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## LEXICAL FEATURES OF THE METROLOGICAL UNITS OF THE ENGLISH AND UZBEK LANGUAGES

Annotation

The purpose of this article is to analyze the psychological, practical and historical prerequisites for the emergence of measurement methods, as well as to consider anthropocentric methods of measurement and describe some linguistic means of their expression in English compared to Uzbek. As for the tasks of the study following points can be mentioned: (1) to explore the evolution of the measurement category; (2) to consider the category of measurement in the anthropocentric aspect; (3) to compare the national units of measurement of the English and Uzbek people, which are mostly found in folk oral arts; (4) to identify some lexical units and phraseological units with words of measurement found in both languages. To collect material for this article the method of continuous and random sampling is used. Descriptive method is also used for material processing and analysis. According to the findings of the article, units of the measurement are investigated as a notional category in both languages and history of Uzbek and English measurement units are analyzed.

**Key words:** Units of measurement, length, weight, time, distance, notional category, anthropocentric, folk oral art.

## INGLIZ VA O‘ZBEK TILLARIDA METROLOGIK BIRLIKLARNING LEKSIK XUSUSIYATLARI

Annotatsiya

Ushbu maqolaning maqsadi o‘lchov usullarining paydo bo‘lishining psixologik, amaliy va tarixiy shartlarini tahlil qilish, shuningdek, o‘lchashning antropotsentrik usullarini ko‘rib chiqish va o‘zbek tiliga nisbatan ingliz tilida ularni ifodalashning ba‘zi lingvistik vositalarini tavsiflashdir. O‘lchov kategoriyasining rivojlanishini o‘rganish (1); o‘lchov toifasini antropotsentrik jihatdan ko‘rib chiqish (2); ingliz va o‘zbek xalqlarining ko‘proq xalq og‘zaki ijodida uchraydigan milliy o‘lchov birliklarini solishtirish (3); ikkala tilda uchraydigan o‘lchov so‘zlari bilan ba‘zi leksik va frazeologik birliklarni aniqlash (4) kabilarni mazkur maqolaning vazifalari sifatida aytib o‘tish mumkin. Ushbu maqolani yozish davomida doimiy va tasodifiy tanlab olish metodi qo‘llanilgan. Materialni qayta ishlash va tahlil qilish uchun tavsiflash metodi ham qo‘llanilgan. O‘lchov birliklari har ikki tilda shartli kategoriya sifatida o‘rganilib, o‘zbek va ingliz o‘lchov birliklari tarixi tahlil qilinganligi maqoladan olingan asosiy xulosalar sifatida aytilishi mumkin.

**Kalit so‘zlar:** O‘lchov birliklari, uzunlik, vazn, vaqt, masofa, tushuncha kategoriyasi, antropotsentrik, xalq og‘zaki ijodi.

## ЛЕКСИЧЕСКАЯ ХАРАКТЕРИСТИКА МЕТРОЛОГИЧЕСКИХ ЕДИНИЦ В АНГЛИЙСКОМ И УЗБЕКСКОМ ЯЗЫКАХ

Аннотация

Целью данной статьи является анализ психологических, практических и исторических предпосылок возникновения методов измерения, а также рассмотрение антропоцентрических методов измерения и описание некоторых языковых средств их выражения в английском языке по сравнению с узбекским. Что касается задач исследования, то можно упомянуть следующие пункты: 1) изучить эволюцию категории измерений; 2) рассмотреть категорию измерения в антропоцентрическом аспекте; 3) сопоставить национальные единицы измерения английского и узбекского народов, которые в основном встречаются в народных устных искусствах; 4) выявить некоторые лексические и фразеологические единицы с словами измерения, встречающимися на обоих языках. Для сбора материала для данной статьи используется метод непрерывной и случайной выборки. Описательный метод также используется для обработки и анализа материала. Согласно выводам статьи, единицы измерения исследуются как понятная категория на обоих языках, а также анализируется история узбекских и английских единиц измерений.

**Ключевые слова:** Единицы измерения, длина, вес, время, расстояние, категория понятия, антропоцентризм, народное устное творчество.

**Introduction.** Every measurement unit has an extensive background. When there were no various tools for measurement in the past people had a huge interest and willing to measure. Human organs have also been employed as measurement devices in the past. The textual monuments that have been passed down to us reflect and are maintained throughout various eras. The key idea is that everyone should be able to obtain these measurements. Units of measurement in the past included the followings: the fingers, hands, feet, joints, miles, twins, mills, hooks, elbows, stones, and others. Analyzing units of measurement and identifying their features is vital for comprehensive understanding of the world.

Without any hesitation we can say that they served as the foundation of world's mathematical model. "The creation of a mathematical model is an important stage of cognition, because when it is created, we know from what premises we derive consequences. In the course of experimental verification, we have the opportunity to investigate the correspondence of each of the premises of reality" [1]. Knowing measure is a concept that develops gradually as a person's cognitive abilities grow and they start to recognize that the world is made up of objects that can be further divided into smaller components helps us to understand how units of measurement came to existence. The multiplicity of objects in

both the material and spiritual realms suggests an equally multiplicity of conceivable divisions and corresponding measures. A person developed the capacity for comparison as he started to recognize his "I" and emphasize the ideas of "singularity-multiplicity".

An individual measured what he saw, and since space was three-dimensional, it got to be fundamental to calculate all the characteristics of a protest - length, height, weight, size, volume and others. We can say that man copied geometric shapes from the nature itself. A logical use of the facts supported the development of original ideas in geometry.

In the following example we can see the proof to our above-mentioned ideas: Jack made a big circle with his hands and said, "I love you so much that cannot be explained with words". This utilize of motions may be a common human characteristic, particularly in cases where for a few reasons it is troublesome to specific the degree in words. Individuals frequently illustrate measurement units with the help of gestures to express the height of their children, shape of things, length of something and in most cases shape of things to give information to the speaker whom they are talking to. In a few cases, a motion can moreover demonstrate the degree of a unique concept: "The basis of brains is superior than one of cash, but" he held his thumb and index finger almost a sixteenth of an inch separated - "about that as well much better" [2]. For example, mostly children make a big circle with the help of their hands to describe their desire, dream or wish, to show how gigantic dreams they have.

**Research methodology.** To collect material for this article the method of continuous and random sampling is used. Descriptive method is also used for material processing and analysis. "The solution of any mental problems, including those related to measurements, is closely related to the use of language, because language turned out to be the most powerful in semiotic terms of all communication systems" [3]. Language cannot function as an object of knowledge during the categorization of reality because its "version" of the world's structure has not yet come to resemble a single image. He assumes the role of a subject who "remembers" and forms information throughout this time [4].

The primary period within the history of estimations, amid which an individual did not require other exact measurement tools, but the period in which measurement units based on parts of human body lasted very long time. Not only nowadays, but also centuries ago different phraseological expressions were used to express the measure. From head to foot, at arm's length, within one's reach, a few steps from, from top to toe, within the grasp are some examples for phraseological expressions in the English language. These expressions are often found in fiction: "Head down, he was only a few steps from the darkened doorway; I saw her eyes too, dubious, considering, taking in my clothes from top to toe; Donald's extended hand was within reach of his; ...but it is a terrible thing to see another grouping blindly for it, when it is almost within the grasp; Sister Martha held Sister Elizabeth at arm's length; But the doe did not rise from under the tree, till the girls were almost in touch; She was a head taller than me and her shoulders were broad, her bones large and raw" [5].

With the advancement of considering, expository capacities of an individual, a crave to ace the world around him showed up. It is very normal that the primary information around the world in an individual were based on the tactile level of discernment - what he saw, listened, felt, etc. The analysts note that data almost the outside world and almost one's put in it comes to us over a few channels, which compare to the strategies of tactile perception [6]. The foremost critical channels for an individual are visual and sound-related, as well as motor, which carries data almost the

same with the one that owns position as one's body in universe. "The share of data seen by other sense organs is insignificant" [7]. Because of course everything in the world cannot be measured with the help of human organs. There not many phraseological units involved within the representation of the category "measure" within the English dialect and reflecting the level of tangible discernment. They are the followings: inside or out of one's locate; within or out of earshot; inside or out of hearing; within the squint of an eye. In the event that we compare with Uzbek, a few expressions can moreover be found. They are as followings: qo'l yetar joy, ko'z ko'rar yer, bir qadam, eshitarli joy, ko'z ilg'amas, ko'z ochib yumguncha. Let's see some examples in English that are given in the book named "Units and Measurement systems": "They were sitting on the bench under the cedar within earshot of other people; "Come hither", he called to a very old Induna or counselor, who was sitting with others in a circle round the king, but out of ear-shot; He had his pistol, but if he used it, there might be other Apaches within hearing; Hank looked around anxiously, but there was no one within sight; Mor stepped back a little, so that he could observe the newcomers without being anywhere in Nan's field of vision" [8].

Units of measurement that are created with the help of units including sensory language to accept the reality included expressions, free phrases and some subordinate clauses. Followings are some examples: "...when Twala the king calls up his regiments their plumes cover the plain as far as the eye of man can reach; See you not that broad sheet of water which the eye cannot compass; Behold, the land is yours as far as ye can see" [9].

**Analysis and results.** According to the analysis that we made in this article it is understandable that anthropocentric measurements can act also as metaphors to identify gravity of feelings and their degree of participation in the various situations, asset of the sound and completeness of the attention. For example: "She was head over ears in love with him; Julia often asked herself what it was that had placed her at least head and shoulders above her contemporaries; It all came so gradually that I didn't realize what was happening till I was in it up to my neck; Julia with half an ear listened to the list Margery read out; People began rising from their seats, putting their hands together, shouting at the top of their lungs" [10].

When it comes to speak about Uzbek measurement units, a few sources state that the term metrology started to be used in the books in the late of 19th century. That being said, our forebears created the foundations of estimation a long time ago. The amazing researcher Ahmad Fergani was the first person in the world to design and create a device for measuring water level, and Abu Abdullah Muhammad ibn Musa al-Khwarizmi's works contain a wealth of information about measurements and units of estimation. This device was first created in 861. Yusuf Khos Hajib's calls not as it were to utilize the units of estimation, but moreover to have an intensive information of measurement in his work named "Qutadgu bilig" composed in Turkish. As a matter of fact, a few illustrations can be found within the book "Qissasi Rabguzi" (The Story of Ar-Rabguzi), composed by Nosiruddin Rabguzi within the Turkish dialect. They are as followings:

Musoning lashkarini ko'rdiki, Avj to'rt yig'och yerni band qilib turardi.

Solih yurtidan chiqdi, yetti yig'ochlik yo'l yurib Qar tog'iga keldi.

In the examples above, the word "yig'och" was used as a distance measuring unit, it was equal to nine kilometers.

The Uzbek people have a rich social history and have contributed immensely to the global scientific community. They have also long contributed greatly to the field of

estimating and its advancement. Experts were estimated to be locked in. There are approximately 20,000 unknown recorded written sources in our country's libraries, archives, and historical institutions. If you search through them, you might find units of measurement that were used in the distant past. The manual's historical material on traditional units of measurement is an essential resource for understanding the historical perspectives of the Central Asian people groups and our country. Our ancestors not only established the basis of local units of measurement, but also strictly controlled the correct use of measurements. Historical sources state that those who betrayed the buyer on the scales or on the gas were severely punished. It is no secret that Ibn Sino, Abu Rayhon Beruni, Mirzo Ulugbek, using local units of measurement, was immortalized. The towers of Samarkand, Bukhara and Shakhrisabz, Khiva, which amazed the human mind, were built on the basis of these units. Better understanding of the measurement units is very crucial. Because this topic is widely connected with not only astronomy, mathematics or building, but also it has deep connections with history, linguistics and literature. It must be emphasized that we need to give students an idea of units of measurement in the past [11]. This is especially important in literature classes. Because students may not understand the meaning of measurement units as above examples given in their textbooks. For example, a student reading Navoiy's lyrics is confronted with the word "qadam". If he knows that the word "qadam" has long been used as a unit of measurement, he can easily understand the value of a poem.

Hamul yerdan o'n ikki ming qadamdir,

Vale har bir qadamda yuz nadamdir.

Person should know the meaning of "chorak guruch" written in the works of Muqimiy, to understand better the meaning of words and thoughts of the poem:

Qirq chorak gurunch olay deyman,

Yana to'yimga yetmagay deyman.

We can see such kind of examples not only in the works of historical poems and writers, such as Sakkokiy, Maxmur, Lutfiy, Furqat, but also in the works of contemporary writers as Abdulla Qodiriy, Abdulla Qahhor, G'afur G'ulom, Sharof Rashidov, Nazir Safarov, Odil Yoqubov, Pirimqul Qodirov, Mirmuhsin.

**Conclusion.** The scientific disciplines of the past centuries and decades did not know how to divide into limit specialties. Metrology is not an exception either. It developed in close solidarity with cosmology, math, geometry, and other divisions of old science. Researchers of the past were common researchers with a wide profile. Additionally, they were ordinarily at the same time travelers, students of history, journalists, writers, lawmakers and indeed competitors. Moreover, there were clerics among them. Science of the past was graphic, going through a period of amassing realities. However, at all times, starting from profound relic, there were individuals who understood the significance of ensuring the consistency of estimations, who attempted to present a degree and number into science. Mendeleev stated some time ago that science begins when they begin to degree. Whether they wanted to or not, these people set the groundwork for modern metrology. In summary, it should be noted that the history of metrology provides an incredibly fascinating and instructive picture of the application and development of the concept of degree, contingent upon the complexity of tasks that emerged some time ago among groups carrying out cognitive, generation, and trade capacities. The evolution of metrology reveals in a clear and unique way the common ground upon which all cognitive thought has developed throughout history: from erratic, subjective, and subjective to broadly critical, normalized, and objective; from a state of chaos to desired differences; from autonomy and fracture to interconnection and solidarity; and from observation to logical strategy. The arrangement of contemporary measurement units and the development of a few proverbs emphasize the importance of this phrase throughout human progress.

#### REFERENCES

1. Aveni, A. (1989). *Empires of Time: Calendars, Clocks, and Cultures*. Basic Books. New York.
2. Bendick, J. (1989). *How Much and How Many? The Story of Weights and Measures*. Franklin Watts. New York.
3. Bondarko, A.V. (2002). Categories in the system of functional grammar. Communicative and semantic parameters of grammar and text. Digest of articles.
4. Bruce, R.G. (2014). *Units and Measurement systems*. Second edition. England.
5. Bryansky, L.N. (2002). *Uncombed metrology*. Moscow.
6. Bryson Bill. (2008). *A Short History of Nearly Everything*. New York.
7. Davidovich, Y.A. (1970). *Materials on metrology of medieval Central Asia*. The science.
8. Depman, I.Y. (1953). *Measure and metric system*. Children's literature.
9. Dmitriev, Y.Y. (1995). Category of quality, quantity and measure in the historical and philosophical process. Genesis. Patterns of development.
10. Hebra, A. (2003). *Measure for Measure: The Story of Imperial, Metric, and Other Units*. Johns Hopkins University Press. Baltimore.
11. Ivanova, N.A. (2002). *Philosophical and anthropological foundations of knowledge*. Tomsk State University Publishing House.