

# The Concept of Logos in Greek Culture

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A. Pythagoras, Heraclitus of Ephesus, Anaxagoras, Empedocles, Xenophanes, Parmenides, Diogenes of Apollonia, and Anaximenes

The term Logos (Λόγος) was widely used in the Greco-Roman culture and in Judaism. It has many meanings such as *word, speech, statement, discourse, refutation, ratio, proportion, account, explanation, reason, thought*.<sup>1</sup> This term, however is not used for a “word” as used in the grammar, but another term, *lexis* (λέξις), is used instead. Both these terms derive from the Greek word *legō*, (λέγω), meaning to tell, to say, to speak, to count. But the meanings which have philosophical and religious implications are basically two: as an inward *thought* or *reason*, an intuitive *conception*, and as an outward *expression of thought* in speech. In any theistic system it could therefore easily be used to account for a revelation or could be personified and designate a separate being. Throughout most schools of Greek philosophy, this term was used to designate a rational, intelligent and thus vivifying principle of the universe. This principle was deduced from an analogy to the living creature, and since the ancient Greeks understood the universe as a living reality in accordance with their belief, it had to be vivified by some principle, i.e., the universal Logos.

## **Pythagoras**

Beginning with the father of Greek philosophy, Pythagoras of Samos (b. ca 570 B.C.E.), we find already in place all the elements of future Greek schools, of the Philonic synthesis of Hellenic philosophy with Hebrew myth and of the so-called Christian philosophy. Pythagoras came in about 540 B.C.E. to Croton in southern Italy where he founded his school like a religious sect with a strict, austere moral code. The members were taught to devote themselves to the cultivation of philosophy, mathematics (arithmetics and geometry), music, astronomy and gymnastics. His school was centered on the Muses who were the goddesses of harmony and culture. Their leader and guide was Apollo whose name was interpreted later by the Pythagoreans such as Plutarch of Chaeronea (45-125 C.E.) as equated with the One (in Greek *a* = not, *pollon* = of many).<sup>2</sup> Plutarch was himself a priest of Apollo in the temple at Delphi. But Apollo was a representation of the cosmic principle of harmonic order or logos and the dialectics.<sup>3</sup>

Though many before Pythagoras called themselves sages or *sophoi*, Pythagoras is the first who called himself a *philosophos*,<sup>4</sup> a “lover of wisdom.” For him philosophy was not only an intellectual endeavor, but also a way of life whose aim was to reach assimilation to divinity understood as a governing and originating cosmic principle. For Pythagoreans liberation of the soul is achieved by contemplation of the first principles. Thus philosophy is a form of purification, a way to immortality for they accepted the Orphic belief in transmigration. Man was composed of all the principles constituting the cosmos and as such has reason, divine power. By contemplation he becomes aware of the divine, i.e., of the universal principles which constitute the cosmos. We find in the Pythagoras philosophy the trinity of the cosmological principles, Monad, Dyad, and Harmony, which corresponds on the moral and intellectual level to the trinity of Truth, Goodness, and Beauty. The principle of Harmony immanent in the universe, was responsible for the proportional (*analogia*) relation (*logos*) of one thing to the other.

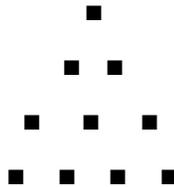
In Pythagoras' understanding of reality, the cosmic intelligible principle from which everything evolved by emanation was the MONAD (μονάς) represented by the number One. Number One was seen as a principle underlying number, thus numbers in general were seen as manifestations of the diversity in unity. MONAD was the undifferentiated principle of unity of the whole of reality and the source of the world as an ordered universe. It was the principle of all things and the most dominant of all that is, all things emanated from it, and it emanated from nothing. It was indivisible and immutable. Everything that exists and even that which is not created yet exists in it. It is the nature of ideas, God himself, the soul, the beautiful and the good. It is every intelligible essence itself such as beauty, justice, equality.

The next principle was the DYAD (δύάς) which represented diversity in the universe, the opposing powers, the duality of subject and object, and the beginning of the third principle, HARMONY (ἁρμονία). This third principle was the relation (the ratio, *logos*, in proportion, *analogia*) of one thing to another, and was particularly represented by the proportion between numbers, geometrical figures, or tones in the musical scale. This Triad was immanent in Nature and represented the dynamic process of cosmogony: the One was the unification of the whole reality, the Two represented diversification and differentiation of the One in the process of forming the world-order or ordered-world (κόσμος, kosmos), and Harmony or Logos, by extension, was the bond uniting these two extremes.<sup>5</sup>

For Pythagoras the intelligible number is the principle of order in the cosmos and life and is immanent. Thus his philosophy is a metaphysics of immanent order in contrast to Plato's metaphysics of the transcendent. For Plato divinity is transcendent and the number is not divinity but the transcendent Form. It follows that truth may be apprehended only through the intellect. In contrast, for Pythagoras, the divine principle of Harmony can be grasped through the mind and it also can be perceived through senses, producing intellectual apprehension.

In the cosmology of the phenomenal material world, Aristotle preserved in his *Metaphysics*<sup>6</sup> the Pythagorean idea of order connected with Limit (Form), or a definite Boundary (πέρας) represented by the Monad, and the idea of diversity or multiplicity linked with the Unlimited or Indefinite (Matter) (ἄπειρον) represented by the Dyad. Moreover, the Pythagoreans differentiated ten principles of contrarities in the world. The cosmic numerical Pythagorean principles were represented by geometrical figures and were the powers that ordered the world.

The Pythagorean scheme of reality originated from an analysis of the musical scale and by using the discovered mathematical principles of proportion and harmony, Pythagoras was able to explain the movements of the celestial bodies and to describe the universe and its dynamics. Another example of this approach was the principle of Tetraktys (Τετρακτύς) which represented the numerical pattern of the entire Pythagorean system:



This pattern represented numbers in a geometrical fashion, e.g., one was represented by a point, two by a line, three by a triangle, and four by a tetrahedron (the diagram viewed in a three dimensional projection). The whole pattern represented differentiated Unity returning back to Unity (number Ten) and was projected on the cosmic reality described previously in terms of the metaphysical principles of the Limited and the Unlimited.<sup>7</sup> The paradigm of this Pythagorean cosmology in which unorganized, primordial matter represented by the Unlimited or Indefinite receives shape, qualities and differentiation by Limit or Form in order to produce the phenomenal, sensible universe was adopted by Plato with a small modification only.<sup>8</sup>

Following the Pythagoras example, one of his disciples, Alcmaeon of Croton,<sup>9</sup> applied this world view to the study of medicine, that is, the phenomena underlying the condition of health and disease, and developed a concept that

health is “the harmonious mixture of qualities” which became for centuries, until modern times, the foundation of the Hippocratic school of medicine. We find in these Pythagorean concepts also the first representation of a metaphysical trinity as the cosmic unity in the whole reality of the three principles, Monad, Dyad, and Harmony. This cosmic metaphysical trinity corresponded on the moral and intellectual level to the trinity of **Truth** (grasped through the intellect, but also through the senses), **Goodness** (moral principle achieved by harmony between the psychic and somatic faculties), and **Beauty** (art or order at the psychological and social level).

### **Heraclitus of Ephesus and Anaxagoras**

Next, the term Logos seems to be employed in its special philosophical metaphysical meaning by Heraclitus of Ephesus (540 - 480 B.C.E.)<sup>10</sup> who claimed that all things in the world happen according to the Logos.<sup>11</sup> He meant by this statement that the world and phenomena are a collection of unified things, and an orderly structure (*kosmos*) regulated and arranged by the Logos.

But the whole concept of reason in natural phenomena can be found in most pre-Socratic philosophers<sup>12</sup> with the exception of the Atomists, who claimed that all phenomena that occur in nature are a result of inherent properties and interactions between the structures constituting nature. Anaxagoras of Clazomenae (500-428 B.C.E.) is considered to be the first philosopher who assumed Mind (Νοῦς) to be another term closely related to the Logos, thus a rational principle, as the first cause of all things.<sup>13</sup> He believed that every substance or "stuff" was eternal and non-particulate. In the beginning everything was a gaseous chaos and the cosmos originated through separation produced by the cosmic force, Mind. When Mind began to move all things were separating off from everything and dissociated. They were still further separated by their revolution. This force was different from the rest of things and did not mix with them for Mind is something infinite and self-controlling, and it is alone itself by itself. But we do not know how Anaxagoras interpreted this Mind: whether it was a personal rational agent comparable to the later post-Nicaean Christian concept

of God or, an impersonal natural force. It seems probable that Anaxagoras meant an impersonal force comparable to the natural forces of “Love” and “Strife” postulated by Empedocles (ca 495-ca 420 B.C.E.).<sup>14</sup>

The task of human wisdom, according to Heraclitus, consists in grasping this rational principle. Whatever we do or think depends upon our participation in the divine Logos.<sup>15</sup> This Logos has to be thought of as a principle with God as it was reported about Heraclitus’ thought that

fire, by the Logos and God which arrange all things, is turned by way of air into moisture, the moisture which acts as seed of the world-forming process and which he calls “sea”; then out of this, earth comes into being and heaven and everything enclosed by it.<sup>16</sup>

The world-order is just a modification of the eternal world and in Heraclitus’ view undergoes a cyclic process of creation and transformation back into cosmic fire.<sup>17</sup> This cosmic fire as the purified form of fire is thought to fill the sky and the “stuff” from which the celestial bodies are made. It was thought by Heraclitus to be the “most incorporeal” of substances thus the most likely to be the motive force in the natural change.<sup>18</sup> This cosmic fire was later identified with the ether (αἰθήρ) of the Platonic school and the fifth element of Aristotle.<sup>19</sup> The “visible Gods,” the highest class of divine beings have bodies of fire. It is also the substance of demons. In earlier writings ether was identified with air and with fire, as for example, by Anaxagoras.<sup>20</sup> Thus this cosmic fire is the “first principle” or constituent of all things, an *archē* (ἀρχή). At the same time this fire, as the most non-corporeal of all the elements, at some point is identified by Heraclitus and others with the intelligent and creative agent, the cause of managing and organizing the universe, and thus with God himself, i.e., Zeus.<sup>21</sup> And as such it itself remains stable and unchanged. The power of Zeus, God of the bright ether, would emanate violently from it as a thunderbolt and lightning flash. God, as we have seen, is also wisdom.

This divine principle alternately creates the world from itself and again itself from the world thus, “all things are an exchange for fire and fire for all

things.” Heraclitus also believed in the resurrection of the visible flesh in which we are born, aware that God is the cause of this resurrection and that the judgment of the world and all who are in it will come through the eternal fire.<sup>22</sup>

### **Empedocles, Xenophanes and Parmenides**

The most interesting cosmological synthesis among the pre-Socratic philosophers was undoubtedly that created by the already mentioned Empedocles of Akragas (later renamed by the Romans as Agrigentum) (ca 495-ca 420 B.C.E.) in Sicily. He was a prominent physician, politician and poet. He was widely known and recognized and even a statue was erected to honor him in his native city of Akragas that was reportedly transferred later to Rome and placed before the Senate building. His cosmic model represents the world in a constant evolutionary and cyclic process quite like the modern cosmological theory of the Big Bang and the Big Crunch. He was misunderstood in antiquity and, because he used poetic language and the names of Greek mythological gods to designate his cosmic elements and forces, Aristotle called him Homeric.<sup>23</sup> Also, Aristotle erroneously ascribes to him the addition of a fourth element, earth, to water, air, and fire.<sup>24</sup>

It is generally accepted that Xenophanes of Colophon (ca 570-ca 478 B.C.E.) was the first on Greek soil who formulated the theory of the four elements. However, Diogenes Laertius (historiographer of philosophers in the third century C.E.), claims that it was Manethos and Hecataeus who brought this concept from the Egyptians.<sup>25</sup> Originally these four elements were merged into an unorganized primordial stuff, “matter,” and later they were separated.

At the time of Empedocles there were two current concepts of the universe. One doctrine propounded by Parmenides of Elea (b. 515 B.C.E.) and his school represented a strict philosophical monism and claimed that the universe was one, indivisible, eternal, immutable, and static. It denied the existence of void and time. For them Reality, the One or Being was in an ever-existing presence. Any change or movement was only a deception of the senses.<sup>26</sup> The other was the idea developed by Heraclitus of a universe undergoing continuous metamorphosis

from cosmic fire back to cosmic fire, which was at the same time the stuff of the universe from which everything emanated. This was the opposite of the Parmenides immutability, and in the Heraclitus universe there was no real identity of things. Heraclitus is reported to have said: “You cannot bathe twice in the same river; both it and yourself will be different, on the two occasions.”<sup>27</sup> Moreover, all becoming or generation was a result of a clash between opposites: “war is the father of all things.”<sup>28</sup> Above all these opposites, however, presides the Logos, the universal Reason introducing harmony and unity among the opposites.

Empedocles first combined these two cosmological concepts in his work *On Nature*. Later, at an advanced age, Empedocles joined the Pythagorean mystical-religious sect, probably under the influence of Pythagoras' son Telauges and disciple Philolaos, and he modified his views in his work entitled *Purifications* by adopting the ideas of immortality of the individual soul, of sin, and of the transmigration of the soul as the way to expiate sins. His admiration for Pythagoras was absolute:

There was one man among them, who knew more than any one and possessed the largest wealth of intellectual power. ...<sup>29</sup>

The synthesis offered by Empedocles was, however, original, unique, very coherent, and is confirmed in principle by modern science. For Empedocles and Greek thought, the universe was eternal and nothing could be created out of nothing. Total annihilation is equally unthinkable.<sup>30</sup>

For Parmenides, the universe was eternal, immovable, unchangeable, but not limitless. If it were limitless, then it could come into being from and disappear into the Infinite.<sup>31</sup> For Empedocles the universe was immense and not limitless either, but was in constant flux. Therefore, Empedocles denied birth and death.<sup>32</sup> The stuff of the universe was finite since nothing can be born out of nothing and nothing really perishes though mortals call the dissolution of things and creatures death. The only things that are immortal and indestructible are the four elements which he calls “roots” (ῥιζώματα, rhizōmata). The term commonly used later for the elements, “stoicheia” (στοιχεῖα, stoicheia), was probably introduced by

Aristotle. But he speaks in three ways of the elements: in a metaphysical sense as the elements proper of the universe, in the usual sense of everyday experience of visible elements, and in a mythological and symbolic way not unlike that of Philo of Alexandria's interpretation of the Hebrew Bible. The continuous process of coming into being of things and living creatures exists in the universe by mixing of the four primordial elements in a proper proportion, which is then followed by their dissipation. The elements return to their homogeneous pool or they produce new combinations, thus new beings or mortal creatures.<sup>33</sup> Thoughtless people, according to Empedocles, call the disappearance of objects death and their coming into being birth. But this universe is perpetually the same since the same conditions return periodically through a cyclic process of generation and dissipation in the four stages.

The supreme stage in the cyclic evolution of the universe is the occurrence of the Sphairos (Σφαῖρος) or Sphere, which is periodically destroyed and reformed. This Sphairos is the final stage in one cosmic cycle and the initial stage in the following one. Empedocles conceived the metaphor of the Sphairos based on the concepts of Xenophanes and Parmenides. For Xenophanes, if we believe the testimonies of later doxographers, was to use the metaphor of the sphere in order to describe the perfection of the divinity without all the usual trappings of the anthropomorphic features, a divinity totally transcendent and detached from the human world. Thus this Sphairos would represent the form of the divine, a sphere neither finite nor infinite, all mind, having nothing in common with humans and existing outside the universe but simultaneous with it.<sup>34</sup> For Parmenides the universe as a whole was immutable, unchangeable and spherical. As a Being it was perfect and resembling (ἐνᾠλίγκιον enalinkion) in any way the bulk of a well-rounded sphere, equally balanced in all ways from the center.<sup>35</sup> For Empedocles the Sphairos becomes a special stage in the cosmic cycle when all objects, everything that exists, celestial bodies, men, beasts, gods, elements are dissolved in an amalgam, a state of perfection. It is round, enormous and not limitless and can be described only negatively.<sup>36</sup>

The metaphor of the Sphere was chosen because it easily represented something perfect. It is not unlike a representation of the giant Black Hole, a cosmic stage before the Big Bang and a result of the Big Crunch of modern astrophysics. The mind of mortal humans is not able to grasp this awesome universe, one only Empedocles is able to understand.<sup>37</sup>

The idea of the forces that operate in the universe, Strife or Hatred ( $\nu\epsilon\hat{\iota}\kappa\omicron\varsigma$ ) and Amity or Love ( $\phi\hat{\iota}\lambda\acute{\iota}\alpha$ ) (also designated allegorically as Aphrodite, Harmony, Kypris) was developed by Empedocles under the influence of Heraclitus and his dialectic of contradictions operating simultaneously under one Law of the universe, the Logos that permeates all nature. Though the law is universal, each human has his own mind.<sup>38</sup> These forces are not personal causes directing the world but they are subject to the Law of the cosmic cycle.

In the phase of Sphairos the dominant force is Amity, and Strife is pushed to the periphery, but it slowly finds its way into the center of the Sphairos and now creates havoc, a vortex-like movement dispersing the elements. From this action a process of physical evolution of the world takes place producing all the phenomena and the unusual disasters together with the biological evolution creating strange creatures taken from ancient mythology (the second stage in the cosmic cycle). At the same time Amity operates too, slowly pushing Strife to the edges of the world and creating order in the inanimate and animate realms of the world, producing normal creatures and the usual phenomena. This is the third stage in the cosmic cycle, an ideal era when all creatures are tamed and friendly to each other and man. At a certain phase mortal humans emerge as well as the “long-lived” but mortal gods. No gods of war exist then, only Kypris ( $\text{K}\acute{\upsilon}\pi\rho\iota\varsigma$ ) or Aphrodite. This idealistic picture was supplemented in the second work of Empedocles by the description of the cult of Kypris in bloodless sacrifices. Greek scholar H. Lambridis interprets the picture in historical terms as an echo of a surviving memory of the peaceful and happy pre-Greek civilization.<sup>39</sup> Personal immortality is not possible, according to Empedocles, no survival after death or existence before death except in the form of elements.<sup>40</sup>

Men rejoice at seeing birth and grieve at seeing death, but these are nothing more than a coming together or separation of the elements.<sup>41</sup>

In the process, the elements were supposed to be running through each other in some way and in time become different, but they are forever the same.<sup>42</sup> This created a controversy with the Hippocratic school since Galen (second century C.E.) objected to the mutual penetration of the elements, as they could only be mixed by juxtaposition.<sup>43</sup> Nevertheless Aëtius (philosophical historiographer, fifth century C.E.) thought that Empedocles and Xenophanes considered elements as composed of still smaller “elements of elements” of the same quality and undifferentiated between themselves.<sup>44</sup> Amity generally has a tendency to unite elements and bring some order, beauty, and design. Strife, on the other hand, primarily works dispersing the objects and elements, but it also creates things of unusual shapes and without order. It creates animate monstrous creatures that cannot survive and which are slowly eliminated (dissipated) by Amity.

The world's equilibrium when Amity's action predominates is disturbed next by slowly gaining Strife. And now it seems that Empedocles shifts his point of emphasis to the aspects of moral human actions and describes the current state of affairs in our imperfect world with all its destruction of animal species, hatred among men and gods, and wars. Gods now demand bloody sacrifices which to Empedocles, who became a Pythagorean, were equivalent to the slaughter of human beings. Empedocles, like Heraclitus and Pythagoras, expresses his passionate appeals to his compatriots to stop these nonsensical animal sacrifices:

They atone for blood shedding  
by smearing themselves with blood,  
as if to cleanse oneself from mud,  
you had to wallow in mud.<sup>45</sup>

This current historical period will last some time before the destruction by Strife will take place (the fourth stage in cosmic history). Then the world will be

dissipated into its elements and again, due to the action of Amity, turned into a perfect amalgam of Sphairos.

Thus world history operates in a cyclic fashion from one Sphairos stage to the next Sphairos stage and covers an enormous stretch of time. Though Empedocles does not specify how long such a cycle lasts, we may get some insight from H. Lambridis who compares it with the Babylonian concept of the “long year” two minutes of which are equivalent to 720 earthly years. Just one Babylonian year would be 262,800 of our years. But it is governed by the fourth principle which is above the Forces and the Elements – Fate or Necessity as the supreme governing Law (Logos). This law was not God since the gods in the Empedocles scheme were generated in the cyclic evolution and like everything else they were subjected to the Forces with the difference that they lived longer and were honored by men.

In the later part of Empedocles life, after joining the Pythagorean sect, his outlook on the world underwent a significant change. His Sphairos became now a transcendent being outside the sensible world, just as Xenophanes and Empedocles ascribed to the Sphairos consciousness and thought.<sup>46</sup>

Empedocles probably got interested in the Pythagorean theories because of his attraction to the idea of the transmigration of souls and survival of consciousness. He was probably affected by many trends current at that time, including influences from the East in the form of a new Buddhist religion.<sup>47</sup> Pythagoras himself claimed to pass through four transmigrations. Empedocles still did not believe in the transcendentalism of the gods, they were historical figures who became immortal.

In *On Nature*, Empedocles believed that the highest human attainment was to be merged in the Sphairos as its integral part without any personal memory. Now, in *Purifications*, when the Sphairos became a transcendent being, the highest attainment for man became deification but after transmigration in order to expiate sins:

In the end they become seers and composers of hymns and

physicians,  
and leaders of men on earth. From these (states) they sprout  
up again as gods immortal, honored above all.<sup>48</sup>

Empedocles now wants personal immortality for man and recognizes it in the survival of consciousness after dissolution of the elements of the body. It is not clear, however, whether this means survival only through one cosmic cycle or through many.<sup>49</sup>

Another change was his deep preoccupation with sin. It came probably from the Orphic occult sects which were quite popular at that time in Greece. The idea of sin was not prominent in Greek philosophy. It was well developed in the Hindu and Egyptian cultures, and in the mystic religions like Orphism. His main concern was the crime committed by killing sacrificial animals and thereby the people who were incarnated in them. Empedocles considered himself among the sinners.<sup>50</sup>

### **Diogenes of Apollonia and Anaximenes**

Another concept of pervading intellect was developed by Diogenes of Apollonia (fl. ca 430 B.C.E.) who is considered the last of the pre-Socratic natural philosophers.<sup>51</sup> He explained the world by reference to infinite and eternal air. He, like Anaximenes (fl. ca 548 B.C.E.),<sup>52</sup> made air the primary substance of the universe, and assigned to it intelligence and identified it with God. He claimed that humans and other animals, inasmuch as they breathe, live by air, which was the vivifying agent, or the soul. The human soul was thus air and a portion of God.

Medical writers of the epoch regarded breath as the agent giving life and intelligence, inspired by respiration and transmitted by the arteries.<sup>53</sup> They had obviously intuition of the modern oxygen which is a life-sustaining component of the air. Obviously, the link between breath, life, and divinity was a common observation and the conclusion drawn from it led to the formulation of vitalistic assertions about animating breath, *pneuma* (πνεῦμα), “spirit,” or “soul.” This also was the understanding of the human soul in the early Christian writings where the

Greek concepts of the *pneuma*, under the influence of the Essenes, replaced the Hebrew concepts of the soul, “life” (*nephesh*). Josephus wrote that the Essenes adopted the Greek Platonic view of the immortality of souls derived from the “most subtle air” and united to their bodies as in prisons.<sup>54</sup> This vitalistic conclusion still survives in religious systems though in a little more refined version. Nevertheless, the basis for the current religious concept of the soul is the observation and explanation given in antiquity.

Thus air in the pre-Socratic metaphysics is for human beings both soul ( $\psi\upsilon\chi\acute{\eta}$ ) and intellect ( $\nu\omicron\upsilon\delta\zeta$ ) and if this departs, they die.<sup>55</sup> The air pervades all things, possesses intelligence, governs all things and is responsible in humans for their sensations and mental activity ( $\phi\rho\omicron\nu\epsilon\acute{\iota}\nu$ ). It is breathed (Greek *pneuma* is breath or breathed air) in and circulates throughout the blood vessels.<sup>56</sup> The human soul is air and thus “a portion of God.” The Greek terms were translated directly into Latin and the commonly used term “spirit” (*spiritus*) designates exactly the same things: *the action of breathing, a single breath; the air breathed into and expelled from the lungs; breath as the concomitant of life or consciousness; life, consciousness; the non-corporeal part of a person; the vital principle animating the world or a person.*<sup>57</sup> The terms fire, ether, and air should be thus considered as antecedents and equivalent of spirit used in modern times since they represent a substance which was considered “incorporeal” or the least corporeal.

## B. Plato and His Dualism

Plato (427-347 B.C.E.) was a creator of a strict dichotomal order of reality divided into Being and Becoming. The order of Being, defined as “that which always is and never becomes,”<sup>58</sup> was the real world consisting of the incorporeal Forms or Ideas ( $\epsilon\acute{\iota}\delta\eta$ ) which are the objects of rational understanding and are comprehended only by intelligence, and of the operations of logic and mathematics. The Forms were also defined in Pythagorean terms as The Limit.<sup>59</sup>

They serve as an intelligible and unchanging model for the formation of the universe perceived by the senses. The order of Becoming, defined as “that which is always becoming but never is,”<sup>60</sup> was the world of objects perceived by irrational senses and which are coming to be and are ceasing to be, and was governed by some cause. In *Philebus* Plato described this realm of reality as the combination of matter, defined in Pythagorean terms as The Unlimited, and of the Forms. We cannot have any certain and final knowledge about this world. For Plato, empirical knowledge was uncertain and unsatisfactory and, as such, was proof of a rational and purposeful design of nature. The sensible world is a product of an intelligent action of its Maker (Δημιουργός) described variously as God, Father, Maker, Craftsman, One, or Mind, is directed by intelligence for a good purpose, but was formed from preexisting material.<sup>61</sup>

The obvious analogy is to a human craftsman who needs material to work on and a plan which serves as a model for his construction. In a similar way the divine Craftsman makes the universe out of preexistent chaos “which is a nurse of becoming.” This material is initially described as the four traditional elements, earth, air, fire and water, and later as the Receptacle of Becoming also defined as “the nurse of all Becoming and change.” (πάσης εἶναι γενέσεως ὑποδοχὴν αὐτὴν οἶον τιθήνην). It consists of indeterminate “space” in which a disharmonious and disorderly motion takes place. This chaos takes the form of the qualities of the four elements when reduced to the four geometrical figures by the Creator: tetrahedron = fire, octahedron = air, icosahedron = water, cube = earth. The elements are visualized by Plato not as fixed things, but rather as having different qualities. Plato compares this Receptacle to a mass of plastic material upon which differing impressions are stamped. As such it has no definite character of its own.<sup>62</sup>

Plato next constructs a spherical world, highly organized, with a central earth and an outer sphere carrying the fixed stars. The planets are carried around on rings constructed within the outer sphere. Plato's world is hierarchical and was

designed for a purpose and good. The motive of the Creator for creation of such a world was to make things as good as possible because he is good and wished all things to be like himself. So in the Platonic system goodness is coupled with purpose. “Thus God, wishing that all things should be good, reduced the visible universe to order from disorder, as he judged that order was in every way better.”<sup>63</sup>

Plato, as did the many pre-Socratics and Stoics, visualized the world as a living creature with intelligence and therefore a soul. When fashioning intelligence the Maker implanted reason (νοῦς) in the soul (ψυχή) and the soul in the body (σῶμα). So the world came to be through God's providence (πρόνοια), and is a living being (ζῶον) with soul and intelligence.<sup>64</sup> The model for the world is the “eternal living creature” which is the complex system of Forms whose likeness we can find in the world of Becoming. The world formed from the disordered primordial matter is a unique universe and God's “only creation (μονογενής monogenēs).” It is a single complete whole consisting of parts and is subject neither to age nor to disease. Its figure is the one that contains within itself all possible figures, i.e., the sphere and the extremes are equidistant in all directions. The world is endowed with a uniform circular motion on the same spot. This universe Plato treated as a created and blessed God (εὐδαίμονα Θεός). The soul of the world was put in the center and diffused through the whole. It was made by mixing the three logical categories, Existence, Difference and Sameness. The world thus is formed and is not eternal though formed from eternal, preexistent, unorganized matter. Each planet is a living creature a compound of soul and body and thus a created god. Time is measured and detected by the movement of the sun, moon and planets. The basic scheme of the world has a Pythagorean origin.<sup>65</sup>

In his metaphysics, Plato differentiated several divine beings. The creator God, Demiurge, is a transcendental being and not an object of worship. In *Philebus* Plato equates this God with Mind.<sup>66</sup> He is not equated with the supreme

god of the Greek pantheon, Zeus, and he is not the personal, omnipotent god of the Jews or Christians, Yahweh. And he is not reason, Logos, immanent in the world of Stoic philosophers. This Platonic creator God is also a creator of traditional Greek gods subordinate to him. But Plato prefers not to talk about them referring us to the traditional sources:

It is beyond our powers to know or tell about the birth of the other gods ... We cannot distrust the children of the gods, even if they give no probable or necessary proof of what they say, we must conform to custom and believe their account of their own family history. Let us therefore follow them in our account of the birth of these gods.<sup>67</sup>

This statement of Plato amounts to an assertion accepting the accounts of Greek gods as revelation equivalent to the revelations of other religions. Other divine beings are the souls of the stars, the world soul and, bridging the divine with the human element, the immortal parts of the human soul (power of reason and decision located in the head).<sup>68</sup>

The immortal parts of human souls were created directly by Demiurge, Father of the universe, but the formation of the human bodies from the four elements he left to the created gods for if they were created by him “they would be equal to God.” Thus in order to have mortal creatures the other gods must create them just as Demiurge did by weaving mortal and immortal together and creating a living creature.

The ingredients for the human soul are the same as for the world soul but “only not quite so pure.” And Demiurge allotted each soul to a star. They are told at their creation that any failure in living a good life in their first incarnation as man will lead to reincarnation as women first and then into some animal or lower animals suitable to the particular kind of wrong-doing and would have no respite until they bring under rational control their irrational feelings.<sup>69</sup> Thus they are destined for transmigration until they reach a liberated state.<sup>70</sup> Those, however, who would live well for their appropriate time would return to their native star

and live an appropriately happy life. The other two mortal parts of the human soul are closely related to the physiological processes and are located in the heart (power of emotions and feelings) and in the abdomen (physical appetites). Plato makes a close connection between body and mind and between the mental and physical state explaining that often wrongdoing is not a deliberate choice but a result of a failure of coordination between mind and body.

The world soul is an intelligence which permeates the world and is needed in the Plato universe as a continuous force causing the regular motion of the heavenly bodies. In another place Plato stated that the universe was given intelligence by the Creator.<sup>71</sup> Thus we may find here a doctrine of two Minds, one as permeating the universe and the other as imparted from the transcendent deity. In Plato's metaphysics the superior part of the human soul has a divine nature and in this way humans partake of the divine Mind.<sup>72</sup> Also the divine Mind was the agent that organized the visible world. In Plato's dynamics, bodies in motion must have either that motion imparted by another body or have within themselves a self-acting source of motion like living organisms that were endowed with a psyche, life or soul. Thus soul, in this naïve explanation, was regarded as the only self-originating source of motion, therefore, the analogous world soul was responsible for keeping the heavenly bodies in motion. It is characteristic that from the physical motion of heavenly bodies which were regular and irregular (equivalent to the logical categories Same and Different) Plato deduced two types of logical judgments in human rational thought.

### C. Xenocrates

Xenocrates of Chalcedon<sup>73</sup> (d. 314 B.C.E.) was the second successor of Plato in his Academy after Speusippus. We have only fragments of their writings and testimonies left by others about their doctrines. They both elaborated further on the existence of cosmic principles in Plato's *Philebus*,<sup>74</sup> already listed by Pythagoras. Eventually such speculations led to the abandonment of the theory of Ideas as separate entities and to postulating the Ideas as the thoughts of the divine

intellect. As Pythagoras ascribed a great role to numbers and Plato described the cosmos as an expression of geometrical and mathematical regularities,<sup>75</sup> it seems that Speusippus and Xenocrates substituted numbers for the Ideas just fusing the ideal and mathematical entities. Xenocrates, however, claimed that there are no separate numbers from sensible things.<sup>76</sup>

The Xenocrates philosophy constitutes an important transition to Middle Platonism. He derived everything that exists from the supreme Monad (ἐκ τοῦ ἑνός) identified with the Intellect and from the non-one (ἀενάου) which he identified with matter or the indefinite Dyad (ἡ ἀορηστος δυάς) due to its multiplicity.<sup>77</sup> He tried to preserve the Platonic concept of Ideas as the models of things so he treated them as numbers because just as numbers were defining things, so Ideas were defining matter. They were invisible, comprehensible by the intellect, and incorporeal principles of the sensible reality imparted from the supreme Monad. As to the material of the sensible world, it was made of four simple and primary elements. These were organized into composed entities analogically to the construction of the geometrical figures which were produced from the primary figures. Moreover all reality was divided into three geometrical patterns according to the three types of triangles: the equilateral triangle represented unity, thus the soul of the Supreme Divinity; the isosceles represented equality and disequality, unity and variety, thus the soul of demonic beings having human passions and divine faculties; the scalene with all unequal sides represented the descending souls mixed with the material elements, thus human beings. Next, following his master, Xenocrates claimed that the universe was born out of disorder and brought into order by the divinity. But he defended Plato claiming that, when Plato said that the world was generated, he did not mean to say that the universe was generated in time, but only intended to explain better that the cosmos derived from preexistent matter and from the form just analogical to the process of mathematical reasoning. And the cosmos had an indestructible nature which meant that it persisted in existence by the will of the divinity which

governed it. Thus he could clearly state: “The universe is eternal and ungenerated.”<sup>78</sup>

We can reconstruct similarly Xenocrates’ psychology from the preserved fragments and testimonies.<sup>79</sup> According to a view found in all ancient philosophers, the soul has two characteristics: it is able to move by itself (therefore, able to move the passive body) and has consciousness. These two characteristics are essential properties of living matter. Thus the soul is the cause of life. Xenocrates is said to have claimed that the soul was the “number that moves by itself” and since it defines the body, it is the component that gives the living being an impulse to move in a manner which is proper to it. It was explained that Xenocrates, by using the analogy of a number, wanted to indicate an intermediary character of the soul between the ideas *in se* and the things made on the model of ideas. Thus the concept of the number refers to the Idea; the concept of the movement refers to the things made on the model of ideas. In it two realities are mixed together, the indivisible and the divisible, the intelligible (οὐσία νοερά) and the sensible. As such the soul is life *par excellence*.

The nature of the soul was defined by Xenocrates as a mixture of the astral substance (which was either fire or ether) and the element earth. Because of this double character some tried to fuse together the Democritus doctrine of the soul as the corporeal with that of Xenocrates. But this double nature was similar to the nature of the demons, though they were closer to the divinity. Thus sometimes the soul was called a “demon” as well, and those humans who had a “good demon” were called happy (εὐδαίμονες) because they had a soul perfect in virtues.<sup>80</sup>

In his theology, Xenocrates<sup>81</sup> differentiated two cosmic principles as divinities – the Monad (ἡ μονάς) and the Dyad (ἡ δυάς). One was the masculine divinity, and, as such, had a role of the Father and ruled in heaven. He proclaimed it to be the One (singular) and the intellect. This was the supreme deity, the First God, immovable and unchanging, called Zeus. The other was the feminine divinity that had a role of the Mother of gods and ruled over the gods beneath the heaven – she was the Soul of the Universe. Clement of Alexandria ascribed to

Xenocrates the distinction between Zeus the supreme God, the Father, and the other inferior God, the Son. Some claimed that Xenocrates differentiated eight gods (or groups of gods): the astral gods with the Olympians; the five planets; the whole of heaven as such (whose substance was ether); and the demons or Titans, the invisible demigods inhabiting the regions below the moon. There were also special divine powers residing in the corporeal elements (e.g., Poseidon, god of the humid element, Demeter, goddess of productive earth, etc.). The demons were gods located between the celestial divinity and the humans; and there were good and bad demons. They were susceptible to human passions and changeable because they had a corporeal admixture (of the element earth?) to their divine element.<sup>82</sup> Demons were those who incited humans to all bad ceremonies and religious rites, to human sacrifices and to wars; they inflicted humans with disasters and plagues. Others, like Tertullian, claimed that Xenocrates differentiated only two groups of gods: the astral Olympians and the Titans derived from earth. Thus the astral bodies would be the instruments of the Monad, and the sublunary Titans and Demons linked to the invisible corporeal elements would represent the manifestations of the Dyad.

#### D. The Stoics and Their Logos

The Stoic philosophers fully used the idea of the Logos but transformed it into an immanent power, force or law in reality.<sup>83</sup> The Stoic philosophy was the most important and influential development in Hellenistic philosophy and it affected Christian writers and their moral thinking, and many philosophers. It was revived in the deism and naturalism of the Enlightenment and continues to affect modern thinking as well. It was founded by Zeno of Citium (333-262 B.C.E.) and developed by his successors Cleanthes (303-233 B.C.E.) and Chrysippus (b. ca 280 -d. ca 208/4 B.C.E.).

Like Aristotle, Stoics assumed a reality composed of two fundamental principles: matter and form. Matter constituted a passive, indeterminate principle

(τὸ πάσχον εἶναι τὴν ἄποιον οὐσίαν) and form was the governing, active principle (τὸ ποιῶν ... λόγον τὸν Θεόν) constituting the nature of beings.<sup>84</sup> This form is an active principle that enlivens and vitalizes creatures. Following Heraclitus, the Stoics assumed that it is one and the same principle, Logos, that governs the thought and structure of the world which was considered ideal because of its orderliness.<sup>85</sup> The Stoic philosophers (Zeno and Cleanthes) initially identified this all-pervasive Logos with celestial fire (πῦρ τεχνικόν = artistic, creative fire),<sup>86</sup> but, influenced by contemporary physiology and Diogenes of Apollonia, they came to view it as the creature's breath, that is, *pneuma* (a weightless permeation or in modern terminology, spirit), which was a compound of cosmic fire and air.<sup>87</sup> By analogy with the living creature, the rational principle of the whole world was also identified with *pneuma* as an activating and vivifying principle. This principle, identical with God, accounts for differences in particular things by differentiations of itself. Thus the human soul was also regarded as an offshoot of God.

This rational principle and order in nature was described under various names, Logos, Pneuma (πνεῦμα = breath, spirit), Fate, God, Providence, and, because of it the world was considered to be fully deterministic. This creative reason, the cosmic rational principle, was anticipated by Plato's "soul of the world" or "divine Craftsman."

According to the Stoics, God did not make the world as an artisan does his work, but he is the Demiurge of the universe by wholly penetrating all matter. They ascribed several properties and functions to the Logos (*pneuma*) to give it coherence and to hold together the other pair of elements, earth and water; it penetrates the whole cosmos uniting its center with the circumference and, at the same time, preventing the universe from collapsing (unlike the other elements *pneuma* does not have weight). It acts the same way in every living creature that also has a governing principle (*hegemonikon*). For the irrational animal it is its soul. The nature or form of this principle for humans is reason or Logos.<sup>88</sup>

Typical for the Stoics, as well as for Greek philosophy in general, is biological orientation. The Stoics considered the world itself as a living creature, governed by a rational principle, the Logos. From this follows that the connections between cause and effect in nature and between premises and conclusions in the process of thought, are both governed by one and the same principle, the Logos. What is logical is natural at the same time. Truth, cause, nature, necessity – all of them partake of the Logos and represent different aspects of the same substance, a unity, i.e., the Universe, Nature or God.<sup>89</sup>

All these terms – Soul of the world, Mind of the world, Nature, Providence, Craftsman, Logos, God – all refer to one and the same thing, an artistic and creative celestial fire, fiery and intelligent breath (πνεῦμα νοερόν καὶ πυρῶδες, πῦρ δυναμειῶς, πῦρ τεχνικόν). Inasmuch as it is the principle controlling the universe, it is called the Logos. And inasmuch as it is the germ from which all other things develop, and their specific types are defined, it is called the seminal Logos (*Logos spermatikos*). But the statement that Nature is the Logos is not a tautology because one has to differentiate between the meaning of the word and the thing to which it refers. For example, the nature of irrational animals is a soul and of men the Logos, reason,<sup>90</sup> the rational act. Nature taken as a whole, as the governing principle of all things, is equivalent to the Logos, but as for particular living things, only some possess reason as a natural faculty. This Logos governing the world is, at the same time, a force, the natural law from which nothing can escape and which leads the entire world to a common end.

The concept and existence of God as divinity of nature was important in the Stoic and Greek philosophy. But again it is not the detached and transcendental God of the Hebrews, Plato or Aristotle. Moreover, this divinity even when treated as transcendent to the material world is a part of larger Reality, Nature. Many arguments were used for justification of the existence of God or Gods. Cicero emphasized that the prevalence and strength of the human idea of divinity provided evidence of the necessary existence of God.<sup>91</sup> Cleanthes referred to the validity of prophecy and divination, benefits men enjoyed from the earth,

awe inspired by certain phenomena like lightening or earthquakes, beauty and the orderly movement of the heavens.<sup>92</sup> Chrysippus reasoned that if there is something capable of producing, which human reason is incapable of, it must be better than man, “And what name rather than God would you give to this?”<sup>93</sup>

Other arguments for the existence of God were developed from the concept of designs, such as that the existing world is the best of all possible worlds with a divine purpose immanent in it. This is a reversal of the Epicureans, though the Epicureans also did not approve of ceremonies, they rejected sacrifices, temples and images, and interpreted individual gods as names of natural phenomena (e.g., Hera or Juno as air) which were divine manifestations of the one ultimate deity, Nature, named Zeus. The divinity of the stars and great heroes of the past represents the working of a cosmic reason in its most perfect form.<sup>94</sup>

There are distinctions between Stoicism and Platonism on the one hand and Stoicism and Aristotelianism on the other. For Stoics the Logos was immanent in the world and everything that exists, exists necessarily in accordance with universal Nature and its rationality (Logos). Plato made a distinction between the realm of the world and the realm of the Forms, and Aristotle, between the celestial and sublunar realms, between contingency and necessity.

The soul for Plato is something incorporeal like the Form. The Stoics reject the Forms and make the soul along with their “artistic fire” a corporeal entity, however, not matter. The closest approximation to our modern way of thinking would be to equate their artistic fire with a nonmaterial, “spiritual” substance. For Aristotle, nature is the cause, but he does not conceive nature as a rational agent. Though sometimes Aristotle speaks of nature as divine, God is not within the world. His God is a Prime Mover, a pure and detached mind, which acts on the world through the mediation of heavenly bodies. The Stoic Nature is a rational agent, an ultimate cause but it is also a corporeal substance – an “artistic fire” which pervades all things.

A different interpretation of nature was offered by Strato of Lampsacus (contemporary of Zeno of Citium) who, together with many pre-Socratic philosophers before him,<sup>95</sup> denied any function of God in the explanation of the universe. Nature is for the Stoics the ultimate cause of all phenomena and is conceived in mechanical terms. Stoics looked for the ultimate cause of change within the world and, in the process, transformed the Aristotelian concept of matter and form. For them everything that exists must be corporeal, a kind of body because it must be able to produce or experience change. Zeno maintained that if mind were an incorporeal entity it would not be capable of any activity.<sup>96</sup> Consequently, Stoics claimed that justice and moral qualities must be bodies as well,<sup>97</sup> but that they are clearly different entities, principles or starting points, and the active principle is Nature or God. Matter or substance is the passive principle without qualitative determination. Matter is inert and dormant, whereas the active principle is reason which shapes matter and makes all things. The relationship between the two is a blending, a being. Thus God is mixed with matter; he penetrates the whole of matter and shapes.<sup>98</sup> Matter is not equivalent to corporeality, it is only one aspect of corporeality which in any particular body is conjoined with the active component. Bodies in the Stoic system are compounds of matter and minds (God or Logos). Mind is something other than body but a necessary constituent of it, the reason in matter.

This position was derived from considering the world by analogy to a living being. Hence Zeno and Cleanthes identified the Logos with cosmic fire because it was believed that heat is something vital and active in a living creature. They claimed that all things which are capable of nurture and growth contain within themselves vital heat.<sup>99</sup> Heat was a cause of growth in every seed, thus Stoics extended this biological notion to the whole universe. Nature, thus, is an artistic or creative fire and God is the 'seminal Logos' of the universe.<sup>100</sup> Matter is fiery because it is associated with the Logos. The final conflagration of the world *ekpyrosis* (ἐκπύρωσις) which will end each of the world-cycles is the resolution of all things into cosmic fire. During this process the supreme deity which is

equivalent to the Logos or Nature is “wholly absorbed in his own thought.”<sup>101</sup> But later from Chrysippus on, the Stoics identified the Logos throughout each cycle not with pure cosmic fire but with a compound of fire and air, i.e., *pneuma*. *Pneuma* or breath was regarded by medical writers as the vital spirit transmitted via the arteries. Zeno connected fire and breath in his definition of the soul (“hot breath”). Thus the same reasoning applied to the universe and to the living creature so that the *pneuma* became the vehicle of the Logos as both a physical and rational component.<sup>102</sup>

The Stoics developed an ingenious unified theory of the universe. Whereas for Heraclitus material constituents of the world were modifications of fire, for the Stoics cosmic fire was the only element that persisted forever. We can visualize this cosmic fire as Proclus, the fifth century Platonic philosopher did, by describing it in those terms: “The celestial fire is not caustic, but is vivific in the same manner as heat which is naturally inherent in us.” This fire was a component of all stars, yet they had also other elements.<sup>103</sup> According to Aristotle it emanated a certain illumination from which every animal received life. The dynamic disposition of matter causes it to take on other qualifications in the sublunar region of the world besides hot, such as cold, dry, and moist. Thus matter with these respective qualities becomes air, fire, earth, or water, the traditional four elements of the Greek theory of matter. The four elements thus constitute two pairs: one active (fire and air = *pneuma*) and the other passive (earth and water). Once the cosmic fire gives positive determination to air, this derived element joins with fire to produce the active component of the body, while earth and water constitute its passive counterpart.<sup>104</sup>

So we have here a conceptual distinction between active and passive components of the universe or the Logos and matter which reflects the empirical distinction between *pneuma* and the elements of earth and water. At the same time, the pair of elements, earth and water, are not simply “matter” but a disposition of matter since they are engendered by fire. In a further elaboration of the structure of the universe, the universe becomes a sphere which is held together

by *pneuma*; only earth and water have weight;<sup>105</sup> *pneuma* pervades the whole sphere and prevents the universe from collapsing under its gravitational pull.

The *pneuma* functions also at the microcosmic level in every individual body. Organic and inorganic things owe their properties to the *pneuma* which is a blend in different proportions of air and fire. One of the arrangements of *pneuma* is the soul of an animal, the structure of a plant etc.<sup>106</sup> *Pneuma* operates basically by producing tension between parts which represents “movement outwards and inwards.” Movement outwards (expansion due to heat, fire) produces quantities and qualities, while movement inward (contraction due to cold, air) produces unity and substance.<sup>107</sup> The Stoic world picture is a dynamic continuum of all parts interconnected according to the mixture and tension of the *pneuma* that pervades them. The properties and movement of individual bodies are a consequence of a disposition of a single all pervading substance. This picture is quite different from the model developed by other philosophers like Epicurus, who assumed the existence of empty space and atoms, or Aristotle for whom movement is in a continuous spatial medium, but this medium itself has no function. In modern times the Stoic concept of *pneuma* was transformed into the ubiquitous ether or the field force activating matter. This reduction of qualitative distinctions between object and within objects to states or dispositions of *pneuma* interacting with matter is probably the most interesting part of their philosophy of nature.

Since both matter and *pneuma* are corporeal (though *pneuma* is the most tenuous and the least corporeal), Stoics had to develop a special theory about how *pneuma* could interact with matter permeating it completely. They developed a theory of complete fusion or blending by which every particle shares in all the components of the mixture because a quantity of *pneuma* is such that a volume of it can simultaneously occupy the same space as a volume of matter<sup>108</sup> (just as later it was said about immaterial spirit). This was necessary since the Stoics, in accordance with ancient theories, did not recognize action by distance.

Thus Stoics maintained that everything that exists is a substance (or corporeal matter) with certain qualifications determined by the *pneuma*. The immaterial things, the so-called *lekta* (λεκτά) do not exist as do the substances, but they "subsist" as the content of thought such as void, time, place. Matter is a continuum (something that exists, τὰ or *quod est*) and is differentiated into separate parts or qualified by *pneuma* in such a way that each gives it characteristics which persist as long as *pneuma* persists.<sup>109</sup> Each qualified substance has an "individuating quality." The matter or *pneuma* may be in a certain state or disposition thus making this disposition responsible for the permanent or accidental characteristics of the individual. For example, the "soul is a *pneuma* in a certain state" possessed by every animal. Also virtues or vices are a certain state of the *pneuma*. The disposition is thus something that permits us to describe individuals as having certain characteristics or properties, e.g., being in some time, acting, having a certain size, being of a certain color.<sup>110</sup>

Stoics were the first philosophers who maintained systematically that all things are necessarily interrelated "from everything that happens something else follows depending on it by necessity." Chance was for them simply a name for undiscovered causes.<sup>111</sup> Since things in the world are related in one way or another (mutual relationship and interaction within the world Stoics called "sympathy"). Stoics postulated that they are related by relative disposition, that is, they depended upon something else, e.g., being a father entails a relationship with his child or children, etc.<sup>112</sup> This idea may partially correspond to modern concepts of mutual interdependence in ecological terms. But it had much deeper significance for the Stoics since it also included a moral and psychological sense of relating to one's self, society, and the world. To be a happy and good man meant for the Stoics to be related to the universe, "to feel at home in the universe," and to other human beings in a manner according to reason. Marcus Aurelius wrote: "Neither can I be angry with my brother or fall foul of him; for he and I were born to work together..." and, "The chief good of a rational being is

fellowship with his neighbours – for it has been made clear long ago that fellowship is the purpose behind our creation.”<sup>113</sup>

Individualism was antithetical to Stoicism. Since all things are interconnected they have one universal cause which was “creative reason” or the Logos which is the indwelling cause of all things.<sup>114</sup> A portion of this *pneuma* is in each substance, therefore, the substance is something particular, e.g., a stone or a man etc. Every natural substance has a structure which is a causal component of anything predictable from its reaction to the external stimulus by its intrinsic structure.<sup>115</sup> The *pneuma*, therefore, is the internal and external cause. This model was applied to human action<sup>116</sup> in which we have to distinguish the external stimulus and the mind's response. The stimulus causes an impression which presents the mind with a possible course of action. It is up to the individual as to how he is to respond.<sup>117</sup> A deliberate act is thus a combination of an impression and an internal response exactly as Aristotle would define it.<sup>118</sup> The Stoics and Aristotle did not look for a criterion of voluntary action in “being free to act otherwise.” Thus the character of an individual was the general cause of one's actions which was a result of heredity and environment.<sup>119</sup> Moral corruption was traced by the Stoics to persuasiveness of external affairs and communication with bad acquaintances.<sup>120</sup> In the last analysis, the Logos was the determining factor since it was all-pervasive. An individual's logos, assuming a particular identity, is the real self of an individual. Its logos is the self-determining factor. Thus the Stoic philosophy of nature provided a rational explanation for all things in terms of the intelligent activity of a single entity which is coextensive with the universe.

In the Stoic worldview the uncreated and imperishable Nature, God, Pneuma, or the universal Logos exercises its activity in a series of eternally recurrent world-cycles beginning and ending as pure fire with each world. Within each cycle, Nature disposes itself in different forms: animal, vegetable, and mineral. Man is just one class of animals that is endowed with a share of its own essence and reason, in an imperfect but perceptible form. Nature as a whole is a perfect, rational being; all of its acts are the ones which should commend

themselves to rational beings. If the “world is designed for the benefit of rational being” is there nothing bad within it? Here Stoics approach the problem of evil in the world and showed their utmost ingenuity.<sup>121</sup> Stoics claimed that nothing is strictly bad except moral weakness. Natural disasters are not bad *per se* and they do not undermine Nature. They have their own rationale peculiar to themselves for, in a sense, they occur in accordance with universal reason and as such they are not without usefulness in relation to the whole. They are not Nature's plan but an unavoidable consequence of the good things which are. Thus Nature plays a double role in any causal explanation.<sup>122</sup>

But this Greek, metaphysical concept of the Logos is in sharp contrast to a concept of a personal God typical in Hebrew thought. Everything was determined by preexisting conditions and it was believed that everything that happens was the best possible result of these conditions; thus God, the Logos, Providence, aim at the good. This was an optimistic philosophy that oriented life in accord with Nature and the development of virtues, that is, the perfection of human nature which is reason.<sup>123</sup> The moral ideal thus became a virtuous person who knows the good and acts in accord with it following the rational order.

Concerning human nature, Stoics gave the traditional answer: that it was the Mind that distinguished humans from other creatures. The concept was borrowed from Diogenes the Cynic (b. ca 412 B.C.E.). This human rationality was understood as the practical wisdom of living in accordance with Nature. Individual human beings share this rational principle with Nature, thus it is a part of the world. They are endowed in varying degrees with "seed powers" (or *spermatikoi logoi*) which were part of the principle or Logos of God. Cosmic events and human actions are both consequences of one thing, the Logos. Therefore, humans have the ability to know the rational order governing the world and this order is conceived as life-supporting breath or *pneuma* by analogy to the individual living creature. In Plato's idealism mind and body were two distinct things. Modern psychology, physiology, neurology, and psychiatry provide

evidence that there are no reasons to deny that mental processes are purely physical processes in the central nervous system.<sup>124</sup>

Stoic theory thus has anticipated modern concepts since mind and matter are two constituents or attributes of one thing, the body. A man is a unified substance, but what he consists of is not uniform. All human attributes, according to the Stoics, are due to the permeation of matter by *pneuma*. The soul of man is a portion of the vital, intelligent, warm *pneuma* (breath) which permeates the entire cosmos<sup>125</sup> and the body. At death the soul survives for a limited time only. And *pneuma* does not endow everything with life, only individual things with *pneuma* of a certain kind of tension are endowed with life. Depending on the type of tension, things are endowed with a different type of life and only animal life and man have soul.<sup>126</sup> The soul has eight faculties or qualities, five of them are senses and the other three are the faculties of reproduction, and of speech, and the governing principle, the so-called *hegemonikon*, a principle “capable of commanding,” or “the most authoritative part of the soul.”<sup>127</sup> It is situated in the heart. From the heart it dispatches the other parts of the soul as “currents of warm breath” (*pneumata*) throughout the body governing through them the body.<sup>128</sup> It is sensitive to the messages it receives from the external world and the internal bodily states by means of the air currents which it administers.

This governing principle is the seat of consciousness and to it belong all the functions which we would associate with the brain. One function is called “impulse,” (ὄρμη) “a movement of thought towards or away from something”<sup>129</sup> which initiates an impression. Impression and impulse provide the causal explanations of goal-oriented animal movements. Creatures are genetically determined to show aversion and preference and they are well disposed towards themselves. The technical term describing this relationship to the environment is *oikeiōsis* (οἰκειωσις), a “self-awareness.” Behavior depends on animal or human recognition of the object as belonging to itself by its faculty of “assent.”<sup>130</sup> But we are not impelled or repelled by things which we fail to recognize as a source of advantage or harm.<sup>131</sup> This faculty impels us to select things necessary for self-preservation and not necessarily by reason. An infant is “not yet rational” as it takes about seven years to develop the logos.<sup>132</sup> Impulse thus governs the behavior of humans in the earliest years, the first thought is self-preservation. Gradually, as the child develops, its governing principle is modified by accretion of the logos, then “reason [becomes] supreme as the craftsman of impulse.”<sup>133</sup> Reason, however, does not destroy the earlier impulses rather they are taken over by reason.

Thus human nature develops from something which is non-rational to a structure governed by reason, which in turn brings a change in the direction of impulse.<sup>134</sup> Now new objects of desire develop and virtue becomes a human characteristic.<sup>135</sup> This process is a natural development towards a moral life described by Epictetus of Hierapolis (60 - ca 120 C.E.):

But God has introduced man, as a spectator of himself and of his works; and not only as spectator, but as an interpreter of them. It is therefore shameful for a man to begin and end where irrational creatures do. He is indeed to begin there, but to end where nature itself has fixed our end; and that is, in contemplation and understanding, and in a scheme of life harmonious with nature.<sup>136</sup>

Attainment of rationality alters the whole structure of an individual’s governing principle. Human behavior is a mode of rational conduct which is the use of faculties for the purpose designed by universal natural law. Even the actions which we usually describe as an irrational impulse are in fact governed by the rational principle in the sense that they produce a judgment (intellectual assent) that moves to action, the movement of the soul. So the distinction is between the right reason (εὖλογος, eulogos) and wrong reason (ἄλογος, alogos).<sup>137</sup> Therefore, everything that we do is rational in a sense, but the sage or the good man is the criterion, because

he alone has the right reason in a consistent way. We fluctuate between right and wrong reason and we make moral progress not by extirpating the desires and emotions but by making them increasingly consistent with the right reason.<sup>138</sup>

### **Summary of the Stoic concept of the Logos**

1. Logos is the power or principle which shapes and creates all things from itself, in the final analysis.<sup>139</sup> Logos is immanent in the existing world.
2. According to Stoic metaphysics, something to exist must have body; also if mind were incorporeal, then it would not be capable of any activity.<sup>140</sup>
3. Logos, the power or principle which unifies and gives coherence to the world, was metaphysically associated with the artistic, self-moving and generative fire by Zeno and Cleanthes, and from Chrysippus with fire and air – *pneuma*.<sup>141</sup> This was done through analogy with the living creatures which required, in accordance with the physiological theories of the epoch, heat and breath, i.e., hot breath as a vivifying agent. Thus *pneuma* became the vehicle of the Logos.
4. It is the Soul of the world, Mind of Nature, Nature, God. Nature is an artistic or creative fire and thus God is the seminal Logos of the universe.<sup>142</sup>
5. The *pneuma*, though corporeal, is not matter itself. *Pneuma*, unlike other elements, pervades the universe and establishes the individual parts of it.<sup>143</sup> It gives coherence and holds together other elements, unites the center of the universe with its circumference and prevents the universe from collapsing under the heavy pull of its heavy constituents (*pneuma* does not have weight).<sup>144</sup>
6. This principle is manifested as Natural Law, Necessity and Destiny.<sup>145</sup> It functions at the macrocosmic and microcosmic levels as God, Providence, Craftsman, and the “right reason” at the moral level.<sup>146</sup>
7. It operates in plants, animals and man manifested respectively as a particular nature “*physis*,” “soul” or “logos.”<sup>147</sup> The human “soul” is thus an “offshoot” of the divine Logos. If breath and heat are necessary according to physiological doctrines of the epoch, then the human soul is, according to Zeno, a “hot breath.”

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