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DEMOCRITUS' VIEWS ON ATOMS IN THE INTERPRETATION OF BERUNI AND IBN SINA

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ABSTRACT: - This article provides brief information about the scientific and philosophical heritage of Beruni and Ibn Sina, who played an important role in the development of the philosophical thought of the Early Renaissance, as well as the importance of correspondence, which is considered one of the most important scientific and philosophical heritage of the 11th century, the opinions of our great scientists about teachings of the ancient Greek philosophers.

KEYWORDS: Abu Rayhan Beruni, Abu Ali ibn Sina, Correspondence of Beruni and Ibn Sina, Arithmetic of Hind, Euclid and Ptolemy, Isfahan Observatory, atom, "About Heaven", "Physics", atomistic doctrine, "Sam' al-Kiyan"

INTRODUCTION

Thinkers who have made a great contribution to the development of world science are not limited to the scientific and philosophical works of Abu Rayhan Beruni and Abu Ali ibn Sina and the merits of other great thinkers, their scientific works and works, but also to the fact that they founded scientific schools that left a deep mark on the history of mankind. Based on this, it is important to pay special attention to the communication and correspondence between Abu Rayhan Beruni and Abu Ali ibn Sina.

In the process of democratic reforms and further development of civil society in Uzbekistan, it is important to objectively and impartially study the scientific-philosophical correspondence of thinkers Abu Raykhan Beruni and Abu Ali ibn Sina, who made an incomparable contribution to the development of world science, in the spirit of the historical period.

THE MAIN FINDINGS AND RESULTS

After our country gained its independence, the rich heritage of our great ancestors was recorded in the scientific and philosophical

correspondence of Beruni and Ibn Sina, but the 18 questions of Beruni regarding Aristotle's "On the Sky" and "Physics" and Ibn Sina's answers to them are the first to be found in Uzbek and Russian. languages was published in 1972 in Tashkent [1], we can have certain information about them in scientific research conducted by well-known philosophers and scientists of Uzbekistan. One of the interpreters of the questions and answers, a shark expert, is prof. Yu.N. Zavadovsky "The idea that Ibn Sina was mainly a philosopher, which is widespread in scientific studies, is not only an outdated idea, but also a wrong idea [2]."

Ancient Greek civilization and one of its major representatives, Aristotle's views on existence, the scientific and philosophical teachings of Ibn Sina and Beruni, the great scholars of the Renaissance, which flourished in Central Asia, serve as a connecting bridge between Eastern and Western civilizations.

The diversity and universality of the scientific researches of Beruni and Ibn Sina is a unique phenomenon.

Obviously, some scientific and philosophical issues discussed in the correspondence of Beruni and Ibn Sina were also analyzed in their major fundamental works.

In other words, in the field of exact sciences, they introduced a lot of innovations to the concepts of the Greeks in the fields of science and enriched these areas. For example, Ibn Sina mastered Indian arithmetic, mathematical concepts from the works of Greek scientists Euclid and Ptolemy, engaged in regular astronomical practice while living in Isfahan, and established an observatory in Isfahan, managed it in 1024-1032, conducted observations, and wrote several treatises in the field. Beruni also raised the fundamental issues of science, especially the theories about existence [3].

Now let's turn to the issue of how thinkers based their views on atoms on the basis of different approaches in direct correspondence.

The coordinates of all particles in the universe and their impact on us, the strength of the interaction between them, is an important issue of different interpretations of these views among scientists.

Part of Beruni's and Ibn Sina's scientific and philosophical correspondence is also focused on this issue. In his fourth question, Beruni specifically stated that he wanted to know Ibn Sina's opinion on his views on atoms.

The existence of bodies in different forms and their connection with each other, influence and constant movement is not only at the macro-mega level, but also how it happens in the macro world is one of the main topics of the Bakhshs of Beruni and Ibn Sina. In his ontological teaching, Aristotle also responds to Democritus' views on atoms. In his opinion, he considers the concept of indivisible particles to be a concept with a relative character. That is why Beruni asked his fourth question why Aristotle does not agree with those who say that there are indivisible particles (i.e. atoms)? gives in the form of.

It should be noted that Beruni basically supports Aristotle's opinion, and in his question to Ibn Sina, he made his position clear and expressed the opinion that people who say that there is an indivisible part should have many more objections. From a philosophical point of view, Ibn Sina's attitude to Beruni's solution to this issue is interesting and noteworthy.

Ibn Sina elaborates on the works of Aristotle and explains this issue in the 6th article of his treatise "Sam' al-Kiyan" on the basis of strong arguments and Ibn Sina describes what kind of body an indivisible part is. Any indivisible piece

(that is, in the sense of a particle) is said to be something without two sides. Aretotel's views are defended and developed by Ibn Sina. Ibn Sina clarifies that the meaning of Aristotle's words that every part is divided into something infinite does not mean that it is divided forever. As long as every body has a center, that is, a core, and its two sides. Ibn Sina answered in his answers, "So, some parts can be divided between these sides" and some bodies cannot be divided because they are very small [4].

Ibn Sina, understanding Beruni's question and his opinion, expresses his opinion, which finds its confirmation in the current atomistic doctrine. Fine particles are divided into the smallest pieces and are always in motion. It is known that all the elements that make up the atom (elements) are in constant motion and "if he had not refrained from speaking excessively long words, I would have mentioned this" Ibn Sina said at the end of his answers [5].

CONCLUSION

Their scientific-philosophical debates, especially in the well-known and famous questions and answers in the history of science, discussed some philosophical issues that are still waiting for their solution. Beruni and Ibn Sina are considered to be great thinkers and encyclopedist scientists who created during the early renaissance of the East and made a great contribution to the development of scientific and philosophical thinking. The two thinkers' views on the universe, revealed during their scientific observations, serve as one of the scientific-philosophical bases of our national ideology and meaningful values.

REFERENCES

1. Toychiev B.T. Correspondence between Beruni and Ibn Sina based on Aristotle's work "On Heaven". News of UzMU, June 1, 2017
2. Yu.N.Zavadovsky Ibn Sina and his philosophical correspondence with Beruni. Materials of the scientific session of the Academy of Sciences of Uzbekistan dedicated to the 1000th anniversary of Ibn Sina. Tshkent: 1953, p.47
3. Toychiev B. Beruni and Ibn Sina. Tashkent: 2020, "Ijod print" page 7
4. Snow C.P. Variety of man: Statesmen Scientists, Writers-London, Penguin 1969;
5. Toychiev B. Beruni and Ibn Sina. Tashkent: 2020, "Ijod print" page 101