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Abu Nasr Farabi: About the Factors in the Development of Science

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Annotation: ***Farabi, dealing with the theory of knowledge, says: science is a means of knowing the world. Sciences serve as a means of understanding the world. Disciplines are divided into theoretical and practical. The first group is logic, natural sciences, and metaphysics. The second is ethics and politics. Science has three main elements: a concrete subject, a convincing argument, and evidence. It has three sources: the senses, the mind, and the muscles. With the help of the senses and the mind, direct cognition is achieved. And thinking makes it possible to take things as a basis. Real science, I think, is based on thinking. Farabi sees logic as a weapon in separating truth from falsehood. therefore, the study of logic is extremely important for the science. logic is the basis of reason, because it reliably keeps you from making mistakes. logic is divided into two, based on its relation to reality according to Farabi. Section one: Theory of concepts and definitions. Section two: discussion, conclusion, and proof theory.***
Keywords: Category, substance, accident, concept, judgement, inference, apodictics, dialectics, sophistry, rhetoric, poetics, syllogism, deduction, induction, analogy.

Абу Наср Фараби: о факторах развития науки

Аннотация

Фараби, занимаясь вопросами теории познания, говорит: наука служит средством познания мира. Науки служат средством познания мира. Дисциплины подразделяются на теоретические и практические. Первая группа-логика, естественные науки и метафизика. Второе-этика и политика. Наука имеет три основных элемента: конкретный предмет, убедительный аргумент и доказательства. У него три источника: органы чувств, разум и размышление. С помощью органов чувств и разума достигается непосредственное познание. А мышление дает возможность взять за основу вещи. Реальные науки, я думаю, основаны на мышлении. Фараби видит логику как оружие в отделении истины от лжи. Поэтому Изучение логики необычайно важно для наук. Логика-это основа разума. Потому что он надежно удерживает вас от ошибок. Логика делится на две, исходя из ее отношения к действительности по Фараби. Раздел первый: теория понятий и определений. Второе: обсуждение, заключение и теория доказательств.

Ключевые слова: Категория, субстанция, акциденция, понятие, суждение, умозаключение, аподиктика, диалектика, софистика, риторика,

Farobi's views on scientific, philosophical concepts and their interrelationships play an important role in the study of conceptual-categorical means of science in modern times.

He devotes a special study of the nature of Farobi's concepts as forms of thought to his works, such as “Eysagoge”, or “The Introduction”, “Cataguria”, or “Categories”, “The Book of Letters”, and “The Introduction to Logic”. Interpreting concepts in the spirit of Aristotle's logic, that is, considering them to be higher rocks representing universal essences, he first focused on the study of the forms in which these concepts exist.

In the history of science, Plato, Aristotle, then al-Kindi, ar-Razi, and in the new era, F. The classification of sciences proposed by Bacon, Saint-Simon, Gegel, Auguste Comte, and others is well known.

Unlike Aristotle, the great thinker of the Eastern Renaissance, Pharoah did not consider concepts to be both the sexes of being and the sexes of knowledge at the same time, and sought to explain the difference in their meanings. In his view, rocks do not have a logical nature when taken as the most general properties of things, but consist of some phenomenon that can be understood. "They are called 'categories' when taken as universal concepts about emotionally perceptible objects and expressed through reflections." [3, 210-211] Farobi believes that concepts and categories reflect substances and accidents, that is, the most general, necessary features of objects. He writes: "Know that there is nothing but substance and accidents." [4, 91] Also, according to the scientist, we acquire things in the mind only when we know the essence of things, that is, their substance and accident [3, 160].

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Farobi often understands category as an opinion about substance. That is why the first of its ten well-known categories is "essence." According to the thinker, this category, which represents substance, expresses its content by subjugating the remaining nine higher rocks (quality, quantity, space, time, etc.) to which they belong. Going to concretize his idea, Farobi distinguishes between individual substances (“primary substances”), individual accidents, universal substances (“secondary substances”) and universal coincidences, and examines their relationship in the context of the movement of thought from individual concepts to the highest generalizations. According to him, for example, "Zayd" is an individual substance, "man" is a universal substance, "Zayd is an educated person" is an individual accident, and "educated person" is a universal accident.

It should be noted that Farobi’s approach to the study of categories is dialectical. In particular, he describes concepts as ideas in which the structural elements of considerations represent the subject and the predicate, the form of thought expressed by definition, the knowledge that expresses its nature in the description.

The thinker argues that the concepts used in thinking arise from the generalization of experimental results about a particular gender of objects and exist in the form of a logical conclusion derived from them. He says that the essences that are understood by the mind will be in material form until they become the real essence. These essences acquire the status of logical forms only when they become a contemplative, intelligible being. By studying the formation of notions of a particular gender of existing things in their relations with being, by considering concepts as reflections of the general features of emotionally perceptible objects, and thus by emphasizing the objectivity of the knowledge expressed in them, Farobi takes a clearer position than Aristotle. In particular, the great scholar states that universality, that is, the general, exists through individual objects, and, in turn, that individual objects exist through universals.

It is also noteworthy that the thinker attempts to identify differences in concepts with varying degrees of generalization. In his view, although all concepts emerge on the basis of emotional experience, they have different dimensions and meanings and enter into a gender-gender relationship. In particular, it distinguishes between simple concepts, general concepts, and logical (philosophical) categories. The concept of "Zayd" mentioned above is an example of a simple concept. Farobi, interpreting simple concepts as reflecting the concrete state of objects, interprets them as intellectually recognizable essences, but does not show a movement toward abstract generalization. They reflect certain aspects of being and "apply to the art of physics, geometry, or some other mental observation, in which case they are not considered "categories" [3, 211].

General concepts, on the other hand, can relate in some way to the gender and types of objects that are emotionally perceived as “higher rocks” and “universal concepts”. The logical-epistemological status of such concepts can be seen in the fact that they can be intelligently understood, in the image of the emotionally perceived things in the heart, in the form of images. Higher rocks, according to the scientist, can only become logical categories because certain conditions exist. In particular, universal concepts are embodied in the form of logical categories only when they express a two-way relationship: one is individual-oriented and the other is feedback-oriented. Accordingly, logical categories exist in two different forms: first, as an informative concept of emotionally perceptible objects, and second, in the form of a concept within reason. The logical meaning of the categories in the structure of reasoning is determined by the interrelationship of the cut (general) and the possessive (partial). Hence, only through the establishment of the connection between the two possibilities of being and the general and the partial can categories become a logical description, a definition of the essence of the subject. The linguistic expression of Farobi concepts, the logical analysis of the issues of creating scientific terms also have a certain scientific value. His views on the denotation of thought (i.e., the class of objects that the idea encompasses and expresses) and its concept (i.e., the essential features of that class of objects) and their reflection in the scope and content of concepts have survived as important rules of modern logic. The question of the transformation of a word expressing a concept into a scientific term on the basis of a nominal definition has not escaped the mind of the thinker.

It proves that Farobi’s legacy is important not only for historical significance, but also for modern scientific knowledge.

Pharoah understands the logical process of forming a new judgment by means of one or more true judgments. Identifies types of inference such as deductive, inductive, and analog. The most reliable of these is the deductive conclusion that gives a true conclusion, i.e. the syllogism. The art of syllogism serves to substantiate and prove the truth. It gives real knowledge, as al-Farabi points out.

The syllogistic arts, according to the great scholar, differ from each other in the means used in them, in the degree of accuracy of the knowledge acquired. In addition to the five syllogistic arts — apodictics, dialectics, sophistry, rhetoric, and poetics (which Farobi called simple syllogistic arts) —he distinguishes more complex syllogistic arts. They use mixed syllogisms with different inference forms. In particular, they combine apodictic, dialectical, rhetorical, sophistic and poetic considerations. Often,

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“syllogisms composed of apodictic, dialectical, rhetorical, sophistic, and poetic considerations are, in Farobi’s view, created either out of ignorance or deliberately to convince the general public of something [7, 77].

According to Farobi, for a syllogism to exist, the existing sentences must form its components or be appropriate to it. The concepts that make up these judgments are called terms (concept, word). Many sentences are logically derived from syllogisms. Accordingly, they form part of the syllogism. In this case, “If the sentences are the result of a syllogism, the conclusion is called the basis of the conclusion, if they are an integral part of other syllogisms. Hence, the conclusion of one syllogism serves as the basis for another syllogism” [8, 30].

According to Farobi, "syllogism as a method of proof is the most accurate way to bring to truth, on which science, philosophical knowledge is based" [6, 91]. In the process of analyzing the mechanism of proof, the thinker has deepened the doctrine of understanding, judgment, and inference, which are the basic forms of thinking.

Al-Farabi divides all available arts, including scientific and practical activities, into nosillogistic and syllogistic types. In his view, the practical activity of man, manifested in medicine, farming trades, etc., is the art of nosillogistics. Because he sees it as his action and purpose to do something special, concrete. In contrast, the syllogistic arts apply the theory of syllogism in their movements. Abu Nasr al-Farabi emphasizes that the essence of syllogism is in the need to impart new knowledge. “Self-evident syllogisms are perfect, and those that need something else for clarity are called imperfect syllogisms. Imperfect syllogisms give a clear, accurate conclusion by bringing them to perfect syllogisms” [3, 164]. This view of al-Farabi is consistent with the view expressed in Aristotle's First Analytics. In addition, Abu Abdullah al-Khwarizmi, one of the most learned and wise scholars of Central Asia, also studied and developed syllogism in depth after Farobi.

Pharoah calls the syllogism used in the proof an apodictic or scientific syllogism, and considers it to be the highest form of the syllogism that gives man precise knowledge. If we take into account that in Farobi “the creation of true knowledge is considered to be the same as the attainment of truth, the importance of this type of syllogism becomes clear. Only such knowledge is an indicator of human perfection. ” [9, 105]

According to al-Farabi, "all syllogistic arts (philosophy, dialectics, sophistry, rhetoric, poetics) have such commonalities that they are integrated into a logical process that is expressed in the form of syllogistic questions and answers" [2, 129]. This is especially true of dialectics, sophistry, rhetoric. Typically, a syllogism is used either in the way people communicate with each other or in the mind of one of them to bring something up intelligently.

In the above cases, the use of syllogism in philosophy is explained by the scholar as "philosophical reasoning is a problem that can be proven, and it is aimed at studying the truth, revealing what defines it" [2, 129].

According to Farobi, the method of syllogism and proof is the method that leads to the most correct conclusion, on which science and philosophical knowledge are based.

The encyclopedic scholar views induction as a form of proof, a form of inference that goes from the particular to the general, and considers it to be the second most important means of knowledge after the syllogism. It is "a syllogism that occurs by induction." "Any movement is walking, swimming, flying, etc." and "Any movement, swimming, flying, etc., exists in time" [2, 340]. “Such an induction is understood by Pharoah, like Aristotle, as a means of substantiating the foundations of the first figure of the syllogism. So, according to al-Farabi, induction is based on deduction” [2, 340].

As a method of proof, after syllogism and induction, Farobi considers drawing a conclusion by analogy. He compares the analogy with induction and shows its closeness to induction. The conclusion in induction is based on the study of all or, more or less detailed cases. A thinker's conclusion by "analogy" is the transfer of thought from one particular situation to another; one of which is more well known than the other, and is also given in a general sense, on the basis of which it is concluded that it is less well known. In the analogy, a partial conclusion is drawn from the detail” [5, 348]. Thus, according to Farobi, all or some of the indicated means are used in syllogistic art, especially in proof. In apodictics, in his opinion, strict and conditional syllogisms and apodictive induction formed from true bases are used. Dialectics is applied in the form of dialectical syllogisms and dialectical induction, formed from bases that are in fact accepted, both having fixed and conditional syllogism forms. The scholar calls entheme rhetorical syllogism and considers it to be the main means of rhetoric.

The art of logic gives such special rules for each syllogistic art that by means of these rules (syllogistic) arts (are formed) are formed. With the help of the art of logic, the doctrine of each syllogistic art is examined and determined by the affirmative (object), and logic again gives the knowledge of whether that doctrine is compatible with that art.

In short, Farobi created a coherent, coherent logical doctrine by deeply analyzing the essence of the concept, judgment and its types, inference, i.e. the syllogism and its figures, which are the basic forms of thinking, and connecting them with proof, and at the same

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time the process of cognition and logic. was influenced by Aristotle's philosophical views in his teachings on, which in turn filled in his shortcomings.

It is important to note that the thinker acknowledges that the attainment of true knowledge, that is, true knowledge, is achieved through a "syllogism."

In the current context of globalization, the study of our ancestors, great encyclopedic scholars, in particular, the scientific-practical and rich spiritual heritage of Farobi, the reforms being carried out in our country serve as an important foundation of the Third Renaissance.

As the President said, "Building a new, democratic society, building the foundation of the future, of course, requires each other to be resolute and effective, to think differently, to work in a new way" [1, 9].

REFERENCES

[1] Ш.М.Мирзиёев. Янги Ўзбекистон стратегияси. -Тошкент: "Ўзбекистон" нашриёти. 2021.
[2] Аль-Фараби. Вводный трактат в логику.
[3] Аль-Фараби. Логические трактаты. –Алма-Ата, 1971.
[4] Аль-Фараби. О произхождении наук. // Естественно-научные трактаты. –Алма-Ата, 1978.
[5] Болтабоев М. Н. Вопросы гносеологии и логики в произведениях Ибн Сины и его школы. –Душанбе: Ирфон, 1965.
[6] Муталибов С.А. Учение о силлогизме в логике Фараби // Логико-гносеологические идеи мыслителей Средней Азии. –Т.: Фан, 1981.
[7] О логическом учении Аль-Фараби. –Алма-Ата: Наука, 1982.
[8] Файзихўжаева Д. И. IX-XI асрларда Марказий Осиё мутафаккирларининг мантиққа оид қарашларида исботлаш муаммолари: Автореф. Дисс. ... фал. фан. номзоди. -1999.
[9] Шарипов А. Д. Проблемы логики в книге "Ключи наук" Абу Абдаллаха Хорезми // Логико-гносеологические идеи мыслителей Средней Азии. –Т.: Фан, 1981.

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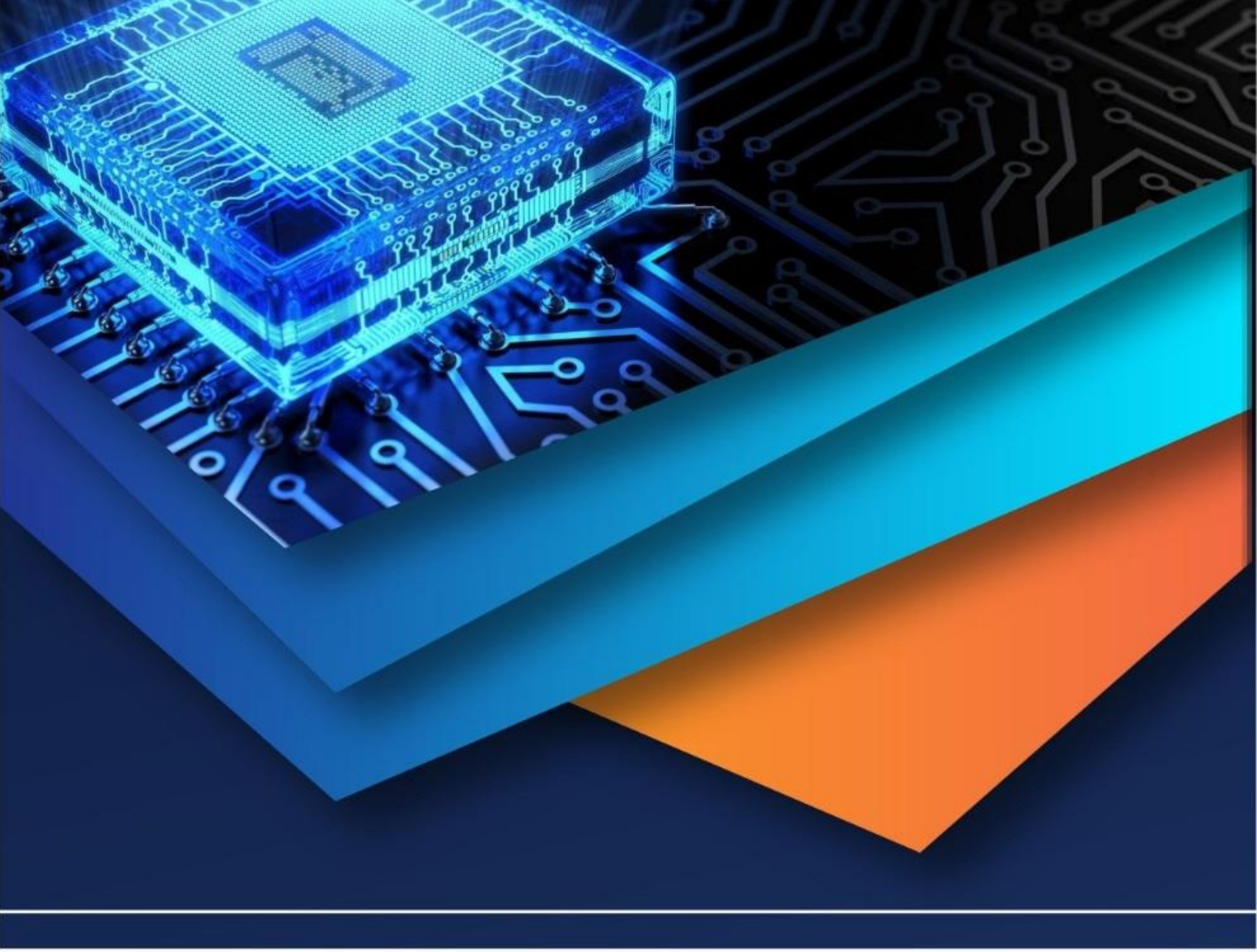

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