



## Intention of Rationality in the Research Practice of Central Asian Thinkers

**Kushakov Shuxrat Saliyevich**

Doctor of Sciences Philosophy, professor  
Professor of the Department of Social Sciences  
Samarkand institute of economics and service, Uzbekistan  
Email: [Kushakov690@scientifictext.ru](mailto:Kushakov690@scientifictext.ru)

**Abstract:** the paper considers the use of the norms of scientific rationality in the research practice of Central Asian thinkers during the first wave of the socio-cultural Renaissance (VIII-IX centuries). The scientific and logical-methodological ideas of thinkers (Beruni and Ibn Sina) concerning the nature of scientific knowledge, norms and principles of scientific rationality are analysed: objectivity, problematic, causality.

**Keywords:** science, rationality, norm, truth, principles, causality.

### Introduction And Validity

A large-scale socio-cultural phenomenon of medieval Islamic civilization was the Renaissance of culture and spirituality, the progress of the natural, social and human sciences. Philosophers and scientists of the Muslim East have made a great, and in many ways, original contribution to the development of the problems of philosophy, epistemology, theory and methodology of scientific knowledge.

It should be noted that the thinkers of the Muslim East creatively developed the theoretical provisions and conclusions of ancient science, made a step forward in terms of experimental research into nature, and used devices that were quite complex in design. Thus, the Arab Scientist Ibn al-Haytham used the action of a camera obscura to obtain an image of the Sun and the Moon. Studying the laws of reflection and refraction of light, he approached the organ of vision as an optical instrument. According to al-Bayhaqi, Ibn Sina invented a new instrument for observing celestial bodies [1, p. 52]. His older contemporary, the encyclopaedic scientist Abu Rayhan Biruni, made accurate determinations of the densities of metals using a "conical device" made by him. This attitude of thinkers to experimental research is based on the awareness of the need to use the norms of scientific reality in cognitive activity.

### Literature Analysis

Although Biruni considered it necessary to use the criteria and norms of scientific research, he nevertheless attached paramount importance to the ethical aspects of cognitive activity. According to his deep conviction, there is an inextricable link between the search for truth in science and morality. This caused the nomination by him, as a preliminary condition, of the moral imperative, which is the main principle of ethos. This is how Biruni formulates this principle: "... it



is first necessary to cleanse your soul of the (bad) properties that spoil most people, and from the reasons that make a person blind to the truth, that is, rooted habits, addiction, rivalry, submission to passions, struggle for power and the like. The method that I have mentioned is the best path to follow in order to reach the true goal, and the strongest assistant to eliminate the stains of doubt and uncertainty that obscure the truth, without this we will not be able to achieve what we want even at the cost of great work and persistent efforts" [2, c.11].

When studying any specific problem, the main criteria for knowing the truth for Biruni are the norms and principles of scientific rationality. First of all, it is the principle of objectivity. The authors of the preface to the book "India" show how this principle works in the research practice of the scientist himself and note that when Biruni worked on this work, he paid great attention to the accuracy of translation and citation, criticizes the Indian handwritten tradition, and makes guesses about gaps or distortions. In the text, offers his own understanding of the quoted passage. The scientist describes the material being studied "in a calm, neutral tone, builds a presentation on critically verified material, not only indicates the source of information, but also assesses its reliability and reliability" [3, p.45].

Biruni believed that the necessary criteria for the truth of knowledge are accuracy, evidence and reliability. In his work "Geodesy", he wrote that only those who, being a philosopher and a deep connoisseur of theory, are engaged in practice and are accurate in research, have the right to be called a true scientist [4, p.262].

### Results

Further development of the idea of scientific rationality gets in the writings of Ibn Sina. This was facilitated by the fact that the thinker specifically dealt with the problems of logic, wrote several works on this discipline. In them, along with the traditional questions of the logical structure of judgments and syllogisms, the methods of setting and solving scientific questions are also considered.

In the thinker's creative arsenal, rationality, as the main tool for comprehending the world, is split into its separate varieties (scientific-theoretical, metaphysical, theological, ethical-aesthetic, etc.) fastened into an integral system of norms and criteria for cognitive activity. The core-forming principle of this system is expressed in the position that any knowledge that is not weighed on the scales of the mind is not reliable and, therefore, is not true knowledge [5, p.62].

In the logical and methodological teaching of Ibn Sina, scientific and practical rationality is embodied in the identification and interpretation of the principles of description, explanation, definition, proof and problematicity. The study of these principles is carried out in logic, which is a science-measure. The norms of scientific-theoretical rationality, according to the thinker, are opposed by delusions, logical errors, refuted arguments and absurdity. So an example of an error, according to Ibn Sina, is the use of polysemantic words, metaphors and barbarisms in definitions.

A certain model of scientific rationality is the logical structure of the problem built by Ibn Sina, which he himself characterizes as an explanation of the types of scientific questions. Ibn Sina writes: "Scientific questions are divided into four types: First: "is there?" (hal) who asks about being or not being. Second: "what is it?" (ma'), who asks about the quality of the item. Third: "what? (ay)" who asks about specific subjects. Fourth: "why?" (lima) who asks about the reason" [5. c. 199].



### Conclusions

In the logical and methodological teaching of Ibn Sina, the defining principle or foundation is the principle of causality, which directs the research intention to search for the cause of the properties and characteristics of the object under study. The corresponding theoretical concepts and judgments act as necessary conceptual means: "Perfect knowledge in relation to a concept is such that it cognizes a thing through essence and definition, and in relation to a judgment it is such that it is a reliable judgment about all the causes of those things that have causes" [c. 152].

In conclusion, we can say the following: consideration of the logical-methodological and epistemological views of Beruni and Ibn Sina shows that they, without adhering to anyone's authorities in science, effectively applied the norms of scientific rationality in their research activities, skillfully used the heuristic potential of critical thinking. And this is the enduring value of their achievements, research experience and scientific heritage.

### References

1. Ал-Байхаки. "Китаб татимма сиван ал-хикма" // Багирова С.Г. Сочинение Ал-Байхаки. "Китаб татимма сиван ал-хикма" как образец средневекового энциклопедического справочника. Т.: "Фан", 1987. – С. 52.
2. Абу Рейхан Бируни. Памятники минувших поколений // Абу Рейхан Бируни. Избр. произв. Том 1. Т., 1957. – С. 11.
3. Халидов А.Б., Эрман В.Г. Предисловие к книге Бируни "Индия" // Абу Рейхан Бируни. Избранные произведения. Том 2. Т., 1963. – С. 45.
4. Абу Рейхан Бируни. Избранные произведения. Том 3. Т., 1966. – С. 262
5. Ибн Сина [Авиценна]. Книга знания // Избр. филос. произведения. М.: "Наука", 1980. – С. 62.
6. Ризаев И. И. и др. Коэволюционное развитие самоорганизации: взаимосвязь стабильности и нестабильности в социальной системе // Человек. Знак. Техника: II междунар. междисциплинар. молодеж. форум: [сб. ст.]. – Текст: электронный. – Текст: электронный. – 2022. – 2022.
7. Qahramonovich N. N. WORTHY DESCENDANTS OF THE SAMARKANDIANS: ENLIGHTENERS JADIDS // World Bulletin of Social Sciences. – 2022. – Т. 13. – С. 37-40.
8. Хаккулов Н. К. САМАРКАНД ЗЕМЛЯ ПРОСВЕТИТЕЛЕЙ ДЖАДИДОВ // Conferencea. – 2022. – С. 48-52.
9. Кушаков Ш. С. Семантическая виртуальность как понятие философии и науки // Вестник науки и образования. – 2020. – №. 12-2 (90). – С. 56-60.
10. Кушаков Ш. С. О ПОНЯТИИ СЕМАНТИЧЕСКОЙ ВИРТУАЛЬНОСТИ (постановка вопроса) // Инновации в технологиях и образовании. – 2019. – С. 71-74.
11. Кушаков Ш. С. Креативность как характеристика семантической виртуальности. – 2016.
12. Кушаков Ш. С. МЕТОДОЛОГИЧЕСКИЙ ПОЛИМОРФИЗМ В ЦИКЛОЛОГИИ.
13. Кушаков Ш. С. ЦИКЛОЛОГИЯ-СТАТУС, ПРЕДМЕТ И МЕТОДОЛОГИЯ ИССЛЕДОВАНИЯ // Материалы четвертой Международной конференции «Циклы». (Ставрополь. – 2002.



# Czech

## Journal of Multidisciplinary Innovations

**Volume 12, December, 2022.**

**Website:** [www.peerianjournal.com](http://www.peerianjournal.com)

**ISSN (E): 2788-0389**

**Email:** [editor@peerianjournal.com](mailto:editor@peerianjournal.com)

14. Кушаков Ш. С. Общая теория цикла и философия //Циклы. Материалы Пятой Международной конференции. – Т. 1. – С. 17.
15. Кушаков Ш. С. Некоторые размышления о философских основаниях общей теории цикла //Циклы Ч I. Ставрополь-Кисловодск. Сев. Кав ГТУ. – 2001. – С. 38-39.