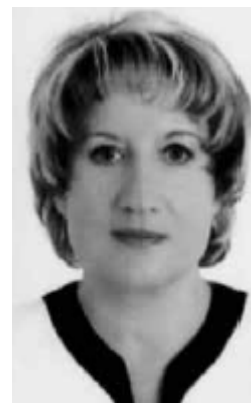


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## COMBINATORIAL SYNTAGMATICS: FROM THE THEORY OF VALENCY TO THE THEORY OF CONCEPTUAL INTEGRATION

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### **Abstract**

*The topical and complicated problem of modern linguistics has been examined in the article. It deals with the study of the processes and mechanisms of creating new senses by the various combinations of both language signs among themselves and the transformation of the meanings of ready-made signs. This problem was begun to be solved in structural linguistics by the representatives of the theory of valency and the theory of distribution. The following conclusion has been made: developing in parallel as two directions of syntagmatics, both the theory of valency and the theory of distribution caused a lot of discussions on their correlation between them, as well as with the understanding of the problem of compatibility in general. However, their representatives agreed that these categories are in a relationship of matching: inclusion, cohesion and interdependence. They are represented with two levels of combinatorial syntagmatics: while the language level is more typical for valency, then the speech one is, predominantly, for distribution. The particular attention is paid to a new cognitive view of the essence of the valency and distribution. It helps to assume that both notions are broadly understood to be cognitive categories that reflect the ability of native speakers to associate certain language signs in a specific communicative situation, usually called the context. It is pointed out that the development of this problem was reflected in the works of representatives of compositional semantics. They first focused their attention on studying the relationship among the configurations of components of complex signs from the cognitive point of view. The arguments are given to justify a new stage in the development of combinatorial syntagmatics, developed by J. Fauconnier and M. Turner, the supporters of the theory of the conceptual integration. According to it the creation of new senses by the configuration of language signs occurs in the system of mental spaces – the mental spheres (cognitive contexts reflected in the consciousness of the carriers of a certain language), connected with the comprehension by a person of various situations and having a cognitive status, i.e. with the process of cognition of the phenomena of the surrounding reality.*

**Keywords:** *the theory of valency, the theory of distribution, combinatorial syntagmatics, the configuration of the language signs, compositional semantics, the theory of conceptual integration.*

## **1. Introduction.**

The modern anthropocentric and cognitive-oriented linguistics considers a language to be an instrument that reflects the structures of human knowledge, the operations on which are performed in its cognitive system in the process of perception and generation of speech (Dyachkova 2014: 155). The language provides the processes of categorization and conceptualization of the world that represent certain conceptual structures at various levels.

Such a view on a language that makes it possible to analyse many language phenomena more deeply with the appeal direct to the consciousness of native speakers. Exploring the language through the structure of consciousness, one can get an access to different knowledge on the world (A. A. Zalevskaya (Zalevskaya 2004), Ye. S. Kubryakova (Kubryakova 2004), etc.). The following thought has already become a trivial one: perceiving the world, a person reflects it in the form of certain structures of knowledge that get a language embodiment. According to T. Yu. Lopatina's opinion, "the mental entities acquire the symbolic forms, thereby enabling them to operate at the level of the language: to create various language constructions, the study of which allows us to assume how the correlation between different mental spaces is being represented" (Lopatina 2006: 170).

In the cognitive-discursive paradigm the problems of the interaction of signs in the composite constructions of a language (from a word to cognitive structures) are considered in the theory of the conceptual integration of the mental spaces of J. Fauconnier and M. Turner, in the theory of frames of C. Fillmore and his followers, etc. They contribute to the elucidation of regularities in the rules for the semantic composition of signs. According to Ye. S. Kubryakova's view, the necessity to study the mechanisms of interaction (and not just folding!) of the meaning of the components of the complex signs and types of correlation and relationships among them (Kubryakova 2002a; 2002b).

## **2. Formation of Combinatorial Direction in Linguistics.**

According to M. V. Vlavatskaya's words, in classical structural linguistics the issues on the combinatorics of the language signs "began to be solved in the aspect of syntagmatics based on linear relations of the language signs. By the middle of the XX century the following understanding is being formed in linguistics: the study of the syntagmatic construction of speech ought to become the subject of a special field of linguistics, which will directly study the rules for composing combinations of the language signs in accordance with a stated meaning (Vlavatskaya 2013: 3). At the end of the XX century – early XXI century the new trends have emerged in the study of syntagmatics and combinatorics from the cognitive point of view. They date back to the theory of conceptual integration. Such a turn was dictated by a cognitive view of the semantics of a word in general and the components of a lexical meaning and their compatibility within the lexeme, in particular. It allows one to combine the words in a broad cognitive context (situational) to achieve certain goals.

Thus, there is a reason to speak on a new stage in the development of combinatorial linguistics (M. V. Vlavatskaya (Vlavatskaya 2013) et al.), i.e. the directions of theoretical linguistics that study the syntagmatic relations of the language signs and their combinatorial potential in the context of the conceptual integration of mental spaces. Its basis is formed, on the one hand, by the syntagmatics, i.e. the study of the language rules for the compatibility of the single-level signs, on the other hand, by the combinatorics, i.e. the analysis of combinations of the language signs that are conditioned by a stated meaning (Vlavatskaya 2013: 5), but within the third one, the compositional semantics (Ye. S. Kubryakova (Kubryakova 2002a, 2002b)) and conceptual integration (J. Fauconnier, M. Turner (Fauconnier et al. 1995) et al.), i.e. the disclosure of cognitive mechanisms for the creation of new meanings in the process of syntagmatic-combinatorial properties of the language signs.

According to M. V. Vlavatskaya's observations, ontologically, these three aspects are associated with the problem of the compatibility of the language signs. It was developed practically at all the language schools of the far abroad at different times: the French syntagmatics, or functional syntax (A. Martine), the transpositional syntagmatics (Ch. Bally), the structural syntax (L. Tenier); the German theory of valency (L. Weissgerber, H. Helbig, H. Schreiber et al.); the Danish glossematics (L. Hjelmslev); the American descriptive linguistics (L. Bloomfield et al.), the London contextualization theory – the system-functional linguistics (J. R. Förs, M. A. K. Holliday et al.), the theory of semantic synthesis (J. Katz, W. Weinreich et al.), etc. (cited in: Vlavatskaya 2013: 4–5), as well as the Russian and Ukrainian linguists, i.e. the representatives of the syntagmatic direction, in particular, the theory of general syntagmatics (O. S. Akhmanova, L. V. Shcherba, V. V. Vinogradov, A. A. Reformatsky, A. A. Kholodovich, S. I. Kartsevsky, M. M. Plyushch), the syntactic syntagmatics (V. V. Vinogradov, I. R. Vykhovanets, N. B. Ivanitskaya, A. I. Leuta, N. Yu. Shvedova, G. A. Zolotova, N. A. Slyusareva, D. N. Shmelev et al.), the semantic syntagmatics (Yu. D. Apresyan, V. G. Gak et al.), the lexical syntagmatics (I. A. Melchuk, O. V. Demyanchuk, A. K. Zholkovsky, A. A. Ufimtseva et al.), the contextual theory (M. P. Kochergan et al.), the compositional semantics (Ye. S. Kubryakova, L. F. Omelchenko, N. N. Polyuzhin, T. S. Tolcheeva et al.).

Despite the fundamental tradition of developing compatibility issues development as categories of syntagmatics (O. L. Lyubovskaya, W. Abraham, L. N. Rebrina N. L. Shamne, M. V. Milovanova, E. V. Terentyeva, P. Hanks, L. Fesenmeier, V. G. Gak, N. Barri et al.) and combinatorics (S. Eger, M. P. Serrano et al.) in a broad and narrow sense. The issues of the correlation of such notions as “valency”, “distribution”, “context”, etc. remain unsolved up to now.

### ***3. Problems of the Theory of Valency in Combinatorial Syntagmatics.***

The preliminary analysis of the multidimensional scientific literature of scholars of different periods and different scientific schools gives fundamentals to fix the similar views on the nature of the notion of “valency”, although with some differences. They are: 1) the word's property to be combined with other words in the context of speech (S. D. Katznelson); 2) the ability of a word to form a word combination with other words (G. Helbig, V. Shenkel); 3) the ability of a word to establish relations with other words and to discover places based on its significance (K. E. Zimmerfeldt, H. Schreiber et al.); 4) the ability of a verb to be combined with its arguments (L. Tenier), etc.; the various schemes of combinations (D. N. Shmelev), etc. (Vlavatskaya 2013: 6).

In order to establish the zones of intersection of this notion with its above-mentioned adjacent terms and descriptions, it is necessary to briefly dwell on the history of the development of the theory of valency in linguistics and to formulate principal and typical positions for valency that distinguish it from the doublet notions. In addition, a task to search for the origins of the theory of conceptual integration is important for the scientific idea of this article. In our opinion, it goes back to each of the above-mentioned adjacent terms of combinatorial syntagmatics.

In combinatorial syntagmatics, the issue on the founder of the notion of valency is still not solved: L. Tenier, who is most often attributed the primacy, or it is S. Katznelson. K. Buller, the German linguist, is also represented among these scholars.

There is a point of view of M. V. Vlavatskaya among the many scholars, who call L. Tenier “the author of the theory of valency”. It is represented in her fundamental most recent doctoral thesis and one of her articles (Vlavatskaya 2012: 47). She states that “the scholar uses the notion of valency to denote the verbal compatibility and understands it as “the deployment of the verbal core of a sentence by the actant-dependent participants”

(Tenier 1988). She also considers that such an interpretation of the valency is comparable to the notion of one-, two- or three- predicate structure and it is related to the verbocentric theory of a sentence (Vlavatskaya 2012: 47). At the same time, she correctly calls S. Katznelson, who first used the term of “valency”, by which he understood “the properties of a word to be implemented in a certain way in a sentence and to enter into certain combinations with other words” (Katznelson 1948: 132).

However, it is hardly possible to introduce the term without a theoretical justification and argumentation in scientific use. That is why we agree with V. G. Gak (Gak 1998: 79–80), who believes that the notion of valency was first developed by S. D. Katznelson in his work “On the Grammatical Category” (Russ. “О грамматической категории”) published in the Bulletin of the Leningrad University (Russ. “Вестник Ленинградского университета”) in 1948, but not without reason, since L. Tenier, the French linguist, who was engaged in the Slavic languages and began to develop the problems of general syntax since the middle of 1930s. But only after more than twenty years, in 1953, he published a few small articles on this topic and the brochure “An Essay of Structural Syntax” (Russ. “Очерк структурного синтаксиса”) (one year before his death). The scholar’s main theoretical work is “The Fundamentals of Structural Syntax” (Russ. “Основы структурного синтаксиса”) that was published with great difficulty in Paris in 1959 after his death and at first it did not find recognition among his contemporaries. It can be seen that the theory of valency was published in the works of L. Tenier somewhat later than in S. D. Katznelson ones (1948).

S. D. Katznelson linked the valency with the overall combined ability of the words in a sentence and signs at different levels (Katznelson 1987: 32). He also mentioned even the valency of conjunctions and prepositions, but this idea was not elaborated in details in his scientific works. At the same time, he saw the main language sign not in a word, but in a sentence. The scholar attributed the valency to the syntactic type and indicated that a word in a language in its full sense is a sign possessing certain syntactic potencies that enable it to be used only in accordance with specific grammatical relations typical for every language (Katznelson 1987: 32).

Therefore, considering the issue of the relationship of a language with the reality, S. D. Katznelson prefers a sentence, but not a word. Although he does not deny that the operational availability of the inventory of the verbal signs is a prerequisite for the formation of speech (Katznelson 1972: 149). “By combining words and arranging them in a sentence, the speech seeks to recreate a holistic image of events [...] lost in a language. In other words, the words that are the main sign signs of a language that are principally partial. The sentences as minimal signs of speech are relatively the holistic events. Comparing the mental content of a sentence and a word, S. D. Katznelson (Katznelson 1972: 140) says that “the mind content of a sentence is sometimes called the “sense” or “meaning”, equating it to the meaning of a word. But the mental content of the sentences is qualitatively different from the thought content of words withdrawn from the context of a sentence. A word itself outside a sentence does not say anything on the real facts, it does not reproduce them”. Taking into account this view, it should be admitted that today it corresponds to cognitive-discursive paradigm. According to S. D. Katznelson’s words, “the world is not a collection of objects (words), but events and relationships among them” that have already been tested by time and do not raise objections.

S. D. Katznelson (Katznelson 1987: 20–21) explained the valency as a hidden indication in the meaning of a word for the necessity to fill it with words of certain types in a sentence. Hence, it can be assumed that the valency is not typical for all words, but only for those that give a feeling of incomplete utterances.

L. Tenier used the term of “valency” to refer to the compatibility of verbs and the definition of the number of actants, which can be added to a verb (Tenier 1988). In the theory he considered a sentence as a realization of the syntactic valencies of the words, but at the same time he emphasizes the central position of the verb-predicate in a sentence. In this regard, his position on the valency partly coincides with S. D. Katznelson’s point view. When it comes to what term in a sentence causes a feeling of incompleteness of the utterance, it is obvious that this verb is a predicate.

It was the theory of L. Tenier that was continued by the representatives of the structural and semantic syntax, from 60s and 80s of XX century. The notion of valency was actively studied mainly with the respect to verbs, but later the linguists started to use the term valency in a broader sense, linking it with other parts of speech (S. D. Katznelson mentioned on it).

According to V. G. Gak (Gak 1998: 79–80) the following characteristics of the valency can be mentioned: 1) the general type of valency (active / passive), 2) the obligatory valency (mandatory / optional), 3) the number of valency (monovalent / bivalent / trivalent verbs), 4) the form of the complementary member (part of speech, word or sentence, infinitive construction), 5) the categorial semantics of a word that realizes the valency (animation / inanimation, concreteness / abstraction, accountability / inaccountability).

These characteristics reflect different levels of manifestation of valency (Semenyuk 1977: 111–115; Stepanova, Helbig 1978; Vlavatskaya 2012: 47 et al.): 1) *logical* (extralinguistic relations among conceptual contents), 2) *semantic* (compatibility of semantic components (properties, semes), 3) *syntactic* (obligatory or optional occupancy of open positions that are not the same in different languages).

For example, *at the logical level* of a verb the scholars (I. A. Melchuk et al.) come from the specific content of information transmitted by its meaning and consider only the number of arguments under the predicate and the nature of its correlation. On the one hand, the predicates are an intellectual model of denotata, on the other hand, a model of information transmitted by the language structures. In this case, it is necessary to take into account the existing natural correlation among the meaning of a verb and both the number and type of its actants (participants of a situation described by the word). Thus, the specific meaning of a verb requires certain semantic actants, which are an indispensable condition for determining the semantic valency of a word. I. A. Melchuk distinguishes the semantic actants and their valency from syntactical actants and their valency: if the first are the signs and relations of the form of content of the speech segment, then the latter are the signs and relations of the form of expression of a speech segment. The syntactical actants of a word are possible dependent members for a stated word [...] (Melchuk 1999).

It is obvious that, taking into account the different levels of manifestation of the characteristics of the valency of the words, I. M. Boguslavsky proposed a definition of valency, under which he understood the property of the word L to describe a situation in which there is a participant X [...]. A word has so many valences, how many participants in a situation (semantic actants) are necessary to be mentioned in order to fully interpret its meaning (Boguslavskiy 1996: 360).

The same point of view on the nature of valency is inherent in M. Vsevolodova. It reflects the synthesis of ideas of S. D. Katznelson and L. Tenier, because, first of all, this phenomenon is considered in a sentence, which indicates a certain extra-linguistic situation. Although, according to M. Vsevolodova, “every language situation in itself is unique (any situation will happen at another time, in another place or with other specific participants – with actants in L. Tenier). In linguistic consciousness it is reflected as any typed event: the similar situations have already happened, that is why therefore the linguistic consciousness fixed them in the form of a definite formula, in the form of a certain composition of

components; it was not just the fixed composition, but the configuration of these components, the structure of the images” (Vsevolodova 2000: 121).

This view of the essence of the valency indicates that in a broad sense the notion of valency is a cognitive category of combinatorial linguistics that reflects the ability of a native speaker to associate certain language signs in a particular communicative situation, usually called the context or environment (Ispiryan 2012: 75).

#### **4. The Theory of Distribution in Combinatorial Syntagmatics.**

In American descriptive linguistics the notion of all possible environments of a language sign in certain contexts was called *the distribution* as a term adjacent to valency. It was actively used in applied linguistics in the 40s – 60s of the XX century in the period of intensive development of automatic analysis and machine translation of the text. The principles of distributive analysis (one of the technique of the structural method) was formulated by L. Bloomfield at the beginning of the XX century. They were first applied in phonology and morphology. Later the supporters of American descriptivism tried to create a special technique for formal analysis of linguistic material without resorting to the meanings of the language signs (of course, this attempt was inefficient and was sharply criticized). It can be seen that in the works of scholars of this direction the main attention was focused on the search for the precise methods of analysing language material and describing the language structure of a language (Karelskaya 1988: 42).

The fact that distribution and valency are contiguous notions is indicated by all linguists who are investigating these phenomena. In particular N. A. Berezovska-Savchuk notes that “the distribution is closely connected with the valency as a phenomenon of the form of speech, which is realized at the level of real communication, with the phenomenon of the form of language, which is distinguished at the level of abstract thinking”. But in this case, contrary to traditional thoughts on whether these phenomena are broader or wider, the scholar correctly states that they belong to different logical forms, and they cannot be identified. They cannot be regarded as something autonomous, independent of each other. This position is correct one, it reflects the ontological nature of every of these phenomena, and most importantly, it denies the former view of the hierarchy of relations between the notions of valency and distribution (Berezovska-Savchuk 2016: 36). By the way, many grammarians wrote on it at that time that the fact that the valency is only a part of the distribution, or valence-essential communications, actants, described with the help of parts of speech and the members of the sentence, as well as with the help of semantic terms (properties, semes, etc.). It is written in the work “Parts of Speech and the Problem of Valency in Contemporary German” (Russ. “Части речи и проблема валентности в современном немецком языке”) of M. D. Stepanova, G. Helbig (Stepanova, Helbig 1978: 148).

However, there is another point of view according to which the distribution and valency are treated as two different approaches to studying, first of all, the connections of a verb: the first is the semantic and syntactic and the second is the quantitative (Lehmann 1974). But this does not deny the fact that both notions come into relationship with the general notion of compatibility (cited in: Berezovska-Savchuk 2016: 37–38).

Analysing the definition of the distribution proposed by O. S. Akhmanova in the Dictionary of Linguistic Terms (Russ. “Словарь лингвистических терминов”). It is defined as “the collection (class) of all the environments (contexts) in which a stated sign of a language can meet, opposable to all those environments in which it cannot meet, i.e. place, order, compatibility and the properties of its use in terms of the location of the individual parts of the utterance relative to each other” (Akhmanova 2007: 137). It can be argued that the central notion here is the context that creates the conditions for the variability of the meaning of a word. It was noted by I. A. Sternin, who considered the distribution in close

correlation with the lexicosemantic variants of a word, because every of them has a unique distributive form (Sternin 1979: 18).

At the same time, I. A. Sternin highlighted *the syntactic distribution* (the syntactic construction model in which the stated word meaning is realized and which is usually described by certain formulas of syntactic constructions caused by one or another lexicosemantic variant of a word) and *the lexical distribution* (the semantic category of words (certain semantics) that are directly combined with the semantically realizable word. He also highlighted this meaning in the latter and he does not indicate that the main factor in establishing the distributive relations among LSV of a word is the context, called as the term “the syntagmatic environment of a language element” in the Structural Linguistics.

N. A. Berezovska-Savchuk correctly notes that the distribution is [...] any use of a word in speech (context) (Berezovska-Savchuk 2016: 38). The scholar proposed the distribution to be mandatory and optional. *The mandatory distribution* represents such an actant filling of the predicate environment, which completely realizes the semantics of a predicate word in the necessary context. *The optional distribution* has a refinement nature that details the general semantics of syntactic construction (sentence). The mandatory / optional nature of the distribution is verified by the attempt to remove the actant position from the syntactic structure: in the case of violation of the semantic integrity of a sentence, there is a mandatory distribution, and vice versa, if such seizure does not affect the content and meaning of the construction, the optional distribution is to be certified.

Here the context is understood traditionally as a verbal environment of a language sign. W. Schmidt laid the verbal environment as a context to the foundation of its theory of the actual meaning of a word (Schmidt). Later in the second half of the XX century the distributive environment of a word in the aspect of its contextual use began to be regarded as the language connections of a word with other words (see the work “Word and Context” (Russ. “Слово и контекст”) of M. P. Kochergan) in a particular communication situation.

### **5. Role of Context in Combinatorial Syntagmatics.**

M. Pinkal correctly believes that almost all the expressions of the natural languages depend in their content in one way or another on the situation in which they are used (Pinkal). He calls such a situation as the context of the utterance. His idea is not new, because from the Early Middle Ages it has been repeatedly asserted that a word outside the context does not matter at all. This assumption gave rise to two opposing approaches to the consideration of the question of the semantic independence of a word. The first approach was typical for glossematics, in particular L. Hjelmslev (Hjelmslev 1960: 303) said that “a sign does not have any meaning in absolute isolation; any meaning of a sign arises in the context of [...]”. The representative of the second point of view is V. V. Vinogradov (Vinogradov 2001: 14); its essence deals with the fact that “regardless of use, a word is represented in the mind with all its meanings, with hidden and possible, ready for their actualization”.

The cognitive science combined these two views and gave an answer to this discussion. It argued, like V. V. Vinogradov, the academician, that a word is the context itself. The facts indicate that words encode the former experience, the former contexts of its use. A word is the repository of the former situations in which it was used. It can be said that the word is a reservoir of former contexts, the former uses ingrained in the speaker's experience (in the mind) (Kecskes 2004).

A language reflects a previously known reality, but it is ready to change, as it is required by the sociocultural factors. On the other hand, the changes that occur in a language itself, with the use of the old words and word expressions, show the internal capabilities of a language itself. The lexical meaning of a word encodes the contexts in which it was used (Kecskes 2004).

S. D. Katznelson (Katznelson 2001) supported this position and said that “the context is not a meaning generator, but their external developer. The words encoding the former contexts of the use of a stated word or word expression play the same important role in determining the actual meaning of a stated word, like the actual context of use.

The dynamism of the context is expressed in the following: the words generate actual contexts, but the contexts generate word meanings. Hence, there is a correlation between the two sides of the context. At one time Yu. M. Lotman (Lotman 1966) also considered the text not only as a generator of new meanings, but also as a condensate of cultural memory. “A text has the ability to preserve the memory of its previous contexts”, the scholar wrote, calling this phenomenon the memory of a text (Lotman 1966).

At the same time, for communication of communicants it is necessary that similar images of a signifier and a signified (the words’ meanings) and the correlations of these images (the generated meanings) exist in their consciousness. Only in this case the words of a speaker will cause the corresponding images of a listener. The image of a world that constitutes the common of a sign of a speaker and a listener and determines the perception (sense) of a sign is called the presupposition in cognitive-discursive linguistics.

But not only the presuppositions affect the configuration of signs in a certain context, but primarily the type of a language on which the valency and distributive capabilities of a word depend.

N. Chomsky (Chomsky 1982) distinguishes between the configurational and non-configurational languages ones based on how the words are organized in the sentences. The word order defines the grammatical relationships, but the logical object usually coincides with the grammatical object in the configurational languages, particularly in English. The suffixes and endings express the grammatical meanings, but different permutations of the word order are possible without a major change in the meaning of a sentence (but also not always) in the non-configurational languages, for example, in Ukrainian.

Such an approach indicates that the focus was on the word and its behaviour in the process of constructing on a sentence in Classical Syntagmatics.

#### ***6. Cognitive Vector of Development of Combinatorial Syntagmatics.***

However, the ideas of the cognitive view on the nature of the meaning of a word are gradually ripening in the works of psychologists of the second half of the XX century. The fact of the development of meaning L. V. Vygotsky (Vygotsky 1960) associated with consciousness and he said that a word is the apparatus that reflects the external world in its correlations and relationships. The context is started to be considered as the skills of information design in the form of language, because the factors of repeatability of ready-made constructions. Such the collection of constructions is constantly represented in the mind of a person, as well as the new opportunities for compatibility (combinatorics) of signs.

This point of view was inherent in the works of the representatives of compositional semantics (see the work of Ye. S. Kubryakova), but later in the cognitive interpretation, as well as in the works of the scholars of the theory of conceptual integration.

Ye. S. Kubryakova points out that, trying to explain the nature of the meaning of signs, which represent a combination / composition / configuration of several ready-made signs of a language in their composition, H. Frege introduced the scientific term “compositional semantics”. The scholar believed that the semantics of a complex sign is a “composite function of the meanings of those signs that are part of a complicated sign and the relationship among them” (Kubryakova 2004: 440). Later, in the study of the semantics of complex signs, the search for linguists passed in two directions: 1) in the direction of studying the meaning of the components of complex signs and 2) in the direction of determining the type of relations between these components.



According to Ye. S. Kubryakova, a new stage in the development of compositional semantics began with a cognitive vector in linguistics where “the problems of organizing semantic structures among different language signs began to be analysed as problems of objectifying these signs of different knowledge structures as problems of participation of these signs in the processes of conceptualization and categorization of the world” (Kubryakova 2002: 5–6), i.e. in another, broader context that was called the cognitive context by N. N. Boldyrev.

In the future the compositional semantics became the object of study in the theory of conceptual integration of the mental spaces of J. Fauconnier and M. Turner, in the grammar of constructions and the frame approach of C. Fillmore and his followers. It contributed to a deep ontological explanation of the rules (possibilities) of the semantic composition of signs (i.e. valency, distribution, compatibility). According to Ye. S. Kubryakova, to identify what the types of interaction are observed in complex signs of different orders (Kubryakova 2002a; 2002b).

I. Sweetser in his work on compositionality emphasizes that the ability of a language to new combinations of signs is its central property. The scholar notes that the formal theories of semantics are not fully capable of giving it an adequate interpretation, but the theory of the conceptual integration of the mental spaces of J. Fauconnier and M. Turner reveals the nature of this phenomenon. Even in the simplest cases of a compatibility of an adjective with a noun, there is not at all a simple addition of meanings, but something much more complicated. In explaining such cases, it is also necessary to use the idea of merging different mental spaces, as well as the ideas on active zones in the objects described, thoughts on profiling (see R. Langacker), and concepts of frames (see M. Minsky), etc. (Sweetser 1999: 131).

**7. *The theory of conceptual integration*** correlates with the universal principles of human cognition and language as a way of expressing it, according to which the scholars explain the process of conceptual integration as a cognitive instantaneous mechanism of the creative juxtaposition of informative elements in a system of mental spaces. They are the mental spheres of conceptualization (cognitive contexts reflected in the consciousness of carriers of a certain language) that are associated with the understanding of real situations, past and future, as well as have a purely cognitive status, i.e. they do not exist outside the mind of a person (Fauconnier 1998).

The mental dimensions are organized with the help of cognitive models. As a rule, two input mental dimensions participate in the usual model of conceptual integration. The cognitive operation on mapping the elements of their structures based on the identity, similarity and analogy is performed among them (Fauconnier, Turner 2003). In the theory of a cognitive metaphor such an operation is called the mapping (J. Lakoff et al.). In the theory of valency and distribution a complex mechanism of mapping or conceptual integration was explained not at the deep (cognitive) level, but at the level of ready-made configurations of language signs, i.e. at the language level.

The general that signs the source mental spaces is projected into the so-called generic space, which is a special combinatorial mechanism. In the process of conceptual integration a new model of the generated space is transferred to every source mental dimension that ensures the structural consistency of their elements. Then there is a process of selective integration of structures and elements of the source spaces to create an independent mixed dimension, i.e. the blend, which results in an integrated structure with a new meaning. The formation of a new meaning (a new structure of consciousness) occurs through three cognitive operations: 1) the composition of the elements of the source mental dimensions and the establishment of relations among them that do not exist when they are separately

considered; 2) the completion based on the participation of the background conceptual structures of native speakers; 3) the elaboration, i.e. the mental reflection on the new structure. Moreover, J. Fauconnier and M. Turner note that these operations are carried out instantaneously, that is why the selection of their sequence is a rather conditional scientific explanation of the phenomenon of conceptual integration (Fauconnier, Turner 2003).

The integrated spaces reflect one of the fundamental properties of human thinking and language, i.e. the property of combinability, or structural compatibility, is the result of the logicogrammatical, lexicosemantic correlation of the components of the formed language structure, i.e. the new structuring of the experience represented in its meaning.

### 8. Conclusions.

Summarizing the consideration of this complicated problem, i.e. the processes and mechanisms for creating new meanings through various combinations of both language signs among themselves, as well as the transformation of the meanings of ready-made signs, etc., it should be noted that this issue began to be solved in the structural linguistics, which initiated the development of the theory of valency and the theory of distribution. Developing in parallel, these two directions of syntagmatics caused a lot of discussions on the correlation of these notions with each other, as well as with the term of compatibility. In the end, it was assumed that these categories are in the relations of inclusion, cohesion and interdependence and they represent two aspects of combinatorial syntagmatics: language that is more typical for valency and speech – mainly for distribution. A new cognitive view on the essence of both valency and distribution gives all the fundamentals to argue that both notions in the broader sense are the cognitive categories that reflect the ability of native speakers of a particular language to associate certain language signs in a specific communicative situation, usually called the context. The further development of this problem was reflected in the work of representatives of compositional semantics, who first focused their attention on studying the relationship between configurations of components of complex signs. A new stage in the development of combinatorial syntagmatics began because of the development of the theory of conceptual integration of J. Fauconnier and M. Turner. According to it the creation of new meanings by the configuration of language signs occurs in the system of mental spaces of a person connected with the comprehension of various situations and having a cognitive status, i.e. with the process of cognition of the phenomena of the surrounding reality.

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### Бібліографічний опис:

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### Анотація

У статті розглядається актуальна і складна проблема сучасної лінгвістики, пов'язана з вивченням процесів і механізмів творення нових смислів шляхом різних комбінацій як мовних знаків між собою, так і трансформації значень уже готових знаків, яку почали вирішувати ще у структурній лінгвістиці представники теорії валентності й теорії дистрибуції. Зроблено висновок про те, що,

розвиваючись паралельно як два напрями синтагматики, і теорія валентності, і теорія дистрибуції викликали чимало дискусій щодо їхнього співвідношення між собою, а також із поняттям сполучуваності загалом. При цьому вказано, що з часом науковці дійшли згоди і заявили, що обидві категорії перебувають у відношеннях взаємозумовленості й становлять два рівні комбінаторної синтагматики: мовний рівень, характерний більше для валентності, і мовленнєвий, – переважно – для дистрибуції. Особливу увагу приділено новому когнітивному погляду на сутність і валентності, і дистрибуції, який дозволяє припустити, що обидва поняття в широкому розумінні є когнітивними категоріями, що відображають здатність носіїв конкретної мови пов'язувати (поєднувати) певні мовні одиниці в конкретній ситуації спілкування, тобто у контексті. Показано, що досліджувана проблематика знайшла відображення в роботах представників композиційної семантики, які спершу були зорієнтовані на аналіз відношень між конфігураціями компонентів комплексних знаків із когнітивного погляду. Наведено аргументи для обґрунтування нового етапу розвитку комбінаторної синтагматики, що розробляється послідовниками теорії концептуальної інтеграції Ж. Фоконьє і М. Тернера, згідно з якою творення нових смислів шляхом конфігурації мовних знаків відбувається в системі ментальних просторів – мисленнєвих сфер (когнітивних контекстів, відображених у свідомості носіїв конкретної мови), які відображають осмислення людиною різних ситуацій і мають когнітивний статус, тобто процеси пізнання явищ навколишньої дійсності.

**Ключові слова:** теорія валентності, теорія дистрибуції, комбінаторна синтагматика, конфігурація мовних знаків, композиційна семантика, теорія концептуальної інтеграції.