

SCIENTIFIC TERMS BORROWED FROM PERSIAN IN THE LEXICON OF THE UZBEK LANGUAGE

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Abstract: This article explores the influence of Persian-origin scientific terminology on the Uzbek lexicon. Linguistic interactions between Persian and Uzbek languages date back centuries, with significant exchanges facilitated through trade and cultural connections along the Silk Road. Persian, as a prominent language of science, literature, and culture in the medieval Islamic world, enriched Uzbek scientific lexicon with terms related to philosophy, mathematics, medicine, and literature. The article examines key scientific terms of Persian origin, their etymology, semantic evolution, and adaptation within the Uzbek language. Insights into their phonetic adaptation and semantic broadening or narrowing are provided, illustrating the dynamic interplay between the two languages.

Keywords: Uzbek lexicon, Persian-origin words, scientific terminology, linguistic interaction, etymology, phonetic adaptation, semantic evolution.

Introduction

Language contacts between Persian and Uzbek go back to ancient times. These contacts arose mainly as a result of trade, cultural and scientific ties along the Great Silk Road. Since Persian was important in the Muslim world in the Middle Ages as the language of science, literature and education, scientific and cultural terms of that time were often in Persian. Persian scientific terms occupy a special place in the lexicon of the Uzbek language. Language contacts between Persian and Uzbek have been formed since ancient times, and these ties have also found their expression in the field of scientific terms. Below we will analyze some scientific terms of Persian origin and their meaning.

Some scientific terms borrowed from Persian

1. **فلسفه** – This word is borrowed from Persian and Arabic and means "philosophy". Philosophy studies the nature of human thought, existence and knowledge.
2. **کیمیا** – The term "chemistry" is used to refer to the scientific discipline of chemistry. In early times, it also meant "elixir" or "alchemy".
3. **ریاضیات** – The Persian name for the science of mathematics, which comes from the Arabic word "riyaz" (exercise).
4. **حکمت** – This word is used in the meaning of "wisdom", "rational thinking". It is widely used in the scientific and theoretical sphere.
5. **طبابت** – A term used in the medical field. This word comes from the Arabic "tib" and Persian suffixes.
6. **نظریه** – In Persian and Uzbek languages it is widely used to denote a scientific hypothesis or scientific view.
7. **ادبیات** – It is a mixture of Persian and Arabic languages and is used in the sense of literary activity and its theory.

Persian terms have had a great influence not only on the scientific lexicon, but also on the cultural, social and religious spheres. The scientific characteristics of Persian words in the Uzbek lexicon can be summarized as follows:

Etymological layer: Words borrowed from Persian are usually associated with Arabic origin and are localized in the Uzbek language.

فلسفه - It comes from the Greek word "philosophia", which means "wisdom and love". It entered Persian through Arabic and later became part of Uzbek.

Meaning: Related to the study of scientific and philosophical views.

Chemistry - comes from the Greek word "chemi" or "chymia", meaning "chemistry" or "art of mixtures".

Formed in Persian under the influence of Arabic and assimilated into the Uzbek language.

Meaning: A scientific field based on the analysis and transformation of substances.

رياضيات - It comes from the Arabic word "riyaz" (رياض), which means "exercise" and "teaching".

Formed in Persian through Arabic, it is used to refer to the science of mathematics.

Meaning: The science that studies mathematical processes.

نظريه - Derived from the Arabic word "nazar" (نظر), meaning "to see", "to look" or "to think".

Widely used in Persian and passed into Uzbek as a scientific term.

Meaning: Scientific hypothesis or theoretical idea.

1. Expanding the scope of meaning: Persian words are sometimes used in Uzbek in a broader or narrower sense.

زمستان – Zemeston - The root word "zem" or "zam" (زم) means "earth" or "cold" in Old Persian. This goes back to the word "zama" (snow or cold) in Old Iranian languages.

"Stan" (ستان) is used in Persian to mean "place", "region" or "season". Together, the word "zemestan" means "cold season" or "winter season".

زمستان فصل سردی است. Zemeston fasle sardist. (Winter is a cold season.)

هوا زمستانی است. Havo zemestonist. (The weather is winter.)

2. Phonetic adaptation: words borrowed from Persian are adapted to the phonetic rules of the Uzbek language.

Although this word is pronounced as "zemeston" in Persian, it sometimes undergoes sound changes when adapted to other languages. For example:

- In Uzbek it is translated as "zimistan" or "winter".

- In Turkic languages, the form "zemestan" is less common, but the meaning is preserved. The word "zemeston" is traditionally used in Persian to denote winter and cold weather. Its ancient origins and multifaceted meanings indicate that this word has a rich heritage from a linguistic and cultural point of view. As Persian scientific terms are assimilated into Uzbek, their semantic scope expands or narrows. For example, the word hikmat has a broader meaning in Persian and denotes general wisdom, while in Uzbek this word is used mainly in a philosophical and educational sense. Also, the word davo, while retaining its original meaning, has adapted to modern medical terminology.

Today, scientific terms of Persian origin have not lost their meaning. They not only represent historical and cultural heritage, but are also actively used in scientific texts and textbooks. In particular, these words are widely used in university-level educational literature and scientific works.

Conclusion

Scientific terms that entered the Uzbek lexicon from the Persian language occupy an important place in the Uzbek lexicon, and they are a product of centuries-old cultural and scientific ties between the Persian and Uzbek languages. Terms such as philosophy, chemistry, mathematics, wisdom not only enriched the scientific base of the Uzbek language, but also expanded the scope of cultural and conceptual thinking. Phonetic and semantic adaptation of these words in the Uzbek language reveals their unique features in the process of assimilation. These terms are still widely used in scientific texts and textbooks today and retain their meaning. The study of Persian terms is of great importance in linguistics not only for preserving historical memory, but also for highlighting cultural and scientific progress.

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