

SHEIKH MUHAMMADALI BABAKUHI BAKUVI

Although Azerbaijan is not a very large country, it has always been notable for its distinguished poets and thinkers, given that science, culture, art and literature were the focus of attention here in the early Middle Ages and skillful experts were nurtured for the development of these fields. Moreover, Azerbaijani scientists have been interested in the scientific processes of the countries located near Azerbaijan's borders and continued their research in those countries as well.

Academician Ziya Bunyadov mentioned that some Azerbaijani scientists had taught different sciences and carried out researches in Baghdad, Mosul, Alexandria, Aden, Cairo and cities in other Arab countries in the early Middle Ages. It means that there were high-level education centers in most cities of Azerbaijan at that time.

Professor N. K. Keremov noted that Azerbaijani geographers and travelers played a significant role in the

collection of accurate and precise information about the nature, population and economy of the Caucasus and Middle Asia, Near and Far East, India and northern Africa (1).

N. K. Keremov was right, because most remarkable personalities of Azerbaijan travelled to different countries and collected very interesting information since the early Middle Ages. One of them was poet, scientist, philosopher, traveler and cosmographer Sheikh Muhammadali Babakuhi Bakuvi (931/32-1051). Orientalist and researcher Y. E. Bertels had written his whole name as "Sheikh Muhammadali Abu Abdullah Muhammad ibn Abdullah ibn Ubaydullah ibn Ahmed Shirvani Babakuhi Bakuvi".

Sheikh Abdullah Ansari, Abdurrahman Jami and Aliajdar Saidzadeh thought that Babakuhi had travelled to Iran, Middle Asia, Arabia and India. Professor Eybali Mehraliyev had also written about it. "Sh. M. Babakuhi had travelled to Iran, Middle Asia and India over more than 20 years. He met local scientists, shared his views on the development of some movements in the Muslim world and the learned traditions of indigenous population during his travels..." (2)

Babakuhi was aware of the existence of the world ocean, just like the scientists of the ancient times. This conclusion can be made after reading his poem:

*There is a very rich nature
In the endless and large sea
So, sages know its value. (3)*







Sh. M. Babakuhi used to describe the nature and travel routes in his ghazals. He had described the shape of the Earth in one of his poems too:

*Your love was a white cock,
The Earth resembled an egg,
Its yolk is the Sun,
The nature has put it in the centre. (4)*

Professor Eybali Mehraliyev explained the poem as follows: "The scientific explanations of the poet were made as explanations of love. When the poet described the Earth as an egg, he explained the main features of the universe's heliocentric system. Besides, he explained it as a natural law. His scientific thoughts have not lost their significance to this day. It was impossible to write down such ideas differently at the time when Islam had just begun to spread. Babakuhi's explanation was made 30-40 years before that of Abu Raihan Al-Biruni from Khwarezm and was a very resolute thought about the heliocentric structure of the universe. Moreover, this explanation was made 500 years before a corresponding discovery of Pole scientist Nicolaus Copernicus... On the other hand, the poet described the Earth as an egg, the Sun as an egg yolk and hinted at the creator of biological processes by emphasizing the word "cock". But Babakuhi's thoughts had not been described openly." (5)

The word "world egg" is used for the Earth in Sufist cosmography. (6)

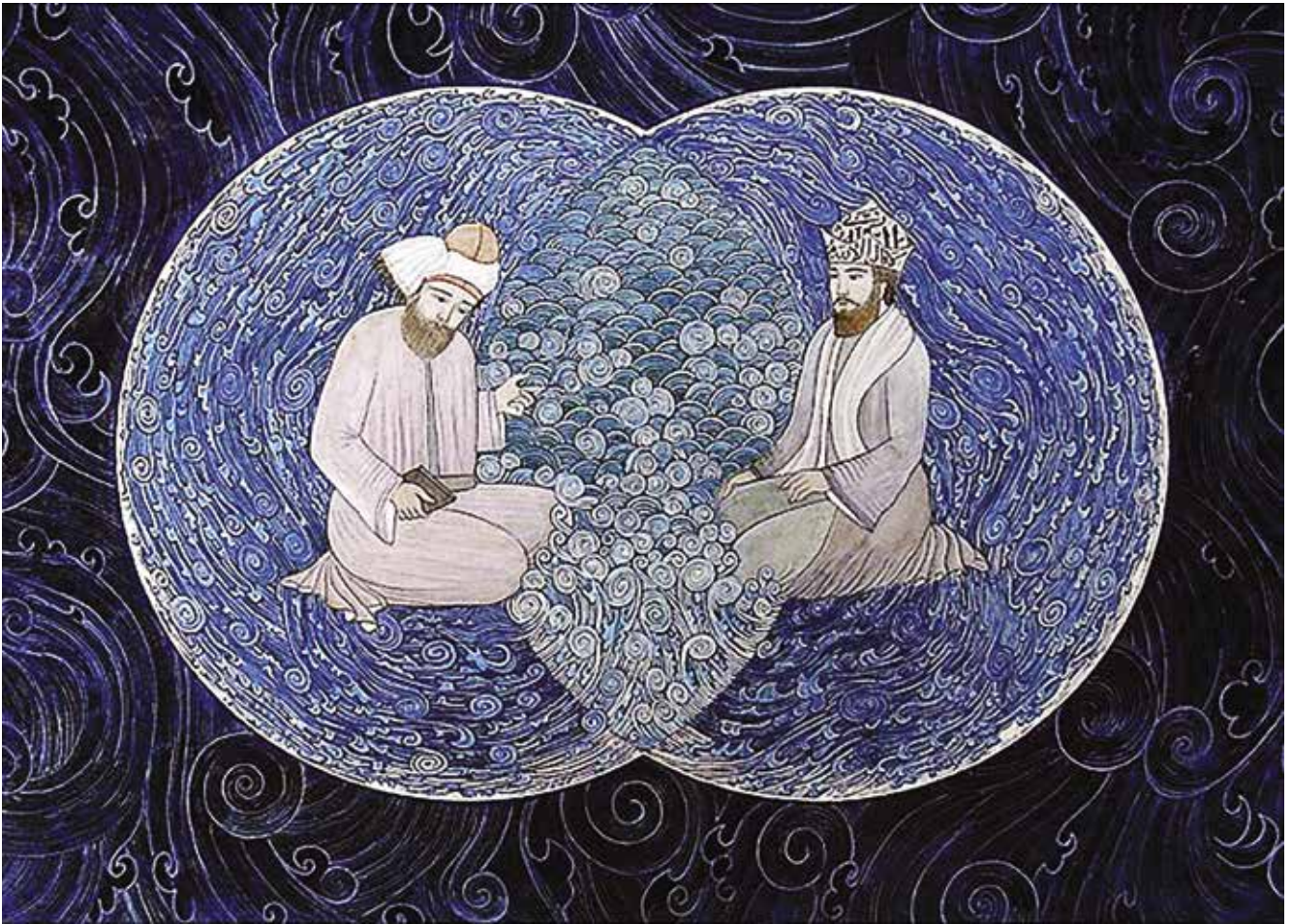
However, to my mind, Babakuhi described the universe in the above-mentioned poem. He referred to human love as a white cock, and the word "white cock" may be used for our galaxy.

The scientist described the world as the universe and the Sun as an egg yolk located inside it in the hemistich "The Earth resembled an egg". In the hemistich "The nature has put it in the centre" Babakuhi sought to note that the Sun was a fixed planet. It means that the Sun could not revolve around the Earth, but the Earth could revolve around the Sun. The scientist surpassed Copernicus by 500 years with this poem. Probably, Babakuhi was the author of scientific *treatises* too. He knew astronomy as well as most of the well-known scientists of the Near East. Most likely, Babakuhi had improved his knowledge about the structure of the Earth and sky owing to Ebul Vefa, Abdurrahman Al-Sufi, Abu Raihan Al-Biruni, Hamid Al-Khojandi and Abu Nasri ibn Iraq.

There is no information available about a direct meeting of Babakuhi and the mentioned scientists in known historical documents. However, presumably, he had communicated with them. Orientalists have to carry out researches in public libraries and the manuscript funds of Tehran, Shiraz and Hamadan in order to find historical documents. Babakuhi read the works of Hussein Al-Khwarizmi, Al-Farabi, Abu Ali ibn Sina, Al-Balkhi, Abu Raihan Al-Biruni, Naser Khosrow and other scientists when he was in Khwarezm. He also met some scientists there. Thus, Babakuhi had communicated with well-known scientists of the East.

Most of the scientist's works are still available. It should be kept in mind that the scientist, who lived 120 years, visited Maragha, Hamadan, Khorasan, Baghdad, Isfahan, Rey and other cities and participated in scientific meetings held there. It is beyond doubt that the works of the scientist could be kept in the libraries located in the Maragha observatory founded by Rashidaddin and Nasiraddin Tusi. Tusi's cosmographic thoughts couldn't influence the thoughts of the remarkable astronomer and mathematician.

Though there was no observatory in Azerbaijan in the X and XI centuries, astronomy and geography were highly developed. Babakuhi described the Earth, universe and galaxy before Nasiraddin Tusi in his poems. He mentioned that the universe was surrounded by space bodies and the Earth was part of it. The Sun was a fixed planet. Most parts of the Earth were covered with the



World Ocean, a great sea. It means that Babakuhi was aware of the existence of the heliocentric system.

It is noteworthy that Greek scientists had a significant role to play in the intensive development of astronomy by Oriental scientists, because well-known scientists of the East used to read the works of Greek scientists before they started their activities. The influence of Greek scientific schools was very important in the regions of the Near East in the early Middle Ages. Most scientists accepted this fact.

Though some authors approved of the establishment of an Islamic union, science and philosophy of the Greeks had spread in the Near East and Iran by means of political and economic relations of the Byzantine Empire after the first part of the V century. Nestorian teachers taught Greek philosophy in Syria and Lebanon. Since the Nestorian school was closed in 431 because of the church, those teachers moved to Iran and began to translate the works of Greek scientists into Arabic. (7)

Even in 1149, Khaghani Shirvani was a friend of the Byzantine princess Comnena. (8) ◆

References:

1. Керемов Н.К. Путешествие Гудси. Москва, "Мысль", 1977. стр. 5
2. Mehraliyev E. Babakuhi Bakuvi (Nişapuri, Şirazi) və Pirhüseyn Şirvani. Bakı, "Nafta-Press". 2002. səh. 37
3. Перевод на азербайджанский язык. Э. Мехралиев.
4. Перевод на азербайджанский язык. Э. Мехралиев.
5. Mehraliyev E. Babakuhi Bakuvi (Nişapuri, Şirazi) və Pirhüseyn Şirvani. Bakı, "Nafta-Press". 2002. səh. 37
6. Бертельс Е. Я. Суфизм и Суфийская литература. Москва, 1965. стр. 283, 284
7. Исаченко А. А. Развитие географических идей. Москва, "Мысль", 1971. стр. 11
8. Kəndli-Herisçi Q.. Xaqani Şirvani. Bakı, 1988. səh. 517