

RESEARCH ON ASTRONYMS IN WORLD LINGUISTICS

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Abstract. *This article provides a systematic analysis of research conducted in world linguistics on astrononyms and astronomy. In particular, comparative, linguocultural, ethnolinguistic, and lexicographic studies carried out in Russian linguistics and other languages are examined. The paper also analyzes the role of the anthropocentric approach in the naming of celestial bodies across different languages, the differences between folk and scientific astrononyms, and their historical and etymological sources. The article serves as an important scholarly resource for studying the interrelation between language and culture through astrononyms.*

Keywords: *astronym, astronomy, names of celestial bodies, linguoculturology, ethnolinguistics, anthropocentric approach, comparative linguistics.*

Annotatsiya. *Ushbu maqolada jahon tilshunosligida astronim va astronimiya yo'nalishida olib borilgan tadqiqotlar tizimli ravishda tahlil qilinadi. Xususan, rus tilshunosligi hamda boshqa tillarda amalga oshirilgan qiyosiy, lingvokulturologik, etnolingvistik va leksikografik tadqiqotlar ko'rib chiqiladi. Shuningdek, maqolada turli tillarda osmon jismlarining nomlanishida antropotsentrik yondashuvning o'рни, xalqona va ilmiy astronimlar o'rtasidagi farqlar hamda ularning tarixiy-etimologik manbalari tahlil etiladi. Maqola astronimlar orqali til va madaniyat o'rtasidagi o'zaro bog'liqlikni o'rganishda muhim ilmiy manba sifatida xizmat qiladi.*

Kalit so'zlar: *astronim, astronimiya, osmon jismlari nomlari, lingvokulturologiya, etnolingvistika, antropotsentrik yondashuv, qiyosiy tilshunoslik.*

Аннотация. *В данной статье системно анализируются исследования, проведённые в мировой лингвистике в области астрономов и астрономии. В частности, рассматриваются сравнительные, лингвокультурологические, этнолингвистические и лексикографические исследования, выполненные в русской лингвистике и других языках. Также в статье анализируется роль антропоцентрического подхода в наименовании небесных тел в различных языках, различия между народными и научными астрономами, а также их историко-этимологические источники. Статья служит важным научным ресурсом для изучения взаимосвязи языка и культуры через астрономы.*

Ключевые слова: *астроном, астрономия, названия небесных тел, лингвокультурология, этнолингвистика, антропоцентрический подход, сравнительное языкознание.*

Introduction. To date, research conducted in world linguistics has analyzed astrononyms and astronomy across various languages and from different theoretical perspectives. Astrononyms, as a specialized category within onomastics, represent the proper names assigned to celestial bodies and cosmic phenomena, reflecting both linguistic structures and the cultural-historical development of human societies.

Comparative analyses of astrononyms in Russian linguistics and other languages are reflected in dissertations, monographs, and articles authored by scholars and researchers such as Y.Karpenko, S.M.Podvigina, Y.P.Panasova, G.Y.Gulyayeva, O.V.Chyokha, M.E.Rut, O.N.Bil, Ch.O.Vladimirovna, L.F.Fomina, M.A.Siderenko, D.Chunyan, A.A.Bakirova, and others.

In Russian linguistics, notable research on this topic was already being carried out in the 1980s. For example, Y. Karpenko provides information on the names, history, and

etymology of planets, stars, and other celestial bodies in the Russian language. The scholar classifies astronoms into two main categories: ancient and modern astronoms, as well as folk and scientific astronoms. In addition, he proposes another classification of astronoms, distinguishing between cosmic objects and natural-real entities. Almost all of these classifications should be taken into account in one way or another during the analysis of astronoms, since the affiliation of a cosmic name with a particular group helps to characterize certain features of that name[5].

Such studies became particularly prominent in the early 21st century. In our view, this can be explained by the following factors: first, the development of cognitive sciences has intensified the need to observe the anthropocentric essence of the surrounding world and to identify similar features; second, the increasing influence of the anthropocentric approach in linguistics has led to a growing demand for studying existing scientific problems from a linguocultural perspective. In world linguistics, astronoms are considered an important subject of study because they demonstrate the intersection of language, cognition, mythology, and scientific knowledge. From a classificatory perspective, astronoms can be divided into several types, including cosmonyms, which refer to large cosmic structures like galaxies and nebulae; astroponyms, which denote individual stars and celestial bodies; planetonyms, which are the names of planets; and selenonyms, which relate specifically to the Moon and its surface features. These categories help linguists organize and analyze naming systems across different languages and cultures. One of the most significant aspects of astronoms is their etymology, as many celestial names have roots in ancient civilizations, particularly in Greek and Roman mythology, where gods and mythological figures were used to name visible planets and prominent stars. This demonstrates how early humans interpreted the cosmos through mythological frameworks, embedding cultural narratives into linguistic forms. In addition to etymological studies, the linguocultural approach to astronoms emphasizes how different cultures conceptualize the sky and celestial bodies in unique ways, often attributing symbolic meanings and integrating them into folklore, literature, and belief systems. For instance, certain stars or constellations may be associated with heroes, animals, or spiritual entities, reflecting the worldview and imagination of a particular culture.

Methods. In particular, linguist S. M. Podvigina[8] studied this topic from a comparative perspective, attempting to identify national characteristics by comparing and contrasting phraseological units that express astrononym-related concepts in Russian and German. The researcher conducted a comparative analysis of celestial body names used in languages belonging to the same language family.

Research conducted by Russian scholar Y.P.Panasova is devoted to the linguocultural characterization of the concept “sun” which is significant for the Russian mentality. At a time when individual concepts forming the national conceptsphere are actively studied in modern linguistics, this research was especially necessary for Russian linguistics. The

scholar emphasizes that the figurative layer of the “sun” concept manifests traditional features inherent in folk consciousness, such as “gold”, “god”, “labor”, “beauty” and “fire”. Based on the presence of the antonymic opposition “good” – “evil” it is noted that the concept of the sun in Russian has a dual (positive and negative) significance. The study also highlights that in Russian texts, the sun is perceived as male and the moon as female, which draws attention to the issue of grammatical gender in Russian: *Солнце* – prince of the earth, *луна* – princess[7]. This is characteristic not only of Russian culture but also of universal cultural traditions.

G.Y.Gulyayeva presents the materials collected in her research by distinguishing between artistic (individual) and linguistic (usual) concepts[3]. At the same time, the active use of individual images in the lexicon substantiates such an approach.

O.V.Chyokha compares astronomical concepts from modern Greek folk language with Slavic languages and analyzes the concepts of “moon” and “lunar time” from an ethnolinguistic perspective. The data collected from the Greek language are compared with information from other Balkan traditions from linguistic and ethnocultural viewpoints[12]. However, the researcher also notes, with examples, that Greek and Slavic traditions do not always correspond to each other.

Results and discussion. A specialist in onomasiology and metaphor theory M.Rut, through a number of studies, presented original ideas not only in Russian linguistics but also in general linguistics. The research examines 186 Russian astronoms, including 52 variants of the Big Dipper, 21 variants of Orion, 27 variants of other constellations, 20 names of the Milky Way, 18 names of Venus, and 9 names of the Pole Star. For example, it is noted that the constellation Big Dipper (*Bolshaya Medveditsa*) is referred to in folk usage by names such as *Volchya Zvezda* (“Wolf Star”), *Kovsh* (“Ladle”), and *Kolesnitsa* (“Chariot”), most of which are metaphorical names[9].

Scholar M.E.Rut compiled a dictionary of astronoms, thereby enriching Russian lexicography with another unique source. The dictionary is divided into two parts: the first presents folk astronoms, and the second includes scientific astronoms. The scholar also notes that in astronomy, the brightness of stars is denoted by Greek letters. For example, the brightest star in a constellation is designated by α (alpha), the second brightest by β (beta), and so on, and this principle is applied to the stars presented in the dictionary. In our opinion, this dictionary may be the first of its kind in Russian and other national linguistic traditions.

Several articles by L.F.Fomina devoted to astronoms and astronomy occupy an important place in research within this field. In her initial article, she discusses the formation of Russian scientific astronomy and the names of zodiac constellations. She divides stars into two groups: zodiacal and non-zodiacal constellations. The names of constellations are analyzed from diachronic, semantic, and etymological perspectives[11].

The fact that the naming of astronoms in Russian is scientifically grounded determines their high scholarly value for the study of astronoms in other languages.

Approaching the study of celestial bodies from a lexicographic perspective, the scholar analyzes star names presented in V.I.Dal's explanatory dictionary of the Russian language and also points out certain inconveniences in the use of the dictionary.

The naming features of Chinese astronoms were analyzed by linguist M.A.Siderenko through the names of stars and constellations[10]. The article notes that the terms *astronym* and *astronymy* convey different meanings and states that in ancient China the sky was divided into five major regions (Western – White Tiger, Central, Eastern – Blue Dragon, Northern – Black Tortoise, and Southern – Red Bird), which were approximately equal and governed by five stellar emperors (the North Star, Scorpio, Andromeda, Taurus, and Leo). This is evidently connected with Chinese mythology. One point in the article requires editorial revision: the author states that Chinese astronoms are designated by Greek letters α , β , γ , δ based on the size or location of stars. This does not fully correspond to M.E.Rut's view that such designations are based on brightness. We consider the latter interpretation to be more appropriate.

In the second half of the 20th century (the 1960s), articles devoted to the study of astronoms in Kazakh, Tatar, Bashkir, and Chuvash languages appeared almost simultaneously by Y.Nemet, T.J.Januzakov, V.A.Nikonov, N.Kh.Maksutova, D.K.Nurjanova, M.N.Yukhma, G.Kh.Akhatov, and others.

Kh.Kh.Kuzmina investigated the structural and derivational features of astronoms in the Tatar language and identified four specific characteristics: most astronoms are metaphorical and based on similarity; many are one-component (single-word) units; root astronoms outnumber derived ones formed through affixation; and names borrowed from Indo-European languages via Russian dominate in the Tatar literary language[6]. These observations are supported by examples.

This standardization process is particularly important given the rapid expansion of astronomical discoveries, including new planets, exoplanets, and deep-space objects that require systematic naming conventions. Beyond their scientific function, astronoms also hold considerable cultural and historical significance, as they have been used for navigation, timekeeping, and the development of early calendar systems, allowing ancient civilizations to organize agricultural activities and religious events. Furthermore, astronoms occupy an important place in literature and art, often serving as metaphors and symbols that convey philosophical and emotional meanings. In contemporary linguistics, new research directions have emerged, including cognitive linguistic approaches that analyze how humans conceptualize and categorize celestial objects through language, as well as sociolinguistic perspectives that examine the interaction between global naming standards and local linguistic traditions.

Conclusion. Astronyms in linguistics function not only as lexical units but also as significant linguocultural phenomena reflecting a people's worldview, cultural thinking, and mentality. Research conducted in world linguistics, particularly in Russian and Turkic languages, has contributed to identifying the semantic, etymological, and metaphorical features of astronyms. The development of cognitive and anthropocentric approaches in the early 21st century has intensified the need to study astronyms from a linguocultural perspective. Studies have demonstrated that the naming of celestial bodies in different languages is closely connected with national traditions, mythological representations, and cultural values. Research in this field provides a solid scientific foundation for future comparative and comprehensive analyses of astronyms. Additionally, technological advancements and space exploration have introduced new challenges in naming previously unknown objects, raising questions about linguistic creativity, cultural representation, and scientific responsibility. Overall, astronyms represent a unique and multifaceted area of study within world linguistics, combining elements of language, culture, history, and science, and offering valuable insights into how humanity has perceived and interpreted the universe throughout different periods of development.

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