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SEMIC COMPOSITION MODULATIONS OF QUANTITATIVES IN THE PHRASEMES OF ENGLISH (METHODICAL PRACTICES OF ANALYSIS)

Kiekybinių rodiklių seminės kompozicijos
moduliacijos anglų kalbos frazėse (analizės
metodinės praktikos)

ANNOTATION

The article examines the process and result of semantic modulation of English quantitatives, which they necessarily undergo when affected by phrasemic context. The definition of the concept of semantic modulation is clarified at the background of the processes of semantic derivation and semantic transposition. A new comprehensive methodology for the analysis of modulation changes in phrasemic quantitatives of the English language is proposed, which, in addition to the traditional methods of decomposing the meaning into its components and detecting semes (integral, differential and gradational), includes automated tools of the computer program “Acrobat Reader” for searching the studied units in the electronic dictionaries of the English language. The expediency of adhering to the methodological principles of anthropocentrism and isomorphism of language and culture to study changes in the semantic structure of phrasemic quantitatives is substantiated. Componential analysis of the semantic structure of quantitatives has been carried out and the nature of the semic components’ redistribution in it under the influence of the phrasemic context has been

revealed. The correlation between the activity of phrasemic quantitatives and the processes of semantic modulation has been established.

KEYWORDS: phrasemes of English, quantitative component of semantics, componential analysis technique, seme, semantic modulation of quantitatives, quantitatives with semantics of counting, quantity and measurement.

ANOTACIJA

Straipsnyje aptariamas anglų kalbos kiekybinių žodžių semantinės moduliacijos, kurią jie neišvengiamai patiria veikiami frazeminių konteksto, procesas ir rezultatas. Semantinės moduliacijos sąvokos apibrėžtis paaiškinama semantinės derivacijos ir semantinio perkėlimo procesų fone. Pristatoma nauja išsami anglų kalbos frazeminių kiekybinių moduliacijos pokyčių analizės metodika, kuri, be tradicinių reikšmės skaidymo į komponentus ir semų (integralinės, diferencinės ir gradacinės) nustatymo metodų, apima automatizuotus kompiuterinės programos „Acrobat Reader“ įrankius, skirtus tiriamų vienetų paieškai elektroniniuose anglų kalbos žodynuose. Pagrindžiamas antropocentrizmo ir kalbos bei kultūros izomorfizmo metodologinių principų laikymosi tikslingumas tiriant frazeminių kiekybinių žodžių semantinės struktūros pokyčius. Atlikta kiekybinių reikšmių semantinės struktūros komponentinė analizė ir atskleistas seminių komponentų persitvarkymo joje pobūdis veikiant frazeminiam kontekstui. Nustatytas frazeminių kiekybinių aktyvumo ir semantinės moduliacijos procesų ryšys.

ESMINIAI ŽODŽIAI: anglų kalbos frazemos, kiekybinis semantikos komponentas, komponentinės analizės metodas, sema, kiekybinių reikšmių semantinė moduliacija, skaičiavimo, kiekio ir matavimo semantikos kiekybiniai rodikliai.

INTRODUCTION

Modern phrasemic semantics continues to search for optimal approaches to the analysis of phrasemic signs (Brenier, Michaelis 2005), the use and application of which will bring scholars closer to building a consistent and efficient classification of these units. Currently available taxonomies of phraseological resources of national languages require significant adjustment, particularly in terms of clarifying the principles and criteria for identifying (Howarth 1998) stable figurative compounds that differ in relation to the sources of linguistic and cultural motivation and chronology of phraseologization.

Scientific discussion (Mikola V. Gamziuk (2000), Iryna F. Zavarins'ka (2022), Marija O. Šutova (2016), etc.) about the criteria for identifying phrasemic signs

is far from over. It is primarily connected with the need to study combinatorial possibilities of a word within phraseological/phrasemic units (the so-called phraseological unit component) and to reveal the nature of preserving potential relationships with its lexicographic meanings outside phraseological context.

Recently, the degree of controversy surrounding the semantic self-sufficiency of the key component of phrasemes has significantly decreased, and the opinion of phraseologists that under the influence of phraseological context, the latent meanings of the key component of phrasemes are necessarily actualized, no longer raises categorical objections. First, it is emphasised that such meanings can be reconstructed by “semantic description of phraseological units through the identification of the invariant of the internal form of their components and fixing this invariant in the model of the idiom’s meaning” (Baranov, Dobrovol’skij 2009: 21).

Inner form of the phraseme component encodes potential opportunities for the formation of new meanings, including figurative. As a result of the analysis of changes in the semantics of quantitatives of English, which are associated with the redistribution of semic constituents between the archisemes of counting, quantity and measurement, under the influence of the phrasemic context, it will be possible to confirm the assumption that semantic modulation as a cognitive mechanism reflects the ability of a native English speaker to figuratively reconceptualize these archisemes and generate their variants (LSVs) as components of phraseologically bound meanings. For example, the quantitative component *penny* in the composition of phrasemic signs e.g., *to cost a pretty penny* – ‘to cost a lot of money’, ‘to hit the pocket’; ‘not to have a single penny’; *turn an honest penny* – ‘to make honest extra money’ acquires a new LSV (phraseologically bound meaning), but at the same time it does not lose its connection with its lexicographical meaning ‘a small amount of money’, which is actualized in the archiseme ‘quantity’ and in the integral seme ‘imprecise/indefinite quantity’.

For a more convincing proof of the aforementioned assumption, special methods of phrasemic analysis (in this case, a phraseme with a quantitative component of semantics) are required, since until now, according to Stefan Gries (2008: 18), the major problem in this matter remains the lack of unanimity of opinions among phraseologists, in particular, which methods are the most appropriate: classical or new, or their combination. In this regard, there is a need to develop a special relevant complex and comprehensive techniques for the study of semantic shifts in the quantitatives of English, which they undergo falling into the composition of the phrasemes of English under the influence of phrasemic context.

The purpose of the article is to apply the method of componential analysis in combination with the techniques of etymological searches and linguocultural practices to reveal the mechanisms of semic redistribution in the quantitatives of English with the semantics of counting, quantity, and measurement under the influence of the phrasal context.

The tasks of the article

- to substantiate the expediency of developing a new special method of analysis of semantic changes in the quantitatives of English under the influence of phrasemic context;
- to propose a special invariant-variant methodology for the study of semantic modulation of quantitatives in the composition of English phrasemes on the basis of the principles of anthropocentrism and isomorphism of language and culture, which, in addition to the techniques of traditional componential analysis, includes methods of automated search for the studied units in electronic dictionaries, practices of etymological searches and linguocultural procedures;
- to prove that the new technique of applying the invariant-variant approach to study shifts in the semantics of quantitatives – from archiseme as an invariant of meaning to integral, differential and gradational semes as its variants, actualized in English phrasemes, is relevant and promising for further research.

1. MODULATION CHANGES ANALYSIS METHODOLOGY IN THE PHRASEMIC QUANTITATIVES OF ENGLISH

Semantics of phrasemic signs with quantitatives reflects general human ideas about objects and items that constitute a quantity, and are subject to counting and measurement. These units retain ancient traditions, since they were formed by different generations of representatives of a particular linguoculture.

In the process of phraseosemiosis, changes occur in the semantic structures of quantitatives at the level of their meanings, their lexicosemantic variants (hereinafter LSVs), as well as at the level of semic components of their meanings. Semantic shifts at the level of semic components are usually considered through the prism of the theory of semantic modulation, which correlates with the classical theories of semantic derivation, i.e. ways of forming new meanings from the original/primary meaning, or semantic transposition, i.e. metaphor and metonymy formation mechanisms (Demiančuk 2021). Over time all these theories have been enriched with new provisions of the theory of conceptual integration (Fauconnier, Turner 2006). Each of the mentioned theories has its own methodical practices of factual material research, in particular phraseological

material, which, in our opinion, can be combined and adapted for the study of semantic changes in phrasemic quantitatives of English.

Proposed in this article new special comprehensive methodology for analyzing semic modulations of English quantitatives under the influence of phrasemic context is comprised of optimal methods and procedures and gives reasons for the logic of their sequential and sometimes parallel application. The developed methodology is based on the invariant-variant approach. Practicality of implementing an invariant-variant approach to the identification of a wide range of commonly used phraseological units based on the above-mentioned theories is argued by Marija Omazić (2008: 67–81).

The invariant-variant approach implies two fundamental points: while the theory of metaphor makes it possible to differentiate phrasemic signs as a result of semantic transposition of its key component, and in this way to fix a new meaning or a new LSV in the semantic structure of the invariant word, then the theory of conceptual integration operates inter alia with the mechanisms of semantic modulation, reflecting the rearrangement process of semic signs in the semantic structure of the word on retention of the archiseme.

The limit for semantic modulation is the change where the archiseme is realized in at least one feature of a certain meaning or its LSV. As for the semantic modulation of quantitatives in the phrasemic context, this issue should be considered in connection with the rearrangement in the semantic structure of the quantitative, e.g., two main features ‘precise quantity’ and ‘imprecise quantity’, which are allocated to the archiseme ‘quantity’. In this case, the archisemes of quantitative meanings fulfill the role of an invariant, while their semantic modulations act as variants.

The initial stage of the special complex methodology involved the automated selection (using the computer program “Acrobat Reader”) of English quantitatives (names of numbers, names of aggregates, names of measurements of quantities, numerals, pronouns, nouns, adverbs, etc. with the semantics of counting, quantity, and measurement) from electronic explanatory dictionaries (POAD 2008; LDOCE 2015) with the subsequent analysis of their meanings and LSVs. For this purpose, *the procedure of definition analysis* was applied. The number of selected quantitatives for analysis in this article is 100 units.

At the second stage, the use of tools of the computer programme “Acrobat Reader” for the automated search of phrases with a quantitative component of semantics in electronic English-language phraseological sources (ODOI 2004) was continued. Hence, highly productive (15 per cent of the total sample), rarely productive phrasemic forming quantitatives, which occasionally participate in the phrasemic formation (60 per cent of the total sample), as well as unproductive/inactive at all (25 per cent of the total sample) were identified.

The third stage is related to the study of the mechanisms of modulatory and semantic changes in the quantitative components of English phrasemes. By applying the method of componential analysis, modulations of invariant archisemes of counting, quantity and measurement in the direction of their rearrangement into integral, differential and gradational semes have been investigated. Componential analysis procedure is traditional, tested in many scientific studies, including contemporary ones (Noricks 2009; Dewiyanti, Suryani 2017). Componential analysis as early as in the middle of the 20th century was described in the writings of representatives of the American school of ethnolinguistics (Ward Hudynaf and Floyd Lounsbury), who substantiated the effectiveness of using this technique for decomposing a polysemous word into semantic components (semes) on the basis of kinship terms in different languages. Since then, componential analysis has become a mandatory technique for studying various aspects of word semantics. Even today, there are studies where terms of kinship, previously worked out by scientists in the same algorithms, are proposed to demonstrate this technique (Widyastuti 2010).

We will demonstrate the method of performing componential analysis using the example of decomposing the semantic structure of the quantitative *one*. The procedure was carried out according to the following scenario. In the electronic explanatory dictionary *Longman Dictionary of Contemporary English* (LDOCE), using the tools of the “Acrobat Reader” program, all existing definitions of the quantitative *one* were selected, copied into a separate file, and characteristic semes of their meanings and available LSVs were identified. The next step is to build a matrix with a general list of semes encountered in the definitions of the quantitative *one*. Further, with the help of the “+” sign in the matrix, the presence in each specific meaning and LSV of the relevant archiseme “quantity”, as well as integral, differential and gradational semes is recorded.

Thus, for example, in the electronic explanatory dictionary LDOCE, the following acquired definitions of the quantitative *one* were determined:

a) the actual numeral (one1) – 3 meanings without LSVs, where the archiseme “quantity” and the integral seme “small/a small amount” were identified;

b) as a pronoun (one2, plural *ones*) – 24 meanings, their LSVs with network connections for the archiseme “quantity”; for 4 integral semes (“indication of a large quantity”, “indication of an already known quantity”, “indication of the sequence of actions, events, objects”, “indication of the aggregate as a multiplicity”); for 9 differential semes; and for 3 gradational semes (“indication of the degree of manifestation of a large quantity” (the presence of the graduator *one too many*); “indication of the uncertainty degree of a large number quality manifestation” (the presence of the graduator *a difficult one*); “indication on the

degree of manifestation of the age characteristic” (of young children) (presence of *the little ones*) graduator).

At the final stage, changes were attested in the semic composition of the quantitative *one*, discovered on the basis of the meanings and LSVs recorded in the LDOCE, as well as in the composition of phrasemes selected from the electronic dictionary *The Oxford Dictionary of Idioms* (ODOI). The obtained results are described in paragraph 3 of this article.

At the same time, the techniques of linguocultural analysis were applied to explain the mechanisms of figurative reinterpretation of meanings and LSVs of quantitatives, which influenced the process of semic redistribution. If considered necessary, it is worth appealing to etymological versions. The effectiveness of etymological search practices is argued in paragraph 2 of this article.

2. METHODOLOGICAL PRINCIPLES AND PRACTICES OF STUDYING SEMANTIC STRUCTURE OF QUANTITATIVES IN THE PHRASEMIC CONTEXT

The category of quantity, first highlighted by Aristotle as a universal form of thinking, is the result of human cognition of the quantitative understanding of the phenomena of existence, expressed in all languages of the world (Akulenko 1982; Ivčenko 1955; Taranec' 1999; etc.).

Based on review of the research papers devoted to the development of general methodology for studying quantitativity in general (category of quantity, category of number, ways and means of their nomination, etc.) and phraseological quantitativity in particular, we will provide comments for the main cognitive principles underlying it.

1. The key principle of anthropocentrism is focused on the study of the linguistic world model and its fragments, one of which is quantitative. Following this principle, the researcher's obligatory methodological technique is to analyze symbolically loaded units in correlation to a person, consciousness, thinking, and various types of human activity.

Since the image of number is the basic symbol used by humans, the category of quantity and closely related category of quantitativity are considered to be peculiar cognitive structures objectified in the lexical and grammatical systems of the world languages (Talmi 2000). According to Svetlana A. Žabotinskaja's (1992), the most characteristic function of numbers, according to which cognitive components of the category of quantitativity are

fully revealed, is the function of quantity. The presence of this function in the cognitive category of quantitativity allows us to distinguish among its structures the concepts of QUANTITY, COUNT, MEASURE, verbalized in various combinations of phrasemic contexts by the articles *a/an, the*, demonstrative pronouns *this, these, that, those*, measures *some, several, many, few*, etc., nouns denoting aggregates such as *group, herd, couple*, etc, parametric adjectives *big, small, long, short*, etc., adverbs-graders *more, most, less, least*, etc., recursive terms like *father, grandfather, great grandfather*, and numerals (see Žabotinskaja 1992: 263).

Another important methodological principle that is directly related to the epistemology of the problem under study in this article is the principle of isomorphism of language and culture, according to which phrases with quantitative semantic components are defined as verbal signs of culture and involve reference to etymological data, to reconstructed archetypes and codes of culture.

Interesting methodological practices are offered by the students and followers of the school of quantitative phraseology in Ukraine (Anochina 2018; Baranova, Kobiakova, Švačko 2007, and others), founded by Professor Svitlana O. Švačko (2008). As a result of long-term observations, the researchers concluded that semantic modifications of quantitative elements in the phraseological context with full or partial preservation of the general quantitative content, as well as content related to counting and measurement, realize both general cultural and national cultural meanings. The process of modification of the studied units reflects evolution of their semantic development, a retrospective movement from the subject to the quantitative meaning, cyclically repeated at a qualitatively new stage, especially in national and cultural conditions.

For example, referring to the etymological versions of the English word *brace*, professor S. O. Švačko in the methodological work *The quantitative units of the English language: translation aspects* (Švačko 2008: 57–63) reveals exceptional role of the hand that it played in the processes of quantity, counting, and measurement establishments in many linguistic cultures, as evidenced by semantic parallels in Old French *brace, brase* – “two hands” and Latin *brachium, brachia* – “hand”, “hands”, from where they came to most European languages, including English, in their original meaning of “two hands”. Later, mostly in the phraseological context, the original semantics was used to develop subject and quantitative meanings. For a long time, the word *brace* functioned in parallel with the word *fathom*: *They have built a tomler [...] a brace and a half high* and was eventually replaced by the latter.

In later works, in particular, in the article “Means of expressing the concept of duality in English” (2010), professor S. O. Švačko and Iryna K. Kobiakova, appealing to the same etymological parallels, argue not only their connections with pairing in the process of counting objects but also with duality.

Based on the above etymologies, S. O. Švačko suggests that the subject meaning of the word *brace* was original, primary, based on which secondary meanings were developed (Švačko 2008: 57). The scholar presents semantic derivation of *brace* in the following scheme: “dog harness” → “dogs in a harness” → “two animals” → “two”. In ancient Rome, the measure of land was Latin *jugum*. This name arose as a result of associative links between an instrument of labour and a plot of land that was ploughed in a single day. Over time, the word acquired the meaning of ‘two’ (Švačko 2008: 57).

A similar way of semantic development: from subject to quantitative meaning is also characteristic of formations like Mod. English *yoke*; *span*: cf. Old English *geoc* – ‘contrivance for coupling draught animals by the neck; pair of animals so coupled; *fig.* subjection, suppression’ (ODOEE 1966: 1020), cf. the genetic material for *yoke*, which shows close semantic ties with Old Saxon *juc*, Old High German *joh*; Old Norse *ok*; Gothic. *juk*, Latin *jugum*, Old Slavic *igo*; Lithuanian *jūngiu* – ‘harness’; Sanskrit *yoga*; Hittite *jugan* (ibid.).

The word *span* – ‘harness, yoke (e.g. to a vehicle)’ has undergone a similar evolution: the seme of ‘pairing’ is differentiated in Canada, the United States of America, and South Africa when referring to the number of bulls, horses, and elephants. In modern English, this seme is more often distinguished in the meanings of the words *couple*, *pair*, since the quantitatives *span*, *yoke*, *brace* are limited in their usage and are considered rarities.

The main conclusion drawn by S. O. Švačko (2008) is important for the study of the processes of linguistic semiosis of quantitatives in general.

In those cases when words with the meaning of quantity, counting and measurement (quantitatives like *mile*) are derived from numerals, their semantic structure does not etymologize the subject meaning, if they appeared later (Švačko 2008: 59) than numerals, their evolution can be traced from the subject to the quantitative meaning.

3. COMPONENTIAL ANALYSIS AND ITS EFFECTIVENESS IN DETECTING MODULATION CHANGES IN THE SEMANTIC STRUCTURE OF PHRASEMIC QUANTITATIVES

Quantitatives in the phrasemic context balance between two poles of denotative correlation: on the one hand, they reflect a connection with specific objects of counting, quantity, and measurement, which ensures its unambiguity; on the

other hand, figurative and symbolic meanings allow us to perceive quantitatives as figuratively loaded signs that are not tied to a specific quantitative value or the value of counting, or the value of a certain measurable entity.

The phenomenon of semantic modulation of quantitatives in the phrasemes of English is the result of logical, mathematical and naive comprehension of the procedures of counting, quantity, and measurement. While a strictly mathematical approach implies unambiguity and precision of the result of these procedures, for the sphere of national culture and naive linguistic consciousness, such operations can be transmitted through figurative rethinking of the irrational properties of an object, subject, substance, space, etc.

To demonstrate the mechanisms of phraseosemiotic rethinking of counting, quantity, and measurement operations reflected in the minds of representatives of the English-speaking linguistic culture and recorded through various quantitatives, the method of componential analysis seems to be the most appropriate.

The technique of componential analysis is an integral part of the structural method developed and described in the works of Louis Hjelmslev (1961), S. Gries (2008), and other linguists-founders of structural semasiology.

The purpose of the componential analysis is to decompose semantic structure of a word into its components. The semantic structure of a word is thought as the unity of interrelated meanings organized within a single lexeme of a particular language, taking into account systemic relations and patterns of its functioning.

This implies that the semantic structure of a word is a hierarchy of meanings and their LSVs, the top of which is the so-called archiseme, concretized by semes of different levels of abstraction (integral, differential, gradational, etc.). The semantic structure of a word can be reconstructed by performing two sequential operations:

- 1) segregating the smallest components of a word's meaning or a whole LSV, i.e., semes;
- 2) establishing regular connections and relations between the semes, i.e., a conceptual and semantic network.

Structural semasiology has developed various classifications of semes. Most commonly, they distinguish between a *classeme* – the most generalized feature in terms of content, which reflects the part-of-speech affiliation of a word (for example, the presence of signs of quantity and sequence span in counting indicates that the word is a numeral, but at the same time, in contextual use, it can also belong to nouns, pronouns, etc.). Vladimir G. Gak (1972) traditionally distinguishes the following types of semes: *archiseme* (a general seme of invariant meaning (in the material under study, the archiseme reflects a feature

that is characteristic of the verbalizers of the above three concepts: QUANTITY, COUNT, and MEASURE). Integral semes are common to different invariant values (in this case, integral semes convey information common to the three concepts). *Differential semes* of aspective meanings reflect the features on which quantitative variants are contrasted in phrasemes clustered by the integral seme. Potential semes are actualized in the broad context of the functioning of phrasemic quantitatives. In addition, the scholar emphasizes that in different usage scenarios, any of these semes can be actualized, and come to the fore, while other semes reflecting aspects of nomination that are already known or irrelevant to the speaker lose their significance, are neutralized, and may disappear altogether from the semantic structure of the word (Hook 1972: 371).

Each highlighted seme is a component of the meaning, and a LSV is a semantic component of the quantitative meaning as a whole. In this case, a seme is understood as a reflection in the mind of a native English speaker of a feature of general quantitative semantics represented in a set of structurally ordered semes (the algorithm of seme extraction is sufficiently described in the most recent works: Susana Widyastuti 2010, Sri Dewiyanti and Hani Suryani 2017, and the mechanism of their rearrangement (semantic modulation) on the example of quantifiers in paragraph 1 of the article).

For example, the integral seme of quantitatives (which verbalize the concept of MEASUREMENT) is represented by at least four differential semes: height, width, length, and time.

1. The differential seme ‘height’ (English: *low, short, lowly*) stands out in the phrasemes *A **low** hedge is easily leaped over*, which is used to refer to “those people who take advantage of other mostly weak people”. Another phrase ***Short** folk are soon angry* – lit. “Short people (short/short) quickly become angry” in its definitions also has this differential seme identified based on binary oppositions “high – low”, “many – few”, “top-bottom”. These examples show the actualization of a negative assessment of the analyzed value, which is associated with such negative human traits as arrogance, self-interest, and aggression. The rethinking of the measured value occurred as a result of the semantic modulation of the quantitative in the phrasemic context.

At the same time, we can also observe positive marking/evaluation of height with the help of quantitatives in the phraseme like ***Lowly** sit, richly warm*, which is used to justify the behaviour of a cautious/prudent person who is purposeful and persistent.

2. The differential seme ‘width’ (*narrow, thin*) is realized in the meaning of the phrase *Wide will wear, but **narrow** will tear*, which is used to characterize a person when he or she is perceived according to the harmony or disharmony of clothes (appearance) and internal qualities. In the phraseme *A **thin** meadow*

is soon mowed – literally, “A meadow covered with sparse grass is easy to mow” – the quantitative of width *thin* actualizes the phraseological meaning of ‘reproaching people who do stupid things’, expressing a negative attitude towards such human qualities as lack of common sense and intelligence.

3. The differential seme ‘length’ (English: *near, next, neighboring, short*) is differentiated in the meaning of the phrase *A long tongue is a sign of a short hand* to evaluate a person who “promises a lot but does little”. Here, the semiotic situation “much is not enough” is explicitly contrasted. In the above given example, the figurative reinterpretation of the meaning of the quantitative *short* “short distance” or “short length” acquires a negative assessment in the English linguistic culture as a result of its semantic modulation. A positive appraisal of this value is observed in the figurative meaning “the closer to the family, the better” of the phraseme *It is good to be near of kin to land* <*an estate*> – lit. “It is good when a person settles near his/her family”.

4. The differential seme ‘time’ (English: *awhile, fast, quick, quickly, short, soon*) is characteristic of the phrasemic meaning with quantitatives measuring a large or small amount of time required to perform something or to approach/occurrence of something: *The mirth of the world dureth but a while* – lit. “Joy is short-lived”; *A moneyless man goes fast through the market* – lit. “A person without money moves quickly around the market” (opposition in terms of “much – little”, “poor – rich”); *At every hour death is near* – lit. “Death is getting closer by the hour” (emphasizing the inevitability of death: a contrast in the opposition “life – death”); *Quick and nimble, more like a bear than a squirrel* – lit. “A nimble person is more like a bear than a squirrel” (a reproach to people who are slow to fulfill urgent tasks: a contrast in the opposition “fast – slow”).

Depending on the research material, there are also gradational semes that indicate the degree of manifestation of a certain feature. As for the gradational semantics of quantitatives, it expresses the degree of its manifestation with regard to the norm. The degree of manifestation of a feature is indicated by gradational markers or gradators, which are indicators of the presence of a gradoseme as a result of semantic modulation of a quantitative in a phrasemic context.

The gradators fixed in the definitions of phrasemic quantitatives allow us to determine the degree of manifestation of the features of quantity, counting, and measurement in one of the areas on the gradation scale with reference to the norm (*exactly, normally, enough, average, same, similar*): the lowest possible degree (*hardly, least, slightly, little, few*), the lowest degree of manifestation of quantity features (*(a) little, (a) few, small (amount), not enough; less, rather, quite, almost, nearly*), the highest possible degree (*absolutely, completely, extremely, too, totally*), a high degree of manifestation of quantity features (*a lot of, lot(s), much, many, (a) large number/amount, a great/good deal of; very, all*).

Semantic modulation is characteristic of quantitatives in which the gradational seme is actualized, indicating the degree of manifestation of an imprecise quantity in the opposition “much – little”. For example, the phraseological meaning of the stable phrase *bow and scrape* (to show *too much* respect to somebody important), lit. “to show too much affection to someone”, is actualized based on the gradative *too much* with the meaning of the highest possible degree of manifestation of the imprecise quantitative feature “much”. In this case, the indicator of the extremely high degree of its manifestation demonstrates an ascending gradation.

The analyzed excerpt of the selected linguistic and illustrative material (as exemplified in the individual verbalizers of the concept MEASURE) confirms the assumption that the technique of componential analysis with its algorithms is the most optimal tool for studying the processes and mechanisms of semantic modulation of quantitatives in the phrasemic context.

4. CORRELATION OF THE PHRASEMIC QUANTITATIVES ACTIVITY WITH THE PROCESSES OF SEMANTIC MODULATION

The study of this issue will allow us to form a clear view of different quantitatives' participation degree in the processes of semantic modulation and, as a result, in the generation of phrasemic meaning by transforming their semantic structure (at the level of meanings or LSV).

Preliminary observations suggest that the highest activity in the phrasemic context (and, accordingly, productivity of semantic modulation) is demonstrated by the quantitative and pronoun *one*, which, although having the meaning of “one” (number, quantity): *oneself, oneness, one-armed, one-sided, one-way (street), one-track (road), one-armed bandit, one-time, one-star (hotel), one-up-man-ship*, in the process of phrasemic semiosis realizes various possibilities of its multidimensional semantic structure.

Apparently, the phrasemic-forming activity of the quantitative *one* with its semantic modulation stratification can be explained, first and foremost, by extralinguistic factors. Jack Tresidder in his Dictionary of Symbols notes: “the number one symbolizes the primary integrality, the divine essence, the light or sun, the source of life” (Tresidder 1997).

The Pythagoreans attached special significance to the unity and believed that it was not just a number like the rest, but the beginning of numbers; to become a number, everything must join in the unity. Therefore, the Pythagoreans did

not consider the unity to be an odd number. The first even number, in their opinion, is the two, while the first odd number is the three. Jean C. Cooper speaks about the original values of the unity: “beginning”, “primary unity – the root cause”, “Creator”, “essence”, “mystical center (including the center of the house – the hearth)”, “something indivisible”, “ascent”. The unity is associated with the principle that helped to develop quality and thus contributed to the formation of the idea of multiplicity – many. That is, the unity became the foundation for all numbers and the basis for life. In astrology, it corresponds to the Sun, in alchemical symbolism it is associated with the Fire (Cooper 1987).

Accordingly, the creation of phrasemic signs with the quantitative *one* is based on the image of the beginning, primacy, unity, a certain intergrality, etc. All nominative-derived entities containing expressive-evaluative meanings necessarily point to the image that was the source of the linguistic and cultural motivation (choice) of the word in question for the nomination of a new notional signifier (designate). The created image is always associated with analogy or comparison as a way of establishing similarity.

The selected material empirically confirms the above-mentioned theses and arguments that the component *one* is characterized by high activity, yet at the same time, the degree of productivity of archisemes and their redistribution as a result of semantic modulation requires further study.

The archetype ‘number’ is directly actualized in phrasemes that reflect both universal and nationally specific ideas about the preciseness of arithmetic operations (*clear as that two and two make four*) or about the specific designation of a concept that exists or once existed: *The 39 Articles* of the Church of England; or the designation of a specific event that is happening for the first time: *first night* “premiere, the first performance”; *get to (reach) first base* “take the first step in a certain matter”.

According to M. O. Šutova (2016), since in the English linguistic culture, a person is inclined to individualism, this ethnocultural stereotype of the English character (to have an opinion) is fixed through the symbolism of the quantitative component *one*, which, in addition to the archetype ‘quantity’, actualizes the integral seme ‘separate/individual’ with emphasis on the intrinsic value of the existing in its unity: *one and the only: one rotten apple spoils the barrel; one and the only* “unique, the only one”; *look after (take care of) number one* “take care of yourself, your interests”; *one in a million* “one in a million”; *one-way* “one way”, etc.

Phrasemic-forming activity is also manifested through the realization of differential semes: ‘integrality, but not as a plurality, but as something single’: *to be of one accord; on one footing; one bone one flesh; all in one breath; all for one and one for all*; ‘opposition one-another-other’: *one fire drives out another; talking is*

one thing, doing is another; one man's meat is another man's poison; 'instructions' (in biblical phrases): the Evil One; the One above; 'sequences': one after another/ one by one.

The multilayered semantic structure of the meanings and LSVs of the quantitative *one* as part of phrasemic signs, based on which differential semes “precision”, “singularity”, “identity”, “unity”, “integrality”, “sequence”, etc. are distinguished, affords grounds for regarding its archetypal-prototypical-stereotypical invariant-variant model. The quantitative *one* is a multifaceted symbol, and because of its exceptional nature, it occupies a special place among numbers. This explains its very high activity and productive semantic modulation in the composition of English phrasemes.

So active is the quantitative *two*, which encodes the idea of divisibility of the whole. If the unity in mythological consciousness was represented as goodness and happiness, then the dualization appears as the disintegration of unity – as evil and misery, for example: *two dogs over one bone seldom agree.*

In the process of initial selection of the sampled phrasemes, as in the previous material with the component *one*, we attested examples where the quantitative *two* realizes the archiseme ‘quantity’, but with the actualization of the differential seme ‘conflict’ against its background. The phrasemes with this component retaining its formal quantitative meaning, are united by the general theme of a conflict situation, which requires at least two parties: *there are/it takes two to tango; it takes two to make a quarrel.*

Whereas the quantitative *one* indicates the absence of the integral seme of ‘imprecise quantity’, namely ‘plurality’, the quantitative *two* in the phrasemic context acquires it, but sometimes not directly, but by actualizing the differential seme of ‘bipartition’ (*between two fires, fall (sit) between two stools*), while retaining the primary semantics of ‘indicating similarity, resemblance of objects or characteristics of people’ (*as like as two peas*).

Here are examples of the activity of the quantitative *two* in the process of actualization of the integral seme ‘imprecise quantity’ in its phrasemic meanings: the numeral *two* transformation of meaning is observed in the process of phraseosemiosis in such signs as *between two evils 'tis not worth choosing/of two evils choose the less*, where the literal meaning of two alternatives/adversities, between which one has to make a choice, is interpreted as an imprecise quantity (as several problem situations).

The precise meaning of the quantitative *two* is changed to imprecise in its LSV “impossibility to solve all the tasks at once” in phrasemic signs like *if you run after two hares you will catch neither.*

The same process occurs when reinterpreting the phraseme *to kill two birds with one stone*, where the quantitative *two* denotes a certain aggregate (several

problems), and the quantitative *one* in this context *actualizes* the differential seme ‘saving resources’. In this example, we observe a semantic modulation of the archiseme ‘quantity’ for two quantitatives – *one* and *two*. Such examples are not uncommon in the dictionaries of English idioms.

It is also worth noting the activity of the quantitative *two* as an actualisator of the gradational seme in the phrasemes *cross as two sticks, as thick as two short planks*, where it functions as an intensifier of quality as well as a grademarker of the degree of its manifestation, characterizing the object “as very evil, ill-natured, and completely stupid”. The gradational seme is also present in comparative-quantitative phrasemes such as *be like as two eggs/like two peas in a pod*, where component *two* enhances the degree of similarity of the objects being compared.

High semantic activity of the quantitative *three* is based on the positive meaning of this number in different cultures. The number *three* symbolizes the idea of perfection and goodness and realizes actional semantics in the phrases *three is the magic number; three is a charm*.

The phrasemes *three in One, three foundations*, whose linguistic and cultural sources of motivation are mythology and religion, fix the TRINITY and establish it as the fundamental basis of the universe.

Apart from that, the quantitative *three* does not always actualize positive connotations in phrasemes. For example, in the meaning of the phraseme *two is a company, three is a crowd*, the archiseme ‘quantity’ and the integral seme ‘precise quantity’ actualize the differential semes ‘destruction of the usual order’, ‘imbalance as opposed to harmony’ encoded in the meanings of the LSV of the quantitative *two*.

Modulation of the integral seme ‘precise number’ into the quantitative *three* is based on the loss of its basic meaning in the phraseme *three may keep a secret if two of them are dead*, on the one hand, as a result of which a new integral seme ‘indefinite/imprecise number’ is actualized (several people cannot keep a secret). On the other hand, the precise number is required for the arithmetic operation, the meaning of which is that the secret will remain only if it is known to one person, since the quantitative *two*, as noted above, with all its equilibrium and balance, provokes the possibility of conflict.

The quantitative *seven* has a high phrasemic activity, which in the naive consciousness of speakers of different languages, as the English material shows, is also associated with magic, eternity, and mysterious knowledge. This explains the redistribution between the integral seme ‘precise quantity’ and the integral seme ‘imprecise/indefinite quantity’: *a fool may ask more questions in an hour than a wise man can answer in seven years*.

Apparently, the ordinal numeral-quantitative *seventh* should likely be classified as active in the phrasemic context, as it actualizes the gradational seme of ‘higher degree of pleasure/enjoyment’ in its semantic structure: *to be in your seventh heaven*.

In addition to the performance of the integral seme ‘imprecise quantity’ and the gradational seme ‘highest degree of manifestation of a feature’ in the phrasemic context of the quantitatives *seven/seventh*, attention should be paid to the extra-linguistic factors related to religious and mythological sources of their motivation, where they realize the integral seme ‘precise quantity’: *to commit the seventh (commandment); the seven wonders of the world*.

Other quantitatives of the top ten, starting with *four*, especially *five*, *six*, and *nine*, demonstrate low phrasemic-forming activity, modelling integral gradational semes in the phrasemic context, in particular, ‘of an inexact amount (many)’: *a stitch in time saves nine*.

The quantitative *four* in the phrasemic context preserves the integral seme of ‘precise quantity’, actualizing it by cosmogonic ideas about the four corners of the earth, the four elements, etc., in which the real exact meaning of its symbolic perception is preserved.

A survey of the selected phrasemes with quantitatives containing the numbers *five* and *six* shows their low activity, where they tend to retain a connection with the precise quantity. The number *five* in the phrasemic context is associated with the symbolism of the hand – the five (five fingers, one’s hand). The identification of this number with the hand is the motivational basis for the phraseme *to give smb. five*, meaning a handshake. The number *six* realizes its quantitative semantics with the help of the ordinal numeral *sixth* in the phrase *sixth sense*, which is used to denote the heightened supersensual personal ability to intuitively perceive and guess something (as an addition to the five senses).

As for the quantitative *nine*, its phrasemic-forming activity is low and is mainly associated with the actualization of the gradational seme, for example, the phraseme *cats have nine lives* means a high degree of the feature expression and symbolically emphasizes extraordinary vital endurance of cats. The gradational seme ‘to show exceptional skills’ is also modelled in other phrasemic signs such as *to be on cloud nine; to touch it off to the nines*.

Among various activities of the numbers of the first ten (quantitative and ordinal numerals that serve as quantitative components in phrasemic formation), at this stage of the study, no examples with the number ***eight*** were found in the selected material. Nevertheless, the material sampling continues.

CONCLUSIONS

To summarize, we note that quantitatives of English are symbolic signs that encode logical, mathematical, and naive comprehension of the world based on the procedures of counting, quantity, and measurement. For the sphere of national culture and naive linguistic consciousness, such operations can be transmitted through the figurative rethinking of irrational properties of an object, subject, substance, space, etc. in phrasemes with a quantitative component of semantics.

The results of the study show that functioning of quantitatives in the phrasemes of English and their semantic structure are subject to various changes: semantic derivation, semantic transposition, and semantic modulation. The latter is related to the mechanisms of rearrangement semantic components in the semantic structure of quantitatives – from archisemes to gradational semes.

In the process of analyzing modulation of the semantic composition of quantitatives in the phrasemes of English, it has been established that the transitional limit for this phenomenon is the changes where the archiseme is realized in at least one feature (integral, differential or gradational) of the main meaning of the quantitative or its LSV. It has been proved that the phrasemic-forming activity of quantitatives, which is actualized by intra- and extra-linguistic factors, directly affects the stratification of their semantic structure and, as a consequence, redistribution of its semantic components.

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Kiekybinių rodiklių seminės kompozicijos moduliacijos anglų kalbos frazėse (analizės metodinės praktikos)

SANTRAUKA

Straipsnyje pristatoma speciali invariantų-variantų metodika, skirta anglų kalbos kiekybinių žodžių semantinių pokyčių, kuriuos jie patiria veikiami frazeminių konteksto, analizei. Semantiniai kiekybinių žodžių pokyčiai angliškose frazėse atspindi tokį procesą kaip semantinė moduliacija, kuri siejama su semantinių komponentų pergrupavimo kiekybinėse reikšmėse mechanizmais: nuo archisemų iki gradacinių semų.

Pradiniame specialiosios metodikos kūrimo etape automatizuotai (naudojant kompiuterinę programą „Acrobat Reader“) buvo atrenkami anglų kalbos kiekybiniai rodikliai (skaičių pavadinimai, prietaisų pavadinimai, matavimo vienetų pavadinimai, skaitvardžiai, įvardžiai, daiktavardžiai, prieveiksmiai ir kt. su skaičiavimo, kiekio ir matavimo semantika) iš

elektroninių aiškinamųjų žodynų su vėlesne jų reikšmių ir angl. LSV (frazeologiškai susietos reikšmės) analize. Antrajame etape buvo tęsiama automatizuota frazių, turinčių kiekybinę semantikos komponentą, paieška elektroniniuose frazeologijos šaltiniuose ir identifikuoti frazemas formuojantys itin produktyvūs, mažai produktyvūs, kurie tik kartais dalyvauja frazeminėje daryboje, taip pat ir visai neproduktyvūs kiekybiniai vienetai.

Remiantis konkrečia faktine medžiaga įrodytas naujos metodologinės praktikos invariantų-variantų požiūrio taikymo kiekybės semantinei moduliacijai tirti – nuo archisemos, kaip kiekybinės reikšmės invarianto, iki integralinės, diferencinės ir gradacinės semos plėtojimo leksiniuose ir semantiniuose variantuose – efektyvumas.

Daroma išvada, kad kiekybinių žodžių frazės formavimo procesas, kurį aktualizuoja vidiniai kalbos ir nekalbiniai veiksniai, tiesiogiai veikia jų semantinės struktūros stratifikaciją, taigi ir jos semantinių komponentų persitvarkymą.

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