

# The Mind of the Ancient Physical Philosophers

## Abstract

Although this conception of the soul belonged to an ancient tradition expressed already in Homer and Orphism, the thesis of Anaximenes that conceived air as a physical substrate of the human soul, which was continued by Heraclitus, Democritus and Diogenes of Apollonia, was considered the first theory of antiquity on the human psyche in science and philosophy. It is presented here.

## Introduction

The work of the pre-Socratic Ionian philosophers often has been interpreted, over centuries, in a simplistic way through the prism of a modern reductionist materialism that actually has little to do with the original approach of these ancient thinkers. It has been done, many times, a naive reading of their thesis on the elements of earth, water, air and fire as creative principles of the universe. A classical naturalist approach considered these authors the remote initiators of the natural sciences, which visions and solutions became logically obsolete. These called physical philosophers have made contributions of great merit to geography, astronomy, meteorology, mathematics and biology, certainly, but their production is not limited to a conventional interpretation through the prism of current science, as their purpose was not that of making a science detached from the whole of man and his daily experiences. Do not be fooled, they were philosophers in the broadest sense and not 'physical' or scientists who provide some sort of technical solution as we understand now. Their goals were far-reaching.

Angel Cappelletti [1] points out in this regard that study of each of the pre-Socratic philosophers separately, and an overview of them, impels precisely to break schematic and restrictive conceptualizations of their work and look for something much more fundamental and intuitive: «... what compels us to see in them a true philosophical school are especially common problems centered on the idea of 'physis' and the shared worldview derived from an original intuition. A single, eternal, infinite and active reality which is at once matter, life and spirit, from which all things arise and return, and all are made of it and by which all become what they are, that is the core of such a worldview».

As Cappelletti [1] says, these thinkers had a clear universal orientation and wondered for the principle of reality, of the whole reality ('arché'). Their thought concerns the investigation of the origin of reality and being, is ontological, and seeks a unifying principle, a common element to suggest that all is essentially the same. This concern converges in all cases in humans because despite the apparent subject of investigation is physical or a foreign to person matter, these thinkers assume that all natural phenomena arises from human experience or manifests in it. Thus, natural phenomena, the physical and material world, converges with the phenomena of perception, thought, consciousness (the phenomena of soul and spirit). There is only one fundamental reality that is at once matter and spirit, which is life, by which all things exist and are what they are. Nature and being are either the

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same single reality, which works by unique and active principles.

## Anaximenes

We begin by noting the proposal of one of the initiators, Anaximenes, that the principle of all is air (single reality), an element that is immeasurable (infinite reality), which precedes all things (eternal reality) and it is also the generator of all things (active reality). In its process of mutation, the air generates the other elements and these are also dissolved in it in their corruption, says Anaximenes. Air is the first rise of both material and mental. We can say that the air is God. «Anaximenes established that the air is God, and that it is engendered, immense and infinite, and is always moving» Cicero collected in *'The nature of gods'*. Matter and soul (and thus God) are manifestations of a single principle or reality.

Tradition places Anaximenes (acme around 546 BC) as a disciple of Thales and colleague and successor of Anaximander. Theophrastus said about him: «*The Milesian Anaximenes, son of Eurístrato and colleague of Anaximander, said, as the first, that the underlying nature is infinite, but not undetermined, as Anaximander, but determined, and called it air; Anaximenes differentiates into the particular substances by rarefaction and condensation. By becoming more subtle becomes fire, more condensed becomes wind, then cloud, further condensed water, earth and stone. The other things are produced therefrom. Conceives also eternal its movement by which also generates change*» (Simplicio, *Physics*, 24, 25-26) [2].

Anaximenes sets as 'arché' the air, which is an invisible and infinite principle like the 'apeiron' of Anaximander, but the air of Anaximenes is actually a precise and specific principle, has a physical and concrete existence. Why chooses Anaximenes air as 'arché' and not fire, earth or water? Fernández Cepedal [3], notes that Anaximenes found in the air some empirical properties exercising better than the other elements the functions of 'arché'. The air would be better than water the adequate material for the 'logos' of transformations of elements, through its processes of rarefaction and condensation, because it would manifest very diversely becoming more subtle or, conversely, more condensed: becoming more subtle and slight increases its volume and temperature and becomes something like fire or fire itself. When condenses, on the contrary, decreases in volume and temperature

and becomes something colder and stronger as water and earth, according to Anaximenes. Quantitative changes, the increase or decrease in density, are what generate resulting qualitative differences. The same applies to the opposites hot and cold which Anaximander extracted forcedly from the *'apeiron'* and that Anaximenes says that occur naturally from these same quantitative changes of condensation and rarefaction. «*What is compressed and condensed is cold, and the rare and lax is hot*» Plutarch says (*De primo frigido*, 7, 947 F).

This is a parsimonious theory because the whole comes simply from a single element which varies quantitatively. Then there is the special and interesting property of invisibility of air. «*The air when is perfect is imperceptible to the eye*» (Hippolytus, *Refutatio*. Y 7, 3). The air is infinite and determined, but the determination of the air is much more 'abstract', as it is imperceptible to the senses, than water, because it is invisible. So much that air is usually confused with emptiness (the existence of air as a matter actually was not demonstrated until the time of Empedocles and Anaxagoras).

The invisible air is infinite and «*includes the entire cosmos*» (Aetius, I 3, 4) because the air is empirically imperceptible and seems limitless and occupies a vast region or the whole world, and penetrates everything. Omnipresence of the invisible air is much greater than that of water, is almost complete. Air is the perfect *'arché'*. Air is a very subtle element in continuous motion and change, of which we are unaware precisely because of its great subtlety, lightness and invisibility, that being omnipresent and touching all the other elements and created things must be affected by or be involved in the constant movement and changing of the 'whole'. It is not unreasonable to think, therefore, that the air must be the first cause, the dynamic principle that generates the rest of nature, hidden to our senses, which has therefore 'divine' character. «*Anaximenes says that the air is God*» Aetius and Cicero agree in affirming regarding this philosopher. Orphism yet did an explicit identification of air with the divinity, and said that gods themselves were originated from air or were made of air, literally. Saint Augustine also makes an interpretation of Anaximenes in this sense when he writes «*... Anaximenes attributed all the causes of things to infinite air and did not deny the gods nor was silent about them, he did not believe, however, that the air was produced by them, but they themselves were born from the air*» (*City of God*, VIII, II).

The 'divine' nature of air is related to the idea that the power of this element extends everywhere and penetrates everything, especially the bodies of human and animals, such carnal and 'solid' they seem. Thus the divinity of outside air, when it enters the body, becomes lifeblood. The soul is the air itself and its properties are the air ones. We can say that soul is breath. Within us is soul and outside is air, while spirit or divinity. Soul is the action of air in each individual person, and spirit or divinity is the action of universal air on humanity. «*As our soul being air unifies us, so the breath (pneuma) or air covers the entire cosmos*» (Aetius, I 3, 4). Our soul is air, Anaximenes says, specifically is the inside air that holds us united, and he says, is the same air that covers and bindeth the whole universe. He identifies cosmic air with *'pneuma'*, which in Greek meant air or breath while soul, just as the term *'psyché'*. He considers the air as our soul and as the breath of the world ('the spirit of the world'). The *'aither'* acts in the universe as the *'pneuma'* in the body. Similarly the *'pneuma'* penetrates

and remains attached the body, giving life and governing it, the *'aither'* penetrates and remains attached the universe, giving animation and governing it. There are no boundaries between our body and other physical objects. All is one. The Milesians regarded the universe as a living being, a kind of huge body. Soul and life are not generated individually from the body, but it receives them from air-spirit of the universe, which is 'God'.

## Heraclitus

A similar version to Anaximenes is that of Heraclitus, who maintained, around the year 500 BC, that soul was composed of 'igneous ether' (not simple air) and it was this 'igneous ether' what filled the soul and also the whole sky. Sky and soul were, to this philosopher, a single and unique matter, which was psychic and celestial at a time. Soul of human and universe, made of the same, behave according to similar principles [4].

To Heraclitus 'logos' in the world is produced by the 'igneous ether' or 'fire'. According to him, in nature there is opposition and continuous confrontation between opposing elements, but there is also an underlying order in the becoming of things, although not always it is quite obvious to us. The world, due to 'logos of igneous ether', is a cosmos and not chaos; the 'fire' is the natural process that sorts and organizes everything, says the philosopher. Human life must adapt to this natural order of becoming things, to this 'logos', by wisdom. Since this is the 'logos' which governs the world, true knowledge cannot consist in anything else than its understanding, and there can be no greater motivation and satisfaction that progress oneself in this regard and get positively accommodated to becoming reality.

Reason and 'logos of igneous ether' are the same, because the universe is arranged according to a plan that makes all things, seemingly different, keep organized and really be one, which the human intellect intended to capture continuously and instinctively. The 'logos' is what explains the existence of such a consistency that allows things, in plural and even contrary appearance, be actually linked in a coherent relationship, and human themselves, physically as well as through intelligence, are also a part of which.

To Heraclitus everything is constantly changing, everything flows, according to an order, yes, but which is not explicit but is veiled: «*Some even say no that some things move and some not, but all are in constant motion, although this fact is beyond our sensory perception*» (Aristotle, *Physics*, 3, 253 b 9).

«*Different waters flow over those entering the same rivers. Spread and meet... meet and separate... they are coming and going.*» (fr 12, Arius Didymus, *Eusebium*, PE, XV 20; fr 91, Plutarch, E 18, 392 B). Everything flows, but the senses usually inform us of plural and superficial manifestations of the varying things misleadingly: «*Bad witnesses are the eyes and ears to men who do not understand their language.*» (fr 107, Sextus Empiricus, *Adversus Mathematicos*, VII 126). Understanding is what captures the 'logos', what everything has in common, the order that is in the evolution of cosmos, behind the sensible. Not everybody come to grasp the world order, only somebody. Heraclitus calls barbarians («*barbarian souls*») to those who are not able to understand and interpret adequately the language of the senses and are deluded by the their superficial manifestations. «*...Must be followed what is common, but although the Logos is common most people live as*

having a particular intelligence» (fr 2, Sextus Empiricus, *Adv math*, VII 133). Thus, there is a unique order-logos-language common to all people, a single intelligence which is not specific but all-encompassing, one true understanding that unifies all, that is not made of simple ideas created by the individuals, but it is the actual constituent of things, the logos from the primary cosmic element ('fire'), which is the world's order while the human intelligence.

Intelligence is not an individual affair, but coincides with the 'intelligence of the world', with the understanding and apprehension of 'universal logos'. People is intelligent if is able to understand the worldly order, if his mind is able to apprehend and reflect simply the actual order of the world as it is given, that is, the natural relations of things, what is common to things. Therefore, men cannot have private, individual, personal intelligences, because there is unique intelligence ('logos') mutual to nature and people, corresponding first to 'igneous ether' that 'moves' everything. Human reason has to be a derivation of universal reason, a kind of organ of perception of the universal logos, superior to all others senses, which, unlike them, does not deceive us continuously, quite the contrary. This is the 'sense of reason' which orders for us the elements of the universe. Traditional bodily senses only perceive things that happen and vary constantly, they are not able to perceive what is invariable behind the apparent, that is, the truth and the reason.

All science being guided exclusively by the sensory is necessarily false. Only through higher sense which is the human reason people can perceive the true, the eternal and permanent in perpetual flow of things, which does not change, which is the logos itself, the process of change itself. To Heraclitus 'fire' is the constant source of change processes. The 'logos of fire' is the order and the extent of continuous change imposed by the evolution of everything that happens in nature, with its regularities and irregularities. The 'fire' controls the matter, all matter in the cosmos, the strongest and the most ethereal, everything that exists, also the soul.

We must understand that we recognize the 'fire' as a highly dynamic process of ethereal element that the air is, which Anaximenes referred to as the constituent of the universe and the soul, as discussed previously. The fire, in fact, is very hot air or 'igneous ether'. Indeed instead of the term «fire» Heraclitus often used «igneous ether», referring to the warm and subtle air flowing into the upper region of the sky (which, according to tradition, is identified with God and with soul or spirit): «*The ancients assigned sky and upper region to the gods because they believed it was the only immortal area.*» (Aristotle, *De Caelo*, B 1, 284)

«*Ether received their souls and earth their bodies.*» (Inscription Graecae Y 945, 6; Athens, V century before Christ)

«*What we call hot seems to be immortal, what apprehends all things, what hearths, sees and knows all things, both present and future. Its most part, then, when everything came into confusion, went toward superior revolution and I think is what the ancients called ether.*» (Hippocrates, *De carnibus*, 2)

Heraclitus thinks that the future of all beings on earth, especially man but also institutions that man has created, is intimately linked to the natural world surrounding and that is inevitably affected by the movements of hot ether that comes from

the upper regions of the sky. What man created or participated is sensitive to human behavior and to mood and the 'igneous ether' variations, in a natural way. And he affirms that wisdom consists precisely in being aware of this fact, understanding how the entire world operates (although he admits that the unique thing that can achieve this goal in an absolute way is God, because the logos of the ether is a manifestation of God, or God Himself, and He is the one that is contained and fully understands himself). God is the absolute wisdom. Man and human institutions cannot be understood out of the natural world but all things, even those that are a creation of man, are natural and are governed by the same laws of logos.

To Heraclitus the soul is the igneous ether governing body and mind of men. The human mind has a direct relationship with the soul-ether, such to Anaximenes had in the soul-air. It's basically the same. The soul like ether or air has «*unattainable limits*», moves dynamically throughout the universe, enters everywhere, penetrates all things and moves freely through all parts of body, and does so «*according to its needs*». The action of ether or air expands and acts on everything, but remains veiled to our conscious understanding; it has its own internal 'needs' that are so deep in some aspects that are not intelligible to us: «*You do not get to find the limits of the soul in your way, not even through all the ways: as profound dimension it has*» (Fr 45, Diogenes Laertius, IX 7).

Different authors made their own interpretations of how empirically happens physical 'contact' of soul-ether with the logos of fire. Sextus says that, according to Heraclitus, we simply inhale the logos of igneous ether with air, which gives us the intelligence and puts order and organizes what the senses capture; and that during sleep, he adds, the contact of the soul with the igneous logos remains exclusively through breathing, in a primary mode, being the senses 'closed'. Breathing this divine reason we become intelligent. We forget worldly things while we sleep, but we recover our senses again when awaken, he says. Being the channels of perception closed during sleep, our mind is separated from its links with the surrounding, retaining its unique linkage through breathing, like a kind of 'root' (Sextus Empiricus, *Adv math*, VII 129). He adds that, while we sleep, not being inhalation so intense as when awaken, the soul would be in an intermediate state between life and death. Chalcidius, meanwhile, attributes to Heraclitus the consideration that the soul would only contact with cosmic reason precisely during sleep, being free of the senses and their interruptions, in a Platonic type of interpretation.

According Aetius souls are fed by internal and external exhalations: Internal ones come from the blood and other body fluids; while external would be those that are absorbed through the breath... Breathing is the common denominator of Heraclitus and Anaximenes: We breathe air, pneuma. The action of 'igneous ether', even if it comes from outer sky, reaches us in contact with air, enters our minds by breathing, and is through breathing that preserves, develops and renews our soul; as conserves, develops and renews 'the spirits and gods' that populate the world, because they are, in fact, the same that our psyche: they live there.

## Democritus

Not far from the line of Heraclitus, Democritus, about 460 BC, extended the psychology of atomism of his predecessor Leucippus

and taught that the human soul was a substance composed of very subtle and spherical atoms, as those of fire, and that it was precisely because of their subtleness and sphericity that these atoms contributed to perpetual motion and heat of both fire and human [4]. The soul, to Democritus, is a very subtle and volatile element that exists within the body (made of much more inert and gross material). This volatile soul spreads and penetrates all parts of body tissues and produces the different organs and limbs own vital functions... The thought, consciousness and sensation, particularly, would be the result of a form of variable combination of these ethereal and spherical atoms. The unstable combinations of these would be the source of psychic manifestations and their fluctuations over time.

The atoms of the soul have a continuous circular motion which says Democritus is sustained by the inspiration and expiration of air. Breathing, therefore, is the essential process of life and of the psychic manifestations that occur over time. These are, again, breathing and air.

What the philosopher of Abdera called spirit is not a supreme creative force in the world, or anything supernatural or metaphysical, not even a principle of nature 'superior' to mechanical motion. It is not, in fact, an essentially different force from mechanical movement. What we call 'spirit', like 'soul', is just a more subtle material (air) compared to other grosser and solid (the body) or, if preferred, is the phenomenon resulting from the properties of these finer and subtler air atoms we breathe in their action on our body atoms.

Also, gods, whose existence he admits, are to Democritus basically the same: spirits, beings like the soul in its origin and composition, with no other difference with soul that having a more durable arrangement of their atoms, a longer life, but this is the only respect in which gods and spirits are superior to men and their soul. Gods are also mortal and subjected, like us, to the supreme law of fate, the only constant, i.e. the law of eternal, necessary and universal motion of atoms, the unending flow of organization and disorganization of matter. Gods, spirits, soul, mind, consciousness, sensation, thought... are essentially the same: they are the similar phenomena resulting from the action of air in our body through breathing.

### Diogenes of Apollonia

The last of materialistic and monistic philosophers of ancient Ionia, Diogenes of Apollonia, around the years 440-430 BC, also went right down the same path as his predecessors and held, openly and explicitly, that the air is the 'beginning' of all things [5,6]. Just some fragments of the writings of this philosopher, belonging to his work *'On the Nature'*, are preserved, which were collected by Simplicius. But if we listen to different quotations, he seems to have written several more books, one *'Against the Sophists'*, one *'On meteorology'*, and one on medicine that he would have entitled *'On the Nature of Man'*, which Galen would refer to when he said that Diogenes had compiled diseases and their causes and remedies in a treatise. Everything indicates that Diogenes of Apollonia was a doctor by profession and would have published, indeed, this medical treatise in which their notions about the origin of diseases would appear related, surely, with the ideas of his general theory, which ones have been preserved and we'll see now.

Diogenes thought the world and its parts were ordered in the best possible way by the intervention of a divine intelligence that would be present in originating substance that is air. By the provisions of this 'air intelligence' the world is not a chaos but a real cosmos, where everything is distributed according to some regularities, like the seasons, day-night cycles, weather variations... The essential substance of the whole reality is air, said Diogenes, because of the obvious reason that living beings if they can live is by breathing air. The air is 'soul' understood as vital principle (which gives life), as deduced from the fact that life leaves the body when breath leaves.

This idea was already in some uses of *'zimos'* and *'psique'* of Homer, who Diogenes praised (claimed Filodemo) because *«he told on the divine not poetically but truthfully and claimed that Zeus himself is the air explicitly»*.

Diogenes relates both outer air and the air contained in the body, in the vein of Anaximenes, and relates the term *'pneuma'*, which means soul or spirit, as a synonym for breath and wind. Air is the giver of life, thus becomes God, because if it gives life it has absolute power on everything, on all the phenomena of human existence. It is infinite, eternal and immortal, it is not subject to time limits of life of any body, it does not perish with it (on the contrary, is it that gives and removes life) and it extends everywhere. The air is responsible for the regularities and irregularities of the cosmos, and also of the human psyche. It is not that the air contains intelligence, but it is intelligence itself because it is what orders and disposes the mind and the entire cosmos, it really is the intellectual soul, it is what has knowledge. *«The air is great and powerful, eternal and immortal and it knows many things»* (Simplicius, *Physics*, 153, 20).

One of the reasons that prompted Diogenes conceive the air as the principle of all things and as 'god' was, as mentioned in the case of Anaximenes, the fact that the air is so subtle substance that eludes the senses and seems intangible or incorporeal. Another reason, also commented, is its omnipresence: *«the air rises to the top and downs to the lowest and fills all the spaces.»* Incorporeality and omnipresence are two attributes of the apparent 'metaphysicality' or 'divinity' of air, but actually, paradoxically, they are just a pure physical phenomenon of nature.

One difference with Anaximenes lies in the fact that, to Diogenes, changes that would explain the phenomena of nature are not confined to the rarefaction or condensation of air, but also another factor involved is its temperature. To Diogenes, the distinctive feature of divinity and humanity is heat, in complicity with the ideas of Heraclitus on the 'igneous ether'. To Diogenes of Apollonia intelligence is hot air, *«warmer than the atmosphere although not quite as the ether that surrounds the sun»*.

The temperature of this air producer of intelligence would register continuous slight temporary modifications which may explain, in turn, the numerous and unpredictable variations that occur in time in our perception, our thinking and our psyche in general. A moderate heat would be the distinctive feature of air-soul or *'pneuma'*, which would explain, according to this wise, fluctuating changes in mental states and acts, from the most subtle variations of thought and perception to the most extreme states of sleep and death, which correspond to extreme changes of *'pneuma'*: *«Diogenes says that if the blood, diffused throughout*

*the body, fills the veins and pushes containing air toward chest and bottom belly, sleep occurs and the central part of the body is heated»* (Aetius, V 24, 3).

Clearly Diogenes of Apollonia thought as a physician and led theses of Anaximenes to the field of physiology. He did not maintain outside the body but he entered to explaining how the air acts in the body to produce the phenomena of soul. The universal air gets into the body by breathing and flows, driven by the blood of the veins, to the brain, which acts as an interpreter of fluctuations or 'logos' of this universal air.

The air inside our body partakes of the 'divinity', is part of it, by transmitting the universal to our personal soul. Our thinking becomes a kind of organ sensitive to fluctuations ('logos') of air. The ethereal element extends throughout the universe and also acts on the bodily '*pneuma*' of each person by the action of breathing and blood circulation. Accordingly, changes in our mental and cerebral activity are due to variations in atmospheric air (in terms of temperature, density...) from the outer world but the body interprets it by its natural functioning creating one cerebral and mental 'logos', internal and subjective.

The seat of soul is the brain. The brain is the organ that interprets changes in air, it is which intellects. The brain is the instrument that uses air to think. The (other) sensory organs are subordinated to this main organ that produces the act of understanding. The brain 'resonates' with certain variations of air that give it a 'logos', as ear resonates under certain frequencies to offer sounds and sonorous languages. Outer air 'feeds' the soul and comes first to the brain and stays there; the remainder spreads throughout the body through blood vessels and engages, thus, the whole body in insights and emotions. The whole body, but especially the brain, 'vibrates' with air.

Diogenes maintains that, when a large amount of air is mixed with the blood and lightens it according to its less heavy nature, and penetrates, subtilized, the whole body, originates pleasure; and when air is present against its lightweight nature, by action of moisture, and does not mix, it becomes denser and hence arises displeasure and pain. Similarly moods, such as trust and its opponents distrust and shame, and health and its contrary illness, are originated, says Diogenes. What is the thought itself is caused by the pure, dry and hot air, as all wet emanation inhibits intelligence. This is the reason, he argues, because the thought appears diminished in sleep, in drunkenness and satiety, because in them the air is concentrated in the belly and it becomes dirty by elements that are there, he says. Another proof that moisture removes intelligence is indicated from that other living beings are inferior in intelligence to man because they breathe the closest to earth air, which is wetter and impure, he says. (The birds breathe fresh air, true, but he argues that they have a similar to fish constitution, because its flesh is solid and air does not penetrate completely but is detained around the abdomen... and understands that plants are totally deprived of intelligence for the simple fact that they have no air in.)

To Diogenes intelligence is the same that vital intensity. This is very interesting. There are different degrees of intelligence and different degrees of vital intensity corresponding to them. These quantitative differences in intelligence and vitality would be originated from the properties of surrounding air and the

permeation of air into the body. The human being is the one with a higher degree of intelligence and vitality, because he absorbs and disseminates a lot of air into his body, it is understood. And human being is also highly variable from one moment to another; there is nothing static in him, quite the contrary. There are times when people live life intensely, when everything flows so fast and absorbent, which are those moments that we have a deeper and more vivid thinking. At other times the opposite happens, we are unable to mentally prepare anything and understanding of things is absent, and our existence is drab and boring. In these times, unlike the first, the degree of our vital intensity is low, such as our intelligence. And these changes would obey to changes in qualities of air and / or in our way of breathing. Intelligence (thought) is as unstable and volatile as the element that generates it...

The thought or intelligence, to the philosopher of Apollonia, is nothing 'superior' emerging from elementary 'lower' activities but is at the same level as sleep, senses, pleasure and pain, feelings, health... All are 'sensations' produced by the air. Everything is at the same level. The outside air comes into contact and mixes (or simply waves) with the air inside the sensory organs and the brain, through the veins and blood vessels. To Diogenes insights come from air, which takes over the whole body through veins and blood, especially in those propositions in which the veins itself provide an «adequate anatomy» (Simplicius, *Physics*, 153, 13). The thought, the intellectual soul, is generated by the correspondence between the air and the arrangement of our veins and our brain. The clarity of perception and intellect of a particular proposition depends on the subtlety of air that diffuses into our body, and on the finesse and the straightness of the channels through which spreads: on the resultant of the specific anatomy of involved veins.

When air is mixed with the blood and is permeated in the brain and the whole body, the feeling of pleasure and vivid thought arises. Thought depends on the purity and dryness of air and, as pleasure, arises when air is mixed with blood, subtilizes it, and spreads throughout the body through the vascular network. Thought and pleasure are very similar things in reality. Think the world in an understandable way, understand it (intellective knowing), is a powerful form of pleasure. So, intelligence, thinking, vital intensity and pleasure are totally united in Diogenes. Vitality, enjoyment, insight, understanding, thought... are interrelated in their own essence, if they are not the same thing. Many philosophers have intuited that the understanding of the world is the greatest pleasure to which man can aspire, but have failed to explain the reason. Diogenes of Apollonia, the physical, the forgotten, did.

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