

PALINDROMES

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Анотація *Интерес до вивчення паліндромів – їх генезису, історії та розвитку теорії – обумовлений тривалістю «експерименту» поетів з паліндромом, який налічує понад дві тисячі років і досі продовжує вважатися експериментальним. Очікується, що вивчення зразків поезії та відомостей про паліндром допоможе краще зрозуміти особливості паліндрому як форми та жанру, з'ясувати його різновиди та простежити еволюцію паліндрому від його витоків до сучасності.*

Ключові слова: паліндром, історія паліндрому, формула, так само назад, як вперед.

Abstract *The interest to study palindrome – its genesis, history and development of the theory – is due to the length of the "experiment" of poets with a palindrome, which has more than two thousand years and still continues to be considered experimental. It is expected that the study of poetry samples and information about palindrome help to better understand the features of the palindrome as a form and genre, to clarify its varieties and trace the evolution of the palindrome from its origins to modern times.*

Keywords: palindrome, the history of the palindrome, formula, the same backward as forward.

Introduction

Palindromes are words and whole phrases, numbers or other sequence of characters which reads the same backward as forward, such as *madam* or *racecar*. Palindromes are found in almost all languages of the world, at least because there are elementary palindromes – the names of people consisting only with 3 letters such as Bob. Palindromes belong to a rare form of poetry where the process of the work is associated with significant technical work, and the result does not always satisfy the aesthetic sense. It is most often attributed to experimental poetry associated with understanding the mystery of the language. But along with such an interpretation of the palindrome, there is also its amazing popularity among the general readership, almost every European will name one or two well-known palindromes. This curious form is widely used from literature to classical music composition and molecular biology [1].

Research results

The word *palindrome* was introduced by Henry Peacham in 1638 [2]. The history of the palindrome dates back to antiquity. It is derived from the Greek roots *πάλιν* 'again' and *δρόμος* 'way, direction'. Palindromic poems were known in ancient Greece and China. Palindromes first appeared on the vessels, vases and other objects of the spherical shape. Inscription-palindrome can be read by rotating the body in any direction or approaching it from all sides. Since antiquity palindromes were placed on the portals of houses and temples, on fountains and tombstones.

The ancient Greek poet Sotades (3rd century BC) invented a form called Sotadic verse, which is sometimes said to have been palindromic, but no examples survive. The oldest surviving palindrome is written in Latin and dates back to the 4th century AD. This is the phrase "Sator Arepo tenet opera rotas", which means "Sower Arepo holds the wheels of his plough with care". A palindrome was found as a graffito at Herculaneum, a city buried by ash in 79 AD. This palindrome is called the Sator Square. It is remarkable for the fact that the first letters of each word form the first word, the second letters form the second word, and so forth. Hence, it can be arranged into a word square that reads in four different ways: horizontally or vertically from either top left to bottom right or bottom right to top left. Apparently, the meaning is not so important here, as often happened with magic formulas, the palindrome attracted with its mystery and perfection. Due to the amazing properties of the square, in the Middle Ages it was attributed magical power. In addition to its cleaning properties, Sator Arepo protected property and sleeping people from fire, and the phrase was considered so miraculous that it was endowed with the ability to put out fires if depicted on a wooden board and throw the board into flames. In 1742, the ruler of Saxony issued a decree to keep such boards at hand in every house in order to fight fires. It is even said that this formula was included in the coats of arms of fire brigades in Germany and Lorraine, along with the unburned reptile salamander.

Since 79 AD palindromes have appeared in Latin, Hebrew and Sanskrit. Like the Greeks, the Romans were fans of palindromes. Ancient Roman palindrome "In girum imus nocte et consumimur igni" means "We enter the circle after dark and are consumed by fire". A palindrome is believed to use to describe the behavior of moths.

By the X-XI centuries palindromes had spread first in Italy and then in Western Europe. Since the XII-XIII centuries information about them, although rare, have appeared in textbooks of poetics and treatises on poetry. That was due to the opening of the first universities and the formation of a single European Latinized education system.

The first appearance in music of the original palindrome form dates back to the 14th century. Both musical and poetic palindromes throughout the historical period of its existence were considered one of the highest manifestations of technical skill, the exquisite "jokes of meters" of poetry and music intended for selected connoisseurs. The English poet John Taylor is recognized to be one of the first writers of the palindrome when he wrote "Lewd I did live, & evil did I dwell" [3].

Since the XIX century the genre of "curious poems" from textbooks of poetics have finally moved to the animation sections of popular magazines and in this form continued its existence until the XX century. Poetry and magic are replaced by jokes and fun. In the following centuries, the popularity of palindromes increased and in 1971 the Guinness Book of Records officially began to recognize the longest palindromes in the world. From 1971 to 1980, the winner grew from 242 words to 11,125 words.

In 1980, David Stephens wrote a 58,000 letter palindrome letter "Satire: Veritas." It is the longest letter.

The longest known English palindrome is a 167-page novel by Lawrence Levine published in 1986 called "Dr Awkward & Olson in Oslo". Like Stephen's letter, the novel is primarily nonsense.

In recent history, there have been competitions related to palindromes, such as the 2012 World Palindrome Championship, set in Brooklyn, the USA.

The longest palindrome word in the Oxford English Dictionary is "TATTARRATTAT" (12 letters) coined by James Joyce in the novel "Ulysses", which means a knock at the door [4]. Other sources say that the longest English palindrome is "REDIVIDER" (9 letters). In the Guinness Book of World Records, the longest English palindrome is "DETARTRATED". This is the past tense of the word "detartrate", which means the removal of tartrate (salts of tartaric acid). The world's longest word palindrome (19 letters) is considered to be the Finnish word SAIPPUAKIVIKAUPPIAS (a meadow merchant).

The most famous poem is "Doppelganger" by English poet James A. Lyndon. In the middle of the verse, each line is repeated backwards. The use of a palindrome structure is of literary significance: the concept of "Doppelganger" implies a ghostly reflection of oneself, and the palindrome structure means that the second half of the poem is a reflection of the first half.

The best palindrome toponym is Wassamassaw, a swamp in South Carolina.

There are history-based palindromes such as "Able Was I Ere I Saw Elba". This palindrome is associated with the expulsion of French leader Napoleon Bonaparte to the island of Elba.

Conclusions

When learning English, we often face the problem of memorizing words. Palindromes can be used as word games for faster and more efficient memorization of words and expressions. Word games develop memory and interest to the language. The phenomenon of a palindrome in the language, although not new, but very interesting and unique. The combination of different language styles, word formation, the meaning of each word and at the same limited sets of sounds and syllables create the magic of the language. The theory of a palindrome has been more than two thousand years and still continues to be considered an experimental one.

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