WAS THERE NATURAL PHILOSOPHY IN ANCIENT GREECE?

OLEG A. DONSKIKH
Novosibirsk State University of Economics and Management
Novosibirsk State Technical University (Russia)
olegdonskikh@yandex.ru

ABSTRACT. The philosophy of nature is traditionally understood as the doctrine of the causes of the origin and structure of the world as a whole, while excluding everything supernatural. At the same time, it is usually assumed that philosophy began precisely as natural philosophy. This article examines the question of how such a characteristic is applicable to early philosophical constructions. We need to keep in mind that the word "physis" meaning "the outside world", appears only in the 5th century BC. Thus, neither the Milesians, nor the Eleatics, nor the Pythagoreans study nature in the meaning of the world as a whole, but talk about the origin and development of certain principles that make up the essence of things. And the Milesians are already radically divorced from sensuality, and in their teachings there is a gap between what leads to metaphysics and explanations of individual phenomena of the external world that are in no way related to their metaphysical speculations. At the same time, although the metaphysical doctrines of the fifth century can be considered as religious revelations, it is only a stretch to talk about ancient theology. It is stated that the movement towards metaphysical constructions begins with a change in attitude towards the previous worldview. This begins with Hesiod, followed by a group of poets, politicians, sages, and seers. A rational understanding of mythology and free reflection on it based on striving for a single beginning begins. It is the idea of the one that is fundamentally new, which is being developed by the generation of thinkers following Hesiod. Yet it is pointless to seek unity in the externally sensually given world, because it is infinitely diverse, and the appeal to the supersensible begins in those divine images that occupy a special, higher position in relation to others. We encounter such personified images as fate and justice. Philosophers begin to realize the divine (immortal) negatively as infinite, by denying what is inherent in man and what he is able to perceive with his senses. And it is only through denial that they move towards certain positive characteristics. Ultimately, it can be shown that metaphysical reflections led philosophers away from nature and into the realm of the divine and infinite, while reflections on the outside world led to what we call science.

KEYWORDS: natural philosophy, theology, metaphysics, immortality, infinity, "physis", idea of unity, individual position referring public consciousness.

ΣΧΟΛΗ Vol. 20. 1 (2026)
classics.nsu.ru/schole

DOI: 10.25205/1995-4328-2026-20-1-87-112

A monarchical revolution in the divine world was felt as an imperative necessity. But this movement did not triumph till a time when philosophy or science had already secured an independent foothold.

F.M. Cornford

Natural philosophy, or the philosophy of nature, is usually understood as the doctrine of the causes of the origin and structure of the world as a whole, while excluding everything that is beyond the senses. It is believed that the first Greek philosophers stood at its origins, and that they laid the foundation for what is commonly called "natural history." Therefore, their writings were designated as writings "On nature" (*peri physeos*), and they themselves are usually called natural philosophers.

Aristotle starts his work "On the Heavens" from the words "The science which has to do with nature clearly concerns itself for the most part with bodies and magnitudes and their properties and movements, but also with the principles of this sort of substance, as many as they may be (268a1) (Aristotle 1984, 609).

Saying this Aristotle uses the word nature (*physis*) in the sense of the world around us, which, at first glance, seems to fit perfectly into our ideas (although we will return to this later). However, if we turn to the philosophers who lived two or two and a half centuries before Aristotle, the question arises, how legitimate is it to speak of them as of "philosophers of nature" on the grounds that they were naming such elements as water, air or fire the beginning of existence? This article examines the question of the legitimacy of characterizing the beginning of philosophy as "the philosophy of nature" and whether this was even possible in the first centuries of independent individual reasoning about the world?

Traditional descriptions of the beginning of philosophy

Let us start with a quite simple and familiar description of the beginning of philosophy. According to Aristotle, philosophy (i.e., some rationally grounded knowledge) was divided into three sections – logic, ethics, and physics. He considered the Presocratics as "physicists" or "physiologists." It's not quite science yet, and it's not quite philosophy yet. Aristotle also regarded Thales to be the founder of natural philosophy. As J. Barnes stated,

> "the Presocratics invented the very idea of science and philosophy. They hit upon that special way of looking at the world which is the scientific or rational way. They saw the world as something ordered and intelligible, its history following an explicable course and its different parts arranged in some comprehensible system. The world was not a random collection of bits, its history was not an arbitrary series of events". They did not

> reject the existence of gods, but they "removed some of the traditional functions from the gods" (Barnes 1987, 16).

Frederic Copleston presents a different picture of the first philosophers' views, because, according to him,

> "they did not arrive at their conclusions through a scientific, experimental approach, but by means of the speculative reason: the unity posited is indeed a material unity, but it is a unity posited by thought. ... Consequently, we might perhaps call the Ionian cosmologies instances of abstract materialism: we can already discern in them the notion of unity in difference and of difference as entering into unity: and this is a philosophic notion." (Copleston 1993, 20-21).

He also mentions that they went "beyond appearance to thought". They were trying to find some primitive element, and at the same time they did not have a clear distinction between spirit and matter. Consequently, they could not present their views in strict concepts. They definitely were striving for unity, but here we encounter a contradiction. In the first case, unity turns out to be material (thus nature is a diverse transformation of one material substance), in the second, it is something immaterial (nature is a material expression of immaterial unity). The contradiction is usually removed by the consideration that the Milesians could not yet present their views using strict concepts that appear much later.

However, even if we accept this picture of the emergence of philosophy without any special reservations, it clearly lacks some explanations: 1) why did these Greek thinkers ask questions about the beginning, i.e. why did they start exploring nature, why did they decide to get inside things? 2) why did they decide beforehand that there was only one beginning and that it was a material beginning, and why did they decide that way? 3) How is the tangible coming out of the intangible?

Returning to Aristotle it is easy to see that his description of the teachings of the first philosophers takes into account their apparent inconsistency. He says:

> "The first of those who studied philosophy were misled in their search for truth and the nature of things by their inexperience, which as it were thrust them into another path. So they say that none of the things that are either comes to be or passes out of existence, because what comes to be must do so either from what is or from what is not, both of which are impossible. For what is cannot come to be (because it is already), and from what is not nothing could have come to be (because something must be underlying). So too they exaggerated the consequence of this, and went so far as to deny even the existence of a plurality of things maintaining that only what is itself is." (*Physics* 191a25-191a34) (Aristotle 1984, 453).

It is quite obvious that Aristotle takes the teachings of Parmenides as a model, but he also overturns it to the Milesians. At the same time he asserts that the main

problem for the first philosophers is the problem of the relationship between the one and the many (as a beginning he indicates one of material elements). Yet this problem is realized only when the search for a single principle underlying the diversity of the world around us has already been set. This problem could not arise within the framework of ordinary mythological consciousness, which not only easily accepts diversity, but also determines a person's place in the world through his interaction with many different forces comparable to him.[1]

The Beginning of philosophy and the category of the Divine

The tradition of presenting the beginning of philosophy as natural philosophy developed in the 19th century and has been broadcast in various versions to the present day. However, in the twentieth century a fundamentally different approach was also declared, when the teachings of the first philosophers were understood as the beginning of theology. This point of view is based on the simple fact that neither the Milesians, nor the Eleatics, nor the Pythagoreans are in any way engaged in the study of nature (at least because for them "nature" (*physis*) in the meaning of the surrounding world is secondary), and none of those who are commonly called the first "philosophers", create their own philosophical teaching on this basis.

This was clearly stated by F.M. Cornford, who wrote that the key feature of Greek culture is the fact that

> "... Greek theology was formulated, not by priests, nor even by prophets, but by artists, poets, and philosophers. The great civilizations of the East were dominated by a sacerdotal caste, and the temple became for them the centre of intellectual, no less than of religious life. In Greece nothing of this sort ever happened." (Cornford 1923, xiii).

Cornford shows that for the Greeks, the word *theos* apparently meant "other", "different from us". Hence because the main feature of the divine was immortality, a life that has no end, in a certain sense, "immortal" and "limitless" turn out to be synonyms. Furthermore, the word "theologian" did not have the meaning it later acquired. "... to the Greek ear theologian (*theologos*) meant a poet who sang of the world's beginning and the birth of the gods, and laid claim to the divine inspiration of the Muses." (Cornford 1923, xiv). As a result, Cornford places the Greek "natural philosophers" into the history of Greek religious thought. Then, unlike the above-

[1] H. Cherniss published his research in 1935, where he showed that when building his philosophical system, Aristotle used the sources related to the Presocratics for his own purposes and was not at all obliged to expound them as a doxographer would have done. Therefore, it is wrong to take his descriptions as accurate statements of the doctrines of his predecessors (See Cherniss 1935).

mentioned historians of philosophy, Thales' key statement turns out to be not the declaration about water, but his thesis that everything is full of gods, whereas water as the beginning of everything is only a consequence, a development of this approach. Anaximander speaks of the Infinite, from which everything originates and to which everything returns, and the Infinite rules things so that they all pay compensation to each other for the injustices inflicted in the order of time. The infinite is immortal and indestructible. Anaximenes says that our soul, which is air, defines our integrity, just as air encompasses the entire world. It is difficult to call this approach a philosophy of nature in the generally accepted sense, just because the categories used can in no way be understood as a description of a sensually given world.

A little later, W. Jaeger, based on Thales' statement that the world is full of gods, interprets his approach in a way completely different from natural philosophy:

> "Thales' gods do not dwell apart in some sequestered and inaccessible region, but everything-that is, the whole familiar world about us, which our reason takes so soberly-is full of gods and the effects of their power. This conception is not without its paradox, for it clearly presupposes that these effects can be experienced, and experienced in a new way: they must be something that can be seen with the eyes and grasped with the hands. We no longer need to look for any mythical figures in or behind the given reality in order to discern that it is itself a theatre where higher powers hold sway. So in restricting our cognition to that which we find immediately before us, we are not necessarily compelled to abandon the Divine." (Jaeger 1947, 22).

At the same time, it is already very difficult to attribute to Thales the idea that the whole world, along with the gods (i.e., supersensible beings), grows out of sensually given water. Anaximander then completely abandons sensuality when he introduces the concept of the infinite, the *apeiron*. Apparently it is Anaximander who speaks of *apeiron* as an *arche*, i.e., the origin of everything that lies beyond everything and, apparently, not in a temporal sense, since it itself cannot in principle have a beginning. Jaeger further shows how the later intellectual search of the Greek philosophers leads them to a goal that can be designated as *Gottanschauung*, in contrast to the worldview (*Weltanschauung*) as such, but in this case the understanding of God has to be significantly transformed.

G. Vlastos does not speak about theology as such, but, characterizing those Presocratics, from whom more texts remain than from the Miletians, states:

> "In Parmenides and Empedocles the whole doctrine of Being and Nature is put forth as a religious revelation. The major themes of all the physiologoi – the creation of the world, the necessity of its order, the origin of life, the nature of the soul, and even such things as the causes of winds, rain, lightning and thunder, rivers, meteorites, eclipses,

> earthquakes, plagues-were matters of vivid religious import to their contemporaries." (Vlastos 1952, 97).

It is during the formation of philosophy that there is a gradual realization of the divine as opposed to the natural, but this required generations of intellectual search.

Taking Homer and Hesiod as an initial point, one can state that a new intellectual movement begins at the end of the 8th century BC. Those who would later be called philosophers did not determine their place, i.e. the sphere of their primary interests, until about the 5th century BC. They focus on understanding the god-filled world (Thales) as governed by uniform laws and thus providing an example for human society. "Once the shared interest in theology of the new intellectuals of the sixth century is recognized, diverse thinkers like Pherecydes, the Orphic poets, the Milesians, Pythagoras, Xenophanes, and Heraclitus may be appreciated as forming a more unified group than is usually acknowledged, through their different efforts to reform or break with the theological tradition embodied in the poetry of Hesiod." (Granger 2007, 135). Taking these considerations into account, one can speak about the theological tradition with no less reason than about the naturalistic one.

G.V. Khlebnikov contributes to the purely theological dimension of the early Greek thinkers, considering the entire philosophical tradition of antiquity, from the Milesians to the Neoplatonists, as "philosophical theology." The key to understanding Thales again turns out to be the thesis that everything is animated and full of gods. Hence the interpretation of water as moisture permeated with "intelligent divine Power," and then the conclusion:

> "Thus, Thales is the first to offer an explanation of the mechanism of the divine's influence on the physical, ideal on the material: it is the divine Mind that turns out to be the necessary factor that rationally structures and connects all things and phenomena with each other, making it possible both their being-in-the-world and their logical cognition" (Khlebnikov 2007, 17).

It is quite obvious that Thales' water is not simple H_2O, therefore attributing to Thales the idea of Mind action, which was first expressed by Anaxagoras, the distinction between ideal and material, as well as purely logical cognition, is no less a mistake than attributing to Thales the creation of natural philosophy as a philosophy of nature freed from the divine.

From what has been said, it is quite obvious that *the beginning of philosophy is neither natural philosophy nor theology*, we can only talk about the tendencies that led to the emergence of such trends in the future. But in this case, the question arises, how can one define the powerful intellectual movement that later led to

philosophy, in which framework both natural philosophy and theology were ultimately formed?

Movement towards rationality

In the mythological consciousness, the whole world is represented as a kind of social entity, since everything is filled with life and, accordingly, each being is in a certain relationship with others. These relationships are organized in such a way that they are in harmony, that is determined by the observance of the measure. The gods, in a hard struggle, eliminated those forces that violated the balance, removing them from the world. Due to their efforts the overwhelming forces in the form of horrific monsters, giants, hecatonheirs and titans cease to affect the beautiful arrangement (*kosmos*). It is this morally established world that Anaximander describes when he talks about "... the unlimited, from which the heavens come about and the world that is in them. It is eternal and unaging and it surrounds all the worlds." (D7 LM)[2]. And he states that "...the things out of which birth comes about for beings, into these too their destruction happens, according to obligation: for they pay the penalty (*dike*) and retribution (*tisis*) to each other for their injustice (*adikia*) according to the order of time..." (D6 LM). Obviously, to believe that such views arose as a result of observing natural phenomena is an aberration determined by reliance on the modern worldview.

It should be considered that while the Miletians, Orphics and Pherekides of Syros presented their views, ancient authors easily fit them into the original tradition, not considering their views to be radically opposite. Thus, Achilles writes: "Thales of Miletus and Pherecydes of Syros posit as the principle of all things water, which Pherecydes also calls Chaos (D7 LM)," "probably derived this name from Hesiod..." (R22 LM). Proclus, speaking about Pherecydes, reports on the striving of the cosmos for unity through Zeus. "Pherecydes of Syros said that when Zeus was about to begin his work of creation, he transformed himself into Eros, because, since he was putting the world together out of the contraries, he led them to agreement and friendship and sowed in all things identity and the unity that pervades the universe" (R24 LM). Pherecides built his theo-cosmogony, which begins with the words: "Zas [i.e. Zeus] and Chronos were always, and Chthonie was. But the name of Chthonie became Earth when Zas gave her the earth as a present." (D5 LM). From the seed of Chronos (Time) came the next generation of gods.

Based on this picture of Pherecydes, Damascius quite thoroughly draws a parallel between him and Anaximander. He says that the physical cosmogony of Anaximander corresponds to the theological cosmogony of Pherecydes. Granger

[2] All quotes are given according to Laks & Most 2016.

develops this idea: Pherecydes and Anaximander closely parallel one another in introducing elemental materials from a seed or germ, thrown off from their own version of the "eternal." (Granger 2007, 156). However, Granger makes a reservation that, perhaps, Anaximander's cosmogony is more abstract than Pherecydes' theogony, and his biological parallels can be considered as metaphors. However, according to Anaximander, everything appears and disappears, even gods and countless worlds. The neoplatonist Simplicius, like Damascius, asserts that Anaximander "... having observed the transformation of the four elements into one another, he thought that he should not make one of these the substrate, but some other thing besides them" (R2 LM). Here, the *apeiron* is pointing to the nature behind the material elements, i.e. a certain creative essence that determines the emergence of the four elements.

Thus, the very possibility of the cycle described by Anaximander can be provided by something beyond everything, and this is the *apeiron*. Only he is immortal and indestructible. *Apeiron* finds itself in the place of the divine principle (Zas) and time (Chronos) of Pherekides. Thus, Anaximander's limitless (*apeiron*) is very close to the idea of the divine, which is characterized by immortality. Then we can accept the point of view of Cicero (*De natura deorum*), who interprets the Miletians as the creators of theogony:

> "Thales of Miletus, who was the first downward person to investigate these matters, said that water was the first principle of things, but that god was the mind that moulded all things out of water – supposing that gods can exist without sensation; and why did he make mind an adjunct of water, if mind can exist by itself, devoid of body. The view of Anaximander is that the gods are not everlasting but are born and perish at long intervals of time, and that they are worlds, countless in number. But how can we conceive of god save as living for ever? Next, Anaximenes held that air is god, and that it has a beginning in time, and is immeasurable and infinite in extent, and is always in motion; just as if formless air could be god, especially seeing that it is proper to god to possess not merely some shape but the most beautiful shape; or as if anything that has had a beginning must not necessarily be mortal." (Cicero 1967, 29).

Henceforth, if we rely on Cicero in the understanding of ancient philosophers, they turn out not to be the creators of metaphysics or philosophy of nature, but "theologians" (in another treatise "De Divinatione" Cicero follows Aristotle, calling Thales a "physicist"), since behind all changes in material elements there is an infinite and immaterial mind or God. Either way it cannot be material, and it is no accident that Cicero mentions Anaximenes, who, having abandoned the apeiron of Anaximander, transferred its properties to the element of air.

From observation to generalization?

So far we have dealt with the most general concepts, such as God, origin, element, infinity. But it is known that both Thales and Anaximander are traditionally credited with some views that we now consider scientific, and the question arises how to relate their general philosophical/theological statements to more specific and, in some cases, presupposing certain observations ones? For example, Thales is known to have predicted the solar eclipse of 585 BC. (seeing the reason that the Moon covers the Sun), observed the starry sky and discovered Ursa Minor, determined the diameter of the Sun as 1/720 of the solar orbit, divided the year into 365 days, measured the height of the pyramid by the shadow, claimed that the Sun and Moon has earthly nature, was the first geometer among the Greeks, believing that the diameter divides the circle in half, etc. Moreover, in some cases, his explanations are based on quite natural grounds. Thus, he explains the flooding of the Nile by the action of northern winds, which prevent the free flow of the river (D9 LM). He also says that the morning sunset of the Pleiades occurs on the 25th day after the equinox (R21 LM).

The same applies to Anaximander, who "was the first to draw the outline of the earth and sea, and he also constructed a [celestial] sphere." (D5 LM), argued that

> "The Earth is suspended; it is not controlled by anything, but remains where it is, because it is at the same distance from everything that exists. Its shape is flat, round, similar to a stone column; one of its surfaces is the one we walk on, the other is the opposite of it. The stars are a wheel of fire; they are separated from the universal fire and surrounded by air. The sun's wheel is twenty-seven times larger than the moon's, and the Sun occupies the highest position, while the circles of the fixed stars occupy the lowest. Animals are born as a result of evaporation under the influence of the sun. At first, people looked like another animal, that is, a fish. Winds arise when the finest vapors of the air separate and, set in motion, gather in clumps; and rains from vapors rising from the ground under the influence of the sun; and lightning when the wind hits the clouds and tears them apart (D7 LM)."

The question is: how are these statements related to the general principles on the basis of which Thales and Anaximander are considered philosophers?

There are at least three possible positions here: 1) the general propositions of Thales and Anaximander are *inductive generalizations* of empirical observations; 2) observations only confirm *general propositions that are similar to some common mythological concepts* like fate or Eros; 3) *general propositions and empirical statements are practically unrelated to each other*, existing in parallel.

Strictly speaking, only the first position can be considered natural philosophy, since it is limited by material nature and does not attract any other entities to complete the picture.

The most consistent representation of the first position can be found in Patricia O'Grady's work on Thales. She believes that Aristotle quite adequately stated the position of Thales, who thought that water is the beginning and nature of everything that exists:

> "At Miletus, Thales was ideally situated to observe the continual development of the Island of Lade, while the silting up of the Gulf of Lade was taking place at a rate that could be recognized over a few decades. Thales would have believed that he was witnessing the modification of water into earth. It is consistent with his hypothesis that, in thinking about the large land masses, he would have envisaged that because these features existed on such a massive scale they must have been proceeding over a long period of time." (O'Grady 2016, 91).

In addition, she believes that Thales clearly understood the world around him as existing on its own:

> "But because Thales realized that the events of nature bore no relationship to mythological entities, he was able to put forward proposals that explained natural phenomena as events occurring without the need for unnecessary hidden entities." (O'Grady 2016, 249).

In other words, Thales thinks like a modern scientist, makes measurements, and tries to confirm general propositions with empirical observations. Moreover, these general provisions relate to the external nature, alienated from any divine forces.

If we accept this position, a number of questions arise. Aristotle says that

> "... according to some thinkers, Thales' views are consistent with those of the first theologians and that the fundamental difference is that he does not name the gods, but water as the origin. And there are also some who think that the very ancient thinkers and those long before the present generation and the first to reason about the gods made the same assumptions about nature. For these poets made Ocean and Tethys the parents of creation and said that the oath of the gods was water, which they called Styx. For the assumption was that the most ancient thing was the most worthy, and that an oath was the most worthy thing. If then this opinion that nature happens to be primordial and ancient is perhaps unclear, yet Thales is said to have made these declarations concerning the primary cause." (*Metaphysics* 984a, Aristotle 1998, 13).

Why would Aristotle mention this? It is relatively safe to assume that he does this in order to clearly separate Thales' views from the mythological implications that were certainly common at that time. Also, some believed that Thales borrowed his teaching about water from Egypt, where this opinion was stated among the Egyptians in the form of myth, "... and because Thales perhaps brought back this explanation from there." (R33b LM). Patricia O'Grady dismisses the influence of mythological views on Thales:

> "The explanation that the gods, far distant on Olympus, controlled nature and the affairs of man, could not satisfy Thales. From what we know of his contemporaries and the esteem in which he was held by later philosopher-scientists we can conclude that Thales's mind was not attuned to the mythopoetic traditions. What Thales did was to examine the natural phenomena, consider possible processes of change, and offer the hypothesis such as 'water is αρχή of all things' and 'water is the originating principle which supports the earth' (O'Grady 2016, 81)."

Or take the words of Rossetti:

> "But even if we do not refer to mythology as the beginning of Thales' reasoning, there is practically no evidence that he reasoned about nature, bringing everything out of the water as *arche*... Clearly, the Thales who tells us about earthquakes, springs, seeds, nourishment, and corpses is not trying to answer questions of a cosmological nature. His interest is limited to what happens on the surface of the earth, or just below it, as well as to the generality of living beings upon it." (Rossetti 2022, 123).

In this case, no mythological representations give grounds to Thales' conclusion about water as a deity and, accordingly, do not give us grounds to assume, as P. O'Grady does, that he was trying to confirm the general view of water with specific observations or that he deduced the general position about water as an *arche*. Moreover, if we accept Aristotle's argument, then Thales speaks of different manifestations of water in nature – which are the sea, and groundwater that gives rise to rivers, and moisture that nourishes plants, and is dissolved in the air, etc. Whether Thales had a general idea of water as a single element, remains a question. His main merit then is to change the general view of the world, within which he begins to give rational explanations to visible objects.

Unlike Thales, Anaximander, along with specific observations and considerations, speaks about the world as a whole. Anaximander asserts that there is an infinite (or boundless, "a kind of infinite body", Aristotle). Yet this boundless is not entirely material, even according to Aristotle:

> "... There cannot be a principle of the infinite, for that would limit it. Further, as a principle, it is both uncreatable and indestructible. For there must be a point at which what has come to be reaches its end, and also a termination of everything passing away. That is why, there is no principle of this, but it is this, which is held to be the principle of other things, and to encompass all and to steer all, as those assert who do not recognize, alongside the infinite, other causes, such as Mind or Friendship. Further they identify it with the Divine, for it is deathless and imperishable" (*Physics* 203b, Aristotle 1984, 478).

Moreover, Anaximander is talking about the world as a whole, and there is no need to talk about any specific observations on which his views are based. We can also

recall his famous fragment about retribution which is definitely quite mythological, and through which the image of the Erinyes shines. These are pure declarations and not rational conclusions.

Cornford is certainly right when he says that "Thales and Anaximander should not be considered as free artists who were like Adam on the day of his creation, with no tradition behind him, no inherited scheme of things, opening his innocent eyes on a world of pure sense impressions not as yet co-ordinated into any conceptual structure." (Cornford 1957, 3).

So, the most general statements of Thales and Anaximander are not inductive conclusions based on specific observations. One can only say that their thought is oriented towards the one, the unity, but this desire for the one is simultaneously manifested in other thinkers, politicians and poets, and is not directly related to observations of the outside world (Donskikh 2025).

From mythology to observations?

Speaking of the second possible position, that the specific observations of Thales and Anaximander only confirm the general propositions, it is necessary to understand their origins. In this case we can only turn to mythology as a basic source of general ideas.

It is worth paying attention to one more point: if the transformations and benefit of water are as natural as Aristotle writes, pointing to its quite physical role, then, firstly, why did the disciples of Thales not accept the argument of their teacher and introduce other principles, and, secondly, if they start from mythology, then why not take for granted the same authoritative statement of Homer that the Ocean is the ancestor of all? Furthermore, it is necessary to take into account that it is not by chance that Thales uses the word *hydor* (water), and not the name of the deity, and this is where rational reasoning about the world as a whole begins.

The emergence of new forms of intellectual life required rethinking existing words, turning them into concepts, as well as the emergence of new words and generalizing terms. Rational thinking inevitably requires this. It builds a hierarchy of meanings that make it possible to move from single meanings to the most general ones. A monarchically and, accordingly, hierarchically organized conceptual space is being built – from the "being" of Parmenides to the categories of Aristotle.

Before moving on, it is worth paying attention to two important points.

1) For the traditional consciousness, there only exists what is named. To name is to create. In addition, it is characterized only by words not with general but exclusively with specific meanings. Accordingly, within the framework of such consciousness, it is impossible to designate something that has not yet been named, and cannot be named, because it is "other", because it is beyond naming. The solution was

found in the formation of purely negative concepts that have sense but do not have meaning, a referent. They are arranged as different aspects of the divine (the most general meaning of which Cornford defines as "something different from us") – Zas and Chronos of Pherecydes, "the water" of Thales, "the apeiron" of Anaximander, "the air" of Anaximenes, "the god" of Xenophanes, "the being" of Parmenides, as well as "the law" (Themis), "the truth" (Dicke) and some others. They are beyond ostensive definitions and are comprehended only by negating the visible.

2) These concepts are built within the framework of the realization of the divine as immortal. After all, the main difference between gods and humans is gods' immortality. Immortality can only be described just negatively as the absence of death, as well as infinity and boundlessness. Immortality as the acquisition of the divine essence is known from Homer: "In Homer becoming immortal is not just a matter of prolonging one's existence. It is also to become *an* immortal, a god, and that means acquiring the ability to act as a god" (Long 2019, 8). But it is philosophers who begin to realize the divine (immortal) negatively, by denying what is inherent in man and what he is able to perceive with his senses. It is only through denial that they move towards certain positive characteristics.

Let us return to Thales' "water". His idea of water is contradictory in the sense that if water is a unity, and it itself takes on different forms, then how can it, being changeable, determine the unity of the world? That is, there must be something behind it, specifically this defining unity, that it can only be something divine. Traditionally, it is assumed that 1) Thales reasoned rationally (according to Aristotle), based on the fact that water is life; 2) Thales could have been influenced by Homer with his statement that the Ocean is the forefather of everything. It is very difficult to accept the first point of view, since rational discourse has not yet quite developed and, moreover, as already noted, his assertion of water as the primordial substance was not supported by his students. Rather, it could be about the influence of mythology. The worship of water-related gods dates back to time immemorial. Sumerian mythology knows, for example, "the cult of the good deity of underground waters (the world's freshwater ocean on which the Earth floats and which gives moisture to rivers and wells)," Enki ("Lord of the Earth") (D'yakonov 1990, 144). Akkadian people knew Enki under the name Ea.

Enki's special role is that he embodies the power and wisdom of water and he is the lord of this world ocean Abzu.

> "In the functioning of the universe the powers which are peculiarly Enki's manifest themselves often and in many places. They are directly active in the roles played by water everywhere: when it falls from heaven as rain, when it comes flowing down in the rivers, when it is led through canals out over fields and orchards where it produces the crops of the country and the prosperity of the people." (Frankfort et al. 1949, 160).

Besides the fact that Enki is the personification of fresh waters, the idea that earth floats on its surface is associated with him, and this is also one of the statements attributed to Thales. This explains the earthquakes. Considering Thales' stay in Egypt, it is impossible not to recall also the Egyptian idea of Nun – ocean = chaos, which became the father of all the gods and to which everything will return at the end of time. In "The Book of the Dead" Osiris is mentioning "… the time when this earth came into being from Nun, when it sprang from the watery abyss even as it was in the days of old." (Budge 2008, 823). In the Oxford Encyclopedia, in the section on Nun, it says that "… The sphere of life floated as a bubble, surrounded by the limitless dark waters of the inert god Nun. This oceanic abyss, while giving rise to and sustaining the cosmogony, also concealed the threat of disorder in its chaotic depths." (Oxford Encyclopedia of Ancient Egypt 2001, 557). In his 2022 monograph, N. Molinari takes into account Thales' possible familiarity with all these mythological and religious systems and suggests that they served as the initial impulse for his philosophizing:

> "Thales was speculating about the ultimate status of the various aquatic divinities he encountered: Which was true? Later, presumably something like: What does the commonality reveal about reality? It is from this initial source of wondering about watery gods that he appears to have formulated a universal theory that incorporated all of these figures in his philosophy of divine water and idea that all things are full of gods." (Molinari 2022, 197).

On the basis of written and archaeological evidence Molinari proves that the key figure who led Thales to the philosophical movement towards the category of being is the river god Acheloios. The problem is that it is hardly possible for Thales to argue that some particular god is truer than another one, since one of the most important features of the pagan worldview is that the question cannot in principle be posed in this way. It is alike asking about which tree is more tree than another one. All mythological views are equally respectful.

When we turn to Anaximander, it appears to be even more difficult to connect a limitless entity with a particular deity. His beginningless principle, which "encompasses everything" and "rules everything," is, of course, closer to the idea of something divine rather than natural. We know that Simplicius attributes to Anaximander the idea that the infinite firmaments (worlds) are gods. However, to imagine some kind of infinite god is to also come to a contradiction, as Aristotle clearly says. According to H. Gottschalk

> "… 'indefinite substance' is not a suitable appellation for the parent and ruler of the universe, and the word 'indefinite' is meaningless unless we consciously abstract qualities from things, something that Anaximander probably could not do. The term *apei-*

ron had the advantage of predicating something positive of the *arche* without committing Anaximander to any view of its nature. He chose it precisely because it did not refer to the kind of substance but only to its vastness of extent." (Gottschalk 1965, 53).

In his turn, J. Mansfield (2011) believes that infinity is a characteristic of a dynamic principle in which everything appears and disappears, while the elements themselves are constantly fighting with each other. At the same time, there is no direct mythological correspondence here. The closest thing to the infinite is Uranus, the heavens that contain the cosmos, but this analogy is far from fully valid. (A close look at Anaximander's teaching is presented by Couprie & Kočandrle 2013).

Nevertheless, if we take into account the objections to the direct transformation of mythological images into general concepts such as elements or principles, it becomes more convincing to believe that the connection here is not direct. Neither the image of the world Ocean river, nor the Egyptian image of Nun, nor even the image of Acheloios lead us to the image of water as an independent element. It is worth remembering that when Empedocles speaks of the four elements, he uses the names of gods: "Hear first of all the four roots of all things: Zeus the gleaming, Hera who gives life, Aidoneus, And Nêstis, who moistens with her tears the mortal fountain (D57 LM). But this is obviously a retrospective identification of the elements already discussed earlier with the gods. In the earlier Alcman, the primary (or penetrating all things) element is copper ("Everything has a nature similar to matter of copper" (POxy 2390, l. 17–18, Fragments 1989, 80) and copper is associated in Ancient Greece with Aphrodite (as the patroness of Cyprus with its copper mines) and Hephaestus. However, Alcman speaks in this fragment about Thetis. These examples only indicate that there are obviously no direct associations or analogies between certain elements and gods.

Anaximander is also credited with views that are almost impossible to connect with the doctrine of the infinite. So, what does the statement that thunder and lightning are the result of a split cloud have to do with it, or that the Sun is a hole in a wheel that moves in a circle twenty-eight (or twenty-seven) times larger than the Earth? In turn, the claim that eclipses are associated with the fact that the holes in the celestial spheres are blocked is completely rational and has nothing to do with any mythology. It is rational (though not convincing for Aristotle) to think of Earth as a cylinder equidistant from everything. It is also rational to argue that humans were born inside pisces and only after reaching a certain independence and the ability to protect themselves, they came out. But all these views cannot be deduced from the idea of the infinite.

At least it can be argued that the striving for the one, which is observed in mythology and guides the consciousness of ancient intellectuals, expresses itself in

parallel (1) in generalized images of the gods, where such gods as Zeus, Themis, Dike, as well as the goddesses of fate Moira and those who monitor the fulfillment of the divine laws of Erynias come to the fore; and (2) in such concepts as measure, justice, benevolence, infinity, water and fire. But using these concepts does not lead to empirical observations. Thales and Anaximander do not try to confirm their general statements with their observations.

Thus, the above leads to the conclusion that it is reasonable to speak only about the third position: within the framework of the emerging rational thought, general propositions and empirical statements *are practically unrelated to each other, existing in parallel*.

Then the picture builds up as follows: the Milesians and poets such as Alcman, or politicians-poets like Solon are reasoning using the most general categories, which ultimately find an absolute generalization in the poem of Parmenides with his concept of being. At the same time, those whom we call philosophers engage in empirical observations or talk about the world, making arguments that often do not relate to mythology. Therefore, the task is not to explain the emergence of philosophy as such, but to explain the emergence of rational thinking, which requires proof or at least substantiation of the statements being made.

The Individualistic Revolution in the Spiritual World

The key moment that determined the emergence of a new way of looking at the world is *a change in position towards the previous worldview*. This new position is expressed by Homer and Hesiod. Homer has a very definite idea of the speaker's personal position, for this he uses the word *autos*, which "... serves to indicate that an action or thought involves, affects, or regards the agent in some way or that it has a bearing on the agent's well-being» (Miller 2009, 30).[3] The fact that Homer represents not a local but a Pan-Hellenic position is clearly shown in a list of ships the *Iliad,* where the Achaeans are depicted obeying the will of a single Zeus and other Olympian (non-local) gods. Hesiod more clearly manifests an individual position, which is determined by a Boeotian peasant's approach to understanding and rethinking the mythological universe:

> "And yet Hesiod is without oriental precedent in one respect: the gods and the universe were described by him as a matter of private interest. Such freedom was unheard of in the Near East, except among the Hebrews, where Amos, for instance, was a herdsman.

[3] Although the question of to what extend Homer himself was aware of the personal individual principle remains open (Miller 2009, 44-45).

> In Egypt and Mesopotamia religious subjects were treated by members of the established hierarchy. But Hesiod was a Boeotian farmer called by the Muses, 'which time he tended his flocks under holy Helicon'." (Frankfort H. et al. 1949, 250).

G. Nagy argues that Hesiod was perceived as connected with a heroic cult; it is no coincidence that he bears the epithet 'servant' (*therapōn*) of the Muses. They give Hesiod a *skeptron* – scepter as an emblem of his transformation from shepherd to poet (Nagy 1990, 49). Hesiod's position thus turns out to be Pan-Hellenic rather than local. This allows him to speak on behalf of the king. The scepter received by Hesiod from the Muses means that the poet's words are endowed with the authority of the king – the authority emanating from Zeus himself (Ibid.):

> "For this is why kings are wise, because when the populace is being harmed in the assembly they easily manage to turn the deeds around, effecting persuasion with mild words; and as he goes up to the gathering they seek his favor like a god with soothing reverence, and he is conspicuous among the assembled people. Such is the holy gift of the Muses to human beings. For it is from the Muses and far-shooting Apollo that men are poets upon the earth and lyre-players, but it is from Zeus that they are kings" (Hesiod, *Theogony* 88-96, transl. Most 2006, 9-11).

We find out that a new situation is emerging socially, when the opinions of individual members of a community become universally valid and a group of intellectually significant individuals appears and authorizes itself regardless of the existing social structure. This group is by no means a single entity, although its members may meet at Greek festivals or competitions. They can live in the same town, or they can travel and communicate either in person or through students. They can take an active part in political life directly or through their works, like Thales, Tyrtaeus, Pythagoras or Solon, or they can withdraw from it, like Archilochus or Heraclitus:

> "Hesiod, Alcman, Epimenides, Xenophanes, and others show us that cosmology was not the private preserve of a select academy of 'Presocratics': in any Greek town, in any generation, there must have been rhapsodes, seers and amateur sages who would be ready to give an account of the origin of the world" (West 1967, 1).

Some of them continue the previous tradition of singers, but at the same time create new genres and reinterpret well-known myths about gods and heroes. They are filled with personal dignity, that is, they are proud not only of belonging to their family and social status, but also of their intellectual vocation, proud of their choice, their right to speak about what they consider to be true.

A rational rethinking of mythology turns out to be the starting point that determined the further development of critical thought. After all, if the mythological

representation of the world becomes an object of reflection, then it is obvious that there is a way beyond this representation. Jaeger also writes about this:

> "Hesiod's *Theogony* is already thoroughly Greek both in content and in spirit; and the impulse which makes the Ionian philosophers of nature seek to comprehend the world in universal terms takes a form that is utterly and unmistakably their own. The Hesiodic type of rationalism, with its interpretation and synthesis of the traditional myths, has given way to a new and more radical form of rational thinking, which no longer draws its content from the mythical tradition, nor indeed from any other, but takes as its point of departure the given realities of human experience – *ta onta,* 'the things that exist'." (Jaeger 1947, 18).

This new position allows us to begin to distinguish between what is perceived by the senses and what is not directly perceived. As a matter of fact, this distinction turns out to be the starting point of the reflections of the Milesians and other lovers of wisdom.

It should be noted that the distinction between the sensually given and the supersensible does not imply that "not perceived", "divine" or "other" is something unified. So it is precisely this idea – the idea of the one – that is fundamentally new, which is being developed by the generation of thinkers following Hesiod. In the teachings of all the first philosophers the problem of the correlation of the one and the many is discussed.

The aspiration for unity is obviously born earlier and stands outside of these considerations, defining them. It manifests itself both in the political and the religious consciousness, which begins to reflect on the mythological consciousness, critically comprehend certain myths and rituals.[4] For the Greeks, this intellectual search is determined by the need to build a polis as a political unity and the emergence of an individual religious consciousness, a religious teaching with its reinterpretation of Zeus as the beginning, middle and end of everything that exists (as manifested in Orphism). The root of the situation is that these lines of thought run parallel to the emergence of philosophy, and, accordingly, the philosophical movement towards an awareness of the unity of existence is only part of a more general intellectual development.

This is the period of the emergence of individual creativity and the individual search for truth, when singers, lyrical poets, politicians, philosophers begin to speak on their own behalf; the comprehension and rethinking of previous spiritual experience also begins, and the idea of a single law for all things gradually crystallizes. This happens both within the framework of mythological consciousness and within the framework of the emerging conceptual space.

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[4] In this context, religious and mythological are understood as synonyms.

Clearly, it is futile to look for unity in the sensual world, because it is infinitely diverse. But it is also pointless to look for it in the spiritual world. There are spirits of the dead, and qualities inherent to individual gods, sometimes mere personifications (like Nike, victory), a huge number of spirits and demonic creatures, etc. (Cornford 1923, xi-xii). The highest level is occupied by the Olympian gods, who are fundamentally distinguished from humans by their immortality. Zeus rules over all of the gods. At the same time, he is not omnipotent. He, for instance, cannot save his children if their death is predetermined by fate.

Thus, one should turn to the supersensible in those divine images that occupy a special, higher position in relation to others. We encounter such personified images as fate (Moira), law and justice (Themis and Dike). Later, Physis is added to them, initially as "the nature of things" and later as "the surrounding world." Cornford gives the following definition of physis – "The object called by this name in Greek philosophy is concrete: it is a material continuum, which is also alive and divine, Soul and God – a substance, therefore, invested with mythical properties. This substance, rather than the manifold phenomena which Nature presents to us through our senses, is the primary object of early speculation; and from its inherent properties, as material, living, and divine, the various systems can be deduced, according as one or another interpretation is put upon what those properties imply" (Cornford 1957, viii). It is also obvious that *physis* obeys the laws of morality, which is clearly recorded, for example, by Anaximander. Later, in the period of sophistry, nature is conceptualized in opposition to the law (*nomos*) as originally existing in contrast to the order established from the outside.

The discovery of infinity

Anaximander calls arche the infinite, *apeiron*, and naturally *apeiron* finds itself beyond all four elements, generating them, and besides, he contains everything within itself and rules everything. Anaximenes, on the other hand, tries to combine these concepts into one thing – an infinite air which turns into the other three elements. A little later, his follower Diogenes of Apollonia speaks of the air as having thought and sensations. "Diogenes, just as he does in the case of life and thought, connects the sensations too with air," R10 LM).

Thanks to consciousness, the air contains the measure of everything: "It is impossible for it, without consciousness (ἄνευ νοήσιος), to be distributed (δεδάσθαι) in such a way as to contain the measures of everything (πάντων μέτρα): winter and summer, night and day, rains, winds and fair weather" (fr. 6 Laks, B3 DK, cf. Afonasin 2009, 565). Thus, Thales' followers accepted his logic and clarified the picture by expanding the category of infinity. It is this category that points to the divine principle, i.e. it fundamentally goes beyond nature, and at the same time it

turns out to be a condition for the integrity of nature. The combination of negative and positive leads to the idea that everything presented to man combines the divine and the sensual.

For Pythagoras, philosophy is participation in the beautiful, that is, the penetration of reason into the divine, which stands beyond the visible and controls it:

> "Heaven in its entirety, he said, and the stars in their courses, is a fine sight if one can see its order. But it is so by participation in the primary and intelligible. And what is primary is number and rational order permeating all there is: all things are ranged in their proper and harmonious order in accordance with these. Wisdom is real knowledge, not requiring effort, concerned with those beautiful things which are primary, divine, pure, unchanging: other things may be called beautiful if they participate in these." (Iamblichus, *On the Pythagorean Life* 59, tr. Clark 1989, 23-24).

The celestial realm is the divine world:

> «The sun and moon and other stars are gods, since heat predominates in them, and that is the cause of life. The moon is made to shine by the sun. Humans have a kinship to the gods by sharing in heat; that is why god exercises forethought for us (Diogenes Laertius, tr. White 2020, 336). "It is a part of aether, and due to this it is immortal, since of course the source from which it has been detached is immortal." (Ibid., 337).

For the Pythagoreans, the divine and the immortal are synonymous. So, according to Pythagoras, the divine, represented in numbers, was the true being, while the visible world turned out to be something else. Matter, on the other hand, is something fluid and changeable. This idea of the unchanging divine as truly existent is later found in Parmenides.

A good argument for the indistinguishability of the natural and the divine among the early philosophers is the previously mentioned fact that Empedocles calls the elements by the names of specific gods.[5] For Parmenides also "Hera is the air, and Zeus is heat" (R3 LM).

Xenophanes also builds an image of God, contrasting him with man. There are no words about immortality in the surviving texts, but the very negative logic of his reasoning clearly indicates that he is moving away from this key opposition: the gods do not reproduce, they do not have sensory organs, their thoughts differ from

[5] Thus the Aidoneus-Nêstis pair is opposed to the life-affirming Zeus-Hera pair, since the kingdom of the invisible is opposed to the kingdom of the visible. This is interesting especially considering that Nêstis was identified with Persephone. Here we again face the opposition of life and death, although in a different aspect. "The coupling of Nestis with Hades, the meaning of her name, her connection with tears, springs, and streams, and even Empedocles' allusive style all point – due allowance made for the factor of secrecy – to the very probable conclusion that Nestis was a cult title for Persephone" (Kingsley 1995, 354).

ours, etc. (Long 2019, 9). Strictly speaking, it was the realization of existence as an unchangeable divine being (after all, there is neither past nor future in the world of the gods), something that resists any change and is comprehended not by feelings, but only by reason, that made Parmenides a key figure of the Presocratic period of philosophy.

Thus, the sensory world turns out to be only a manifestation of what is beyond it. Nature, to use the words of Heraclitus, likes to hide. Then what is meant by "philosophy of nature"?

The most consistent philosophy of nature, with an attempt to exclude the supernatural, we find, of course, among the atomists. In their view, the world is infinite, and both components of the world are infinite – an infinite number of atoms and an infinite void in which these atoms move, forming everything around them in an infinite number of worlds. Here the influence of the divine is vanishingly small. Plato and Aristotle are not satisfied with the key element in this teaching – spontaneity:

> "There are some who actually ascribe this heavenly sphere and all the worlds to spontaneity. They say that the vortex arose spontaneously, i.e. the motion that separated and arranged the universe in its present order." (*Physics* 196a-b, Aristotle 1984, 26).

It is known that Democritus presents the view that everything is ruled by necessity, yet for Plato and Aristotle it means exactly the absence of reason. However, is it possible to assume that Democritus completely excludes the rational, which is certainly associated with the divine? As far as can be understood from the surviving fragments, Democritus' statements about the gods are contradictory. In his commentary to atomists' worldview C.C.W. Taylor says that there is evidence that according to Democritus "all events have determinate causes, and hence that nothing comes about by chance" and also "we have evidence that the atomists assigned some role to chance in the causation of events, though precisely what role is not easy to determine." (Atomists 1999, 190). There is some evidence that Democritus believed in divine *eidola*, which are either beneficent or hostile (Ibid. 214).

Cicero argues that Democritus

> "... has no fixed opinion about the nature of the gods. At one moment he holds the view that the universe includes images endowed with divinity, at another he says that there exist in this same universe the elements from which the mind is compounded, and that these are gods; at another, that they are animate images, which are wont to exercise a beneficent or harmful influence over us; and again that they are certain vast images of such a size as to envelop and enfold the entire world." (*De nat. deorum*, Cicero 1967, 115–117).

Cicero believes that such ideas about gods lead to the denial of religion, since chance denies rational causation. Yet the situation is complicated by the fact that Democritus' views are less consistent when it comes to other aspects of his worldview. Thus, Democritus, according to Cicero, in many places recognizes the possibility of foreseeing the future. But this is impossible if we remain in the position of chance as the foundation of worlds. Democritus' ideas of the soul are also quite contradictory. For him, the soul is a fire consisting of spherical atoms that determines the movement of living beings. At the same time, the soul and the mind are one and the same (Lurie 1970, 314-318).

Quite revealing in this respect are some of his statements presented by Dio Chrysostom:

> "Democritus says this about Homer: 'Homer, by getting a share in the divine nature, accomplished the ordering of all kinds of verses', meaning that he could not have composed such fine and learned poems without a divine and superhuman nature." (Atomists 1999, 137)

Then Democritus turns to ethics, and formulating his eminent doctrine of *eu-thumia* (well-being), says:

> "He who chooses the goods of the soul chooses more divine things; he who chooses the goods of the body chooses human things (Ibid. 235)."

Commenting this statement McGibbon concludes:

> "Here the mortal/immortal contrast is clearly the same as the human/divine and body/soul contrast ... The importance of the fragment is not only that it testifies to the same religious conception but explicitly links this conception to 'well-being' (*eu-thumia*). It is generally agreed that the latter was a central idea in Democritus' ethics, representing the goal towards whose attainment life should be directed. In the connection between 'well-being' and divinity, therefore, lies an indication that Democritus gave religious values an important place in his thought." (McGibbon 1965, 388-389).

Even if we accept that Democritus in his understanding of the universe as an infinite multitude of worlds freed himself from the idea of the supernatural as much as possible, still in his teaching about the soul he relies on a very clear idea of the role of the divine principle influencing human life.

It seems that the natural philosophy of ancient authors describes the world as inextricably containing the sensual and the supersensible. In other words, the divine is the most important part of the world, its target cause. The word "nature" is understood accordingly:

> «... the term *phusis* in the expression *peri phuseōs* или *historia peri phuseōs* comprises three things: (1) the absolute *archē*, that is, the element or cause that is both the primary constituent and the primary generator of all things; (2) the process of growth

> strictly speaking; and (3) the outcome, product, or result of this process. In brief, it means the whole process of the growth of a thing, from its birth or commencement, to its maturity. More precisely, the term *phusis*, in the expression *peri phuseōs* or *historia peri phuseōs*, refers, at a minimum, to the origin and the growth of the universe from beginning to end» (Naddaf 2005, 20).

This meaning was fully presented by the Stoics, starting with Zeno, who speaks of that nature as something that

> "… makes the cosmos cohere, and sometimes as what makes things on the earth grow. A nature is a state that changes on its own in accordance with seminal principles (*logoi*), both producing and making cohesive what it produces at determinate times, and performing in the same ways as the things from which it originated." (Diogenes Laertius, tr. White 2020, 309).

The world in their understanding includes gods and humans and everything that has arisen for them.

Concluding remarks

Therefore, if we are trying to find an idea of nature, which is described primarily as a material body, then we must turn to the ontology of the atomists or the *Physics* of Aristotle, i.e. to those lines of thought that led to science. The scientific reasoning of the Milesians is only quite indirectly leads to the philosophy of nature.

Is it possible to take Milesians' and other early philosophers' views on nature as an extension of their metaphysics? L. Zhmud considers the Pre-socratics precisely in this vein:

> "Already in Anaximander's book, one can see the movement of thought from cosmogony, which describes the origin of the world from *to apeiron*, to cosmology or an astronomical system, then to 'meteorology', which explains the origin of the seas, the causes of earthquakes, thunderstorms, etc., and finally to the origin of animals and humans. It was not by chance that Parmenides divided his poem into two parts, the first of which expounds his metaphysical doctrine of being, and the second, organized according to the type of the book of Anaximander, gradually moves from cosmogony and astronomy to physiology and medicine. Empedocles' religious and natural philosophical doctrines are set forth in two different writings, and Democritus' numerous books show an already far-reaching process of differentiation." (Zhmud 1994, 333).

However, the extant passages of the teachings and their interpretations do not confirm this conclusion. Rather, they speak of a gap between metaphysical speculations using specially created general concepts and explanations of natural phenomena. Even the most illustrative example of the Pythagoreans seems to say the

same thing. The Pythagorean doctrine of numbers remains at the level of metaphysical speculation and is not the foundation of mathematics or natural science, which appear later:

> "Number and mathematical science are by no means equivalent. Numbers go back in origin to the mists of prehistoric times, but mathematical science, properly speaking, did not emerge earlier than sixth- and fifth-century Greece" (Burkert 1972, 466).

Thus, the situation here is different: at best, the consistent development of metaphysical ideas in relation to natural phenomena can only be found in Democritus, and even then, with some reservations, whereas it is no coincidence that both Parmenides and Empedocles clearly define two different approaches to understanding the world ("everything"). Their natural philosophical views do not affect the way in which they characterize the phenomena of the outside world. It is no coincidence that in Alexandria, where science appears in a relatively modern sense, none of the philosophical schools are represented. Natural philosophy remained with philosophy in the Balkans, and science ended up in the Egyptian Museum.

Now we can answer the question posed in the title of this article. Yes, natural philosophy existed in antiquity, but it clearly saw the material world as having a divine foundation and never parted from the supernatural. At the same time, it did not become theology, remaining a doctrine about the world that included the divine, but without becoming a doctrine about God as such.

And when the Presocratics addressed only the sensory world directly, their ideas were what are considered the beginnings of science, and they were in no way connected with each other by philosophical reflection.

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