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NUMBER, QUANTITY AND HUMAN FACTOR

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Abstract

The article summarizes and systematizes the properties and relationships that underlie the description of the category of quantity. The author analyzes the reflection of the quantitative aspect of the world in natural language. The features of expressing quantitative relationships at various language levels, from phonetics to syntax, are considered. This article considers the quantitative meaning, its realization, its role as a field. The article also sheds light on the issues of the category of quantity and its realization at language levels, as well as its relationship with other categories.

Keywords: quantity, thinking, level, measurement, number, abstraction quantity;

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quantitative value; quantitative characteristics; consistent analysis.
quantitative indicator.

INTRODUCTION

Numbers have been central to human culture, science, and philosophy since ancient times. However, the concepts of numbers that we use today are not only abstract mathematical objects, but also the product of humanity's forms of perception of the world. This brings us to the issue of the anthropocentric (basically, human factor at the center) character of numbers. That is, the concept of number develops and operates depending on the human mind, the process of cognition, and the cultural context. One of the important issues is to study the anthropocentric character of numbers, their origin, application,

Quantitativeness is a substantive field. Because universal substantive units that are expressed at different levels through the units of those levels and that exist at all levels constitute a field. At the morphological level, quantitativeness is formed lexically and morphologically and is manifested through some forms independent words and affixes. The concept of quantity is, first of all, inextricably linked with the number system. Numbers are words that express the quantity, count, and order of an object or action. In arithmetic operations, the concept of quantity becomes abstract. In this case, the object is not indicated: two fifteen - thirty. It seems that numbers acquire a clear concept of quantity only when they form a

and philosophical aspects through a deep and

combination with words from another category. A number of features of units related to the number category are well known: complex numbers are formed on the basis of twenty-two actively used prime numbers; in writing, numbers are represented by letters or numbers; numbers can be combined; they can express quantitative meanings such as totality, estimation, and distribution. Accordingly, numbers are divided into types of meaning. A quantitative sign is also observed in the pronoun and adverb categories. However, the quantitativeness in them differs from the quantitativeness expressed by numbers. The pronoun does not directly indicate quantity, but refers to it. The specific meaning specific to a pronoun is known through the text. The forms of personal pronouns me, sen, u represent the singular, the forms biz, siz, ulur represent the plural. In the I, II persons, the singular and plural are expressed by separate words

[Zulfiyev, 1975:15]. In the III person, the plural meaning is formed by adding the plural suffix lar to the singular form. When the suffix -las is added to the pronoun you, it indicates the speaker's relative position to the listener. Personal pronouns form an opposition. At one pole of this opposition is the singular number, and at the other, the plural number: I-we, youyou, he-they. This opposition is further complicated by the addition of person-number suffixes to personal pronouns: I am–we are, you are–you are, he is–they are. The life of all peoples and cultures is "coded" into numbers. Demonstrative pronouns indicate the distinction of quantity in terms of distance: this–the distance close to the speaker, that–the distance further from the speaker. These two lexemes are distinguished by the semes "closer" and

"further". These semes indicate the quantitativedistance difference between the two lexemes. Demonstrative pronouns can accept the plural affix -s: these, those, those, these, etc. Interrogative pronouns such as "how many", "how many", "how many" serve as a reference to a quantitative sign. Demonstrative pronouns express the meaning of quantitative totality or, conversely, the meaning of separation: everyone, all, all, total; everyone, any, every, every, everything. Adverbs of degree and quantity indicate an indefinite amount. These adverbs express quantitative abundance and quantitative scarcity, forming an opposition: many, many, much, little [Fayzullayeva, 1985: 19].

Each person knows his date of birth, the number of years he has lived, the number of family members, the house number, etc. He also has information about many dates related to the history of the land he lives in, the size of its territory, the number of inhabitants, the annual budget. In everyday life, we are surrounded by numbers: monthly salaries, taxes, prices, calculations, the number of participants, estimates, etc. Words can undergo various changes under the influence of linguistic and extra-linguistic factors, have a sign and value meaning. For a resident of a large city, a fourstory house is considered low, while for a villager it is considered high. To designate quantities in writing, international ideogramsnumbers have been developed, which are used in parallel with words.

LITERATURE ANALYSIS AND METHODOLOGY

In world linguistics, scientists such as F. Schlegel, A. Schlegel, W. von Humboldt, A. Schleicher, G. Steinthal, M. Müller, F. Misteli, F. Fink, I. A. Baudouin de Courtenay, F. Fortunatov, E. Sapir, R. Jacobson, J. Grinberg, M. Gukhman, B. A. Serebrennikov, A. K. Borovkov, A. N. Kononov, V. Gak, I. Meshaninov, V. Skalichka have studied the problem of linguistic type from various aspects [Humboldt B, 1960: 68]. In Uzbek linguistics, there are studies in this area by scientists such as A. Gulyomov, J. Buronov, A. Abduazizov, O. Yusupov, A. Nurmonov, T. Mirzaqulov, G. Hoshimov, D. Nabiyeva [Gulyamov, 1963: 78], but to date, a quantitative approach to the typological features of languages, manifestations of fusion in the Uzbek language, the difference between fusion and inflection have not been the object of a comprehensive monographic study.

In solving the classification problem using the quantitative method, the quantitative characteristics of the morphological types existing in the Uzbek language and their level of occurrence were clearly determined based on the quantitative method recommended by J. Grinberg.

In linguistics, along with theoretical descriptions, quantitative characteristics are also necessary. The quantitative method is very important in accurately determining the type to which a particular language belongs and in determining the position of certain typological features in languages. Because in science, sometimes theoretical ideas do not correspond to practice. Consequently, scientific truth cannot be achieved only by dry theorizing. According to V.Z. Demyankov, the method recommended by J. Grinberg is more reliable and accurate than the existing method of filing in linguistics [Gak, 1989:31]. O.Q. Yusupov also indicated the need for a clear definition of traditions in the languages being compared as an urgent task.

DISCUSSION

Numbers have complex symbolic meanings in many cultures and religions. In China, numbers and their use have always been considered very important, significant. Because the number was associated with the cosmological system and represented the stars (nine stars, which are considered a symbol of the essence of the universe), as well as the five elements (the five forces of the universe: metal, wood, water, fire, earth). All things in the world were classified by these elements. Numbers also designated the eight main aspects of the world. For centuries, the Chinese believed that numbers could predict the future. The number series began with one, because the Chinese considered zero to mean nothing and had a negative attitude towards it.

1— unity, the beginning of all things;

2—consisting of two units and symbolizing symmetry, growth, life; represents the south;

3—a very important number: three points are needed to form a geometric shape; represents the east;

4—associated with useful shapes such as squares and rectangles; represents death, the west;

5—balance. In China, this number is considered perfect, because there are five fingers on the

hand, five vital organs in the body, etc. It is also associated with the five elements.

6—success; represents the north. This is considered a good number;

7—truth; cult of the afterlife; means the south. Associated with the days of the week; associated with the afterlife, the seven-night festival;

8—means growth, development, luck;

9—means long life; 10—completion.

In ancient Russian written monuments, numbers were represented by Cyrillic letters. Their order and meaning were adopted from the Greek script. In this case, a special sign—titlo—was placed above a letter or combination of letters, and a dot was placed next to it.

The oldest number systems arose from the practical needs of man - counting, accounting, and planning objects. For example, the first number inscriptions are found in the form of lines drawn on bones and stones; they were used to count the number of livestock or products. These early systems were directly related to human activity. Over time, the concept of number became separated from concrete objects. In Egyptian, Babylonian, and Greek writing systems, numbers were used in sciences such as geometry and astronomy. However, these systems are still based on practical experience and serve human needs. This situation once again demonstrates the anthropocentric nature of numbers. Cognitive science research shows that humans have a limited ability to perceive and use numbers. People can quickly distinguish objects with a number between 1 and 4 through an intuitive mechanism. However, as the number of objects increases, people are forced to rely on complex counting and thinking strategies. This means that the concept of number is formed within our biological capabilities. Cultures and religions have had a unique influence on the concept of number. Different peoples have different symbolic meanings of numbers. For example, the number 7 is considered sacred in Christianity, while the number 8 is a symbol of good luck in Chinese culture. This clearly demonstrates the anthropocentric nature of numbers - the meaning of numbers is determined by human beliefs and cultural contexts. In ancient Greek philosophy, numbers were considered not only a means of calculation, but also a metaphysical concept. Plato saw numbers as part of an eternal and unchanging world of ideas. In his opinion, numbers are the main elements that determine the order and harmony of the universe. But this abstract approach of Plato also relies on the human mind, that is, it is also anthropocentric. Immanuel Kant believed that numbers are a product of the human mind and intuition. He calls time and space forms of perception and describes numbers as a means of organizing these forms. Therefore, according to Kant, numbers are not a specific property of the external world, but a product of human

perception. This further strengthens the idea of the anthropocentric nature of numbers. Mathematics is often called the "language of nature", because many physical laws and phenomena are expressed precisely through numbers. However, the question arises: are numbers really a specific property of nature or are they concepts and tools developed by man? Some scientists and philosophers believe that

mathematics is a model created by man, which we use to understand the environment.

In today's digital age, numbers have become an integral part of our daily lives. Information management, accounting, communication, and even entertainment are carried out using numbers. The binary number system on which computers operate is a technological solution created based on human needs. This also shows that numbers have an anthropocentric nature - they are adapted to the needs of society.

There are several groups of quantifier words in the lexicon of the English and Russian languages. Such groups include lexical words that name the physical characteristics of objects in existence, names of basic parameters (height, length, width, height, thickness, weight, size, volume, amount, humidity, temperature, age, etc.); artificial segmenters (minute, hour, year, month, meter, kilometer, hectare, liter, gram, kilogram, step, finger, span, fist, head, pinch, heap, cistern, bag, jar, etc.); verb lexicon of measurement and calculation (enlarge, reduce, measure, add, determine, calculate, sum, subtract, multiply, divide, expand, deepen, fatten, lose weight); free word combinations and phrases with a quantitative meaning (a bag of flour, like a drop of water, a tongue with a span, six legs, seven hands, a handful of soil, a sip of water, enough for seven seeds). The quantitative meaning also has a linguo-cultural character. The quantitative shell is distinguished by its versatility in various developed languages. It affects all the main levels of language structure: lexicon, word formation, morphology, phonetics, syntax. Linguists have different opinions on the quantitative category and their proposals for classifying this category.

Quantitative methods, especially statistical ones, have already taken a firm place in linguistics. Quantitative analysis allows for a clear and comprehensive study of linguistic phenomena, and at the same time contributes to the orderly arrangement and correct placement of linguistic units. A thorough clarification of the content of the quantitative logical category is achieved, along with many other disciplines, on the basis of the analysis of linguistic facts.

RESULTS

The meaning of quantity can be expressed through all level units. At the same time, auxiliary words also create a quantitative meaning. This scientific research considers the participation of auxiliary, connective and load in determining different dimensions.

The auxiliary words used with the main conjunction include words such as with, for, like, new, gradually, sari, because, through, because, while, along, along, along, over, inside, about, about, about, about, about, about. The auxiliary with is used in the sense of mutual cooperation, joint performance of a task, task, or work. The word with is also used as a connecting conjunction. The word with expresses quantitative meanings such as plurality, pair and group, unobstructedness, speed of movement, and duration: Tushimme me punq dali ve pakta kiir (P.Q.) ; I will tell you about my brother Yalqin, about the years we spent together (P.Q.); A king from Khorasan passed through Jaihun,

opposite Termez, intending to fight the Turks ("The Teaching of the Ancestors"); As Sattar was getting stronger, Raziya became more courageous (P.Q.); Of course, I knew and understood that many of those who were taking this vacation were enjoying the pleasure of their labors throughout the year, and some were undergoing treatment. (P.Q.). Also, in the expressions "with all one's heart and soul", "with all one's effort", the auxiliary verb bil is used, which means "with all one's strength", "with effort".

Among the auxiliary verbs used with words in the declension of departure, such as to, qadar, qarad, karata have meanings such as the direction of the movement, the temporal and spatial limit, the direction of the movement, the measurement and quantity: The foot ghost was coming towards the children's house, the girl was waiting impatiently. (A.Q.); The auxiliary verbs used with words in the declension of departure, after, after, are directly related to the time of the action. The auxiliary verb beri expresses the time of the beginning of the action. Its synonym is the auxiliary verb bunyon. The adverbs before and before refer to the concept of time and indicate that the action occurred before the moment of speech: After inspection and questioning, the sultan gave permission to the Bedouin ("The Lesson of the Ancestors"); After watching his mother's work for a while, Kumuş went outside. (A. Qod.) When considering conjunctions, it is recognized that they perform the function of connecting sentences or parts of sentences. However, conjunctions, when used singly or repeatedly, can also express the substantive aspects of simple sentences or certain parts of sentences. In particular, declension conjunctions serve to clearly reflect the various aspects of the performance of an action in space and time: Sometimes they would come in droves, sometimes the father himself would accompany them (H.G.); He would go to the porch, sometimes to the kitchen, and would constantly walk (Oydin). The suffix assigns an additional meaning to a word or sentence. One of these additional meanings is the meaning of quantity. In particular, the suffix -gina defines the boundaries of various concepts. To express this meaning, only the suffix can also be used. Emphasis-intensifying suffixes such as –ku, ham, -u, -yu, -da, aq, -yak are added to words expressing various concepts, strengthening their meaning and increasing their significance: Even if a sword comes to my head, you will cut my throat (S.Abd.); I came from very lonely streets! (H.H.); Even the matter became so serious (A.Mukhtor);

-If necessary, get off the horse, drink with humility and faith, by God I am neither your friend nor your servant, - he said. ("Ajdodlar o'giti"). In conclusion, it can be observed that quantitativeness is expressed not within the framework of independent lexicalgrammatical lexemes, but also through auxiliary words. Auxiliary words can express the repetition of action, state, duration, immediacy, quantity, strength of influence and other quantitative properties of signs. Thus, the results of the study conducted on the basis of a quantitative approach showed that for the Uzbek language, the tendencies of synthetism, agglutination, suffixation, relation are dominant signs, while the tendencies of analyticism, fusion, prefixation are

fluctuations. However, it is also worth noting that this situation demonstrates the dynamics of change in accordance with the laws of the synergetic paradigm in the process of historical development, in which the indices of the above signs may differ. Thus, the expression of quantity in linguistics has been studied descriptively at the lexical, morphological, word-formation, and syntactic levels, based on sufficiently classical analyses. Most studies have been devoted to the analysis of the grammatical category of number as a systematic way of expressing quantitative relations. However, the quantitative category of the rich language material has not been studied in an integral, complete and systematic way. This indicates the relevance of a multi-level complex analysis of this problem. The quantitative category is one of the main categories of human thinking. After all, all forms and manifestations of being (matter) are described on the basis of quantitative accuracy. The quantitative accuracy of things is a characteristic that characterizes their external signs, that is, size, as well as the internal nature of things (weight, heat capacity). Things and phenomena existing in being can be manifested both in a single quantity and in a plurality. The logical-substantive category of quantity lives in language as a linguistic category called "quantitativeness", and appears in all styles of language construction. The concept of "space", which includes distance, length, width, height, volume, area, etc., is determined and expressed more vividly on the basis of quantitative description. Space, on the other hand, is related to the category of locality, which, without a quantitative description, is considered a bare and dry category.

A complex analysis of units of different levels with a common meaning has become the basis for studying these units as grammaticallexical or functional-semantic fields. Since the content of the quantitative numeral, the verbal form of quantity, and the pronouns of quantity have a quantitative seme, one can replace the other in the text. In the case of substitution, various semantic changes occur, but they can be transformed.

When studying quantity as a field, it can be seen that the macrofield of quantity consists of two separate fields—the fields of definite and indefinite quantity. The definite quantity has two more subfields: number and singularity. The singularity consists of microfields such as plural and the assessment of indefinite quantity. The field of indefinite quantity is divided into indefinite large quantity and indefinite small quantity. However, the above division is not rigid, but different parts of the microfields can interact within the macrofield and partially pass into each other.

Linguists have different opinions on the category of quantitativeness and have made different proposals for classifying this category. Quantitative methods, especially in statistical linguistics, have already taken a firm place. Quantitative analysis allows for a clear and detailed study of linguistic phenomena, while helping to achieve an orderly arrangement and correct placement of linguistic units.

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CONCLUSION

In general, in understanding the essence of a subject, a quantitative sign is as important as a qualitative sign.

Numbers, despite their abstractness, are closely related to how humanity perceives the world, culture and needs. Historically, number systems arose from human practice, and even in today's technological era, numbers serve our purposes. They do not exist independently of us, they are tools created and used by man. The human mind plays a decisive role in creating and understanding numbers. This confirms their anthropocentric nature. Although mathematics is often considered an objective science, its language and symbols, including numbers, are products of human experience and thought.

The anthropocentric, linguocultural, concrete, abstract nature of numbers is manifested at all stages, from their historical formation to their philosophical and scientific interpretations. Numbers, despite their universality, are a tool created and used by man. They reflect the structure of the environment, but also the specific characteristics and boundaries of human thought, perception, and culture.

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