ON NIZAMI GANJAVI'S COSMOLOGICAL OUTLOOK

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Cosmology is a physical structure of the universe as a whole, the science of science studying the causes and evolution. In the wider scope, it studies studies separate stages of the evolution of the universe as a whole.

The distribution of galaxies in the space is being explored in the field of rayradia-radivacozon to obtain information on the large-scale structure of the universe. To explore the changes in different stages of the universe, the temperature of relic radiation and its spatial features are studied. In addition, various cosmological models are being built for the universe as a whole. Each of these models should take into account the expansion of the universe. Cosmological models are being built on modern features of the space and place (gravity theory), the field of quantum theory, theory of major combination and the theory of elementary particles.

At the same time, the total of all the observed facts of the universe must be taken into account. The known and unknown characteristics of the creation of the universe have always drawn attention of the human race. Despite all the efforts of scholars in this area, it was not possible to make any progress in this direction for a long time .

After the cosmological expansion of the universe in the twentieth century, it was possible to clarify some issues about its evolution.

It should be noted that two views of the universe were existed until the 30^s of the 20^{th} century. Scientific and religious worldview.

According to the scientific world meeting, the universe has been caused by itself from infinitely as a result of the self-natural physical processes. As it does not have a beginning of its creation, there is no end. According to the religious outlook, since certain time, the universe has been created from nothing by the owner of the infinite power, Almighty Allah. As its creation have a beginning, there is an end.

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In 1929, the General Law of Galaxies distancing from each other was put forward by the American scientist Edwin Hubble and right after this, certain progress in this field became possible.

It should be noted that 750-800 years before this event, it was possible to locate certain philosophical ideas on cosmology and the structure of the world in Nizami Ganjavi's works. It is very interesting that these philosophical thoughts are compatible with modern cosmological ideas.

ANALYSIS OF THE WORKS OF NIZAMI GANJAVI AND HIS NATIONAL IDENTITY

In this case, we decided to clarify the issue of Nizami Ganjavi's national identity. For this purpose, pay attention to the part of the language of the work on the text of the Iranian Shah Don Akhsita's Writing "Leyli and Majnun":

This new bride, when works hard,
Ornate it with jewelry by Persian, the Arabic language.
I know the word, you know that,
I quickly choose the new from the old.

Bu təzə gəlinə, çəkəndə zəhmət, Fars, ərəb diliylə vur ona zinət. Sözün sərrafiyam, sən ki, bilirsən, Təzəni köhnədən tez seçirəm mən.

According to logic, if Nizami Ganjavi was Persian or Arabic, then why Akhsita reminds him writing his work in one of these languages. Let's give an example of another part.

Turkish is not useful for our Shah generation,
The Turkish language brings us to the deficiency.
Türk dili yaramaz şah nəslimizə,
Əskiklik gətirər türk dili bizə.

Or in another part of the work, which is a continuation of these verses, the poet is negatively affected by these verses, as follows:

My ear fell into the ring of care. Blood hit my brain, my lips swelled. How dare I run away from home. I did not have eyes, I will open the treasure.

Qulluq halqasına düşdü qulağım. Qan vurdu beynimə, əsdi dodağım. Nə cürətim vardı ki, evdən qaçam. Nə də gözüm vardı, xəzinə açam.

It is clear that Nizami's nationality is Turkish. Otherwise, Shah Akhsita would not write to Nizami not to compose in Turkish. If the Great Wise Nizami Ganjavi was Persian, then why did he have to write his "Leyli and Majnun" poem in Turkish? Why did the statements about the Turkish language of Axhita, should annoy our great poet? It comes to us so that according to simple logic and judgment, the above-mentioned verses clearly clarify the issue of Nizami Ganjavi's national identity. That is, the issue of Nizami Ganjavi's national identity is not a subject of controversy. Because in the above-mentioned verses, the poet wrote unequivocally he was Turkish. Since this issue is out of our topic, it is sufficient to talk about it. Even if Nizami was not a Turk, why should the humiliation of the Turkish language by the shah have affected him badly?

NIZAMI GANJAVI'S COSMOLOGICAL OUTLOOK

The idea, on the form of the planet Earth on which we dwell was in the form of a globe, , its rotation and movement, was opposite to the views supported by the Roman Catholic Church until the XV-XVI centuries. As it is known, in 1600, Cordano Bruno was burned alive in bonfire because he was preaching Nikolai Copernik's ideas that the Earth was not in the center of the universe and it was moving. At that time, the cosmological dogma, which was accepted by all scholars in the world, was that the Earth was in the center of the world and it was stable. All planets, including the Sun and the Moon, cycle around the Earth. This view was called a geocentric system. He believed that the center of the world was the planet Earth where we live on its surface. This worldview, as a dogma, had been in a dominant position for about 2500-3000 years.

Interestingly, 400 years ago, our genius poet, Nizami Ganjavi, a great thinker and philosopher, wrote in his "Leyli and Majnun":

It is not the only Earth in the form of the globe, Every line that rotates, is round, know this. Bu kürə şəklində yalnız yer deyil, Hər xətt ki, hərlənir yuvarlaqdır, bil. AJAz: 2021, Special Issue 42-48

Or, in Khosrov and Shirin, Nizami opposes the thoughts of Greek philosophers about the world's center and that it is immovable, and he criticizes these opinions and points out that they are wrong by alluding the fact that the prrophet Abraham devastated the idols:

Why is the Earthstable, stars mobile? Who said, "Go" to him, "Keep decision"? The stars dress the gown and painted color, It was as if they were ready for worship, Amazement was making me a hundred ways, Zunnar, which closes in such a temple, But when a surprise is excited, The vote came from the obscurity: -Nizami, stop! Nə üçün yer sabitdir, ulduzlar səyyar? Kim ona "get" dedi, buna "tut qərar"? Ulduzlar don gevib rəngə boyanmıs, Sanki ibadətə hazır dayanmış, Heyrət məni yüz yol edirdi vadar, Belə bütxanədə bağlayım zünnar, Lakin heyrət coşub daşdığı zaman, Qeybdən səs gəldi: -Nizami, dayan!

It is clear from these verses, which we show as an example, it is clear that Nizami Ganjavi promoted many progressive cosmological ideas for his time and allotted a place in his works. He put forward valuable ideas related to the fact that the Earth is moving and revolving around its orbit.

The vast majority of people are aware of the World Gravity Law of I. Newton. It is a popular law, played an important role in understanding the world and forming the laws of Physics. As it is known, it was put forward in 1687. Approximately 450 years ago, Nizami Ganjavi displayed that the Earth has Garvity Law in the form of poetry in his works as follows:

Smoke up the rise from this creek,
Two-Three walks in the wind Ruzgar,
Then it turns backwards,
Will fall to the head of the Earth.
If a cloud is up in the desert,
Rising up to a certain point.
Flying to the peak of height,

But again, it does not exceed its limit.

Tüstü bu dərədən qalxar yuxarı,
İki-üç cidalıq gəzər ruzgarı,
Sonra əyilərək geriyə dönər,
Bu yer kürəsinin başına enər.
Səhradan bir bulud qalxarsa əgər,
Ucalar müəyyən nöqtəyə qədər.
Uçar ucalığın son zirvəsinə,
Lakin o sərhəddən aşammaz yenə.

It is clear from these verses that as the smoke and the cloud are light, irrespective of the height they rose, the gravity of the earth returns them to the ground. It should be noted that since people did not take into account the gravity of the Earth, they could not fly into space. From this poet, it also clearly seems that the genius poet and great philosopher, in his works, Nizami Ganjavi mentions the form of the Earth as sphere and it is in the movement.

The owner of the Great Wisdom, philosopher, thinker Nizami Ganjavi, thought about how the world (the universe) had been created, and he wanted to clarify these issues in his own way in his works. As you read the works of Nizami, you become sure that Nizami had got acquainted with the work of Greek philosophers. In his works, he also benefited from the worldview of those philosophers and introduced his own opinions about the creation of the world. In some cases, he expressed his thoughts, from the perspective of a number of well-known philosophers.

In the endless universe, is there an orientation? Within infinite distance, I wonder if it has dimension. Sonsuz Kainatda, məgər bir istiqamətmi var? Sonsuz uzaqlıqların, məgər bir ölçüsümü var.

It should be noted that based on modern cosmological models currently available, the principle is that the universe one-of-its-kind and isotropic. In his works, our thinker poet writes that the universe is isotroped, thus it lacks the chosen direction. However, the views on this were put forward in the 1950s. Currently, it is considered that the universe is endless and always expanding. There are several facts of astronomical observations that confirm this. It should be noted that since the universe is expanding, for this moment, it is finite, but its size is endless because it continues to expand. We coincide with the fact that the universe is endless in the piece we brought from the work of our poet.

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Let's look at another piece.

Ask all people right now:

How was the world created from the gap.

The heavens with unopened science yet,

But laughing in every science is a morning

Those whos are wise when they see a reason

They understand that the One created that,

Nizami, walk away from these ideas,

Do not fall in the trap of this world.

Bütün insanlara sual ver bu dəm:

Nə yolla yarandı boşluqdan aləm.

Hələ açılmamış elm ilə göylər,

Lakin hər elm də gülür bir səhər.

Bir səbəb gördükdə arif olanlar

Anlar ki, yaratmış onu səbəbkar, Nizami, uzaqlaş bu fikirlərdən, Düşmə bu dünyanın tələsinə sən.

Our great poet in the verses we brought as an example above talks about the idea that the universe was created out of nothing. It should be noted that all modern cosmological studies indeed indicate that the universe was created from the gap. It is true that it is opposite to one of the fundamental laws of Physics, which is the law of conservation of energy. Taking into account the complexity of this problem, the poet, in the end, writes "... walk away from these ideas and do not fall in the trap of this world," he concludes. The poet later notes that the solution to this complex issue will be announced depending on the development of science. He calls to deal with science by saying "Laughing in every science is a morning". He promotes the importance of scientific activity. In another work of the poet, he says, "The force is in science, no one else can judge anyone else," There is no need to think about how valuable these ideas are. The poet himself explicitly declares each issue.

Thus, as you peruse works of the Great Duha, Nizami, you cannot become surprised how much a person who had not gone beyond the city of Ganja gained such amount of knowledge. As you read Nizami's works, you see that the analysis of the poet's works has a great need, and indeed, his works have not yet been completely analyzed. You can write a lot about the works of Nizami and there are many words. However, we were able to reflect so much in this small article.

CONCLUSION

- 1.Nizami Ganjavi openly stated his being Turkish in the work of "Leyli and Majnun".
- 2. The scientific worldview in Nizami Ganjavi's works is widely promoted. The importance of education and science is promoted in all works of the poet.
- 3. The worldview of Nizami Ganjavi's on the creation of the universe and the regularities of the universe is compatible with modern cosmological models.

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