is the law of all being. It is an ontological law and not merely a law of thought; it is a law of thought because it is first a law of being.

In addition to the law of contradiction, which covers all subjects, each science has its own fundamental laws, without which it could not be kept separate from other sciences. No one of these laws can be so restricted as to cover only a part of a science, nor so general and remote as to combine uncombinable subjects. Geometrical truths, for example, cannot be demonstrated on arithmetical principles. Thus the ideal of a single all-inclusive science is excluded. Today one wonders how Aristotle would explain analytic geometry, not to mention cybernetics, or the contemporary reduction of chemistry to physics. He is honest enough, however, to say "It is hard to be sure whether one knows or not, for it is hard to be sure whether one's knowledge is based on the principles of each genus or not; and it is precisely this that constitutes knowledge" (*Posterior Analytic*, I 9, 76 a 26).

After manifold sensations, memory, and wide experience, the intellect abstracts the fundamental laws. This is the process of induction and intuition; and although the processes of opinion and calculation are sometimes mistaken, intuition is foolproof and unfailingly accurate. It is consoling to know that at least part of the time men cannot possibly be mistaken, even if they cannot be sure what

part of the time it is.

The most direct contact of Aristotle's philosophy with Christian theology is in his cosmological proof of the existence of God. The argument is extremely intricate; only its general character can be indicated in a brief statement of its five stages.

First, motion is eternal: it never began and will never end. Second, since motion presupposes a mover, there must be a single, eternal mover. Third, this eternal cause of motion cannot itself be in motion. Fourth, the unmoved Mover has no magnitude. And fifth, "The mover must of necessity be situated at the center or on the circumference, for these are the principles of a sphere. Now, the things that move most rapidly are those nearest the mover. Since, then, the rotation of the outer sphere is the quickest motion, there is where the mover must be" (Physics VIII 10, 267 b 6).

3. The Hellenistic age. After Plato and Aristotle, after Alexander had extinguished the independence of the Gr. city-states, and with the rise of Rom. Influence came the Hel. age. As the pre-Socratics had been interested in science, and Plato and Aristotle in epistemology, the Hel. age thought it time to emphasize ethics. The Epicurean and the Stoic schools arose about 300 B.C.

Although ethics presupposes that the epistemological problem has been solved, these schools emphatically rejected the Platonic solution, and agreed with Aristotle only on the point hat knowledge is based on sensation. They even defend the possibility of knowledge in their own way. Both Epicureanism and Stoicism continued in existence for over five centuries, but they had less and less success in persuading philosophers that they possessed the secret of knowledge. The Epicureans were widely despised, and Stoicism faced difficult criticism. Neither did the school of Aristotle conquer the world; rather it went into eclipse. Plato's Academy turned skeptical. If any philosophy can be said to have surpassed the other at this time, it was skepticism.

A skeptical school was founded by Pyrrho about 300 B.C., continued by Arcesilaus (315-240), who was actually a Platonist, the brilliant Carneades (219-129), the relatively insignificant Agrippa, about A.D. 100, who made an excellent summary of the arguments, and Sextus Empiricus a cent. later.

The Stoics had asserted the occurrence of a sensory impression so clear and distinct that its veracity could not be doubted. Carneades replied that there is no specific difference discernible among impressions. Dreams and illusions, while they last, are as vivid and convincing as sensations. Furthermore that man cannot distinguish between twins and mistake Castor for Pollux shows that two different objects can produce the same impression. If knowledge is based on sensation, as the Stoics

say, there is no sure knowledge.

Aenesidemus, about the beginning of the Christian ear, added that the sense organs of animals differ from those of men: dogs receive different odors; birds, different sounds; and flies receive visual impressions different from man's. Why should man assume that his sensations are more accurate pictures of reality than those of the animals. Indeed, animal lovers emphasize the greater acuity of their humble friends.

Agrippa reduced the skeptical arguments to five basic points, which emphasize the logical difficulties of nonskeptical philosophies. First, opinions differ on all subjects. Second, to prove the truth of one opinion, philosophers have recourse to a second, and so on ad infinitum. Third, to escape this regress, they go around in a circle. Fourth, they make an assumption, which only begs the question. Finally, all objects are relative to the subject as Aenesidemus so clearly showed, and hence noting can be known as it really is by itself.

If knowledge is unattainable, what becomes of ethics and the daily decisions of life? One rule of action adopted by skepticism was, "It makes no difference." One day a skeptic, about to cross a road, jumped back to avoid a four-horse chariot. A friend chided him on his inconsistency: he should not have jumped out of the path of the chariot because it made no difference. "But," replied the skeptic, "that is why I jumped back—it make no difference."

Sextus Empiricus tried to accommodate skepticism to the needs of living. Anticipating pragmatism and John Dewey, he held that the sense were made, not for knowledge, but for use; and when men are hungry they should eat. If someone objects that a statement such as this, relative to the purpose of sensation, purports to be knowledge, Sextus replies that adherence to such principles must be motivated, not be reflection, but by a conscious lack of reflection. Medical theories founded on cosmology are worthless, but empirical medicine can cure disease. Without claiming to know anything, men can formulate practical rules and become proficient—not in science, but in art. Medicine is an art; man did not learn it, he practiced it. Man is a doer, not a knower.

The reaction against skepticism and against Stoicism became prominent and effective wit the work of Neoplatonist Plotinus (A.D. 205-270).

Neoplatonism, previously thought to have originated with Plotinus' teacher, Ammonius Aaccus, can be found in the generation that follow Plato. Not only are characteristic Neoplatonic themes found in Speusipus and Xenocrates, the first and second presidents of the Academy after Plato, but Aristotle himself gives, even if mistakenly, a Neoplatonic interpretation of Plato. Nevertheless, it was not until

Plotinus wrote six books of nine tractates each, the Enneads, that Neoplatonism displaced all the other schools of antiquity.

The weak point in Stoicism, by reason of which the skeptics could so greatly embarrass them, was their empiricism and materialism. Even apart from the skeptics, the Stoics themselves were troubled to give a corporeal explanation to the incorporeal phenomena of meaning or significance, space, and time. Because these difficulties had become acute, the time was propitious for Plotinus to insist that knowledge presupposes spiritual realities.

In one of the first tractates he wrote (Ennead IV 7, *On the Immortality of the Soul*), Plotinus rejects the Epicurean atomic soul, the Stoic wax soul, the behavioristic theory of harmony, the Aristotelian form of the organic body, and puts in their place a pure spiritual being.

Briefly, the arguments are that life cannot be explained as an arrangement of inanimate particles, for an arrangement requires a prior arranging mind. Further, if a soul were a material quantity and could be split into inanimate parts, the phenomenon of multiple births could not be explained; each pup of a litter of puppies is a complete dog, he does not have half a soul, part of a soul, but an entire and integral soul. The characteristic of a soul is to remain essentially the same through infinite division, to be entire at every point, to have the derivative part equal to the whole, and this is the characteristic not of body but of incorporeal spirit.

Plotinus analyzes sensation to support the same point. Perception requires the presence of the whole object in the entire unitary soul. If the soul were not unitary but extended, it would be impossible to judge that the perceived color white is different from the perceived taste sweet.

Thought even more clearly than perception requires an incorporeal soul. Even the materialistic Stoics admit that men can think of empty space and conceptual meaning. No material soul could grasp these immaterial realities.

Seemingly the discussion envisage an individual soul, like that of Socrates. If, however, the essential characteristic of soul is to remain the same and be entire at every point; and if all souls are one in species, as the Platonic argument on common qualities requires; and if, finally, a philosopher is bound to assert the unity of the universe, all souls must unite in a single world-Soul.

Although Plotinus investigates psychology in great detail, he does not use the material to build up an empirical argument to prove the existence of a world-Soul. For this purpose, general Platonic principles are sufficient. He does show how the presupposition of a world-Soul accounts of psychological details, and he thus escapes opposing objections. One of these objections is that if your soul and my soul are one soul, then I would feel your toothache. Plotinus replies that a single soul in two bodies gives two different combinations, so that unitary Humanity moves when I move but is simultaneously at rest in you. Hence two people will have different impressions, though their soul is one. An analogy is found in a single person when the left hand does not feel the pain the right hand feels. In this case, the soul is entire and complete in each hand, but the impressions are different. So, also, with different persons.

A question arises why the world-Soul, so superior to man's, descends and contaminates itself by entering man's bodies and becoming their souls. The answer is that the existence of the world presupposes some principles of duality; the Soul is inherently productive; therefore it descends of necessity and produces men's souls and the world that lies even below us. This descent is not all loss, for the Soul's contact with the sensible world heightens its appreciation of the intelligible realm.

Above the Soul is the Divine Mind, or World of Ideas. Were there no such mind, an explanation of human intelligence would be impossible. On occasion men withdraw themselves from the insistent sense impressions and impetuous desires of everyday life and give themselves over to the calm subject of geometry or some deeper philosophical reflection. Men may even go beyond reflection and enjoy the beauty of union with the divine. Here men are in the realm of Ideas, far above the level of perception.

Stressing the viewpoint of Plato's *Sophist*, Plotinus makes it clear that the Ideas are not just a collection of hypostatized concepts, but are in truth a living mind. At this point, a modern student who has heard of Berkeleyan idealism, or a Christian who makes God's decree dependent on God's activity of thinking must take care not to misunderstand Plotinus. "Not by its thinking movement does movement arise. Hence it is an error to call the Ideas intellections in the sense that upon an intellectual act in this principle one such Idea or another is made to exist" (V ix 7). mind and its object are not different, the latter inferior to the former: Mind *is* what it thinks.

Philosophy, however, since its purpose is to discover unity, cannot stop with the Mind or the World of Ideas because here duality still remains. There is a multiplicity of Ideas. In knowledge there are subjects and predicates. Unity requires a further ascent above and beyond duality, therefore beyond knowledge, to the ineffable One. Rational argument shows the need of postulating this One; but to be unified with it, man must leave reason behind and experience the One in a mystic vision.

Four times during the six year of Porphyry's study under him, Plotinus enjoyed this communion. This is a state in which ordinary consciousness is suspended. The soul no longer knows whether it has a body, and cannot tell whether it is a man, a living being, or anything real at all. Knowledge is somewhat like seeing sense objects on a cloudy day. In the vision a man sees the Source of the light that made knowledge possible, and he sees it directly in all its brilliance. This experience is not abnormal; it is the exercise of a faculty which all have but few use; he who has seen, says Plotinus, knows what I mean.

After Plotinus, Neoplatonism continued to the end of antiquity. Only one name, however, needs to be recorded—Proclus (A.D. 410-485). The future was to be in the hand of Christianity. Plotinus himself seems to have known nothing of orthodox Christianity, though he wrote one tractate against the Gnostics.

Augustine was rescued from Manichaeism and skepticism by neoplatonic arguments. Because of this, he gave a Platonic slant to Christian theology, though as he matured in his Christian understanding, he dropped many Neoplatonic details as inconsistent with the Scripture.

In the E., an unknown Christian writer appropriated a section of Proclus's writings. Working up two volumes of strong Neoplatonic and mystical cast, he issued them under the name of Dionysius the Areopagite. This insured their acceptance during the superstitious Middle Ages, seducing even the brilliant Thomas Aquinas, and contributed to the development of pantheism (in John Scotus Eriugena) and to a widespread vogue of mysticism.

In A.D. 529 the emperor Justinian closed the moribund school, and thus Gr. philosophy came to its end.

G. H. CLARK