COGNITIVE ASPECTS OF NUMERIC WORDS

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Words in their polyfunctionality nominate things, concepts, make sentences work, keep memory of the bygone days. People use words not only for communication but also for investigation. Numeric words make no exception here. They eyewitnessed the ways people used to cognise the world. Numeric words belong to counting names of discrete things. But in remote times these words were of another nature. This is proved by linguistic investigation, by reconstruction of old forms in diverse languages, by the study of semantic laws, tendencies, evolution of these paradigmatic units. The etymological analysis of number and measure linguistic signs gives adequate and fruitful results. The analysis brings closer remote times, the mode of life of generations to have gone, their ways of thinking, which spans efforts of people to cognise Universe [1, 2, 3].

Numeric words usually go back to nominal units. Counting as a process embraced both those who count and the things counted. Many a scientific work has been devoted to the matter of nomination but until now it is still open for discussion. English numeric words are being traced in old European forms. These units fulfil not only nominative but also cognitive function. By the cognitive function we understand the ability of the units to reflect the major stages in the evolution in number cognising. The latter implies first and foremost the practice of identification – quantitative identification. The close study of quantitative units reveals their anthropomorphic nature. These words go back to the names of parts of body, of people, of instruments used, of things they counted and measured. The anthropomorphic tendency works both with numeric words and measure units. Though the former are of old exfunction, the latter follow their semantic evolution [5].

Cf. Numeric words	**Measure words**
dozen, couple, pair, brace	*ell, span, foot, fathom, yoke*
score, one, five, ten thousand	*brace, acre, pint, stone, pond*
hundred, million, milliard	*bushel, ton*

Measure words are of later make and some of them are still speaking terms until now. For example *ell, span, foot, brace* etymologically go back to the parts of body and their position. Another group (*pint, bushel, ton, chaldron*) go back to the names of containers in which things for measuring were kept. Other measure units (*yard, rod, pole, par, stone*) go back to the instruments of measuring. Some quantitative words are used for both numeric and measuring functions (*dozen, couple, brace, yoke, score*). Their similar evolution is vivid in metonymic shift: object-name$_1$ → quantity → name$_2$. With proper numeric words – numerals-the first link (object name) is lost with times. Reconstruction of old numeric forms in a set of languages illustrates the derivative nature of numerals, their constant

modifications in terms of semantics. The first ten numerals go back to their unquantative predecessors which were once converted into present units. The derivative nature of numeric words is objectified by social factors. Counting as a means of cognition works in a team with advanced abstract linguocreative thinking. The numerals 1-10 go back to the names of fingers, toes and hands. This tendency is traced in many languages. Denominal nature is verified in the succeeded cycles of their evolution which somehow repeats the previous stages ($N_1 \rightarrow Num \rightarrow N_2$).

Cf. *fiver ($5), sixer (a team), millionaire, millionairdom, etc.*

Denominal nature of numerals is also traced in the process of lexicalization. In set expressions numerals lose their quantitative meanings. In this case numeric components yield to nominal ones. Quality comes forward: *forty winks, as thick as two thieves, nine wonders, two dogs over one bone*. Here numerals don't matter much, they may be dropped or substituted.

Cf. *to make two (both) ends meet, saying and doing are two (different) ways, as drunk as (seven) lords* [5].

Original nominal property comes forth in words related by conversion: *thousands people → thousands of them*. Bisemy of numerals i.e. their quantitative and non-quantitative meanings time and again is proved in their diachronic polyfunctionality.

Cf. *two or three; two upon ten; to be in two minds; when two Sundays come together*.

Deep reconstruction analysis of numeric words proves that binary oppositions were the first to usher in the succession of cognising stages of number. This statement is backgrounded by diverse data from mythology, legends, folklore, ethnography, archaeology and anthropology. Moreover it is revealed, and rigidly into that, in the semantic evolution of the units, their collocations and universal laws working with different language systems.

Binary opposition goes back to the notion of entity. The latter precedes the binary one: entire → binary (dismembered in two) → singling out perception [5].

Cf. *man and woman, sky and earth, light and darkness, etc.*

This opposition of two was considered primarily as an entity. Gradually oneness was singled out of binary entity. Succeeding concepts of three, four…gradually followed. Scientists assert that counting started with two. And it is true for two reasons: two introduced any other number multitude (2>1, 3>1, 4>1) and concept of two was dismembered into one diachronically. The study of binary opposition gives ground for an interesting linguistic assertion: antonyms (**Cf.** binary opposition *day-night, light-darkness*) preceded synonyms which are of later creation though they outnumber at present antonyms [4, 5].

Dual system is the oldest one which is known for its object standard nature. Late Paleolithic period finds show that when people used to count and depict the results of their efforts in drawings. The remnants of the object standards are kept in the treasury of language forms. Some counting words go back to medieval times and work until now.

Cf. *brace, yoke, fathon, pair, couple.*

In late stone age Paleolithic period 35-10 thousand years ago people marked the results of counting by lines, dots, cycles. It was called Paleolithic Ornament. In those times people were afraid of nature and were scared off by numbers. They couldn't overcome the diversity and power of nature while cognising it. Hunting, cattle breading and agriculture made people attentive to singling out phenomena. They tried to overcome the categories of time and space. The survivals of distant cultures prove the great difficulties which people overcame starting with duality [4].

Cf. *Burial of two tweens, the unsplit figures, two goddesses, etc.*

The categories from their start were of tripartite nature – objective, logical and linguistic. Until now the dual number is traced with the names of two eyes, two legs, left-right side of body, two hands, two arms, moon and sun, sunrise and sunset, day and night, etc. thus entity and duality have gone together but apart since times immemorial.

Duality (they say) is associated with matriarchy yielding to patriarchy. With the latter notion of three is closely connected. In mythology it is proved by unions of one god and two goddesses symbol. With Slavonic people three cycles symbolized the god of Sun implying morning, afternoon and night. In folk-tales there existed three-headed snakes, three kingdoms, three urgent problems, three sons, three efforts and the like.

Cognising is slow in its progress. The number of four repeated the evolution of 1, 2, 3 numbers. The Tripol agriculture was four number oriented due to the pressing urgency of land measuring. Four aspects (components) are anthropologically oriented too.

Cf. *ahead, behind, left, right; cross image; four-faced god ruling the Universe.*

Proverbs keep the results of cognition fresh and stable: each succeeding number was firstly perceived in terms of "many".

Cf. *two heads are better than one; four eyes see better than two; two is company, three is none.*

The days of the week in their names go back to god's names, three in number.

Cf. *Thursday, Wednesday and Tuesday*.

Thus the words keep history of civilization fresh and open to those people who are not reluctant to cognize it.

The explicit markers of remote object standard units are lost, for written numerals of nowadays present names of abstract quantitative units but the proof of their old backgrounds is verified by the

study of: primeval language numerals (1), measure units of later make (2), reconstruction of old forms (3), semantic laws of quantitative words (4), their combinability and collocation (5), word-building potentiality (6) and anthropomorphic factors (7).

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