# THE MULTIDISCIPLINARY JOURNAL OF SCIENCE AND TECHNOLOGY 

# VOLUME-4, ISSUE-4 <br> ANALYSIS OF NUMBERS IN LINGUISTICS (IN THE EXAMPLE OF ENGLISH AND UZBEK LANGUAGES) 

Karimova Iroda Baxtiyor qizi<br>Karshi State University Teacher of the Department of Practical English Language (99893)9340111)

## ANNOTATION.

The purpose of this scientific work is to analyze the similarities and differences between the numerical units of the languages being compared based on a comprehensive study of numerological units in the English and Uzbek languages. To reveal the appearance of numbers in English and the difference in meaning between numbers in English and the structural-semantic and functional features of numbers in English and Uzbek languages.

Keywords: number, mathematics, national culture, cultural code, numerology, characteristic and uncharacteristic numbers, semantics of numbers, structural expression of dependencies, Pythagoreans, Gwalior numbers, Arabic numbers, tube numbers, history of numbers;

## АНАЛИЗ ЧИСЕЛ В ЛИНГВИСТИКЕ (НА ПРИМЕРЕ АНГЛИЙСКОГО И УЗБЕКСКОГО ЯЗЫКОВ) <br> Каримова Ирода Бахтиёр қизи

Каршинский государственный университет Преподаватель кафедры практической
Английский язык

## АННОТАЦИЯ.

Целью данной научной работы является анализ сходства и различия числовых единиц сравниваемых языков на основе комплексного изучения нумерологических единиц английского и узбекского языков. Выявить появление чисел в английском языке и разницу значений чисел в английском языке и структурно-семантические и функциональные особенности чисел в английском и узбекском языках.

Ключевые слова: число, математика, национальная культура, культурный код, нумерология, характерные и нехарактерные числа, семантика чисел, структурное выражение зависимостей, пифагорейцы, числа Гвалиора, арабские числа, трубочные числа, история чисел;

## INTRODUCTION

The relevance of our research lies in the fact that, despite the recent comparison of the lexical structure of unrelated languages in different directions, a whole semantic field - numerical units - has not been studied. So far, the meaning and symbolism of digital components in English and other languages have not been studied in detail.

There are no works in Uzbek linguistics that consistently analyze the phenomena of synonymy and antonymy, variability and stability in the diachronic-synchronic aspect based on the materials of numerological units of English languages.

The relevance of our chosen research topic is related to:

## THE MULTIDISCIPLINARY JOURNAL OF SCIENCE AND TECHNOLOGY

## VOLUME-4, ISSUE-4

1) serves to further increase the significance of research results for theoretical sciences related to the study of language culture and its development under the influence of numbers and their symbolism.
2) We observed that the problems of synonymy, antonymy, and the stability and change of the grammatical form of numerological units in unrelated languages are insufficiently studied in modern comparative lexicology, and we create the basis for a theoretical basis as a solution in these aspects.
3) the importance of learning for linguodidactics - we have set ourselves the goal that the numbers in English will serve as lexical expressions for teaching in universities and other educational institutions in Uzbekistan.

## SCIENTIFIC AND THEORETICAL BASIS OF THE STUDY OF NUMBERS IN LINGUISTICS

Modern linguistics is characterized by two main directions: on the one hand, its tasks include their adequate description and interpretation, focusing on the specific characteristics of individual languages, on the other hand, the desire of linguists to study linguistic universals at all levels of language from a typological point of view is clear. appeared. These trends are also reflected in the study of the lexical and structural composition of world languages.

The above gives reason to say that the non-mathematical properties of numbers that appeared in archaic systems influenced the formation of various cultural systems and were also reflected in language. Let us remind you that in linguo-cultural studies, the linguistic beginning of numerical signs is shown, which allows to study language units, forms, cultural background, i.e. nominative units (words and phraseological units) [Maslova, 2001].

Despite the existence of studies that place number among the dominant concepts of a given cultural system, the problem of the dual meanings of number seems to be understudied. In particular, the aspect of inconsistency and uniqueness of the secondary meanings of the number in different images of the world requires development.

Accordingly, in our research, we aim to study the semantic structure of lexemes that realize the idea of number in English and Uzbek languages and compare their secondary meanings. We use the terms "number lexemes", "number components", "quantity lexemes", "quantity components" to designate words with the meaning of number. For the purpose of this study, the terms listed are synonymous.

In recent years, the rapid development of linguistics is characterized by the differentiation of the subject of research and the methods of its study, as well as the attraction of new problems and aspects based on the theoretical foundations of numbers into the orbit of scientific research. This process corresponds to the general trend of the development of linguistic theory from simple to complex levels, methods and directions of language learning. The latter also includes a comparative (opposite) analysis of numbers in languages of different groups and systems. The use of comparative-historical, comparative and structural-semantic methods of analysis in the study of the lexicon of numbers of different languages forms a separate section of the theory of numbers comparison.

By the numerical component, we understand the part of speech characterized by the designation of abstract numbers or the number of objects and their order of counting, the almost complete absence of gender and number categories, and special forms of subtraction and word formation. joins only with nouns as a quantum [Rosenthal 2003]. The numbers that have become

## THE MULTIDISCIPLINARY JOURNAL OF SCIENCE AND TECHNOLOGY

## VOLUME-4, ISSUE-4

components of digital units cease to perform their main functions and begin to denote either an extremely small or an extremely large number in the abstract, or have no numerical meaning at all. In this work, we took the interpretation of A.V. as a definition of a phraseological unit. Kunina suggested that they are stable combinations of words with complex semantics, not structured according to generative structural-semantic models of variable combinations (Kunin 1996).

## Development of numbers in English and Uzbek languages.

Numbers are conditional symbols that represent numbers. In ancient times, numbers were represented by words. With the development of the social and economic life of peoples, there was a need for more perfect signs and counting systems.

The oldest Raam belongs to the Babylonians and Egyptians. In Egyptian hieroglyphic numerals (3000-2500 BC), special pictographs appeared to represent numbers, and later hieratic and demotic writing. Babylonian numerals (early 2000 BC ) were mainly cuneiform symbols representing 1, 10, 60, and 100, on which all other Numerals were expressed. From the Egyptian hierative script came all the scripts of the Near and Middle East, as well as the Greek Ionic script, as well as the alphabetic Numeral.

The printed Greek alphabet gave rise to Slavic Cyrillic and Carthaginian numerals. Symbols of the current number (along with zero) appeared in India around the 5th century. Prior to this, India had Kharoshti numerals and, almost simultaneously, Brahmi numerals. From the Brahmi Numeral came the Indian Gwalior Numeral. Gwalior Numerals are the basis of Arabic Numerals. Arabic Numerals consist of Eastern and Western (dust) Numerals.

The Eastern Arabic Numeral is used in Egypt and the Arab countries to the East, Iran and Afghanistan, and the Western Arabic Numeral (Gubor) is used in the countries west of Egypt. In Europe, from the 9th century, the gubor number spread and quickly became popular. In Eastern countries, the gubor number did not spread widely until the 19th century.

Al-Khorazmi's incredible contribution to the history of numbers and its emergence.
Economic in the ancient Egyptians with the development of needs emergence of mathematical knowledge depend on each other. Mathematician Ancient Egypt without skills and numbers scribes carried out land surveying they could not increase the number of workers and they could not calculate their savings or determine the tax benefits they didn't get it. And so, the first numbers appeared in mathematics being the oldest state in Egypt to the period of formation of structures is correct.

II - VI centuries BC Indian astronomers in between the Greek system of sixty-six numerals learned about, and accepted zero from the Greeks they did Then the Greek calculation the basics are taken from China in India combined with the decimal system. It is in India that they are one sign started marking the numbers with Indian writings were popularized by our scholar

Al-Khwarizmi, he A work entitled "On the Indian Account" wrote in this place, our scholar Al-Khorazmi and his "Indian account information about his work let's give it. About zero position system when it comes down to it, we are first and foremost "Indian Account" by Muhammad ibn Musa al-Khwarizmi The book ("Hisab al-Hind") is mentioned. About Khorezmi's parents where is the initial information from? there is no information about receiving it. But some historians according to his information was very talented from a young age, in addition to natural sciences, he also knew many foreign languages. Khorezmi's youth is Arab passed in the states. To science Thirsty Khorezmi of his time to Baghdad, the center of advanced sciences will come. At this time, al-Ma'mun's "House of Wisdom" ("Bayt ul-hikmat") was established. Khorezmi was here earlier

## THE MULTIDISCIPLINARY JOURNAL OF SCIENCE AND TECHNOLOGY

## VOLUME-4, ISSUE-4

with the deeds of the Egyptian and Greek nobles get acquainted, and then mathematics itself, astronomy, geography, history and entire secondary school in medical science It becomes popular in the East. She is to the library in the "House of Proverbs", to the observatory and all scientific investigation directs his work. Muhammad Arithmetic of ibn Musa al-Khwarizmi and his work in algebra great for the development of mathematics contributed. His Indian Account in Arabic in an arithmetic treatise entitled for the first time a decimal positional system and a rule of thumb based on it stated.

This work of Khorezmi was made into Latin in the 12th century arrived in translation of the book at the beginning of Khorezm nine numbers and
one "small circle-like letter 0 " using the Indian calculation that he wants to show the method, this is the method with any number easily and briefly to be determined, with the help of each how to perform an arithmetic operation

He says that it is very easy. All of us al-Khorazmi from the number itself
showed that zero remains " 0 " when subtracted, ie " $3-3=0$ " for example. And then numbers in the decimal positional system how to write using Indian characters shows. This is the main focus Correctly write a number or a number correct reading, "to a small circle to use the similar letter $0 »$ is focused. Sometimes it is instead of a circle point is used. The number is correct as an example of reading the following number brings: 1180703051492863.

This Khorezmi's method of giving the number is different awkward: "A thousand five times and a hundred thousand four times and eighty thousand one thousand four and then seven hundred thousand three times and three a thousand three times and fifty one thousand two times and four hundred thousand and ninety two thousand and eight hundred sixty three". From the reading of your number then perform an arithmetic operation the Hindi method is described

Khorezmi method to perform the procedure in the upper room starts from unity. The word of Khorezmi in other words, this is how it works performance is "both convenient and useful. "Later, the account book in Latin translated, it is a decimal in Europe led to the spread of the system. Arabic numerals to Roman numerals It is more convenient and quickly started to be used all over the world. Today we use them in all areas. For example, in sales, television browsing, talking on the phone, banking receiving money from the account, measuring time and we use in others. So convenient, the basis of the accounting system is our slogan al-Khwarizmi's services are great. Nowadays, our modern imagine our life without numbers
impossible to do.

## CONCLUSION

1) Numbers represent special concepts that are not related to real things and are the most abstract part of speech. The number is characterized by the general nature of the revision process, although compared to other parts of speech, it is characterized by ambiguity when used independently, but as part of a unit, the number loses its number and gives meaning and it makes sense.
2) The presence of numerological units in English and Uzbek languages, whose semantics represent a complex informational complex, is an objective reflection of the phenomena of the material world in human thinking, occupying a certain layer in their system. two groups of languages.
3) The most effective in the formation of numerological units are the first numbers in the decimal system of the English and Uzbek languages, which we associate with the important role

## THE MULTIDISCIPLINARY JOURNAL OF SCIENCE AND TECHNOLOGY

## VOLUME-4, ISSUE-4

of the first numbers in the ancient world. The limited number of compound numbers in the numerological units of the languages being compared is explained by the fact that the complexity of the morphological structure of numbers reduces phraseological activity.

## REFERENCES

1. Aczel, Amir D. 2015. Finding Zero: A Mathematician's Odyssey to Uncover the Origins of Numbers. 1st edition. New York: Palgrave Macmillan.
2. Goines, David Lance. A Constructed Roman Alphabet: A Geometric Analysis of the Greek and Roman Capitals and of the Arabic Numerals. Boston: D.R. Godine, 1982.
3. Houston, Stephen D. 2012. The Shape of Script: How and Why Writing Systems Change. Santa Fe, NM: School for Advanced Research Press.
4. Taisbak, Christian M. 1965. "Roman numerals and the abacus." Classica et medievalia 26: 147-60.
5. Yushkevich A. P., Istoriya matematiki v sredniye veka, M., 1961.
6. O'zbek tilining izohli lug'atill. 1-jild, - T.: -O_zbekiston milliy ensiklopediyasill Davlat ilmiy nash. 2007.
7. Виноградов В.В. Исследования по русской грамматике. М.: Наука, 1975. -559 c.
8. Гак В.Г. Сравнительная типология французского и русского языков.М.: Просвещение, 1989.-290 с.
