

THE LINGUISTIC NATURE OF NUMBERS: STRUCTURE AND MEANING

Yusupova Maksuda Umidjonovna,
Urganch State University maksudayusupova26@gmail.com

Annotation: This article explores the linguistic nature of numbers, emphasizing their structural and semantic roles in language. It highlights how numbers, rooted in cultural and spiritual values, manifest in proverbs and everyday speech across different nations. The study discusses historical developments in number formation, particularly within Turkic languages, and addresses the grammatical, morphological, and syntactic features distinguishing numerals from other parts of speech. Different types of numerals—cardinal, ordinal, and collective—are analyzed in terms of their linguistic functions and transformations. The article also notes how numerals can lose their strict quantitative meaning in idiomatic expressions, reflecting broader cognitive and cultural processes.

Keywords: *Numbers, Linguistics, Language and Culture, Numerals, Quantification, Counting Systems, Turkic Languages, Ordinal Numbers, Cardinal Numbers, Collective Numerals, Lexical Semantics, Morphology, Syntax, Phraseology.*

In global linguistics, there is a growing need to study the interrelation between language and culture from various perspectives and levels. This necessitates examining each linguistic phenomenon within anthropocentric paradigms. Special attention is given to numerical component units that are actively used at the lexical level in all languages, focusing on the symbolic aspects associated with numbers. These aspects are rooted in the spiritual values of specific nations and have led to the emergence of national, international, and universal numerical component proverbs through intercultural interactions. The linguistic and cultural significance of these proverbs is of particular interest.

Language is the materialization of thought; therefore, it reflects the essence of cognition. Similarly, the concept of number is a product of thought manifested in language. In this context, we present definitions of the category of number provided by linguists: "The category of number is a grammatical category that expresses quantification over entities or events denoted by nouns or nominal elements" [4]. "Measurement and counting of objects and phenomena are among the primary logical categories that express the quantifiable aspects of objects" [5].

Thus, the category of number manifests the precision in describing the multiplicity, magnitude, intensity, and the degree of manifestation of certain characteristics of objects and phenomena in the external world. Numerous issues related to the category of number—such as quantity and measurement—have been extensively covered in scientific literature and have sparked various debates [5].

As noted above, in their speech, people initially used the concepts of “one” and “more than ten.” The first ten numbers played an important role in the lives of ancient people and were named differently in honor of gods or respected celestial bodies. The history of the emergence of the first ten numbers and the numbers that followed has long attracted the interest of researchers. For instance, when analyzing the Turkish word *elli* (“fifty”), V.A. Gordlevsky sees the root *el*, which means “hand” [1].

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Regarding the tens, unanswered riddles have remained in Turkic languages concerning the pattern from 30 to 50 (i.e., 30, 40, 50): these numbers appear to be formed from independent words that differ from their corresponding base units (3, 4, 5) [1].

The second counting system for tens and units was composed of independent numbers, often repeated, used to express the order of tens. These words were essential for forming intermediate numbers, and over time, this counting system pushed out the “whole tens.” According to some linguists, the initial counting base among the Turks might have been fifty, meaning that the number 50 served as a boundary for counting [1].

Numbers have also been the subject of many linguistic studies [2][3]. In this regard, certain theoretical issues related to the topic have sparked debates: the conditions of their emergence, the nature and manifestation of numbers. In the course of development, numeral names lose their grammatical gender and quantitative characteristics, and gradually separate from other nouns, forming an independent part of speech—numerals [6].

In normative grammar, numerals are traditionally explained as words that denote the quantity (or number) of objects: “A numeral is a word that expresses the quantity (or number) of an object and conveys this meaning through morphological categories” [7]. “Lexemes that carry quantitative meaning belong to the class of numerals” [7]. However, the study of numerals as a lexical group has also helped identify hybrid phenomena, such as the presence of features typical of both nouns and adjectives, along with purely numerical indicators.

Several perspectives exist regarding the role of numerals in the language system. For instance, V.G. Gak suggests four possible approaches to determining the status of numerals in the system of parts of speech [2]:

“All numerals are considered together and included in the adjective category, namely among pronominal adjectives, as part of the noun determiners group.” However, it should be noted that numerals cannot be classified as adjectives, since they do not convey qualitative features but rather encapsulate the meaning of quantity.

“Numerals are classified as a separate, unique part of speech that includes both cardinal and ordinal numbers.”

Words formed from numerals are treated solely as semantic groups. All numerals can be grouped based on their general meaning; ordinal numbers may be considered adjectives, and cardinal numbers as a separate group [8].

Words classified as “counting nouns” should not be considered numerals, as they possess object-related semantics in addition to quantitative meaning. However, numerals also differ from other parts of speech in their morphological and syntactic features [9].

Key grammatical features of numerals:

Specific suffixes to express ordinal, collective, distributive, and approximative relations [9].

Occasional use of numerals with counting words like “pair,” “meter,” “piece” (numeratives) [9].

Specific suffixes (-ta, -cha, -lab) used only for numerals in Uzbek [9].

Derivation of new words from numerals, though numerals themselves are stable as an independent part of speech [10].

Grammatically, numerals are categorized into cardinal, ordinal, and collective types [7]. Cardinal numbers indicate quantity and combine with nouns to denote exact quantity. Ordinal

numbers indicate sequence and position among objects, differing pragmatically and morphologically from cardinal numbers [8]. Collective numerals convey a plural meaning even though they grammatically appear singular.

As N.Y. Marr states, “Numerals do not have and cannot have figurative meaning... However, when they become components of phraseological units, they lose their core function” [5].

Thus, the concept of number originated from the practical experiences of ancient humans counting objects, and each cognitive object acquires quantitative features during the process of cognition [6].

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