
UNIT 1 IONIAN AND PYTHAGOREAN PHILOSOPHERS

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1.0 OBJECTIVES

In this Unit we introduce the origin and development of Greek philosophy, its history and its philosophers such as Thales, Anaximander, Anaximanes, Pythagoras and Heraclitus with their philosophical insights on God, world and human beings. Most of these philosophers belonged to the Ionian School active at Miletus (hence some of them are also called Milesian thinkers). In the process we will be touching upon various issues of ordinary life, helping one to have a better view on the world experience.

By the end of this Unit you should be able to:

- Begin philosophizing with awe and wonder;
- Look at various issues of life, such as moral, social, religious and political with a philosophical bend of mind;
- Follow the style of Greek thinking; and
- Explain ‘the ultimate principle’ proposed by the Ancient Greek Philosophers.

1.1 INTRODUCTION

The Greeks in general were philosophers, because they were lovers of wisdom. ‘Lovers of wisdom’ means that those who have the real thirst for knowledge. The word ‘philosophy’ itself is coming from the Greek language. The Greek word “*Philo-*

Sophia” means love of wisdom. Philosophy should always aim at the wisdom which spreads light on the supreme cause. This supreme cause is what is called in Greek “*arche*”. This principle is not equal to the phenomena of direct experience such as water, air, and fire as they are manifested in the world of senses: rain, wind, flames, sun, day, night, etc. The sense experience appeared as wonders in their life. Behind these wonders, a cause was sought. The external nature of the universe was considered in the Ionian Period as the first great problem. The enquiry into this problem was dynamic from about 585 to the middle of the 5th century B.C. The first stage in the growth of Greek philosophy was naturalistic: its efforts were oriented to the nature, with the nature, by the nature and in the nature. They were much impressed by the fact of birth, growth, decay and death. It was a search for knowledge for its own sake. The origin of things and the mysteries of universe were the central points. It was a cosmological problem. It was concerned mainly with two problems: what is the basic substance of the universe? And from where do they originate?

1.2 THALES (624-548 B.C)

The historian Herodotus, who used for the first time the Greek-term ‘philo-sophia,’ told that Thales was one of the seven sages: Thales, Biantes, Pittacus, Solon, Cleobule, Mison and Chilon. Aristotle has generally used this name ‘sage’ for philosophers and he particularly called Thales an “Initiator of Philosophy”. The “sophia” of seven sages was merely a moral knowledge or practical righteousness.

Thales, who has fame as the first Ionian philosopher, flourished at Miletus a Greek colony in Asia Minor. This city is now in modern Turkey. At the time of Thales it was a Greek city. He might have done his studies with Egyptian or Babylonian teachers. Miletus had colonies at this time in Egypt.

We do not know much about the life of Thales. Even the dates of his birth and death are uncertain. He was born about 624 B.C. He travelled to Egypt, and visited great centres of Lydia, a powerful kingdom then allied with Miletus and all Ionia. He is the first philosopher of Greece. He was named as statesman, mathematician, and astronomer. It was Thales who told the eclipse, which happened on May 28th, 585 B.C. Thales died in 548 BC.

Thales was also an important mathematician. And he was able to prove several interesting mathematical ideas. He measured the height of a pyramid by calculating the shadow of his own, when his own shadow became the same length of his height. Thales confirmed that

- A circle is bisected by its diameter
- The angles at the bases of any isosceles triangle are equal
- If two straight lines cut one another, the opposite angles are equal.
- If two triangles have two angles and a side in common, the triangles are identical.

His question was about the basic stuff of the universe. He searched for the cause of the universe. According to him, water was the original stuff. He would have been led by myth of oceans and Tethy’s gods of ocean. Water has the potency to become solid, liquid and vaporous forms. Water evaporates in the heat of the sun, and according to Thales it is the transformation of water into fire. Water comes down again in the form of rain and it is transformed into earth. Water is essential to life.

The reason is that nourishment, seed, and heat which are essential to life, contain moisture or wet. Hence water is the primordial principle, and all things (*physis*) were water (*arche*) and are water (*physis*). The earth is a flat disc floating on water. Water is the material cause of all things. He clearly perceived that nature was alive.

His claim involves three vital assumptions. He wanted to assert his belief that the universe is made up of One thing, i.e., water. Indeed, he brought the question of One:

- He believed that the fundamental explanation of the universe must be one in number. There can not be two realities behind the mysteries of the universe. The controlling element of the Nature should be one.
- This one reality must be a 'thing'. It ought to be a definite thing; and this thing is water which has the capacity to be present in everything.
- And this one 'thing' must have within itself the ability to move and change.

METAPHYSICAL PROBLEM AND SOLUTION

From this thinking he comes to the metaphysical problem of "the One and the many". How the multiplicity (*physis*) of beings can be explained in a unity (*arche*), a unique principle? How does Thales explain the term multiplicity? For philosophical understanding, we have to see beings as a whole. This whole is not to be understood as a sum of non-living things lacking movement, but this whole has its life as a single reality. Things have their own lives. Life is the element that brings the unity among all these multiplicity. This is an animistic vision of reality. Therefore, Aristotle quotes of Thales in '*De Anima*', "all things are full of gods" and hence the "*physis*" is something divine (*theion*) both in its being and in its change. What we have is only a first reflection, but that is full of philosophical implications.

He believed that 'All things are full of gods'. Perhaps, he might have thought that the universe is full with small invisible seeds for life. He saw that soon after the first rain after summer the earth began to bring new lives forth. Water may be the primordial stuff or the first cause for all lives in the earth. It can transform itself from one form to another form: solid, soft and again unseen like vapor. When he speaks that water is the '*arche*' of the universe, he does not mean that this '*arche*' is the beginning, but this is the sustaining Principle or material cause. He said already that this '*arche*' is a thing, from that we can guess that this is not god. This water is wet as ultimate reality.

1.3 ANAXIMANDER (614-540 B.C)

He was a disciple of Thales lived around 614-540 B.C. He participated in political life. He travelled to Sparta to construct sundial. For the Milesian sailors in Black Sea he designed a map. He says that the earth is a cylindrical body and is in the centre of the universe. It is not supported by anything but held in the equilibrium by other bodies. These things show his interest in scientific matters.

He sought like Thales for the primary principle and the ultimate end of all things, but he decided that it could not be any particular kind of matter such as water. If change, birth, growth and decay are due to conflict, on the supposition that everything in reality is water, why not in water all other things are absorbed? Therefore, he came to an idea that the primordial stuff is indeterminate. He named this as the material cause. It is different from water or any such kind of things and which is

infinite. From this indeterminate cause emerged all the heavens and the earth. It is “Ageless and Eternal”

This principle consists of and controls all elements, like the water, the earth and the fire; but it is not confused with these same elements. This primordial principle, called in Greek *apeiron*, will be divine, immobile, not generated, immutable, venerable, an absolute justice. This is the reality behind all cause and effect.

MERITS OF TEACHING

- 1) The primordial stuff, according to Anaximander, is a derivative element from ‘water’ of Thales.
- 2) Here the thought of Anaximander has a stage of process of becoming.
- 3) He thinks of a primordial stuff, which is indestructible.
- 4) He refuses to tell the qualities of primordial stuff; because of its complexity.
- 5) Therefore this refusal shows the abstract mode of his thought, by proposing ‘Indefinite Principle’.

Check Your Progress I

Note: a) Use the space provided for the answer.

b) Check your answers with those provided at the end of the unit.

- 1) What is the basic stuff and cause of the universe according to Thales?

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- 2) What is the basic philosophy of Anaximander?

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1.4 ANAXIMANES (6TH CENT. B.C)

The third philosopher of the Milesian school was Anaximanes. He was the disciple of Anaximander. Anaximanes comes back again to the mode of thinking like Thales. He says that the primordial stuff of the world and the heaven is air, vapour or mist. Air is the life-giving element in man. By the disappearance of the air, man stops to breath and he ends. “Just as our soul, being air, holds us together, so do breath and air encompass the whole world.” Air then is the primordial stuff of the world, and out of which all things originated.

He went back to the theory of Thales that the ultimate principle of the universe is a thing. For him water was condensed form of air. Air was therefore the origin of earth, water and fire. He might have thought that earth, air, and fire were all necessary to the creation of life, but the source of all things was air or vapor. Air can also become fire by rarefaction. Air is the thing that animates all things to move. It is something sacred and eternal. The universe is a sacred sphere, with a divine eternal fire or 'pneuma' palpitating at the center and animating all things with a cosmic breath. From air all things arise through the process of rarefaction and condensation. This theory of condensation and rarefaction is an advanced form of scientific explanation of the emergence of elements in the universe.

1.5 PYTHAGORAS (580-497 B.C)

Ionian philosophy moved into Southern Italy through the work of Pythagoras. Pythagoras of Samos (530) is the founder of Pythagorean School. He was born in Samos between 580 and 570 B.C., and immigrated to the Greek Colonies in southern Italy about the year 529. Iamblichus opined that Pythagoras was leader and father of divine philosophy. It is written by V.Capparelli that Pythagoras' philosophy is wisdom impregnated with a profound religious spirit. It is clear that there is evident dependence on the teachings of Anaximanes: the universe is a sacred sphere, with a divine eternal fire, or *pneuma* palpitating at the centre and animating all things with a cosmic breath. The Neo-Pythagoreans identified the central fire with Zeus or with the mother of gods, Olympus, castle of Zeus, etc. The fire stands here as the cause of Unity from where everything derives. He concentrated on cosmology, anthropology and ethics. Pythagorean society had a spirit of religious revival. It began to render the genuine religious teachings.

ETHICAL ASSOCIATION

Pythagoras founded an association for ethical, religious, and political purpose. His ideal was to develop among his followers the political virtues, to teach them to act for the good of the state, to subordinate them to the whole. Here the individual should learn to control himself or herself, to abase his or her passions, to harmonise his or her soul; he or she should have respect for the authority of elders, teachers and the state. Due to this reason, the view has been held that the Pythagoreans were political communities. But they were not essentially political but religious or ethical. Chief orientation of his teachings was to the religious-ascetic ideas which centred round the purification and purity.

CONCEPT OF SOUL

Pythagoreans saw the human soul as the life spirit which endures after the death of its first body and may take it abode subsequently in another human or animal body. This theory of metempsychosis or transmigration of souls is ethically significant since it provides for the rewarding of good action and the punishment of evil in these subsequent reincarnations. He taught silence, music, and mathematics to soften the soul. We are not sure all these teachings are coming from Pythagoras or his followers, Pythagoreans. Diogenes Laertius tells us of a poem of Xenophanes, in which Pythagoras told to stop beating a dog, seeing somebody beating it, because he had recognized the voice of a friend in the yelping of that dog. It strengthens the teachings of metempsychosis. Thus, they give importance to soul not to body. That is why they give soul purification and soul training in their life. It is said that it may be due to

he influence of Orphicism which was indeed a religion rather than a philosophy though it tends towards pantheism. It was also a way of life not mere cosmological speculation. In this regard Pythagoreans inherited something from Orphicism.

THEORY OF OPPOSITES

The Pythagoreans also developed a theory of opposites in which the “limiting” and the “non-limiting” were the chief pair. They understood limit as a definite and measurable characteristic of anything, and the non-limited is that which defied attempts at definition and measurement according to Pythagoras. Their standard geometrical example of the latter was the diagonal of any rectangle: it is impossible to express its length simply in terms of the sides.

ETHICAL PRINCIPLE

This is the beginning of a very important approach to ethical problems, the view that ‘good’ means what is rational and intelligible. Thus, in the fourth century B.C., a later Pythagorean, Archytas of Tarentum, first enunciated the principle of “right reasoning” as the key to good behaviour: “Right reckoning, when discovered, checks civil strife and increases concord...(it is) the standard and deterrent of wrong doers”. It is quite possible that Aristotelian and the medieval theories of right reason (*recta ratio*) as the norm of ethical judgement are directly indebted to Pythagorean intellectualism. The life of reason (*logos*) in the classical Greek is respected very much. Aristotle’s ethics is constructed on the importance of the rationality of the human soul. With the appearance of the Pythagorean concept of good, the Homeric good was rationalised with all the qualities that this had, and it has been elevated to the degree of philosophy.

CONCEPT OF NUMBER

Aristotle tells us in the *Metaphysics* that Pythagoreans are devoted to mathematics. They were the first who initiated this study. The most important teachings of Pythagoras are that all things are numbers. Number is the basis of everything and the principle of universe. He was explaining the universe with the concept of numbers. All things are countable and we can express many things numerically. So the relation between two related things may be projected in accordance with countable proportion. Just as musical harmony is dependent on number, so also harmony of universe is dependent on number. The world is not only order, beauty and system but a relation of intelligible and multiple proportions or numbers. Philolaus has well expressed it in the following words: “Everything that is known has a number; without this, nothing could be thought or known...Never does falsehood approach the number, because the number’s nature is hostile to falsehood, while truth is proper and natural to the species of number. Love, friendship, justice, virtue, health, etc., are pictured on numbers. Love and friendship are counted by the number eight, because they are harmony, and octave is harmony.”

Pythagoras regarded numbers as spatially. One is the point; two is the line; three is surface; and four is the solid. To say that all things are numbers, it would mean that all bodies are of points or units in space, which when taken together form a number. Points, lines, and surface are therefore the real units which form all material bodies in nature, and in this sense all material bodies must be considered as numbers. He believed that the things were the copies or imitations of number. The whole phenomena of the universe can be expressed under the concept of number.

Check Your Progress II

Note: a) Use the space provided for the answer.

b) Check your answers with those provided at the end of the unit.

1) What is the ethical principle of Pythagoras?

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2) Explain 'all things are numbers.'

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1.6 HERACLITUS (536-470 B.C)

Heraclitus was born in Ephesus, the son of a noble family and flourished around 504-501 B.C. He always displayed an extreme contempt for democracy. About one hundred fragments of his writings are extant. They are mostly epigrams and cryptic remarks dealing with the cosmos and the soul. He said, "Man is called a baby by God, even as a child by man".

CONSTANT FLUX

Heraclitus is best known for his cosmological teaching that all things are in constant flux or change. This is the most basic principle of the nature. He gave importance to the perception on the nature. He says, "Everything flows" just like a river. Everything is moving and nothing is remaining just as in the river. He says: "One cannot enter twice into the same river, nor can one twice touch the same mortal substance in the same state" (fragment B 91). When one person steps into the river for the second time, neither the river nor the person is the same. The person would have already changed, because cells of person's body were newly produced. The person is already in the process of becoming; and since the water in the river constantly flows, the river, where the person entered into, would have already changed within seconds; because it is the flowing water what makes the river as river. Since his entire philosophical conception is dominated by a sense of realities' change, he is also known as "crying philosopher".

FIRE AND UNIVERSAL CHANGE

For him the most mobile substance of the world is fire. It is ever-living and never comes to rest, and it is named by him as vapour or breath which is the vital principle in the organism and the essence of the soul. Some interpret that this fire is only a concrete physical symbol for ceaseless activity or process, not itself a substance, but the very denial of all substance. It indicates to a principle that changes constantly

or transforms into something other. Only fire can satisfy these conditions. The way of change to upward is same to the way of change to down ward. Fire changes into water, then earth, earth changes back again to water and fire. All things are exchanged for fire and fire for all things. The things we think that they are permanent, are not permanent, the thing that we do not see the movement which takes place in them. He says, "What is cold heats up, what is hot cools, the wet dries and the dry becomes wet" (fragment B126). "This order of the world is not the same for all, but it has always been and is, and will be a living fire for eternity, which at the due time lights and at the due time goes out" (fragment B 30). The world is an ever-living fire.

THE UNION OF THE OPPOSITES

World is consisted of opposites. The presence of opposites makes the world as it is. The concept good and evil has its place in the order of the world. If there is no war, how can we acquire peace? The war consists of the peace. Construction is for destruction. Birth is for death. Decease demands the need of health. If there were no summer, what is the use of monsoon?

The novelty of the teaching of Heraclitus is in the conception of unity in diversity, difference in unity. He considers opposites as essential to the being of the One. As a fact the One only exists in the presence of the opposites. This presence of opposites is essential to the unity of the One. The reality for Heraclitus is one; but it is multiple at the same time. This is not accidentally but essentially. It is an essential character of the reality that it should be one and many at the same time. The teaching of Heraclitus is more near to the idea of One existing in the many. Here there is Identity in Difference. He confessed that all things are One. This unity is happening only through the conflict of opposites.

There is a principle to unite the opposites into a unity. The monistic principle of the cosmos is known in the name of Logos, which means reason. The reason of Heraclitus is a 'universal reason,' which guides everything that exists in the universe. Among the constant complex changes this 'universal reason' takes role of unity of the cosmos. One's creation is another's destruction, and again the destruction of something is the beginning of the creation of something else. Everything is changed into their opposites. In this world remains nothing permanent in their qualities. Everything both is and is not. Therefore everything unites opposites within itself. For example, harmony in music results from the combination of high notes and low notes that mean a union of opposites. Therefore the world is the combination of opposites. "War is the father of all and the king of all"; because, war is in peace. If we do not fight, we will not get peace. Therefore the peace is included in the war and war brings peace.

ETHICAL PRINCIPLE

Heraclitean fragments suggest that there is an ever-present rational pattern (logos) in this Process or 'Becoming'. Heraclitus says: "To be ethical is to live a rational life, to obey the dictates of reason, which is the same for us all, the same for the whole world." Man is entrusting himself to his senses, and he lives as if he were epileptic. The strife between opposites, such as love and hate, is to be resolved according to a measure (metron). Research on Heraclitus reveals that his moral views are of primary importance in his teaching. Morality means respect for law, self-discipline, control of the passions; to be moral is to govern oneself by rational principles. The following excerpts from his writings illustrate the lofty idealism of Heraclitus' ethics: "Character is a man's guardian divinity"; "It is hard to contend with passion; for

whatever it desires to get it buys at the cost of the soul”. “To me one man is ten thousand if he be the best”. Man’s condition is bad if we look into his mind. One more element is added here to the richness of the concept of our good. Would not this be thought a great influence for the character disposition in Aristotle’s virtue theory? Aristotle says that a good action springs from a permanent state of good moral character. “The many are not worth anything, only the few are valuable” (fragment B 104). In another fragment Heraclitus affirms, “Man lights for himself a light in the night, while his eyes are shut: alive, he touches the dead with what is turned off; awake, he touches the sleeping” (fragment B 26). He is negating the sensory knowledge for the access into the truth. His ethical conception is growing from the external to the internal and from internal to the celestial. “No matter how much you travel, and even though you travel every road, you will never reach the boundaries of soul, so profound is the logos it possesses” (fragment B 45).

According to Heraclitus, man has to become a man of intelligent character. He has to reflect from the immediate concrete data to elevate oneself to a unity where empirical experience is pacified in the principle. Here the phenomenology of Heraclitus leads to the discovery of oneself. He is a philosopher of truth by which he has managed to have an intellectual intuition of intelligent character.

CONCEPT OF “LOGOS”

The word ‘*logos*’ of Heraclitus has a decisive philosophical meaning. The philosophical character of the ‘*logos*’ consists of its value in unifying the universe. The ‘*logos*’ brings the contraries as harmony or as the “coexistence of contraries” or equilibrium. The variety of formulas also indicates the disparity of interpretations, which can be fundamentally divided into groups: the ‘*logos*’ is not outside the contraries, but is their immanent law. Guthrie interprets that the harmony of contraries contains three affirmations. They are: 1) everything is *made up of contraries*; 2) the *contraries are identical*; 3) *war is their creative force* and the constituent director.

As a conclusion, in the teachings of Heraclitus, we could see that there were threefold character: linguistic, gnosiological and ontological. ‘*Logos*’ reveals itself, it thinks itself and it is. It will not be proper, if we see a trinity made up of god, fire and ‘*logos*’. Heraclitus speaks of the One as God and as wise. God is the universal Reason. It is the universal law immanent in all things and binding all things into unity and determining the constant change in accordance with universal law. Man’s reason is a moment in this universal Reason. Man, therefore, has to struggle to live according to the reign of unalterable law. Man’s reason and consciousness, which are the fiery element, are the precious element. Without pure fire body is worthless.

Check Your Progress III

Note: a) Use the space provided for the answer.

b) Check your answers with those provided at the end of the unit.

1) Write a short note on the ethical principle of Heraclitus

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2) Explain the concept of “Logos” according to Heraclitus

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1.7 LET US SUM UP

Ionian and Pythagorean Philosophy taught us to reflect on the external nature and tried to get into the essence of the universe. For every reality there should be a cause and this cause must be the ultimate one which unites, directs, guides and is present in everything. These philosophers helped us to develop a truth seeking mind. They emphasized that it is our duty to disclose the mysteries of the relevant issues in the universe where we live. All the above Ionian philosophers had their reason and logic in solving and answering the questions. All generations in all periods had their existential problems. The wise men of each period have suggested their insights and visions to solve the problems and for a better life. We must have an integral vision on the reality to propose a right view on the universe. When the Ionian philosophers were trying to highlight an aspect of the universe, for example, Change for Heraclitus, he ignored the other reality of Permanence of the universe. Since Pythagoras was a mathematician he ignored many other aspects of the truth about the universe, while stressing the concept number. However, all these philosophers laid foundation for a systematic philosophy which was developed by Plato and Aristotle.

1.8 KEY WORDS

Reality	: Reality is that which exists objectively.
Existence	: Existence is that which is definite in the mind or outside the mind.
Being	: Being is that which is in some way or something.
Change	: Change is transition or passage from one state to another.
Mind	: Mind is the subjective, comprehensive structure of a rational being.

1.9 FURTHER READINGS AND REFERENCES

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1.10 ANSWERS TO CHECK YOUR PROGRESS

Check Your Progress I

- 1) According to Thales, water was the original stuff. Because, water has the potency to become solid, liquid and vaporous forms. It evaporates in the heat of the sun, and according to Thales it is the transformation of water into fire. Water comes down again in the form of rain and it is transformed into earth. Water is essential to life. The reason is that nourishment, seed, and heat which are essential to life, contain moisture or wet. Hence water is the primordial principle, and all things (*physis*) were water (*arche*) and are water (*physis*). Water is the material cause of all things.
- 2) According to Anaximander, the primary principle and the ultimate end of all things is indeterminate. He named this as the material cause. It is different from any finite things. It is infinite. From this indeterminate cause emerged all the heavens and the earth. It is "Ageless and Eternal" This principle controls all elements, but it is not to be confused with these same elements. This primordial principle, called in Greek *apeiron*, will be divine, immobile, not generated, immutable, venerable, an absolute justice. This is the reality behind all cause and effect.

Check Your Progress II

- 1) Pythagoras taught his ethical principles to develop among his followers the political virtues, to teach them to act for the good of the state, to subordinate them to the whole. Accordingly, the individual should learn to control himself or herself, to abase his or her passions, to harmonise his or her soul; he or she should have respect for the authority of elders, teachers and the state. His ethics was centred round the purification and purity.

- 2) Pythagoras regarded numbers spatially. One is the point; two is the line; three is surface; and four is the solid. To say that all things are numbers, it would mean that all bodies are of points or units in space, which when taken together form a number. Points, lines, and surface are therefore the real units which form all material bodies in nature, and in this sense all material bodies must be considered as numbers. He believed that the things were the copies or imitations of number. The whole phenomena of the universe can be expressed under the concept of number.

Check Your Progress III

- 1) Heraclitus says: “To be ethical is to live a rational life, to obey the dictates of reason, which is the same for us all, the same for the whole world.”

Morality means respect for law, self-discipline, control of the passions; to be moral is to govern oneself by rational principles.

“Character is a man’s guardian divinity”; “It is hard to contend with passion; for whatever it desires to get it buys at the cost of the soul”. “To me one man is ten thousand if he be the best”.

“Man lights for himself a light in the night, while his eyes are shut: alive, he touches the dead with what is turned off; awake, he touches the sleeping” (fragment B 26). He is negating the sensory knowledge for the access into the truth. His ethical conception is growing from the external to the internal and from internal to the celestial. “No matter how much you travel, and even though you travel every road, you will never reach the boundaries of soul, so profound is the logos it possesses” (fragment B 45).

- 2) The word ‘*logos*’ of Heraclitus has a decisive philosophical meaning. The philosophical character of the ‘*logos*’ consists of its value in unifying the universe. The ‘*logos*’ brings the contraries as harmony or as the “coexistence of contraries” or equilibrium. The ‘*logos*’ is not outside the contraries, but is their immanent law. Guthrie interprets that the harmony of contraries contains three affirmations. They are: 1) everything is *made up of contraries*; 2) the *contraries are identical*; 3) *war is their creative force* and the constituent director.