



## ONTOLOGICAL ISSUES OF THE LEGACY OF ABU RAYKHAN BERUNI AND ABU ALI IBN SINA

Rakhmonova Dilnoza Rustamovna

assistant at the Tashkent Institute of Textile and Light Industry,  
independent researcher

<https://doi.org/10.5281/zenodo.8414298>

**Abstract.** The article, in a comparative vein, scientifically substantiates the views on existence and knowledge in the heritage of Abu Rayhan Beruni and Abu Ali ibn Sina. From the history of philosophy we know that there were different views and teachings about existence. The concept of existence is a comprehensive concept, a universal philosophical concept, including materiality and spirituality, past and future, objective and subjective reality, death and life, spirit and body.

**Keywords:** ontology, being, meanings, experiment, philosophy, science, science, development, matter, change, development.

As noted in the sources, “the separation and establishment of natural sciences as an independent field actually occurred in Europe not in the 17th century, but in the 9th-11th centuries thanks to the tireless research of Central Asian thinkers” [1, p. thirty].

Philosophy, formed in the ancient East and West, is a prelude to science, science and the spiritual development of humanity. Regardless of their development, uniqueness and uniqueness, they share some common patterns. According to Abu Rayhan Beruni, nature is constantly changing and developing, matter creates and changes the shape of things, the soul (thought, spiritual phenomena) is an important property of the body. It is known that experience is one of the methods of cognition of existence. Beruni writes: “Only experience and repeated verification can eliminate my doubt... despite the unanimity of the speakers, its authenticity is not confirmed by experience” [2, p.44].

According to the researchers, “Beruni can with good reason be considered one of the creators of the empirical method in medieval science. He conducted a number of experiments to determine the properties and specific gravity of metals and minerals” [3, p. 39]. Experienced knowledge is interpreted by the thinker as reliable knowledge according to certain standards. Among them, we can note the observability of objects, the reproducibility of experiments and the verifiability of observations. These considerations allow us to say that experience as a method of acquiring knowledge and testing its reliability was quite common even in the medieval period. It is important that the idea is developed and the acquisition of reliable knowledge is associated with experience, the reliability of the knowledge is verified by experience.

Observation plays an important role in Beruni's work. In the scientific study of nature, observation is interconnected with other forms of knowledge. According to Beruni, the observer perceives the observed phenomenon in the place where it occurs [2, p.57]. Consequently, observation records this or that phenomenon in its specific form [2, p.260]. Old observational data can greatly distort the true characteristics of an object. Beruni notes that the experiment conducted by the researcher and its result are practically reliable. He writes:

“There is no other priority program other than testing; there is no program leading to success other than testing by experience” [2, p. 340].

With the help of astronomical observations, Beruni tried to solve complex problems such as eclipses of the Moon and the Sun, their impact on life on Earth, climate, natural and artificial selection, conservation, developmental anomalies, with the help of new progressive methods and theoretical principles. .

In the Far East, astronomy occupies one of the leading places in the history of the creation and development of observation instrument technology. He paid special attention to improving the old instruments used at that time in scientific research and creating new ones. The scientist was interested in the possibility of creating observation devices that were highly accurate and perfect.

Thus, one of the great merits of alloma can be considered the awareness of the states of celestial bodies not only through instruments, but also by the nature of the object being studied. This methodological goal played an important role in the search for new ways and means of scientific knowledge, despite the limited scope of scientific research.

Historical sources of the Eastern Renaissance period contain information that there were many questions and answers between Abu Rayhan Beruni and Abu Ali ibn Sina. Of course, both scientists responded to the philosophy of existence in terms of clarifying its issues, especially astronomy, physics and logic.

Ibn Sina put forward the opinion that nature is eternal and eternal, its laws do not change by themselves and man is capable of understanding them, the soul is determined by the activities of the body, and its individual eternity is impossible. At that time there was no science that he did not study. In addition to medicine, Ibn Sina actively studied philosophy, especially the theory of knowledge.

Ibn Sina considers objects of the material world as a source of sensations and illuminates their objective nature as a reflection of the external material world. Moreover, he recognizes sensation as one of the properties of matter. Alloma connects feelings with higher forms of matter. Classifying existing things, Ibn Sina notes that intuition is characteristic of bodies called animals [4, p.128].

Ibn Sina considers the Neoplatonic doctrine that the soul perceives sensible things without any part of the body to be unfounded. “In ancient times, some scientists (Neoplatonists) hypothesized that the soul perceives things directly, without any organs. In the case of the medium, the medium for vision is, for example, air, and in the case of organs, the organ of vision is the eye. However, they are far from the truth, because if sensory perception occurred in the soul itself without these organs, then these organs would have been created in vain, there would be no benefit from them,” he writes, emphasizing that the views of the Neoplatons are incorrect. unfounded, but the truth is that sensations require body parts [5, 265-266-bb.], - he comes to the conclusion.

When Ibn Sina talks about sensations and sense organs, he is trying to scientifically explain the mechanism of the occurrence of a particular sensation. In his opinion, no body can have sound by itself. Sound is created by the vibration of the air and the movement when two objects collide. These waves travel very quickly. Having reached the ear, the vibrating air touches the auditory nerves and communicates to the soul [6, p.265]. Although this description is rather simplified, it corresponds to current understanding. This also shows that Ibn Sina did not yet perceive sensations as a subjective image of the objective world.

Explaining sensations as the movement of external influences in the body, Ibn Sina interprets them mechanically.

Ibn Sina developed the doctrine of vision. Explaining the process of vision, he at the same time shows the inconsistency of Plato's teaching about it. Ibn Sina specifically mentions light as the main means of vision [5, p.224]. Alloma studied sensations and all forms of feelings and tried to explain their physiological basis, that is, the location of sensory centers in the structure of the brain. Interpreting the brain as the main apparatus of reflective activity, Ibn Sina associated the form of emotional cognition with the brain and recognized that it is the basis of perception and perception [6, p.38].

According to the teachings of Ibn Sina, perception does not depend only on the reflective system. The sensory center is located in the front part of the brain, the imagination center is in the middle part of the brain, and the ability to remember is in the back part of the brain. In *Kitab un-najot*, Ibn Sina, exploring the physiological basis of each sensation, notes that nerves play an important role in the process of emotional cognition. According to him, the brain transmits sensations and actions to other human organs through nerves. Nerves serve as conductors for the brain [6, p.41]. According to generally known ideas, nerves begin in the brain, and their branches end on the surface of the skin [6, p.99]. As we have seen, Ibn Sina attempts to scientifically explain the physical and physiological basis of emotional cognition.

Ibn Sina, like other thinkers of Central Asia, classifies imagination as an internal sense. A comparative study of Ibn Sina's philosophical heritage shows that he relied on a unified approach to understanding the nature and epistemological function of the imagination. Ibn Sina notes that the power of imagination lies in the fact that everything that reaches common sense reaches our senses [6, p.99].

Thus, according to Ibn Sina, the epistemological function of the imagination is that it embodies images of external things, retains them in memory even after the disappearance of sensory perception. According to Ibn Sina, the essence manifests itself in three ways. Firstly, things are reflected in the senses in the process of observing them. What is meant here is that things are directly reflected in the senses. Ibn Sina raises the issue of levels of cognition, while noting the concept of perception as a process of cognition. It is known that this goal was developed in the philosophy of the New Age and found its gradual embodiment in German classical philosophy [9, p.83].

Secondly, the essence of what actually does not exist in objective existence is understood [10, p.30]. Here it is supposed to understand the nature of idealized objects that acquire formal meaning and are not associated with material existence. This essence shows the creative abilities of the human mind.

Thirdly, the image of a thing, under certain conditions, can be clearly reflected in the soul of the knower. This principle refers to the power of abstraction, which allows us to abstract an object from the connections in which it is perceived. In this case, the image of an object can be reflected despite the absence of its substrate. Based on this, Ibn Sina notes that abstraction plays an important role in rational knowledge. "Cognition is a process consisting of several interconnected stages of abstraction of the image of an object, as a result of which a concept is created in the mind of the knower that represents the essence and characteristics of the object. There are four stages of such abstraction" [7, p. 31].

Ibn Sina includes "general intuition" among internal intuitions. In his opinion, general feeling is a force located in the anterior part of the brain, which independently perceives all

forms reflected by the five senses and the force that they transmit [8, p.266]. Therefore, according to Ibn Sina, feelings obtained through the senses are combined by means of common sense and an emotional image of the object is created. By the image of alloma we mean the totality of external signs and properties of a thing, the random aspects of matter. For example, speaking about a person and his image, he writes: "His image is his length, width, quality, quantity and his condition, that is, everything that relates to a person" [8, p.267]. The above-mentioned ideas of Ibn Sina were developed and enriched with new results in later periods of the formation of scientific thinking.

In conclusion, it is worth saying that the ultimate goal of the cognitive process is a complex process consisting in knowing the essence of objects. Central Asian thinkers of the Middle Ages mainly proceeded from the point of view that knowledge is a reflection of the cognizable object. The human sense organs are the direct connecting link in this, i.e. the source of knowledge is the objective world, cognizable through the senses.

### References:

1. Tahir Karim. The genius of Beruni. -Tashkent, 2007. - B.30.
2. Abu Rayhan al-Biruni. Selected works in 9 volumes -T. 3. - Tashkent, 2022. - P. 44.
3. Khairullaev M. Philosophical heritage of the peoples of Central Asia and the struggle of ideas. - Fergana, 1988. - P.39.
4. Ibn Sina. Treatise on the division of existing things. - Tashkent: Shark, 1983. - P. 128.
5. Ibn Sina. Book of Exile. - Tashkent: Fan, 1967. - P. 265-266.
6. Ibn Sina. Canon of medical science. Book 1. - Tashkent: Fan, 1996. - P 260-261.
7. Ibn Sina. Book of Salvation. - Tashkent: Shark, 1986. - P 224.
8. Ibn Sina. Notification. - Tashkent: Fan, 1976. - P. 264.
9. Masharipova G.K. The influence of the natural science and philosophical heritage of Abu Ali ibn Sina on the development of social thinking. Monograph. – Tashkent, publishing house "Navruz", 2020. – 144 p.
10. Ibn Sina. Selected philosophical works. - Moscow: Science, 1980. - B.30.

