

## Neurocognitive Trends in the Structural-Functional Model of the Lexical-Semantic Way of Word Formation

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**Abstract:** *The article analyzes traditional views of Ukrainian linguists on the consideration/disregard of neurocognitive factors in the lexical-semantic way of word formation (hereinafter "LSWWF"). The relevance of the article lies in a pronounced divergence in the views, as well as in the contradictions in the interpretation of polysemy as a result of this type of word formation. Research methods include analysis of definitions and basic theories, comparison, extrapolation of a neuroscientific perspective on the cognitive nature of metaphorical generation of new meanings on traditional (structural and functional) approaches to linguistic phenomena. The article proves that Ukrainian linguistics involves prerequisites and basics of cognitive subject-based explanation of secondary semantics, present since the Soviet period, and lacks categorical and methodological tools for its interpretation. Besides, the authors of the article suggest some compromise solutions to these contradictions without completely abandoning traditional views on word formation. The international relevance of the article is seen in its attempts to reconsider the significant traditional achievements of Eastern European linguistics (on the example of Ukraine) in the context of objective natural neurocognitive views on key linguistic processes, in particular LSWWF.*

**Keywords:** *lexical-semantic way of word formation; transfer; names of business associations; newly formed proper names; ergonyms and pragmonyms; special terms.*

**How to cite:** Shestakova, S., Dubinina, K., Anikina, I., Myronova, N., Muratova, O., & Radionova, T. (2022). Neurocognitive Trends in the Structural-Functional Model of the Lexical-Semantic Way of Word Formation. *BRAIN. Broad Research in Artificial Intelligence and Neuroscience*, 13(3), 236-251. <https://doi.org/10.18662/brain/13.3/365>

## Introduction

The lexical-semantic way of word formation, as one of the ways of development and enrichment of language vocabulary, has long attracted academic attention. However, in Ukrainian linguistics, in which structural and functional approaches to the formation of new meanings seem to be extremely strong, these phenomena still lack epistemological certainty.

Both the relevance and need for a holistic approach to the phenomena of the human psyche, which includes language, increased in the late 20<sup>th</sup> century. After that, anthropocentrism became the starting point in the interpretation of linguistic phenomena. This led to the introduction of the term “anthropocentric principle in linguistics”. The latter aims to find out “how the human brain functions during the common usage of linguistic units (usus), rather than “how languages are organized”.

Today, interest in the neurocognitive nature of LSWWF is growing in the field of foreign language didactic. The concept of “metaphorical vocabulary”, which was introduced to develop a better understanding of texts with embedded figurative meanings, conveys the nature of polysemy and LSWWF much better than derivatology. This is confirmed by the latest studies on the effects of using cognitive linguistics in teaching English as a second, foreign and additional language (Veliz, 2017). This may have contributed to the fact that the structuralist approach prioritized an illustrative function, primarily in foreign language didactic, and somewhat abandoned explanatory and system-forming ones.

However, it is crucial to first consider the linguistic context of the problem in question. Despite the obvious simplicity of LSWWF, linguists deal with many difficulties in describing it because of several reasons. First, the status of semantic (lexical-semantic) derivation, among other ways of word formation, is neither unambiguously understandable nor sufficiently definite. Second, the theory of derivatology as an independent area in the study of generation, development and change of linguistic units has only recently passed the stage of formation and codification. The description of this method is also complicated by the fact that, with regard to word formation, it is usually considered as heterogeneous linguistic material which covers purely psycho-semantic phenomena, as well as those related to word formation.

Both the complexity and ambiguity of LSWWF is reflected in the terms to denote it: “*semantic derivation*” (Shmelev, 1977), “*semantic transposition*” (Telia, 1988), “*lexical-semantic transformation*”, “*semantic word formation*”, “*seme-*

creation” (Katznelson, 1965), “*intrasyllabic semantic derivation*” (Chernikova, 1997), “*lexical-semantic derivation*” and, finally, “*lexical-semantic way of word formation*” (Kovalyk, 1977; Zemska, 1973).

The authors of the article believe that the term “*lexical-semantic way of word formation*” most accurately reflects the essence of this phenomenon as the process of formation of a new linguistic unit based on the already known one, emphasizing its semantic focus in contrast to morphological ways of word formation. This term finally lacks direct correlations with a traditional understanding of word formation as a formal, morphemic process.

The concept of LSWWF was introduced by Shcherba (1958) and actively supported by Vinogradov (1972). Apart from morphological and syntactic methods of word formation, one should consider semantic methods manifested in the reinterpretation of primary words and the formation of homonyms by splitting one word into two” (Vinogradov, 1972). Kovalyk (1977) also agrees with such a statement. Semantic split, as a linguistic correlate of the mental process of cognitive divergence, is long overdue in Ukrainian linguistics. However, the issue of LSWWF’s status in the system of other ways of word formation remains open.

Another aspect of this problem’s relevance is the distancing from specific mental processes by viewing diachrony as the only possible evolution of new meanings. Unfortunately, there is a tendency to attribute LSWWF to diachronic word formation owing to the origination of word formation as a science after distinguishing between diachronic processes of word formation and synchronous relations of motivation between words and, accordingly, distinguishing between diachronic and synchronous word formation. As noted by Zemska (1973), the lexical-semantic way operates in the field of diachronic word formation. Words formed in this way act as the product of a long historical development. In the system of modern language, many of them are non-derivatives, i.e., not related to the words from which they were formed.

Nemchenko (1984) considers LSWWF as a diachronic phenomenon. The researcher claims that only one of the main ways of diachronic word formation, namely a lexical-semantic one, is completely absent in synchronous word formation. It is because the historically derived words, which emerged due to this way of word formation, are deprived of derivatives in modern language (Nemchenko, 1984). Thus, the researcher believes that the words “*byk 1*” as an animal (a bull) and “*byk 2*” as bridge abutment, “*osnova 1*” (warp) and “*osnova 2*” (the essence of something) are not semantically related.

This consideration of LSWWF diachronicity, as a historical, objective process detached from the active user, has led to a neglect of the human factor in the linguistic cognition of the world.

As a result of the obvious commitment of word formation to synchrony, LSWWF is, unfairly, on the periphery of derivatologists' interests and still requires to be included in the paradigm of word formation.

In this regard, the article aims to 1) critically study the polarized views of Ukrainian scholars (whether they recognize or do not recognize the role of real-time synchronous cognitively conditioned processes of LSWWF on the example of specific native speakers) and 2) suggest ways to eliminate the contradictions existing in traditional views.

The research hypothesis is seen in an opportunity to find not so much a methodological as an epistemological compromise between different views on LSWWF, which is based on the primary nature of thinking and the secondary nature of language. According to Mengtao (2020), "metaphor and metonymy are two effective ways of thinking that belong to the categorization of empirical concepts in the field of cognition". This view has been substantiated and widely discussed in the works of many prominent researchers (Knowles & Moon, 2006; Lakoff & Johnson, 1980; Langacker, 2017). If one assumes that the concepts of *lexicalization*, *transference*, *semanticization* and *transonymization*, taken from different linguistic paradigms, are, first of all, cognitive categories, then the essence of the "derivation or neurocognitive process" dilemma is rather related to verification than logical epistemology.

### **Categorical Diversity and Epistemological Isolation of LSWWF**

The Introduction section substantiates those views which should be totally revised within the framework of anthropocentric linguistics and natural neurosciences related to it now. Therefore, this article continues to consider theories indicating not only terminological inconsistency but also *epistemological isolation of LSWWF* from theories on natural linguistic mechanisms.

To begin with, LSWWF is not included in the system of word formation methods (Ulukhanov, 1977; Vinokur, 1959). Vinokur (1959) pays considerable attention to the issue of homonymy, which is closely related to LSWWF, but does not mention the latter at all. The researcher considers homonymy mainly as a consequence of changes in the morphemic composition of the word and not as a result of LSWWF (Vinokur, 1959).

Ulukhanov (1977) notes that it was Vinogradov (1972) who first classified the ways of word-formation. Unfortunately, this classification ignores LSWWF. Other researchers do not recognize LSWWF since semantic changes in words that originated in this way are not formally associated with the emergence of a new sound complex.

Shansky (1959) believes that LSWWF should be seen as a way of enriching vocabulary. The main argument for the inclusion of LSWWF in the word formation system is the isomorphism of its “derivative essence” of morphological word formation, which lies in the commonality of results and the similarity of mechanisms of both types of word formation (Shansky, 1959). First, the name is not only a phonetic complex (it always acts as an inseparable whole, which has not only a phonetic or structural “form” but also a certain meaning, and therefore each homonym is a new name). Second, with the help of this word formation method, words emerge as a result of “semantic development of a polysemous name under special historical conditions” in essentially the same way as when using a morphological method of word formation. The emergence of new meanings is no less modelled than that of linguistic units due to the morphological word formation method. Analogy, as the basic way of forming new words, “automatically and consistently” operates in certain conditions and causes the emergence of three members of the semantic proportion of the complete “word-formation four-square” (Shansky, 1959).

According to Shansky (1959), LSWWF implies that different meanings of the same word are transformed into different words, etymologically independent and autonomous, or that some well-known word is assigned a meaning (both basic and derivative) that is not related to the previous one. Thus, LSWWF fails to lead to the emergence of phonetically new words: the already known sound complex acquires new lexical and grammatical features. In structural and grammatical terms, however, the words which emerged with the help of LSWWF may still be new linguistic units (compared to the words based on which they were formed). The language can be supplemented by new morphologically based stems (Shansky, 1959).

Indeed, one must not underestimate the importance of Shansky’s (1959) theoretical concept in establishing the word formation system in general and the status of LSWWF as a full-fledged method in particular. At the same time, this interpretation of LSWWF eliminated the possibility of its inclusion in linguistic synchronicity and extended its effect only to homogeneous homonyms.

The word-formation model of LSWWF is a semantic pattern of forming new lexical units due to lexical-semantic features of motivators. Those words which emerged due to LSWWF are included in several similar constructions which are formed through a typical, regular semantic relationship between the motivator and the motivated. Thus, LSWWF is characterized by such systemic-linguistic units as a word-formation type and a motivated word (sememe), which most fully reveal the “content” of word-formation. The only argument of the “non-word-formation” essence of LSWWF may be the lack of formal indicators in the structure of the sememe.

After studying and dividing two types of derivation (*semantic and formal-semantic, or vertical and horizontal*), Golev (1989) also advocates for the derivational essence of LSWWF. In addition to semantic changes, the researcher indicates the existence of additional formal elements (novelty markers) in sememes, which, however, cannot be matched with affixes in meaning (Golev, 1989). Thus, the derivation of the new is divided into two forms: semantic, or vertical (named after the way of placing lexical-semantic variants (LSV) in explanatory dictionaries), and formal-semantic, or horizontal (named after the way of placing LSV in nested dictionaries) (Golev, 1989). Also, Golev (1989) notes that horizontal derivation focuses on the novelty of the form and vertical derivation on the absence of this novelty. Nevertheless, it must be noted that the power of formal accentuation is inversely proportional to the depth of semantic mutations, which are deeper in vertical rows. The following rule is applied here: semantic differences of the vertical chain elements are quite sufficient so as not to use specially designed units (affixes) for their expression (Golev, 1989).

However, formal mutations of the motivator are somehow presented in vertical rows. Formal changes in sememes include changes in the sound form or the lexeme paradigm, transformations in the graphic form (quotation marks), changes in a syntactic position or lexical valence, which serve as the markers of novelty inherent in affixes. Unlike affixes, external mutations do not perform important semantic functions, are not specialized and do not appear because of semantic changes.

Having studied regular semantic relations between the meanings of polysemous words, Shmelev (1977) showed that many such cases were characterized by derivation, which only formally differed from that in word formation. Besides, the researcher tends to use the term “semantic derivation”, which quite clearly reflects the closeness of word-formation facts to derivation in its broadest sense.

As can be seen from the above-mentioned views, researchers attempt to “suppress” the nature of LSWWF in the framework of formal and similar to morphemic models. They intuitively feel the cognitive basis of meaning transfer but avoid emphasizing it by using heteromorphic terms, such as “mutation”, “horizontal connection”, “motivation”, “semantics”, “model”.

Thus, the LSWWF concept develops through expanding the traditional boundaries of the method. Some researchers interpret polysemy as a phenomenon related to word-formation, while others consider polysemy only semantically but not formally similar to it.

### **Neurocognitive Trends in the Structural-Functional Model of LSWWF**

However, even within the framework of traditional paradigms, scholars were forced to acknowledge synchrony (instant formation of a new meaning) and cognitive aspects of nomination after studying LSWWF based on proper names. Specific types of such word formation are *onymization* and *transonymization* (Podolska, 1978).

Podolska (1978) understands *onymization* as the transition of common names into proper names and their further formation and development in any category of proper names. Transonymization is viewed as the transition of proper names from one category to another. In this case, both onymization and transonymization can be semantic and grammatical. Semantic onymization is a process occurring without formal (material) changes in the structure of appellative. As noted by Podolska (1978), it does not belong to the category of word-formation processes, although there is a concept of semantic word formation. This is a lexical-semantic way of forming proper names as in general vocabulary (Podolska, 1978). Semantic transonymization is the transfer of proper names to another onomastic class without changing its structure.

A detailed analysis of the collected factual material allows one to identify, in addition to the known methods of *onymization of appellatives* and *transonymization* of onyms, another way of forming proper names. It is *onymotransonymization*, which is the onymization of appellatives with simultaneous transonymization of onyms. This method is implemented in the process of forming new names as poly-stem lexemes or phrases: “*Victor-service*” (a private enterprise), “*Dnipropetrovsk in the Evening*” (a chocolate brand), “*The European Yard*” (a shop), “*Princely Lviv*” (restaurant), “*My Paris*” (a shop), “*The Olympus Center*”(a company). Within the structural paradigm, researchers need to recognize the reality of a specific cognitive-nominative volitional act

performed by the subject under the guidance of the following impulses: “I wanted and named it like that”, “I named it so because I liked it”, “I named it like that because it attracts customers”.

Similar trends in recognizing the cognitive nature of secondary nominations can be seen in the field of common names. Markov (1981) considered the emergence of homonyms to be the result of LSWWF. He mostly denied polysemy, explaining it by the fact that “without denying polysemy one cannot understand a semantic way of word formation”. Still, it is not that easy to deny it because of its objectivity. Thus, noting that every formal and semantic unity in language should be considered a new word, Markov (1981) begins to realize that a necessary condition for the existence of a word as an independent unit is the autonomy of its meaning. The latter lies in the fact that the meaning of the word is the result of the epistemological process since it does not emerge in context. The word is understood as a linguistic unit correlated with certain phenomena of reality, and this feature of the word corresponds to the need for a full expression of thoughts. Homonymy is possible because an insufficiently expressive verbal phonetic complex can be largely supplemented by context, intonation, situation, that is several additional indicators ensuring the necessary understanding of the word (Markov, 1981).

A thorough study of various explanations and explications of LSWWF shows that the neurocognitive nature of such names is often replaced by variants of the term “semantic motivation”, which is a neurocognitive process. Kovalyk (1977) believes that the words formed by the semantic method belong to lexicology as ready-made lexemes. At the same time, the process and method of their formation are related to semantic word formation, as a result of which a new lexeme, structurally and semantically different from the word stem, is formed. One way to form new words is to give existing words new lexical meanings, resulting in lexical homonyms. This method of word formation is called *semantic* (lexical-semantic). In modern Ukrainian, many proper names are formed in this way: toponyms, anthroponyms (*misto* “*Dolyna*” (town “*Valley*”), *selo* “*Hai*” (village “*Grove*”; surnames “*Khrushch*” (a *May bug*), *Soroka* (a *magpie*), *Shchur* (a *rat*), *Kavun* (a *watermelon*) (Kovalyk, 1977). Importantly, the researcher admits that attributing these processes exclusively to lexicology means not covering many word-formation processes (Kovalyk, 1977). Besides, he emphasizes that “as a result of semantic word formation, we have new derivatives, with new semantic and grammatical features. Semantic processes are present in every phenomenon of word formation; yet, the semantic way, unlike others,



relies only on this basis and, therefore, there are grounds to consider it a separate way in the general system of word formation methods”.

Some scholars recognize the existence of LSWWF as objective and obvious. One of the most complex and, at the same time, the least studied ways of word formation is lexical-semantic, i.e., the emergence of new lexical units by disintegrating the semantic structure of polysemous words. In terms of LSWWF, words with different meanings usually have the same sound form and do not look different from the meanings of a polysemous word. One can explain the quasi-scientific term “semantic structure disintegration” only by divergent and associative cognitive processes.

To expand the scope of LSWWF but leave the concept of this method, introduced by Vinogradov (1972), unchanged, Akhmanova (1957) considers it in terms of homonyms of the “action” – “result of action” type. This could be achieved only by abandoning the usual understanding of homonymy. Without a doubt, the meanings of the types of nouns named by Akhmanova (1957) have common semantic parts, i.e., one can talk about different meanings of one word, not different words.

Thus, LSWWF is a non-morphological way of replenishing vocabulary, which constantly acts in synchrony and has a “way out” in the diachrony of language. There is no clear boundary between the formation of lexical-semantic variants and the emergence of homogeneous homonyms. This is the same linguistic phenomenon at different stages of its existence. Thus, the stage of synchronicity lies in specific individual or group conventional acts of nomination.

Gorpinich (1999) considers LSWWF rather carefully. The lexico-semantic (semantic) method implies that the sound form of the stem word remains unchanged, acquires a new meaning and becomes a derivative. This method does not use any formal-structural ways of word formation, and the *formant* is seen as a change in semantics (Gorpinich, 1999). Furthermore, the researcher identifies three types of semantic word formation: 1) dividing a polysemous word into homonyms: *korin* as a) a root, b) radical sign/root symbol; 2) semantic condensation of a phrase into a word, which becomes a homonym to its counterpart: *temperature* as a) heat rate, b) fever; 3) conditional nomination under the already known name: *Odesa* a) a city, b) a ship; *Kyiv* a) a city, b) a camera brand.

As can be seen from scientific structural or functional interpretations, researchers use the concepts of “division”, “condensation” to replace the recognition of cognitive processes. Such quasi-scientificity refers to neurocognitive processes that were not available for experimental

study within classical paradigms (Demchenko et al., , 2021; Kosholap et al., 2021; Prots et al., 2021).

### **Searching for a Compromise between Functional and Cognitive Approaches**

The introduction of such neurocognitive concepts as “extralinguistic motivation”, “transonymization”, linguistic concepts, as well as the consolidation of occasional concepts (those that emerged in a particular moment of linguistic acquisition of the world), has intensified with the advent of research on homonymy. The latter often develops as a result of a specific cognitive-motivational and nominative act of an individual speaker as the subject of language formation.

Onymotransonymization as a way of creating proper names (PN) has become especially widespread recently. The activity of PN-composites and PN-phrases is due to the tendency towards expressiveness of the name and the maximum motivation of the designation. Expressive (emotional) motivation is the result of speakers’ evaluative reflection. It is an innate neurocognitive mechanism of one’s attitude towards the surrounding world based on the “good-bad” dilemma.

The same applies to the cognitive nature of the subject’s separation of a phenomenon (name) significant to him or her among the many available denotations (names). Superanska (1969) does not acknowledge the legitimacy of the term “semantic method” on the grounds that, as a result of the transformation of the lexeme “taiga” – “Taiga”, one can observe how the use of the word changes, not the semantics. However, proper nouns’ ability to select an object from several homogeneous ones is impossible without transforming the original semantics of appellatives. In addition to semantic differences, proper nouns and corresponding appellatives are characterized by individual capabilities (modality) in terms of lexical valence and word formation. Regarding the terms proposed by Superanska (1969) to denote this phenomenon (appellative onymization, zero affixation, onomastic conversion), only the first one seems appropriate.

At the time of structuralism dominance, researchers intuitively felt that a name or a phrase that had transformed into a proper name without formal changes was undergoing certain changes. However, they had neither alternative research tools nor the right to exceed the structuralist paradigm. A change in lexeme’s status is quite often accompanied by changes in the inflectional paradigm and the set of word-formation possibilities. Still, a certain psycho-semantic process is primary. This was shown by Reformatsky

(1967) on the examples of the words “*vira, nadiia, lubov*” (faith, hope, love) in the function of common and proper names.

The same processes occur during transonymization. As a result of various transitions from one onomastic field to another, both proper names and appellatives undergo specifically onomastic transformations during onymization. After that, there appear new words with new lexical meanings and new grammatical features.

The authors of the article believe that a compromise between heteroparadigmatic characteristics of LSWWF became possible when scholars began to recognize the following fact: LSWWF or polysemy is caused not so much by the long evolutionary process of vocabulary development as by pragmatic needs at a certain synchronous stage.

Thus, assigning LSWWF only to synchrony or only to diachrony is unjustified. It is because the rigid boundary between synchrony and diachrony exists rather as an epistemological conditionality, which does not always contribute to an adequate assessment of linguistic phenomena. In this regard, Shmelev (1977) rightly points out that the fear to “mix” these two aspects led to incorrect assessment of some lexical and semantic phenomena, which include LSWWF.

Thus, one can see how discourse is considered in the context of pragmatics, motivation, linguistic activity and subject’s activity in synchrony even in the works of linguists who do not approve of psychological, let alone neurocognitive interpretations. Here are several arguments based on these works:

- The result of both lexical-semantic and morphological ways of word formation is the emergence of new words (and new meanings): *burman* (*gourmet*) as a name of a café and a vodka brand. Undoubtedly, the presented proper nouns that emerged with the help of LSWWF are not new meanings of the base word but new words related to it as the motivator and the motivated.

- In terms of LSWWF, the *formant* is seen as a change in semantics. The Dictionary of the Ukrainian Language (Bilodida, 1973) presents two meanings of the lexeme “*lotsman*” (a marine pilot): 1) a pilot of a ship, who is well acquainted with navigation conditions of a certain area in the sea, river, canal; 2) a pilot fish. In the first case, the name is transferred to the name of the advertising agency. The meaning of “well acquainted with navigation conditions” allows one to use the lexeme as an ergonym. As a result of the lexeme’s onymization, its connection with the marine theme is lost. Besides, one can observe how the lexeme is being semantically expanded and its

meaning becomes symbolic: a pilot of a ship is the one who knows their job well and confidently pursues their goal. As an ergonym, the lexeme has another additional meaning: it means not only certain abilities of employees of the advertising agency but also the agency itself, which should become the leader among similar companies. Thus, the processes of onymization and transonymization are necessarily accompanied by semantic changes in the base word with their cognitive processing.

- LSWWF can be confidently attributed to synchronic methods, given that the base word and the newly formed name retain motivational relations: *krasunia* (a beautiful woman) as the name for hair salon), “*Kholodna Hora*” (a cold mountain) as a horonym in Kharkiv and a vodka brand produced there. Only when the name that emerged due to LSWWF loses its motivational connections with the base word, LSWWF has access to diachrony (numerous toponyms and anthroponyms).

A detailed analysis of traditional linguistic views has allowed the authors of the article to prove that polysemy occurs when one form of the word is associated with two or more related meanings. If one assumes that the association is the establishment of a new neural connection between denotations and the meaning is the existence of a stable connection, then “virtually every word is polysemous to some extent” (Vicente & Falkum, 2017). The only problem is that these mechanisms are ignored in most “purely linguistic theories”, and researchers find common ground only at the border of neurophysiology and psycholinguistics.

## Conclusions

Thus, the lexical-semantic way of word formation is one of the main but insufficiently studied ways of enriching the vocabulary of the Ukrainian language. Consequently, this presupposes the existence of polarized views on the recognition or categorical denial of LSWWF’s functioning in the word-formation paradigm of modern Ukrainian.

The most adequate compromise between the structural and neurocognitive interpretation of LSWWF involves the following: a) considering semantic changes and relations from an anthropological point of view, namely, linguistic-cognitive activity of subjects; b) recognizing an individual or conventional nomination as the primary one for lexicalization; c) exceeding specific linguistic paradigms when clarifying the nature of LSWWF. This assumption relies on the views of Anthonissen (2020), who observed and justified “the gap between language as a social phenomenon and the cognitive processes responsible for the continuous reorganization of

linguistic knowledge in individual speakers” (p. 309). Also, Anthonissen (2020) studied the author’s word formation and grammatical use of variant forms on numerous examples and concluded that “language change is an emergent phenomenon that results from the complex interaction between individual speakers, who themselves may change their linguistic behavior to varying degrees” (p. 309).

The authors of the article consider cognitive grammar as an important link between the language structure and the nature of new nominations and grammatical relations (syntagmatic potential, valence change, grammaticalization). Searching for new ways of teaching foreign vocabulary at the border of cognitive grammar and foreign language didactic, scholars suggest considering ambiguity and LSWWF as its cause in the form of a network model. Although it has more didactic than scientific potential, it demonstrates the following fact: different meanings of a word in the recipient’s mind form a holistic category, between the elements of which there are neurocognitive connections. This is indeed noticeable when the student begins to learn foreign vocabulary, acquires “the lexical prototype”, relations between the prototype and the extended meaning, and finally deduces typical schemes and relations that structuralists, for some reason, prioritize (Taraszka-Drożdż, 2020).

The representatives of post-non-classical linguistics claim that linguistic descriptions are necessary for systematization, inventorying of linguistic units and structuring of the language itself in the context of foreign language didactic. As noted by Langacker (2017), however, “they should at least be plausible from the psychological standpoint”, given that a language is a *neuropsychological* phenomenon from its causal and natural point of view and a *neurophysiological* one in the context of structural mechanisms. Thus, the descriptive basis of word formation and grammar can be formulated only with the help of cognitive phenomena. It is because the purely linguistic approach is well-structured but fails to specify the deterministic (diachrony) or functional-mental (synchrony) nature of secondary meanings. Langacker (2017) states that “cognitive grammar aims at maximal coverage of language structure based on some minimal assumptions about cognition”.

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