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Polysemous Word Semantic Integrity: General Significance Formation

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Abstract. Hypotheses in the field of polysemous words functioning in the lexicon attract the attention of modern researchers. Currently, there is widespread support for the “checklist” theory of their meanings functioning as unconnected units. The introduced in the article hypothesis reflects the connectionist approach to the problem. A justification for the concepts of “General significance” and “Lexical invariant” is proposed. The aim of the study is to create a lexical invariant model of a polysemous word based on its empirical invariant-component analysis. Lexical invariant is represented as a set of basic dominant components that form the word semantic core. Based on the methods of comparative and component analysis, the concept of “General significance” is verified. A long-standing debate about its existence is presented. The empirical invariant-component method was used to analyze the semantics of a polysemous word *key*. The correlated dominant metaphorical clusters proved the semantic integrity of a word structure. The proposed hypothesis has a number of advantages over the “checklist” theory. It explains the reasons for lexical meanings boundaries uncertainty, revealing the patterns of schematization in lexical networks. In the process of decoding polysemous words, the communicator does not consider all semantic components of a word. The obtained results can be applied in compiling dictionaries. Lexical invariants can serve didactic purposes in vocabulary expansion.

Keywords: general significance, mental and speech lexicon, polysemous word, lexical cluster, lexical invariant

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Семантическая целостность многосемного слова: формирование общего значения

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Аннотация. Гипотезы в области функционирования многозначных слов в лексиконе привлекают внимание современных исследователей. В настоящее время широко распространена теория «контрольного списка», согласно которой их значения функционируют как несвязанные единицы. Представленная в статье гипотеза отражает коннекционистский подход к проблеме. Предложено обоснование понятий «общая значимость» и «лексический инвариант». Цель исследования — создание лексической инвариантной модели многосемного слова на основе его эмпирического инвариантно-компонентного анализа. Лексический инвариант представлен как совокупность основных доминантных компонентов, образующих семантическое ядро слова. На основе методов сравнительного и компонентного анализа проверено понятие «общая значимость». Представлена многолетняя дискуссия о его существовании. Для анализа семантики многозначного слова «ключ» использован эмпирический метод инвариантных компонент. Коррелированные доминантные метафорические кластеры доказывали семантическую целостность структуры слова. Предложенная гипотеза имеет ряд преимуществ перед теорией «контрольного списка». Объясняются причины неопределенности границ лексических значений, выявляются закономерности схематизации в лексических сетях. В процессе декодирования многозначных слов коммуникант не учитывает все смысловые компоненты слова. Полученные результаты могут быть применимы при составлении словарей. Лексические инварианты могут служить в дидактических целях при расширении словарного запаса.

Ключевые слова: семантика, общее значение, ментально-речевая лексика, многозначное слово, лексический кластер, лексический инвариант

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Introduction

The process of polysemous words decoding comes down to selecting meanings from a list of representations associated with a given acoustic or graphic form. For a century and a half, there have been disputes over the existence of General Significance that unites the structure of a polysemous word. Proponents of the semantic integration of polysemous words (I.L. Falcum, A. Vicente [1], V.V. Tur [2], etc.) identified the first or some vague central meaning with a General Significance. Around the latter, the remaining co-meanings are grouped. The nature of this “general meaning” remained uncertain. The results of this interesting discussion will be presented below. Unfortunately, there is not enough practical verification material to prove the hypothesis.

Later, within the framework of cognitive linguistics, another terminological apparatus is used to describe the semantic integrity within the semantic structure of a word: “content core”, “semantic center”, “invariant”, etc. Currently, attempts are being made to describe the semantics of polysemous words at different levels. Today, followers of this theory adhere to the principles of semantic connectivity of polysemous words structures. Linguists deal with issues of completeness of semantic description [3]. There are studies on the multiplicity of levels of abstraction at which the structure of meanings can be described [2].

The alternative contemporary hypothesis presupposes that different meanings of the same polysemous word are stored in the mental lexicon in the form of a simple list of non-connected meanings. It was highly criticized in the 1980s and 1990s, though, in recent years, the “sense enumeration lexicon” idea has unexpectedly received support. Thus, as a result of five experiments, psycholinguists [4] claimed that it does not matter whether the meanings of the same word share any semantic components.

Their experiments showed that there is no clear boundary between polysemy and homonymy. This is confirmed by the fact that the time spent on determining the required meaning is approximately the same both within the structure of a polysemous word and among homonymous variants. Despite the lack of a common component in terms of content, the difference in the storage and processing of this lexical information is not of serious importance. One form in a native

speaker's lexicon is associated with all the meanings known to the native speaker [5. P. 266–276].

In our opinion, the “list theory” still cannot answer the question of how the selection of meanings occurs in the communication process. Very often there is a choice from several dozens, or even hundreds of meanings (the word “head” has 103 meanings). As follows from the authors' comments, some meanings in the selection process accelerated the selection of subsequent ones, while others, on the contrary, slowed them down.

The meanings of a polysemous word “highlight” each other in the process of operating with them, while a single word does not have this possibility. If meanings “illuminate each other” or influence each other, is it possible to unconditionally accept the “list theory” and assert that meanings are not connected in the linguistic consciousness?

There is no doubt that meanings that differ from each other in only one component (like a huge number of synonyms or metaphors of one word) must be semantically related.

Our experimental data show that respondents cannot remember and reproduce even half of the available meanings of polysemous words, which are represented in corpora and dictionaries. Informants were offered not specific little-known terms, but well-known and frequent meanings (metaphors of the lexical category “Plants”: *leaf, root, grain, tree*) [6; 7].

The results obtained are quite expected and we, apparently, do not store words in the form of lists in filing cabinets. The structural and semantic unity of a word is determined by many factors, representing a flexible system with many outputs. The effective forms of meanings representation include semantic networks, frames, modules, logical models, etc.

The invariant-cluster hypothesis, proposed in this work, is only one of the possible hypotheses. The invariant theory is based on the thesis that a word semantic core (its semantic formula) is formed over time. It is “applied” to the objects of the surrounding reality, providing effective semiosis. This content core is dynamic in nature: over time, it is specified depending on contextual usage.

Materials and Methods

Supporters of the connectivity theory intuitively feel that the meaningful core of a polysemous word contributes to successful communication. It allows operating with invariants instead of internally scanning all figurative meanings in the lexicon.

The concept of “Lexical invariant”, which we propose as the meaningful core of a polysemous word, is not equated to the first meaning. Neither it stands for the semantics of all figurative meanings, as metonymy or phraseological units can be successfully explained by means of the first meaning. We understand Lexical invariant as *an abstract linguistic entity, a cluster of semantic components, which in one of their configurations underlie metaphorical meanings of a polysemous word in accordance with the intuition of a speaker*. Lexical invariant is contrasted

with the term “variant”, which functions at the speech level as a contextual implementation of the invariant. This opposition reflects the language-speech dichotomy.

Lexical invariant includes the most significant integral and differential semantic components. It functions at the level of the language system through numerous contextual implementations of metaphorical meanings. On the contextual level, Lexical invariant is realized in one of its combinatorial variants. It is derived from internal “intuitive contemplation” with the use of the corresponding innate brain algorithms, conveying the essence and outlining the boundaries of the semantic structure of the word [8; 9]. At the linguistic level, we are dealing with semantic components bundles or clusters, and it is a model of words functioning in the lexicon at the cognitive level. Such model has presumably an innate character, due to the ability to generalize word semantics along with the categorization and conceptualization processes. Words semantics generalization corresponds to the principle of linguistic economy. Our consciousness bypasses the internal time-consuming scanning of all figurative meanings of polysemous words before choosing the correct one.

The ability to successfully recognize figurative contextual meanings is essential for computational and applied linguistics. Invariant cores would eliminate problems in translating metaphors as modern neural translators often interpret metaphors literally. Compilers of computer translator software could rely on invariant components when translating metaphors.

Unlike today’s electronic translators, our linguistic consciousness functions quite efficiently: by picking up signals from the context, it quickly recognizes the presence of a figurative meaning. The human conceptual system operates as a complex multi-level system of connections (cause-and-effect, associative, hierarchical). They allow quickly navigating the environment and adapting to it.

Performing an invariant-component analysis of each figurative meaning (metaphors), we compare the resulting components with the semantics of the first meaning. Then we leave the most dominant and frequent semantic components which underlie each metaphor. The next step is the lexical invariant formulation. It includes core basic semantic components, which in any of the configurations underlie the word meanings.

The following postulates follow from the hypothesis about the Lexical Invariant functioning:

- Lexical Invariant unites the meanings of a polysemous word and provides effective communication in accordance with the economical nature of language (without treating meanings like bricks in a warehouse – found, took, returned);
- the cluster invariant structure is a flexible and open system; it is capable of developing due to the formation of a new configuration of features: a combination of invariant components with non-invariant ones (contextual, subjective, etc.);
- semantic components are closely related to each other; in case of a communication problems, the entire network of components is “extracted”; this

indicates both the compact nature of the components and the effective functioning of polysemous structures;

- the most frequent semantic components, such as *important*, *upper*, *lower*, *big*, *small*, *large*, are accessed in the lexicon more quickly; they have strongest semantic (synoptic) connections.

The semantic structure of a word represents a network. It is a flexible formation that easily adapts to the needs of the speaker. Invariant components of meaning, combining with identifying and subjective ones, form a contextual word meaning. Thanks to the dominant components of Lexical Invariant, a quick understanding of the general meaning of phrases and sentences is achieved.

Results

To illustrate the functioning of the proposed lexical invariant model, we present an empirical invariant-component analysis of the polysemous word *key*. The empirical component-invariant analysis aims to identify invariant clusters of polysemous words. Explicit and implicit semantic components of all available meanings of the word will be determined. In the process of analysis, all components of trivial nature will be “bracketed” and reduced to pure abstraction. This gives knowledge not only of what the meaning is in its pure form, but also allows us to obtain the semantic “formula” of the entire word. The analysis will be performed considering the cognitive images that stand behind each metaphor.

The first nominative-non-derivative meaning of this word is the following: “a metal object having a specific shape, used to open or close a lock.” The results obtained during the analysis of the rest meanings are presented in the form of a table (within the framework of the article only part of the analysis can be presented).

Table 1. The obtained semantic components of metaphorical meanings of the polysemous word key

Metaphorical meanings	Basis for transfers	Semantic components underlying meanings of a word <i>a key</i>
<i>key of a maple, ash-key</i> (key fruit) ¹	varieties of maple and ash seeds resembling a key in shape (similarity is based on a cognitive image)	a seed of a tree, small, elongated, rounded at one end, with a winglike extension
<i>key</i> (as a pin/bolt/wedge, etc.) ²	cognitive image: cotter pin, wedge, key, etc. used for fastening parts, since they fit exactly (like a key) into the required hole (transfer by function)	a detail (pin/ bolt/ wedge, etc.), small, thin, stiff, elongated, made of metal/wood, fitting into hole, locks parts together, preventing from moving

¹ Longman Dictionary of Contemporary English (2005). Pearson Education Limited.

² Longman Dictionary of Contemporary English (2005). Pearson Education Limited.

End of Table 1

Metaphorical meanings	Basis for transfers	Semantic components underlying meanings of a word <i>a key</i>
<i>key of a valve/ clock winding mechanism, etc.</i> ³	assimilation by the function: the meaning nominates a clock mechanism, valve, etc., which are the main driving parts of the devices, like a key, turning of which provides access to the room	part of a valve, winding mechanism, movable, initiates work
<i>key (as a passphrase)</i> ⁴	like a key that gives access to a room, a password (de)encodes important information from outsiders (similarity in function)	a piece of information, important, secret, providing or preventing access, enables to encode/decode information
<i>key — a sign, colour etc.</i> ⁵	similitude by function: just as it is impossible to open a lock without a key, so without a list of symbols (icons, colors, etc.) it is impossible to understand a map or drawing (the legend to the map explains the meaning of the symbols used)	a list of signs, used in a map/drawing, of primary importance, enables to encode/decode information, providing explanation
<i>key to the success</i> (One key to the store's success has been consistent customer service) ⁶	assimilation by function: to the extent that key (1) is a verbalizer of the cognitive image of unlocking the lock and thereby a symbol of what leads to the goal, to the same extent any event or condition is the main factor of success	a factor, determining, in accomplishing or achieving something, providing access, initiating success
keystone in an arch ⁷	– the top stone or brick of the arch gives stability to the entire structure, like a key fitting tightly into a keyhole – (similarity by its function);	a stone/brick, stiff, elongated, fitting into hole, joints parts together, preventing from moving
<i>key — characteristic style or tone; the tone or pitch of a voice</i> ⁸	– just as key (1) serves as a verbalizer of the cognitive image of the most important tool for unlocking or locking, the characteristic style or tone of voice is its most important characteristic – (similarity by its function)	characteristic style or tone/ pitch of a voice, important

Source: compiled by Svetlana A. Pesina, Olga N. Sanzharova, Natalia S. Sakharova, Vitaly V. Tomin, Maxim V. Faibushevskii, Natalia N. Tsytsarkina

Based on the basic dominant invariant component, all metaphors can be divided into five clusters:

- something of primary importance, that prevents from moving (e.g. *keystone in an arch*);

³ Longman Dictionary of Contemporary English (2005). Pearson Education Limited.

⁴ Longman Dictionary of Contemporary English (2005). Pearson Education Limited.

⁵ Longman Dictionary of Contemporary English (2005). Pearson Education Limited.

⁶ Longman Dictionary of Contemporary English (2005). Pearson Education Limited.

⁷ Webster's Third New International Dictionary (1961). Springfield (Mass) Merriam co. (In Russ.).

⁸ Webster's Third New International Dictionary (1961). Springfield (Mass) Merriam co. (In Russ.).

- something of primary importance, that initiates functioning (e.g. *key of a valve/ clock winding mechanism*);
- something of primary importance, that provides explanation / getting information (e.g. *keys – signs, colours*);
- something of primary importance, that provides explanation / understanding (e.g. *the key to a riddle*);
- something of primary importance, that provides access to something (to the success, to a riddle, to a good voice).

As a result of the analysis of 19 meanings of the polysemous word *a key*, it is possible to identify invariant components that hold together the semantics of the entire word: *something of primary importance that can resemble a key in shape or function: can initiate functioning, provide or prevent from / movement / explanation / getting information / understanding / access to something*.

The analysis shows that the invariant component *something of primary importance* has the status of extra strong. The obtained lexical invariant has a dynamic character: not all invariant components will be simultaneously represented in one meaning or another. The corresponding cluster of components will be activated in accordance with the contextual situation, while the rest will fade into the background, not participating in semiosis. The combination of cluster invariant and component analyzes allows to work with large polysemous words.

The noun *key* often serves in textbooks as a classic example of homonymy. The presented analysis confirms the conclusion that we have a polysemous word.

Meanings represent a combination of dominant and peripheral semantic components, which in one order or another configuration are connected with the image of an object. Therefore, in addition to the need to have a “bank of meanings,” the individual has the need to “quickly assemble” meanings from semantic components, images, feelings, which we call “ability to think and analyze”. L.S. Vygotsky characterized it as “the word is made in speech” [10].

Under conditions of communicative time pressure, the speed of lexical material processing is, as a rule, high. Thus, not all combinations of semantic components are recognized and considered. To “grasp” the contextual meaning, sometimes consideration of one or two invariant components of general character is sufficient [11]. If understanding fails, the remaining components are activated, including the subjective ones. In order to preserve the semantic boundaries of the word, the number of new meanings must remain within the limits of the main invariant features.

J. Taylor in the context of R. Lenaker’s theory about the multi-level representation of a polysemous word claimed that it seemed quite likely that a native speaker can simultaneously store in memory a set of specific uses of a word, and more abstract representations common to these uses. Indeed, there is no inherent reason why a native speaker could not store in memory the meanings of different levels of abstraction [12. P. 283].

Cognitive psychologist E. Treisman, in his theory of feature integration, argues that initially, when analyzing the visual field, the brain relies on individual features, not on combinations of features. Analysis of features anticipates their synthesis, which is performed automatically. Such trivial characteristics as color, shape, orientation is processed automatically simultaneously with the search for information essential for discrimination [13].

Interestingly, the hypothesis of an analogy between semantic and neural networks is confirmed by neuroscientists. There is a theory that the human brain contains neurons that are sensitive to certain semantic properties and take part in the formation of more than one semantic network [14]. Neuroscientists believe that in the parietal visual cortex of the brain there is a large number of highly differentiated neurons, each of which responds to a single component of the perceived object [15–18]. These data indicate, at a minimum, in favor of a semantic connection between the individual meanings of a word.

Discussion

Since there are at least two mutually exclusive opinions regarding “solving the problem of polysemy,” it makes sense to understand the problem of the functioning of a polysemous word in the lexicon. In fact, the importance of this issue can hardly be overestimated and we will need to look at this problem from the perspective of related sciences.

An obvious supporter of the semantic integration of polysemous words was R. Jakobson, who equated General Significance with the first meaning and contrasted it with the figurative ones [19]. S. Bally wrote about a virtual concept, defined by a limited number of components compared to “the real one”, which seemed to be individualized and contained “countless numbers of features that no practical experience could exhaust” [20. P. 87–88].

Russian linguists pointed out that the unity of a word is organized by its lexical-semantic core: “if in the glosses “we do not find such a “core” <...> in this case we get homonyms” [21. P. 23]. The same ideas were reinforced by Yu.N. Tynyanov, who used the poetic genre material. He wrote about the lexical unity of a word and the implementation of several semantic overtones in one word meaning [22].

General Significance has been postulated in full and partial form. Among the adherents of the first point of view is V.A. Zvegintsev, who believes that “a single semantic line always breaks through a random accumulation of meanings” [23. P. 70–77]. Yu.D. Apresyan, a supporter of the soft form of general meaning postulating, points out the possibility of isolating general meaning only in conditions of radial polysemy, when meanings are in relations of direct semantic derivativeness [24].

Opponents of the General Significance functioning in the lexicon interpreted the meanings of polysemous words as separate words, reducing them to speech implementations. Thus, using the term “monophony” instead of “polysemy” and “homonymy,” E. Kurilovich believed that the notion of General Significance is an

abstraction, the usefulness and applicability of which to specific linguistic problems will be decided by the future. “Our personal objection to the introduction of this concept is based on the impossibility of integrating qualitatively different elements, namely, communicative content and affective (stylistic) shades” [25. P. 246].

Unfortunately for supporters of General Significance, it never received a reliable substantiation: its nature was not fully revealed, there was no consensus on its essence. The level of its functioning was not determined convincingly enough, and a clear algorithm for its determination was not proposed. If any components were selected as general or basic for the structure of a particular word, no justification for the reasons for the choice was provided.

The few attempts to define General Significance are interesting, but, unfortunately, not very convincing. Thus, V.A. Zvegintsev defines the General Significance of the English substantive *a hand* as ‘a human organ that carries out activities, communication with a specific person’ [23. P. 158]. The reason for these components choosing is not justified: such components can “cover” the semantics of the words *a leg*, *an arm* and *a head*.

Another attempt to demonstrate the connection between the meanings of a polysemous word is based on the dominance of the first meaning. Thus, comparing the main meaning of the substantive *a key* (*a metal device for unlocking a lock*) and one of its metaphors (*a means, an opportunity for a solution*), D.N. Shmelev points out that the latter directly develops an essential element of the original meaning ‘something with which you can unlock’. He points out that the word is “freed from specific features”. Only the main feature of the functional purpose of the object retains [26. P. 90]. This observation stands as supportive for General Significance, nevertheless, the first meaning does not cover the semantics of other meanings, such as ‘a key springing from the ground’, ‘treble clef’, ‘key to success’, etc.

The problem of the semantic generality of the substantive *key* also remained unresolved for F.R. Palmer, who postulated the extreme difficulty of such research. Thus, for the meaning “key for opening the door” and “key of the staff” the author could not identify the common components [27. P. 48].

Within the framework of this article, using the material of this particular polysemous word *a key*, it has been demonstrated that the meanings of this word represent the interaction of two mental spaces — the systemic invariant meaning space and the meanings functioning in the speech context (speech level). The English word contains about two dozen metaphors, including such as *key of an arch*, *a piano key*, *a key zone in basketball*, etc. Such “far away” from the first meaning metaphors complicate the task of determining the semantic core of all meanings, but the more interesting the task.

There is an attempt of L.A. Novikov’s establishment of the General Significance of the word *an earth*: “the third planet from the sun, considered in a certain quantitative and qualitative sense in everything that relates to it” [28. P. 545]. However, it is unlikely that we think of the earth as a planet, precisely as the “third planet from the sun.” In another example of his, the general meaning

of the word *water* was formulated as “a H₂O substance”. It is not clear how this general meaning can interpret semantics of the meaning “empty meaningless phrases.” In such definitions, the General Significance is not fully general, since it does not reflect the semantics of metaphorical meanings included in the structure of the word. The fact that the word functions at the level of an average native speaker is also not considered.

A.A. Ufimtseva’s attempt to identify a “semantic thread” that unites the meanings of the polysemous word *an earth* looks, in our opinion, more fruitful: “a characteristic of the earth in terms of its spatial extent” [29. P. 113]. She defined three semantic centers — land holding, country and land (she considered the Russian word *земля* that embraces the semantics of English *an earth*, *a land* and *a ground*). Still, her general meaning hardly justifies such metaphors as *the salt of the earth*.

Yu.N. Karaulov believes that the existence of General Significance directly depends on the strength of internal semantic connections between meanings [30. P. 131]. E.G. Belyaevskaya represents the semantic center of the English verb *to jump* as ‘a movement by jumping and overcoming an obstacle’. The obstacle includes ‘a part of the text (to jump a paragraph)’ or ‘a queue for something (to jump the queue)’ [31. P. 87–89].

Table 2 reflects the terminology used by linguists in studies of word structure integrity (General Significance).

Table 2. Typology of semantic integrity of polysemous meanings

Name of the semantic integrity of polysemous meanings	The authors, representatives of semantic schools
general meaning	K. Baldinger, F.A. Litvin, Yu.N. Karaulov [30]
virtual concept	Ch. Bally [20]
first meaning	R. Jakobson [19]
lexical-semantic core	V.V. Vinogradov
semantic core	A.I. Smirnitsky [21]
central main meaning or core meaning	R.A. Budagov
invariant of meaning, general meaning	L.A. Novikov [28]
semantic center	A.A. Ufimtseva [29], E.G. Belyaevskaya [31]
general sign	V.A. Zvegintsev [23]
several common features	E.V. Kuznetsova
oscillation of meanings	Yu.N. Tynyanov [22]
palimpsest superposition of some figurative representations on others	M.B. Gasparov
associative/representative features of the main meaning	D.N. Shmelev [26]
central/nuclear meaning	R.F. Palmer [27]
invariant	Yu.D. Apresyan [24], N.V. Pertsov, B. Norman
lexical prototype	I.K. Arkhipov, S.A. Pesina [7]
lexical invariant, lexical invariant cluster	S.A. Pesina [32; 33]

Source: compiled by Svetlana A. Pesina, Olga N. Sanzharova, Natalia S. Sakharova, Vitaly V. Tomin, Maxim V. Faibushevskii, Natalia N. Tsytsarkina

Currently, researchers are moving away from the unfortunate unpopular term “General Significance”. However, the contemporary connectivity theories are also criticized for the fact that the entire contextual word semantics cannot be brought together. But, this is a matter of a good analytical method and painstaking work. In the dictionary entries there are indications of lexical cores existence: ‘something resembling... in shape or function’, ‘something similar to ...’. In this regard, some dictionaries (e.g. the Oxford English Dictionary) made attempts to structure polysemous meanings in accordance with their dominant components. Also L.S. Vygotsky wrote that the meaning of a word always turns out to be a dynamic, fluid, complex formation that has several zones of varying stability. Meaning is only one of these zones “and, moreover, the zone that is the most stable, unified and precise” [10. P. 87].

Conclusions

The presented above proofs in favor of the “list theory” of polysemous words functioning in the lexicon contradict the research in the field of “semantic integrity” of polysemous words. Despite the great interest in the opposite connectivity theory (General Significance phenomenon), the small amount of polysemous words analysis runs counter to the evidence of this phenomenon functioning. Proponents of General Significance have not clarified its functions and actual scope.

The invariant-cluster analysis presented in this article revealed a multi-level structure of the meanings of the word *a key*. The dominant semantic components underlying each figurative meaning of the word were identified. They form its deep semantic network. The metaphorical meanings were grouped into clusters based on common invariant features. The superordinate level was represented by a lexical invariant that covered the semantics of the entire polysemous word.

The formation of a lexical invariant takes place in the process of metaphors generalization and abstraction from specific contextual components along the line of figurative meanings schematization. A new cognitive model emerged, it was an abstract construct.

The results of the study show that the preservation of the semantic integrity of the word structure and the processes of new meanings formation take place on the basis of invariant semantic components. The lexical invariant, formed as a result of repeated use of existing metaphorical meanings, allows the native speakers to effectively navigate the environment under communicative time pressure. Very often one or two dominant basic invariant components are enough to “grasp” the contextual meaning of a metaphor.

The representation of semantic structure in the form of a semantic network of meanings and components interconnected invariantly has a number of significant advantages over the “list theory”. The presented analysis (our research includes analyses of hundreds of polysemous words) can significantly complement the theory of general meaning. The definition of lexical clusters can be useful for didactic purposes in determining the internal form of the polysemous words meanings. It is advisable to use lexical invariants in the compilation of educational

dictionaries as the content of lexical clusters. During the lexical invariant formation and functioning, a set of certain cognitive dominants is formed in it, which act as a model of the surrounding reality perception.

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