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## CULTURAL VALUES IN THE CONCEPT OF NUMBER


#### Abstract

The numeral is an important object of study in linguistics and serves as a basis for demonstrating the cultural values, thinking and history of a nation. Each number conveys ancient cultural value, superstitions, cultural taboos and symbolic meaning through the conceptual system of language and linguocultural units. Since numbers have become the most important object in linguistics, these numbers with linguistic and cultural codes should be explored more through the conceptual system of language. The numbers include metric vocabulary, quantitative and numbering vocabulary. Moreover, numbers can be considered as the bearers of cultural information. Having learned the cultural meaning of numbers, one can get acquainted with traditions and ancient customs of a nation and their beliefs. This article draws attention to the most valuable information about numbers, starting with " 1 " and further about the culture, superstitions and ancient culture of people. The importance of studying phraseological unities with numbers from an ethnocultural point of view is also shown.


Keywords: concept, culture, history, lingua-cultural, numeral.

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## САН КОНЦЕПТІСІНДЕГІ МӘДЕНИ КҰНДЫЛЫҚТАР


#### Abstract

Аннотация. Сан атаулары тіл білімінің маңызды зерттеу нысанына айналып ұлттың, халықтың мәдени құндылығын, санасын және өткен өмірін, тарихын көрсетуге негіз болып келеді. Әрбір санның бойында сақталған көптеген наным сенімдер, көне мәдени құндылықтар, түрлі ырым-тыйымдар және символдық мағына тілдегі концептуалдық жүйе, сонымен бірге лингвомәдени бірліктер арқылы танылуда. Тіл білімінің зерттеуіне айналған лингвомәдени коды бар сандарды концептуалдық тұрғыда зертте» отырып, әрі қарай айқындай түсу қажет. Сан атауларына метрикалық лексика, сандық лексика және нөмірлеу лексикасы жатады. Сонымен қатар, сандар - ол мәдени ақпараттың тасымалдаушысы болып саналады. Сандардың мәдени мағынасын толық меңгере отырып, сол халықтың салт-дәстүрлері мен ежелгі әдет-ғұрыптарымен, түрлі наным-сенімдерімен егжей-тегжейлі танысуға болады. Бұл мақалада тілдегі сандар туралы, яғни 1 санынан бастап аса құнды мәдени, сенім-нанымдың ақпараттар бар екеніне мән бергізеді. Сонымен қатар, фразеологиялық бірліктер құрамындағы сан атауларының этномәдени тұрғыда зерттелудің зор маңыздылығына көз жеткізеді.


Тірек сөздер: ұғым, мәдениет, тарих, лингвомәдениеттанымдық, сан есім.

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## КУЛЬТУРНЫЕ ЦЕННОСТИ В КОНЦЕПЦИИ ЧИСЛА


#### Abstract

Аннотация. Имя числительное является важным объектом изучения в лингвистике и служит основой для демонстрации культурных ценностей, мышления и истории нации. Каждая цифра передает древнюю культурную ценность, суеверия, культурные запреты и символическое значение через концептуальную систему языка и лингвокультурологические единицы. Поскольку цифры стали самым важным объектом в лингвистике, эти цифры с лингвокультурными кодами следует исследовать больше через концептуальную систему языка. Числа включают в себя метрическую лексику, количественную лексику, а также лексику нумерации. Более того, числа можно в полной мере рассматривать как носители культурной информации. Узнав культурное значение чисел, можно познакомиться с традициями и древними обычаями народа, его верованиями. В данной статье обращается внимание на самую ценную информацию о цифрах, начиная с «1» и далее о культуре, суевериях и древней культуре людей. Также показано значение исследования фразеологических единств с числами с этнокультурной точки зрения.


Ключевые слова: концепт, культура, история, лингвокультурологический, числительное.

## Introduction

As the numerals became the most important object in Linguistics they are the basis of illustrating people's mindset, past life and cultural values. Every numeral which has a linguacultural code introduces ancient cultural value, superstitions, cultural prohibitions and symbolic meaning through the conceptual system of language to young generation. Those numerals with the linguacultural codes should be researched more through the conceptual system of language. This article can shed light on valuable cultural and religious information that is embedded in each numeral, starting from number 1. In addition, it is crucial to analyze the names of numbers within phraseological units from an ethnocultural perspective. By doing so, we can gain a deeper understanding of the cultural beliefs, rituals, and traditions that are associated with numerals in a particular language. Ultimately, this linguistic and cultural research can help preserve and promote the unique cultural identity of a people or nation.

The lexical unit of numerical names is present in all languages, and the semantic field of number names is extremely diverse, as their history dates back to ancient times. The original meanings of number names in mythology were associated with symbols of high value, rather than numerical activities. Despite being an abstract concept, numbers have played an important role in human life. However, in our daily lives, we often overlook the significance and unique meanings of each number. In contrast, our ancestors carefully evaluated the value and characteristics of each number, recognizing their distinct features and using them accordingly, starting with number 1 . Numerical names are a lexical unit common to all languages. The semantic field of number names is also infinitely wide. Because the history of the formation of numbers begins in ancient times. According to mythological data, the original meaning of the names of numbers was not counting, numerical activity, but was accepted as a symbol of high value. Number itself is an abstract concept. But in ancient mythology, the names of numbers denoted a certain thing or phenomenon. No one can deny the importance of the role of numbers in human life. And in everyday life, we do not pay much attention to where and how these numbers come from and that each of those numbers has its own meaning. And our ancestors, starting with number 1, weighed the value and qualities of each number, distinguished their unique features, and used them according to their meaning.

## Materials and methods

The concept of numbers has been present since ancient times and has evolved over centuries. In early human history, numbers were primarily used to measure time, with a five-day week being followed initially and then a 7-day week. Pythagoras, a Greek mathematician, believed that everything in the world is composed of numbers and can be expressed through numbers and pairs. He believed that beautiful expressions and melodious songs arise from the harmonious combination of numbers. Pythagoras also conducted mathematical modeling studies, translating relationships between people into the language of numbers. He referred to odd numbers as "male numbers," even numbers as "female numbers," and the combination of odd and even numbers as "even numbers."

Pythagoras, who believed that "numbers rule the universe," held that every aspect of the world was connected to a certain number. It was thought that numbers were associated with both goodness and evil, happiness and unhappiness, and we needed to understand what they represented. The Pythagoreans regarded the number 1 as the most important number, as the entire world began with it. Unity is the foundation of the universe. Duality represents love but also instability. The number three is not a prime number because it is the sum of the two previous numbers. The number six is considered extraordinary because it is formed from the sum and product of previous numbers, specifically, 1,2 , and 3 . The number seven is regarded as both sacred and holy (Zhmud, 1990) .

Since ancient times, it has been believed that numbers have meaning, that is, they have magical power. Every human being, whether he wants it or not, has a desire for a certain number, and is also afraid of a certain number. According to the ancient Greek people, numbers bring good and bad, happiness and sadness. For example, the number 0 . It is a symbol of absolute infinity. Therefore, zero is a number that represents a world that has not yet appeared. Therefore, he concluded that zero is the beginning of all things and phenomena, that is, dream or death. Therefore, the graph of zero is also represented in the form of a ring or a circle.

Number 1 is the first of the first. Without it, the digital chain will not start. No world can begin without it. Number 2 - softness, has the tactical property of smoothing a sharp corner. Duality exists in the two environments of kindness and cruelty, warmth and cold, light and darkness, wealth and poverty.

The number 3 is considered a symbol of wholeness and full maturity. In the worldview of the ancient Greeks, three was recognized as the luckiest number. And in Ancient Babylon, three gods were worshiped - the Sun, the Moon, and Sholpan. The preservation of the number three in the meaning of happiness in human knowledge is directly related to the value of its formula " $2+1=3$ ". Also, the concept of trinity symbolizes the inseparable unity of the triangle "past, present, future".

The number four was considered a symbol of stability and strength in the worldview of the ancient Greeks. A quadrilateral is associated with a square with four corners and four sides. This concept stereotypes the four corners of the world (four worlds, four seasons), four seasons, four forces of nature (Fire, Earth, Air, Water). For the Slavic people, the square is recognized as a symbol of the Earth. And in the Japanese-Chinese world, the number 4 is considered a dangerous number. Number 5. Pythagoras paid special attention to five.

Number 5 is recognized as the luckiest number. And in the ancient times, "five" was a symbol of risk, that is, it was believed that five has energy, courage, and independence. In the universal understanding, the number 5 is associated with five fingers, five angles of a star, five times of prayer of Muslims, five ghakliyas of Buddhism.

Number 6 is a creative number. For the Slavic people, six is recognized as the symbol of the Sun. Number 7. In Egyptian and Babylonian philosophy, seven was interpreted as the combination of two "viable" numbers (3 and 4). More precisely, three people - father, mother, child - form the basis of life, and four are the four directions of the world, that is, only the four corners of the world know where the wind blows, when it rains, and when the earth is nourished. Therefore, the number 7 is considered to be the beginning of creation and destruction. Therefore, the number 7, formed by the combination of three and four, is recognized as a holy number in the universal understanding. The ancient Greek people believed that the number seven has magical power, because a person perceives the surrounding world through the 7 openings of the head (two eyes, two ears, two nostrils, one mouth). The ancient Jewish people also respected the number 7. Because it was believed that God created the sun and the earth, the sky and the sea in six days of the week, and he respected the seventh day. Under the influence of such beliefs, the number 7 acquired a symbolic value. For example, the ancient Greek people chose the best seven actors every year. The ancient Roman people honored the seven sages. Christianity also talks about seven sins and seven secrets. And we will pay special attention to the sanctity of seven in Kazakh. In Indian tradition, seven elephant statues are presented to bring happiness. Christian fasting lasts 7 weeks. The book of the Bible tells about seven lamps, seven angels, seven years of plenty and seven years of drought. In Japanese culture, there are seven benevolent deities, and therefore it is understood that there are 7 good fortunes in a person's life.

Number 8. In the ancient cultural environment, the number eight was accepted as an expression of confidence, a symbol of perfect faith. Eight is a double square. if it is divided into two and four, both parts will be equal to each other. This quality of eight was the basis for symbolizing the quality of confidence.

The belief that the number 9 has magical powers dates back to ancient times. During that era, nine was sometimes considered a sign of mercy and sometimes a sign of sorrow. The ancient Romans used the number nine as a symbolic symbol of the glory of mercy. And in the Japanese-Chinese world, nine is considered an unlucky number, that is, a sign of illness.

Number 10. In ancient culture, the number ten has always been a symbol of wholeness, harmony and unity. Decimal given by the formula " $1+2+3+4=10$ " is symbolized as a philosophical gem. Here are the good qualities of each number.

Number 11. In the culture of ancient times, the number eleven was included in the list of unpleasant and unfavorable signs. Nowadays, the fact that the activity of the Sun changes every eleven years and has a beneficial effect on human health confirms that this number also has good qualities. But looking at this data, it cannot be said that the number eleven has mystical power.

Number 12. We know that there was a set size (a dozen) in world culture. Based on this, the twelve months of the year, the twelve signs of the constellation, the division of the hour into twelve hours, and the beginning of a new day at twelve o'clock were formed. Therefore, twelve is accepted as a symbol representing the fullness of wholeness, wealth and happiness.

Number 13. In the ancient culture, the number thirteen was recognized as an inauspicious and unlucky sign. Thirteen in its numerical nature is divisible only by itself and only by one number. Probably because
of this, since ancient times, the unlucky quality of thirteen has been permanently marked in the human mind. Since then, the ritual of disliking the number thirteen, the belief that it will lead to bad luck, continues to this day. For example, in the cultures of England, France, Poland, and Russia, the number thirteen was accepted as an unlucky symbol, and people were frightened. Thirteen tries to stay away. And in Kazakh culture, thirteen is marked as the age of starting a family.

Number 40. Forty belongs to the category of lucky numbers, both in Eastern culture and in Western culture. In the system of world symbols, the number forty is associated with the tradition of giving brides in Eastern culture. Also, in the religious traditions of the Slavic peoples, the number forty is used in the meaning of goodness, blessing, abundance.

Number 60. In Babylonian, Persian, and ancient Greek legends, the number sixty is equated with great power. For example, the Babylonians recognized sixty as "God" (Encyclopedia of numerology, 2000).

In conclusion, the information that indicates that the symbolic meaning of the names of numbers one, two, three, four, seven is a global model originates from ancient mythology. Initially, numbers were deeply preserved in the knowledge of humanity due to their numerical features, and later they were semantically developed as magic numbers. Numbers first had a symbolic value due to their individual properties. Later, it was used for other meanings within the framework of philosophical, logical, psychological knowledge. The representation of ethno-cultural and spiritual ancients through numbers reveals the essence of these meanings. By conducting an etymological, linguistic and cultural study of the names of numbers, it is possible to determine the fundamentals of linguistic consciousness.

## Literature review

Plato and Aristotle were the first scientists to comment on the secret properties of numbers. Later, the German physician, philosopher Heinrich Cornelius Agrippa Nettesheimsky, N.L. Gilbright, Australian numerologist Davida Phillips, A.F. Alexandrov, etc., wrote works on the research of number names not only numerical properties, but also other meanings.

Ethnographer G. N. Potanin, reviewing his previous studies, considered the numbers three, seven, and nine sacred. According to him. It is wrong to look for the number seven in the glorification of the seven planets in the sky, he says that it should be understood as the result of people's long-term observation of celestial lights (Potanin, 2014: 93).

About the numerical names of peoples of Turkic origin V.A. Gordelevsky, N. Poppe, I. Zenga, F. Rosenberg, G. Ramstead, W. Bartholdt, V. If scientists like Radlov do historical and comparative research, in Kazakh linguistics, the names of numerals I. Chesenbayev, A. Khasenov, T. Zhanuzakov, E. Koishibayev, Zh. Baizakov, N. Valiuli, A. Elesheva, K. Gabithanuly, K. In Dusipbaeva's research, it is considered from different angles. In particular, the above scientists try to reveal the unique features of numbers by studying the phraseological units in which the number noun is involved from every angle.
I. About the properties of numbers. The number seven is a sacred number deeply rooted in the language of the Turkic peoples. This number is found not only in the Turkic peoples, but also in the information of the Manchurian, Mongolian, Arab, Chinese and Indian peoples. It is assumed that such a commonality should be caused by a historical cultural transition (Chesenbayev, 1977).
A. Khasenov, who studied the number nouns in the Kazakh language, said: "Number names, which belong to the main vocabulary of Turkic languages, are taken from the reality of life, from concrete things, that is, from nouns. Of course, the development of these general numerical concepts is connected with the development of mathematics, it does not contradict the opinion that humanity was born out of necessity, it complements and confirms it. Secondly, if we are guided by the Marxist principle that it is possible to compare the past history of a certain phenomenon with the present one, and to discover and recognize its current forms by studying them, modern linguistic facts, for example, quantitative semantic nouns and phrases, the main numerical nouns in Turkish languages, do not deny our assumption that they were separated from nouns. , confirms again," says (Hasenov, 1954: 20).

In the research of S. Zhirenov: "The use of number names in the Kazakh-Kyrgyz languages with metric measures, abstract concepts shows the mutual similarities and differences of phraseological units created by ethnic number names. Phraseological phrases made with the number "two" in the KazakhKyrgyz languages are two halves, one whole / / two coppers, to be one copper; put both feet in one boot // put both feet in one shoe; to be happy in both worlds // happy in both worlds; to have two eyes and four //
to be two lambs, etc. can be attributed. In the Kazakh-Kyrgyz languages, regular phrases based on the number "two" are very numerous in both languages, quantitatively and qualitatively" (Zhirenov, 2012).

## Results and discussion

According to S. Kasymova, who studied the meaning of proverbs with a numerical component, "comparison strengthens the meaning of the proverb. The six-day holiday for the impudent - in the literal sense, it means that an impudent person should not think about anything, live in the present, and be educated to avoid such strange behavior. Number six depends on the six days of the week. An angel also has five faults - it means that none of the people in general is perfect, that is, no matter how good a person is, he also has some mistakes, periods of character. In general, "angel" in Kazakh is a mythological image, person. He is a protector, supporter of people, pure and innocent. In this context, there is a belief in our people that when making a blessing and a wish, "may it fall into the ears of an angel", there is a belief that angels protect young babies, that angels play in their dreams, and the child laughs or cries from it. All of these represent the power and qualities of an angel, and the proverb gives an example that even a relatively powerful angel has faults, and this proverb is often used as a consolation when a person makes a mistake, commits a mistake, regrets it, and complains" (Kasymova, 2010).

Scientists who studied the symbolic meaning, religious meaning, and ritual content of number names include V.N. Toporov (Toporov, 1980) can be attributed. In the works of scientists who have studied the names of numbers using a comparative method, it can be observed that the concepts of numbers in two or three languages are in common. D.I. Skorobutov studied (Skorobutov, 2004). M.V. Kirillin (1988) studied the theme of the symbolism of numbers in ancient Russian legends and published spiritual values in Russian culture that are not widely known. R. T. Muratova (Muratova, 2009), who specially studied the sacred, magical, symbolic meanings of the names of numbers in the Bashkir language, opened the beginning of a culture common to the Turks in relation to the names of numbers (Skorobutov, 1985). A.S. Shakirov made a semantic analysis of numerical phraseological units in typologically different languages (Shakirov, 1985). O.R. Dosymbekova studied the national features of numerological culture in the Kazakh and Chinese languages (Dosymbekova, 2015).
A. E. Suprin's work can be included among the works that studied the ethno-cultural meanings of the names of numbers in phraseological units (Suprin, 1965). The work of the scientist L. G. Botina, who studied the occurrence of number names in regular phrases in Russian dialects, made it possible to recognize the semantic underpinnings of ancient numerical concepts (Botina, 1983). I.N. Kudelin found out that the equivalents in the phraseological phrase of number names in Russian and German languages are common (Kuledin, 1966). S.A. Sokolov studied the common semantics of numerical concepts in Turkish and Russian languages (Sokolov, 1971). Numerical concepts common to Turkic languages can be found in the work of M. Abdrakhmanova, who studied the symbolic meaning of numeral names in the Turkmen language (Abrahamova, 1972).

Since 2000, researches aimed at studying the continuity of language and culture through numerical names have been published. For example, L.M. Pelipenko studied cognitive-semantic and linguisticcultural features of numerical phraseological units (Pelipenko, 2016). M.R. Khezheva studied the image of a person in the content of numerical phraseological units in the Kabardian-Cherkasian language within the framework of atropolinguistics (Khezheva, 2017). Cui Hong Yen considered the semantics of number names in Chinese and Russian languages from a linguistic and cultural aspect (Cui, 2017). E.D. Devitskaya defined the ancient cultural codes of beliefs and superstitions of the numbers in the wedding ritual of the Kuban people (Devitskaya, 2016)

## Conclusion

Thus, numerical names, which have become an important research object of linguistics, have become the main factor that is the basis for expressing the cultural value of the nation and people through language. The ancient cultural values, beliefs, rituals, symbolic meaning preserved in the language are determined through paremiological fund in the language, material and spiritual cultural lexicon, conceptual knowledge preserved in the language system, and hidden in the language of linguistic and cultural units. Numerical names, which have become a research object of linguistics, are general genotypic concepts. Metric (measurement) lexicon, quantitative (quantity-quantity) lexicon, numerative (symbolic, magical correspondence of numbers) lexicon is included in the list of number names. Therefore, the mentioned numerical lexical units are considered without separation.

## . References

Zhmud L. Ya. (1990) Pythagoras and his school. - M.: Nauka, 1990
Encyclopedia of numerology. (2000) The secret number is the life of wisdom. - M: Piarmida. 2000
Potanin G. N., Potanina A. V. (2014) "Siberia. Mongolia. China. Tibet. Lifelong journey". - M.: Eksmo , 2014. - p.
Chesenbaev I. (1977) Studies on Kazakh linguistics, A., 1977.
Hasenov A. (1954) Numeral names in modern Kazakh language, AKD., A., 1954;
Zhirenov S. (2012) Ethnocultural character of phraseological units formed from names of numbers in Kazakh and Kyrgyz languages (in relation to quantitative units) // Vestnik KRSU. 2012. Volume 12. Number 5

Kasymova S. (2010) Semantic nature of proverbs with number component // KazNU Khabarshisha. Philology Series, No. 4-5(128-129). 2010

Toporov V. N. (1980) On numerical models in archaic texts // Structure of the text / Academy of Sciences of the USSR; Institute of Slavic Studies and Balkan Studies; Otv. ed. T. V. Tsivyan. M.: Nauka, 1980. p. 3-32.

Skorobutov D. I. (2004) Comparative analysis of quantitative phraseological units in modern Western Romance languages: French, Italian, Spanish and Portuguese: diss. ... k. philol. n. M., 2004. p. 233

Kirillin M. V. (1988) The symbolism of numbers in ancient Russian legends of the 16th century. // Estestvennouchnye predyamenie Ancient Rusi: schiselnie let. Numerical symbols. "Abandoned" books. Astrology. Mineralogy: collection of articles / Academy of Sciences of the USSR; Nauch. council on the history of world culture; Otv. ed. R. A. Simonov. M., 1988. p. 76111.

Muratova RT. (2009) Symbolism of numbers in Bashkir language: dissertation ... candidate of philological sciences Moscow, 2009, - p. 197

Shakirov A.S. (1985) Semantic-typological analysis of numerical phraseological units in different system languages: dissertation. ... sugar. philol. Science / Samarkand State. Univ. A. Navoi; science ruk. Avaliani Yu.Yu..- Samarkand, 1985.- p. 247

Dosymbekova R.O. National features of numerological culture in the Kazakh and Chinese languages // Dissertation on the competitive degree of Doctor of Philosophy (PhD) in the specialty "6D020900-Vostokovedenie"

Suprin A.E. (1965) Slavyanskie chyslitelnye (Stanovlenie chyslitelnych kak oskoy chasti rhechi) / Author's abstract dissertation on the competition of academic degrees of doctors of philological sciences. Leningrad: Leningrad State University, 1965. p. 31

B o t i n, a L. G. (1983) From observations on the semantics of numerical FE in Russian dialects. 2nd research M. :Russian language, 1983.

Kudelin I.N. (1966) Имя чисительное как часть речи в немецком языке: Autoref. Dis . . sugar philol. science Ulyanovsk, 1966.- p. 20

Sokolov S. A. (1971) Functional-semantic analysis of the word one and its derivatives in Turkish / S. A. Sokolov // Turkic lexicology and lexicography. - M.: Nauka, 1971.

Abrahamova M.A. (1972) Stable word combinations with numerals in the Turkmen language. - Ashgabat. 1972. - p. 19.
Pelipenko L.M. (2016) Cognitive-semantic, linguistic and cultural features of numerical phraseological units (on the material of English and Russian languages): dissertation ... candidate of Philological sciences. Adygei State University], 2016.p. 208

Khezheva MR. (2017) The image of a person in numerical phraseology of the Kabardino-Circassian language // Philological sciences. Theoretical and practical questions (included in the VAK list). Tambov: Gramota, 2017. No. 4. Ch. 1. p. 186-188.

Tsui Hun Yen (2003) Semantics of name numbers in Russian and Chinese languages: Linguistic and cultural aspect // dissertation and abstract of candidate of philological sciences. Krasnodar. 2003. p. 161

Devitskaya ED. (2016) The sacredness of the number three in the Kuban wedding ceremony // Philological sciences. Вопросы теории и практики Tambov: Gramota, 2016. No. 2(56): p. 92-93

