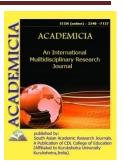




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THE IMPACT OF THE ZAROASTRIAN TEACHING ON THE DEVELOPMENT OF EARLY GREEK SCIENCE

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ABSTRACT

In the following article the impact of the Zoroastrian teaching on the development of early Greek science and its influence on the modern day development of the Pedagogies are analyzed. Its origins are discussed through the framework of the Oriental and Occidental points of views. The hereditary relations of the science and the Middle Eastern and Central Asian schools of thought are revealed through the comparative study of the texts.

KEYWORDS: Greek philosophy, AhuraMazda, Zoroastrianism, Yasna, Universe, Avesta, Thales, Jacques Duchesne-Guillemin.

INTRODUCTION

For centuries, among scholars, the development of science of world has been dominated by the idea that the classification of sciences in its present form originated and developed in ancient Greece. Moreover, the philosophy which had had fulfilled the role of foundation for all of social sciences was developed based by the efforts of Thales, Anaximander, Ariteus, Germotim, Socrates, Plato, Aristotle, underlining the rule that the notion that other sciences were founded based on the philosophy is recognized as an axiom.

However, the in-depth, scientific analysis of the Avestan texts and historical-ethnological, eschatological, archeological sources suggests that the first scientific buds appeared in Central



Asia and later influenced the development of Greek philosophy and later sciences based on the ideas of Zoroastrianism. When studying the influence of Zoroastrianism on the formation and development of early Greek philosophy, firstlywe must rely on the text of the Avesta and Zoroastrian didactics, as well as passages from the works of ancient Greek philosophers, also the political and economic situation between states, nations and tribes.

Due to the fact that the Scithyan-Sarmat tribes in eastern regions gradually transferred the vast territories to their sphere of influence, their worldview, as well as their ideas, which were considered advanced for their time fulfilled their programmatic function for the peoples living in the regions of Asia Minor, they became the impetus for the formation of their worldview and teachings. As a result of the development of cultural ties between the peoples, the ideas of Zoroastrianism, which are the blessings of the thinking of the peoples of the East, began to adapt to the emerging sources of Greek philosophy.

LITERATURE REVIEW

In the teachings of Zoroastrianism, ideas such as being, the absolute soul, the movement of the soul, the properties of the mind and thinking, goodness and depravity were first incorporated into the content of his teachings by Thales of Miletus (624-546 B.C.), the founder of philosophy¹.

When we compare the basic principles of the philosophy of Thales with the principles of Zoroastrianism, we see a striking resemblance, a balance:

According to Thales: He is the most ancient of all beings, yet he was not created.

According to "Avesta": -"Hey, Mazda! The seed of the eternal universe – basis- founder! (Yasna 28-verse,1) I praise ... the greatest of the great, the most beautiful of the beautiful, the most superior of the superior, the wise of the wise, the mighty and the unique Ahura Mazda.It is the one who gives Good Will and joy with good intentions.He created the lone of lones. Created our body. He raised us". (Yasna 1, Verse1)

According to Thales: Universe is the most beautiful of all, yet it was created by God.

According to "Avesta": "O Mazda Ahura! You warn me of your world! Tell me in your own language about the beginning of this world! What was it and how was it built? (Yasna 28-verse. 11).

"Finally, we applaud AhuraMazda. It is Allmighty, the great. We praise it.We sing of its beautiful creation.He created the classical universe and the supreme truth. The light, the ground, and the whole good thing was done". (Seven great Yasht, 16)

O Mazda Ahura!... The thinking of the world that created the world was Yours ...Let's give him the prosperity of this world, the splendor of grace", ... Ahura is the only just judge in this world. It will be what he wants (Yasna 29-verse.2,4).

According to Thales: It is the largest space of all, it encompasses everything.

According to "Avesta": "AhuraMazda, which Zoroaster reported to the Magavan Mughals, means to enter the abode of obedience and worship. This place is the palace of Mazda Ahurafrom the beginning. This is the truth that is revealed because of the guidance of good intentions and Ashah-Khaqiqat. I warn you about them" (Yasna 51- Verse. 15)



According to Thales: The most powerful destiny, the one who rules the world.

According to "Avesta": O Mazda Ahura!...You have made this destiny worthy for us; so that we may be with you and Ashah-Khaqiqat forever in our earthly life and in the world of the mind.We will be toghether"(Yasna 40-verse,2).

"Recognize and don't forget, The fidelZaroastr,

It is totally dependent on our opinions,

Whatthis world should be good,

What will happen in the end of Universe?"(Yashts, 1-yashts.26)

According to Thales: It is the smartest of all, it leaves everyone behind.

According to "Avesta": "O Mazda! O Glorious One, Who created the earth, the water and the plants! Give me perfection and eternity. Give strength and endurance with the guidance of good intentions. Enjoy the light of your enlightenment!".

"Ormaiti-Perfect mind gives purity to human beings, and man gives strength to Ashakh-Khaqiqat with knowledge, words, deeds and religion ...I also want this good knowledge "(Yasna 51-verse.7,21).

According to Thales: The wisest of all is time, in which existence is manifested².

According to "Avesta": "Hey, ashavanAhuraMazda! We glorify you in search of the wealth and wheat; in the hope of all good deeds and events created by good men and Ashakh-Khaqiqat. Let us we all live for long periods in this wealth. In summer, also in winter" (Yasna 16-verse.10)

"O Mazda! All the goodness of this world of life, which you have, was, is, and will be forever, please us with your grace. With the help of Good Aim, the emperor of the Universe and Ashakh-Khaqiqat.

May lord, with the assistance of the Emperor of the Universe and Ashakh-Khaqiqat provide with the eternal body virtue" (Yasna 33-verse.10)

According to Thales:

What is difficult in the universe? – "Self-awareness".

Whatis easy? - "Give advise to someone".

What is with splendour? – "Success".

What is from Allah? – "It who does not know the beginning and the end".

"When does unhappiness easily recede from your heart? "When you see your enemies in a worse situation than you"

Who is happy? -"A person who is physically healthy, pure in heart and devoted to upbringing" such ideas are also recognized in harmony with the ideas of the essence of the spiritual world of the peoples of the East.

In turn, on the basis of the analysis of the works of Greek historians, histrioigraphers, as well as the analysis of sources, the ideas of the sacred book of Zoroastrianism "Avesta" had a significant



impact on the emergence and development of the teachings of the first Greek philosophy (6-5 centuries BC) the brightest representatives Anaximander, Pythagoras, Xenophanes, Heraclitus, Parmenides and Empedocles.

Sources also state that Spytamen Zoroaster was the master of a Mugh named Aston, who was famous in Hellas, and that the same Aston propagated the Mugh doctrine in Greece and in turn he was a master of Democritus and Protogor⁴.

MAIN PART

Through the data of Greek thinkers, the image of Zoroaster became the property of European culture.

The famous Belgian Avesta scholar Jacques *Duchesne*-Guilleminsays the following about Zoroaster: "Among all the children of Asia, the West first adopted Zoroaster as its "son". His teachings enriched Greece four centuries before the teachings of Jesus. Plato well knew Zoroaster. It took a long time for the teachings of Buddhism and Confucius to arrive in Europe. For this reason, for centuries, Zoroaster was the only person in the West who demonstrated the wisdom of ancient Asia ... In Greece, Plato's contemporary and student Cnidus Eudoks equated his master with Zoroaster ..."⁵.

The followers of Prodicus, a contemporary of Plato, boasted that they possessed the secret works of Zoroaster and were familiar with their contents. Aristotle, Dinon, Eudex, Theopopus were well aware of the principles of Zoroastrianism. Even then, the Greeks swore by "the right to the name Zoroaster".

Philostratus in the book «Appolonius of Tyana» writes the following (I,2): "Empedocles, Pythagoras, and Socrates, after negotiating with the Mughs, interpreted many unnatural words and ideas.But for this, no one has taken them to responsibility".

The Timon from Fliurtmockingly describes the greatness of Pythagoras in his comic book "Sillalar":

Before lied Magis of the imaginary words,

Bending head, the Pythagoras,

Afterwards the bearer of absolute words.

Tried to "hunt" for the humans

Plinius(23-79 B.C.) in his treatise "Natural History" (XXX,1,9) states: "It is well known that Pythagoras, Empedocles, Democritus and Socrates "swam across the seas" in order to study and understand the teachings of the Mughs. After they returned, they adopted the teachings of the Mughs and began to teach them to the people, but kept their contents secret from others".

In "The Life of Pythagoras", Porphyry: "AfterKambiz conquered of Egypt, Pythagoras, who was being educated by priests, was taken as prisoner and exiled to Babylon, where he studied the teachings of the Mughs. He learned from the Mughs all the information about the cult of the Gods and the rules of life" his admission that Zoroastrianism had an incomparable influence on the formation of the philosophical views of the Greek scientific circles.



At this point, it is important to recognize that Pythagoras and members of his school made a revolutionary, tremendous contribution to the development of world culture.

It is noteworthy that the representatives of the Pythagorean school laid the foundation stone of ancient civilization, laid the foundation for the system of primary, secondary and higher education, and determined the content and scope of the seven disciplines. Also, the emergence of sciences such as solid state physics, astronomy, optics, the design of the first amphitheater and theater buildings, the theory and practice of governing the state with the help of police are associated with the name of the Pythagoreans. We still use terms introduced to science by Pythagoras today, regardless of the original source: philosophy and philosopher, esoteric, symbol, mathematics, symmetry, catheter and hypotenuse, parabola, hyperbola, ellipse, optics, cycle, ecliptic, diatonics, engarmonics.

Paying attention to the testimonies of ancient historians, we can see that many ideas in the views of Pythagoras(570-497) are manifested in quality in harmony with the ideas of the doctrine of Zoroastrianism. Well what is this harmony and reciprocity manifested in:

First, Pythagoras, in his interpretation of the concept of being, acknowledges the two bases and causes of the existence of things in it, namely **light** and **darkness**.

Hippolytus (Oproverjenievsexyeresey, I, 2, 12) noted the following: "Pythagoras received education from a wise man of the Chaldean nationality named Zaratu.Zaratu told him that the two bases of all things are the presence in the form of the mother and father:father-light, mother darkness, in turn gave knowledge that light consists of: boiling, dryness, lightness and speed, and darkness-cold, humidity, heavy and slow" 10. It can be seen that the concepts of light and darkness are also ingrained in the content of the Pythagorean doctrine under the influence of the concepts of good and evil (Ahura Mazda and Ahriman), which form the basis of Zoroastrian teaching.

In "Avesta", the sacred book of Zoroastrian, the content of the process of constant struggle between Ahura Mazda and Ahriman, that is, on the basis of life, progress, is always in mutual struggle, such as good and evil, light and darkness, truth and falsehood, beauty and ugliness, justice and injustice, the interpretation of the mutual struggle of contradictory concepts and ideas.

Based on the content of these ideas, Pythagoras introduced the concept of opposition to philosophy. He drew up a table of 10 pairs of opposites. They are: infinity and infinity, even and odd, singular and plural, right and left, male and female, stable and moving, straight and curved, good and evil, square and parallelogram. The first of all contradictions is the pair of end and infinity, and it is possible that this recognition was formed under the influence of the Zoroastrian idea of Zurvan brin (intiho) - Zurvon akanarag (timelessness).

Second, Pythagoras interprets wisdom as one of the main attributes of the creator of being: "there is no other wise man than God"; "Whoever pursues a wise attitude and way of life with reason should be called a lover of wisdom, that is, a philosopher". This idea, in turn, is interpreted as an initial definition of the term philosopher. In this view of Pythagoras lies the idea that God, as the creator of all beings, is the "philosopher of all philosophers".



Here we can see that the main of the qualities of god AhuraMazda, that's from the viewpoint of his being wise, the holder of supreme mind was ground for the teaching of Pythagoras, that's in the "YashtKhurmuzd" of AhuraMazda said:

"My name is requestor, the faithful **Zoroaster**.

My second name is Matlub, my third name is **Qudrat**.

The fourth is Truth, and the Fifth is **All Goodness**.

The sixth is Wisdom, and the Seventh is I am **Wisdom**.

Eighth - I am the **Doctrine**,

Ninth — I am a Master".

"In practice I'm head, In Truth I'm needed...,

Wise is my name¹²"

In Zoroastrianism, special attention is paid to the concept of intelligence and mind (khrad).

"The moon, the earth, and all created creatures and beings are protected and governed by the intelligence and mind.

- ➤ The laws of the Universe are determined by it. Good deeds and noble deeds are done through the intelligence and mind.
- ➤ It does little harm to an intelligence and thoughtful person.
- ➤ A person with an intelligence and mind is rich.
- The intelligence and mind are superior to any wealth and cannot be bought.
- The intelligence and mind help to acquire knowledge, experience, skills and competencies in all areas, to live a good life, to have joy, to have glory, and to go to heaven after death."¹³.

Also, when thinking about the educational process, Pythagoras emphasizes the following: "Properly organized education ... should be done through the mutual will and desire of the teacher and the student. The secret of any science and art, as it is studied voluntarily, is to achieve its goal correctly, while in the compulsory case it is ineffective and effectless".

THEORETICAL BACKGROUND

In turn, the Avesta interprets the struggle of contradictory concepts and ideas, such as good and evil, light and darkness, truth and falsehood, beauty and ugliness, justice and injustice, on the basis of life and development, as a logical development of these is described as the wise teacher and coaches, are opposed to the ignorant and letter less teacher, coaches. In this case, teachers and educators are divided into good and bad teachers, depending on how much they know their knowledge, attitude to the profession, dedication, responsibility for their duties.

"A smart teacher admonishes his student... He deceives and misleads the ignorant" that is, a good teacher encourages his disciples to avoid such vices as ignorance, blasphemy, dishonesty, selfishness, injustice, greed, immorality, unprofessionalism, and ignorance, and to praise God always, believing in God, truthfulness, kindness, purity, justice, honesty, and fairness and considered it his sacred duty to help him display such qualities as humanity, and served in this



way.It is praiseworthy to sing about the Master: "He is the one who leads to the abode of humility and cheerfulnessin the light of truth, and you have made this path a building for those who are aware of goodness".

At the same time, in the holy book Avesta, bad teachers who sell their faith and knowledge to giants and durujs are severely criticized and condemned. "The evil educator, by his teaching, reverses the divine words and destroys the perception of life.In fact, it turns people away from the priceless investment of truth and good intentions", or "O people who come from near and far with the intention of acquiring knowledge! Now all of you listen, hear my transparent words and keep them in your mind tightly: Never let a bad educator degrade your life, never let with the help of beast loving seducing language it should'd mislead you¹⁴". Just as goodness and goodness (Ahura Mazda) always triumph over evil and ignorance (Ahriman), the teachings of wise teachers and mentors take precedence over the teachings of bad teachers, ultimately leading to the maturation of students and pupils who have embraced good deeds in their hearts and minds.

It is clear from this that there is no doubt that the definition of teacher and master in the Avesta, the interpretation of the teacher-student relationship, influenced the views of the Greeks on the educational process. At the same time, it is clear that the application of these ideas and views in the educational process, in the direction of spiritual and enlightenment education will have a high effect. This, in turn, requires a deeper, specialized study and analysis of the rich cultural, spiritual and enlightenment heritage of our ancestors.

Concluding our remarks on Pythagoras, we quote the words of Heraclitus from Ephesus (Hērákleitos ho Ephésios), who showed that the ideas in the context of Zoroastrianism were the basis of Pythagorean doctrine: "Pythagoras was aware of their religious teachings and then adopted them as his own" ¹⁵.

There is an opinion that Heraclitus himself studied the teachings of the Mughals and priests based on Zoroastrianism and formed the framework of his views on the basis of these teachings.

In his article "The Influence of Zoroastrianism on the Philosophical Views of Plato and Aristotle", A.N.Khrust admits that the teachings of Zoroastrianism have roots in the views of the ancient Greek thinkers.Included there,he considers Heraclitus's famous phrase "war is the father of all things" and Empedocles' idea that "love and hate form the two foundations of the universe and govern it in turn" to be a sign of the eternal struggle between Ahura Mazda and Ahriman and he asserts that Heraclitus and Empedocles were more or less aware of the basic ideas of Zoroastrianism¹⁶.

Hippolytus makes the following points about Heraclitus: "Heraclitus has the teaching that the soul returns to the body from which we originated. He knows that God is the cause of this resurrection. He says following: The wise people while wakening from the sleep of death in Aida(inferno), in standing mode protects the existing and dead people" 17.

It is here that Heraclitus' views on the eternity and protection of the soul, as well as the doctrine of the Fravashis in Zoroastrianism, became clearly intertwined. In the Avesto, fravashi means to protect, to support, to shelter. "The Fravashis have a number of responsibilities: to resist the forces of evil, to protect the interests of relatives and the people, to bless, to cooperate with Ahura Mazda in preserving the world - all of which he is responsible for," he said" 18.



Ahura Mazda said to Sipiytmon Zoroaster:

- > Spiytimon! Actually, it informs you on the truth and impact, the help and assistance of the zavr, power, mighty fravavashis, also, the help of happy ashavans of fravashis to me and their extent.
- > Zoroaster! I will preserve the bottomless earth created by Ahura because of their majesty and splendor. This low-rise and endless ground is selected from the beauties... Due to their might and splendopur I save the children born in the fetus of the mothers... If the mighty fravashis hadn't helped me my beautiful animals and men could be perished... due to their might and glory the brave men will be born: This men while discussing in the meetings, his words are put to ears; This wise man will be the victor in the disputes 19.

RESULTS

It is clear that the teachings of Zoroastrianism served as the basis for the perception of body and soul, soul and heart, life and death, goodness and depravity, beauty and ugliness, which later became the central problem of Greek philosophy.

Heraclitus' only pamphlet, "About nature" has reached us in 130 piecesof patchworks. According to his teaching, all things come from the fire and are in constant change. For Heraclitus, fire is the basis of existence. The fire combines with the air, and the air turns into water, and the water into the soil. This is the way down. In turn, the soil melts and turns into water. Everything else is made of water. The water evaporates and turns into fire again. This is the way up ... In fact, the Earth we live in was once part of a common fire, which later "cooled"... This cosmos is one and the same for all, it was not created by any god or man, but it has always existed and will exist like a fiery, restless fire. "Fire is a necessity, an abundance and a scarcity".

Given the fact that in the doctrine of Zoroastrianism, the fire is considered sacred and recognized as the basis of all things in nature, it seems that Geraklit is also well aware of the ideas of this doctrine.

In the "Avesta", fire is applauded in harmony with the names of Ozar and Otash. "Ozar" is considered to be the guardian god of fire, and it has a very responsible job. Fire is recognized by Zoroastrians as a symbol of the greatness of Ahura Mazda. The Zoroastrians recognized not the flame, but the hilarity in the quality of light, which is radiated from it as a higher cosmic substation. All material things are wounded by light, irradiation. Fire is the most advanced, most visible form of light. It is the energy that controls temperature, heat, dryness, movement, activity. In Christians, the cross and the crescent in Islam are symbols that serve to strengthen the foundations of religion, while in Zoroastrianism, fire has played a similar role. This is why it is absolutely wrong to call Zoroastrians firefollowers. Now, in our opinion, we quote excerpts from the "Avesto" texts which influenced the worldview of Heraclitus about the fire:

"Hey the fire of AhuraMazda! We applaud you, we honor you; we want to make the best sacrifices, vows. You deserve total praise and honor. Hope to see you having applaudes and glory in this wealth".



"-Hey the Fire of Ahura Mazda! May the wood in our hands be for you!Let its smoke be yours!May its blessings be upon you!May the heaps of wood be yours!Let this noblcreature be your creature! Let this religion aware be your custodian!

Be in this wealth the light!

Be eternal light in this household!

Be enlightened in this wealth!

Stay on foot for long periods til the Resurrection; be eternal, till the Domesday having the good and might!

Hey the fire of AhuraMazda, dedicate to me the solution immediately! Give me shelter immediately! Give me a prosperous life and shelter immediately! Immediately grant me long life, wisdom, eloquence, beautiful language, vigilant spirit, immortal and prosperous intellect!²¹

CONCLUSION

There is no doubt that how deep are the sources of thought of our ancestors, the world around us, the rich content of their weltanschauung formed on the basis of levels of imagination about being, for thousands of years the springs of science have sprouted in these heaven-like regionswere one of the cornerstones of the foundation of world civilizations of this spirituality and culture.

In our next research, we will try to cover issues of influence, mutual harmony and proportionality on the formation and development of the teachings of Socrates, Plato and Aristotle, which are considered the founders of Greek philosophy, science, the doctrine of Zoroastrianism.

Especially during the conquest of Persepolis by Alexander the Great, it was on his orders that the 12,000 head of cattle kept in the library of King Darius were engraved in golden letters on the Avesta, the most advanced artistic-philosophical, natural, medical, socio-economic, political the translation of legal, enlightenment-ethical, ecological ideas into Greek by Aristotle is an important historical fact, indicating that these sources were the basis for the development of Greek science in the later period.

In its turn, the studying and researching emergence of the essence of the ideas in the teaching of Avesta and Zoroastrianism as the basis for the emergence of politics, ethics, aesthetics, didactics, grammar, rhetoric, poetics, arithmetic, geometry, astronomy, music and many other sciences requires a complex, scientifically based branching research.

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