# Recommendations for Illustrative Examples of Terminology Related to Astronomy in Explanatory Dictionaries

Fotimakhon S. Bakhtiyarova<sup>1</sup> Mukhtorjon Y. Bakhtiyarov<sup>2</sup>, Mukhlisa N. Sultanova<sup>3</sup> and Nargiza X. Ernazarova<sup>2</sup>

<sup>1</sup>Alfraganus University, Tashkent, Uzbekistan <sup>2</sup>Uzbekistan State World Languages University, Tashkent, Uzbekistan <sup>3</sup>Tashkent State Technical University, Tashkent, Uzbekistan

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Abstract: In Presidential Decree No. PF-6084, issued on October 20, 2020, titled "On measures for the further development of the Uzbek language in our country and the improvement of language policy," various

directives were outlined for linguists, including the task of compiling new editions of the multi-volume "Explanatory Dictionary of the Uzbek Language" in both Cyrillic and Latin scripts. Consequently, in 2023, the initial series of the new 6-volume "Explanatory Dictionary of the Uzbek Language" based on the Latin alphabet was published. The preface of this dictionary underscores the dynamic evolution of language, wherein vocabulary undergoes significant qualitative and quantitative transformations. It emphasizes the dictionary's role in documenting and standardizing contemporary Uzbek literary vocabulary to enhance linguistic precision and promote speech culture. The article examines challenges related to incorporating visual examples of astronomical terms in Uzbek explanatory dictionaries and proposes pragmatic solutions to

address this issue, aiming to enrich the educational value of such dictionaries for both astronomers and the general public.

## 1 INTRODUCTION

modern dictionaries include illustrations used to make identification (analogy), as well as pictorial examples denoting objects, and additional descriptive tools for names and terms. The compilers of the Dictionary of Lexicography (" Dictionary of lexicographic terms") R.K.Hartmann and G.James considers this to be" a drawing, diagram or photograph that serves to explain the meaning of a particular lexical unit", giving a more detailed definition of Illustration: "In illustrative examples, one can describe a group of single objects or interrelated objects".

V. D. Tabanakova pictorial illustration draws the following conclusions as a lexicographic tool for semanticizing the term only in dictionaries:

- Illustration is used as an additional means of semanticizing the term in an explanatory type of dictionary.
- Illustration is used to semanticize special concepts with Essence.
- Illustration serves to reveal important and distinctive features that are difficult or impossible to articulate verbally, and descriptively (e.g., shape, appearance, structure, location).
- The effective use of graphic illustration as a lexicographic tool for semanticizing a term requires an initial logical and conceptual

alphttps://orcid.org/0009-0001-5784-1375

b https://orcid.org/0009-0001-9462-2083

https://orcid.org/0000-0002-0682-9333

do https://orcid.org/0009-0003-0090-224X

analysis of terminology with the allocation of a set of features for each somaticized concept.

## 2 METHODOLOGY

The problem of the function of pictorial examples and the correctness of their use in dictionary writing is interpreted differently in Russian, European, and American lexicography. For example, according to Landau, simple words do not need additional illustration, but they do need definitions. L. Zgusta believes that only something unusual or unfamiliar/event/action needs pictures.

In his article" Ornamental Pictures in Dictionaries ", L.Zgusta expands on his ideas about the need to include pictorial illustrations and explains this need by the fact that graphic information is visual and contributes to understanding and memorizing words, can be used as an addition to the definition of a dictionary.

It is known that the study of astronomy, celestial bodies, and phenomena has fascinated mankind for centuries. As this field continues to develop, it is becoming increasingly important to interpret the terms related to astronomy clearly and intelligibly. One effective means of improving understanding is to include illustrative examples in annotated dictionaries. These examples not only clarify definitions but also contribute to a deeper understanding of the wonders of space. It is advisable to consider the importance of providing illustrative examples in annotated Dictionaries on astronomy and how they affect a broader understanding of astronomical concepts.

Illustrative examples serve as a practical demonstration of abstract concepts. In astronomy, where many terms describe phenomena that are difficult to observe directly, examples eliminate the discrepancy between theory and observation. For example, explaining the concept of a new star will be more accurate, along with describing the intense brightness and explosive energy released during such an event. These examples help students understand complex ideas by providing comparable scenarios.

Astronomy is a huge field with many interconnected concepts. Examples in annotated dictionaries contain contextual information that helps to understand the relationship between terms. For example, determining a star, including various types of examples such as Red Giants and White Dwarfs, helps students recognize the diversity of star objects. This contextual understanding allows readers to more fully understand the concepts of astronomy.

# 3 DISCUSSION AND CONCLUSION

Astronomy attracts enthusiasts with different levels of knowledge. The inclusion of illustrative examples in annotated dictionaries eliminates gaps in knowledge, allowing this diversity to be considered. Those who are now in this field can easily understand basic concepts, while advanced readers can deepen their understanding using complex examples. Focusing on different levels of familiarity, these examples ensure that students of any level are familiar with and benefit from the information provided.

Astronomy is amazing in nature and arouses curiosity about the secrets of the universe. Illustrative examples in explanatory dictionaries bring a sense of surprise, and interest and inspire researchers. For example, describing large distances in space using the concept of "light-year" leads readers to think about the scale of space and extraterrestrial life. These examples not only teach but also encourage students to delve deeper into the essence of the subject.

Astronomy plays a decisive role in the development of scientific literacy and critical thinking. By including illustrative examples in explanatory dictionaries, readers will be able to get acquainted with scientific concepts and better assess the scientific style. By familiarizing themselves with these examples, readers learn to think critically, analyse data, and analyse/synthesize connections between different astronomical phenomena.

Explanatory dictionaries containing terminology related to astronomy can be significantly expanded by introducing illustrative examples. These examples help provide additional context and clarify definitions, making astronomical terms more understandable.

An Explanatory Dictionary dedicated to terms related to astronomy has not yet been created in Uzbek. The manual for creating an Explanatory Dictionary in the Uzbek language emphasizes the need for a clear interpretation of terms within a particular field, in contrast to common words. This involves working with professionals in the relevant field to provide clear explanations. In this regard, the presence of an Explanatory Dictionary in field terminology can be an invaluable resource. For example, explanatory dictionaries have been developed for fields such as linguistics, history, and medicine. These dictionaries not only help to develop relevant areas but also serve as the main resource for training potential specialists and assessing progress and shortcomings in the scientific community.

Therefore, it is extremely important to accelerate the creation of an Explanatory Dictionary of terms related to astronomy to promote the development of the Uzbek scientific language, observe changes in terminology, and identify factors that promote the increase in the vocabulary wealth of the Uzbek language.

According to our point of view, it is necessary to revise and change the illustrative examples selected for terms related to a particular field using a clear and well-founded approach in the Explanatory Dictionary of the Uzbek language. This is because the explanation of the general terms inherent in a particular area is different from each other. In all three editions of the Explanatory Dictionary of the Uzbek language, illustrative examples of terms related to astronomy are presented in the form of a verbal conjunction and a sentence. For example:

YEAR 1 is the Earth's period of one circumnavigation of the Sun; twelve calendar months are equal in time, and such a measure is equal in time.

2 ...

3 ...

4 astr. The period during which a planet orbits the sun once. Year of Mars (equivalent to 687 days), Year of Zuhra (equivalent to 225 days).

ORBIT [lot. orbit-path, trace; space, depth] astr. The path of an arbitrary natural or artificial cosmic body moving in space relative to another celestial body (for ex., the path of the Earth around the sun is called Earth orbit). The last stage of the rocket brought the automatic interplanetary station into its intended orbit. From the newspaper. Food, equipment, and apparatus, as well as correspondence, were transported into orbit. From the newspaper.

It can be seen that an illustration in compound form is given for the derivative meaning (4) of the terminological unit of the year. In the example given in the queue, an evidential example is given from a source in the form of a sentence.

In addition, there are also cases of non-illustrative examples following the interpretation of terms. For example:

ZUHRA [a. o] (large) 1. astr. One of the larger planets in the solar system is the Arabic name for Venus.

#### 2. ZUKHRA (female name).

PLANETALOGY [planet + lat. logos-knowledge, doctrine] is the branch of astronomy that studies planets and their satellites in the solar system.

In this terminological unit, the headword acquired the property of terminality. A footnote is cited, but no illustration is given. It seems that most of the illustrations given for astronomical terms are from mass publications, samples of fiction. However, it is advisable to take the examples mainly from the literature on the field. Below is the Explanatory Dictionary of the Uzbek language of 5-volumes, we look at the examples collected as illustrations to terms given with mark Astr:

STAR 1 astr. A celestial body composed of heated gas (plasma), which by nature looks like The Sun, appears to be a shining point at night. Light Star. Dim star. Polar Star. Star series. The evening sank Tashkent into the bosom, A star in the blinking Blues. X.Salah. Here The Sun deviates-cool falls, at night, a sky full of stars on top of us. R.Azizkhojayev, "Green chayla."

#### **Recommendation:**

A STAR noun is a luminous celestial body composed of a mass of gas combined with its gravity and emitting light as well as heat. Stars are the most common objects in the universe. Therefore, the study of their physical nature is considered an important issue in astronomy. "Astronomy".

THE PLANET [a. - planet; car; caravan] 1. There is no alternative accommodation, a wanderer, a wanderer. Leave (put down) your prey, hunter, Wanderer like me. Furgat.

2. astr. A spherical celestial body that revolves around the sun and receives light from it, mas., Mercury, Venus, Earth, Mars. It is known that the Earth – planet Earth appeared and evolved in the solar system as a small fragment of the universe. From the newspaper.

THE EARTH. Earth planet, mother planet, kurrai Queen, the first time I saw your photo from the sky. A.Oripov.

#### Recommendation:

THE PLANET - noun is a celestial body orbiting—star, has a spherical shape, and cleans its orbit from other debris. The moon, the satellite of the planet, is also involved in the daily visual movement, moving east-west along with the stars. "Astronomy".

THE COMET [yun. cometes is a long, fluffy-haired] Foggy radiating cloud as well as a celestial body with a tail-like luminous (light) Line appearance, a star with a tail. At all times-at all times, unique comets pass near the Earth. "Youth".

Recommendation:

A COMET – noun is a small celestial body composed of ice, dust, and gas that orbits the sun in an elongated elliptical orbit, often showing its tail as it approaches The Sun. As it approaches the sun, the comet's tail appears. The tail consists of very sparse gas and extremely small particles, which are released

from the core of the comet under the influence of the Sun. "Astronomy".

ASTEROIDS [yun. aster-star + eidos-appearance; similar] astr. Minor planets of the solar system orbiting between Mars and Jupiter, minor celestial bodies; minor planets.

#### **Recommendation:**

AN ASTEROID – noun is a small stony object orbiting the sun, usually located in the asteroid belt between Mars and Jupiter. The dimensions of the largest of the asteroids also turn out to be very small compared to the radius of the Earth. The largest of these are Serera (cross-sectional 1000 km), Pallada (610 km), Vesta (540 km), and Hygeia (450 km). "Astronomy".

It should be noted separately that in explanatory dictionaries of the Uzbek language, the illustrations given for certain astronomical terms are taken from the literature on the field. In recognition of this, it is advisable to give other astronomy-related terms in the same way. In particular, the illustrations given for numerical terms such as galactic, Galactic, heliocentric, and planetary, are taken from the literature on the field. For example:

GALAXY (G-large) [from lat. Galacticos - milky] astr. A huge gravitational system of more than 200 billion stars connected by mutual total gravity, which also includes the sun and other planets in the Solar System: the Milky Way. All Stars and their clusters form an extremely large – giant system of stars in unity, this system is called a Galaxy. "Astronomy".

HELIOCENTRIC [gelio.. + lat. centrum < yun. kentron-tackle. accumulation; Centre]: the heliocentric system is a doctrine that considers the sun as the centre of the universe. A Copernican system, that is, a system with the sun in its centre, is called a heliocentric system. "Astronomy".

It should be noted that in 2023 a new 6-volume "Explanatory Dictionary of the Uzbek language" was published in the Uzbek alphabet, based on the Latin script. It notes that " ...the structure, vocabulary, vocabulary of previous publications are almost completely preserved, the main emphasis is on identifying vocabulary units that were not part of the previous edition of the dictionary, new meanings that appeared within certain words, their inclusion in the composition of the dictionary, expanding the scope of dictionary materials. As noted in the dictionary's preface, the recommended four thousand dictionary units were annotated and incorporated into the dictionary, and the dictionary was also enriched with many illustrative examples from modern editions". During the study, we observed that only 2 new astronomical terms were added, with all the astronomical terms recorded in the 5 volumes of the Explanatory Dictionary of the Uzbek language in this dictionary being included without any changes. These terms are as follows:

WHALE I [Greek. ketos is a sea creature] a very large mammal marine animal that looks like a fish. There are hardly any toothless whales left in the Atlantic. "ÖzME".

WHALE II [lat. Cetus, Cet] is an equatorial constellation near the Zodiac signs Aquarius and Taurus. The whale can be seen in autumn and winter. "ÖzME".

It seems that KIT II is an astronomical term. But in the dictionary, it is not marked with a special marker. The illustrative example is also not taken from the field literature.

EAGLE I 1 ...

2 ...

3 ...

Eagle II astr. is a Zodiac sign located between the constellations Zodiac sign Aquarius around the celestial equator.

And the lexeme in question is a homonym, and the Eagle II was conceived as an astronomical term. But simply given a definition, no illustrative example is given.

# 4 CONCLUSION

Thus, it is necessary to include, and perfect illustrative examples of terms related to astronomy in explanatory dictionaries. These examples go beyond strict definitions of textbooks and contextualize astronomy terms for students. Examples thought out to the smallest detail, turn dictionaries into rich educational resources. Pictorial examples can also be effective in explaining astronomical terminology. Drawings, diagrams, and illustrations create vivid images that are remembered by readers. Explanatory dictionaries enriched with illustrative examples in the field of astronomy, where it is difficult to understand abstract concepts and large distances, are an invaluable resource. These examples improve understanding, provide contextual understanding, fill gaps in knowledge, promote user interest, and encourage scientific literacy.

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