Phraseological predicatives in Bulgarian

Maria A. TODOROVA[1]

This research represents a group of phraseological constructions with predicatives expressing the meaning of state in the Bulgarian language. It is a stage of the work on the study of the syntactic and semantic structure of the predicates for state in Bulgarian with a view to ontological presentation of the meanings of state. The interest is focused on the description of the varieties and characteristics of phraseological constructions with predicatives expressing state semantics, their functions and specifics through the prism of the mutual overflow between the free constructions and idioms.

Keywords: *phraseological predicatives, category of state, Bulgarian language, phraseology*

1. Object of the study

The object of this study are phraseological constructions and phraseologisms with predicatives. Their description is part of the typology of predicative constructions with a view of the linguistic modelling of the ontology of state situations. We investigate the general semantic field of state, characterized by "the presence of the object in some unchanged state, which is not the result of direct influence of someone for a certain period of time" (Zimmerling 2010, 549) or some kind of assessment (Rozhnovskaya 1959; Georgiev 1990; Petrova 2018).

The goals that motivate our work are the description of the meaning and form of the predicative constructions according to formal criteria along with the description of state semantics expressed by predicative constructions.

The predicative constructions and phraseologisms share multi-lexical structure. Multi-lexicality is a productive process that associates "a plurality of signifiers to a unique signified". Multi-lexicality is contrary to polysemy, where plurality of meanings is used for unique signifier. "Multi-lexicality to fixed sequences is what polysemy is to single words" (Mejri 2003, 26).

Considering this we make an attempt to answer the questions which predicative constructions represent semantic integrity and where is their place in the continuum between free phrases and non-free phrases (Melchuk 1995). Our work is based on the hypothesis of the Grammar of Constructions (Fillmore 1988;

---

[1] Institute for Bulgarian Language Prof. Lubomir Andreychin at the Bulgarian Academy of Sciences, maria@dcl.bas.bg

Goldberg 2013; Fried 2015) that equivalent syntactic structures contribute to the construction of meaning in an equivalent way, and the syntactic structure is related to semantic interpretation.

According to Goldberg "constructions are learned pairings of form with semantic and discourse function (...) some aspect of [their] form or function is not strictly predictable from [their] component parts or from other constructions" (Goldberg 2006, 5). On the other hand, grammatical structures are not only combinations of atomic units, but relation constructs based on the transmission of information from subordinate constituents. We outline some of the constructional/structural patterns of idiomatic predicative constructions and explore their lexical, morpho-syntactic and semantic properties.

Fillmore defines idioms as "things that are larger than words, which are like words in that they have to be learned separately as individual whole facts about pieces of the language, but which have also grammatical structure" (Fillmore 1988).

2. Fixedness and phraseologisation

Multi-word units are a dynamic sub-domain of grammar, with its own productivity, interacting with the general rules of syntactic constructions. The recognition of idiomatic constructions as theoretically relevant entities in their own right undermines the modular organisation of the linguistic system and gives chance for the MWEs, which usually are left on the border of morphology, syntax and lexicology. The integration of idiomatic constructions into grammar does not entail that they are regular, but that they should have their own space in the continuum between constructions and units (Langacker 1991).

Melchuk (1995) defines "non-free phrases" as a counterpart of "free phrases". Non-free Phrases consist of two or more graphic words and are used as ready lexicon units of the language. They are reproduced in the process of communication using a preliminary knowledge and tradition. The meaning of the constituents is an object of a semantic transformation, so not all applicable rules of language can be actually applied to them. So the choice of a convenient meaning or of their form is reduced.

As predicative constructions are a specific set of elements: an auxiliary verb, a noun/adjective/adverb/noun group and an obligatory or optional dative or accusative pronoun clitic they are also multi-word expressions. Most of them correspond to free phrases (Melchuk 1995): an expression of two or more graphic words that are regularly combined to represent given meaning according to an unlimited choice of applicable linguistic rules. Those words are interchangeable

with any other word with sufficiently close meaning. But also there is a subset of predicative constructions which belong to the non-free phrases.

The distinction of formal classes of non-free phrases is based on the different types of their paradigmatic and syntagmatic variations and their components' forms and modifications: i) internal properties which include morphological and structural forms of the components in the phrase and ii) external properties which include the semantic and syntactic properties of the phrase as a semantic whole. Several tests based on the possible modifications of the phraseological phrase keeping her "non-free" character in a context are applied:

- manipulations of MWEs' components by permutation, addition, replacement, etc.
- modifications of MWEs' components by adjectives, adverbials, genitive, prepositional attributes etc.
- substitutions of MWEs' components by synonyms, hyponyms, and hypernyms
- morpho-syntactic   flexibility   -   argument   realizations,   passivization, pronominalization etc.

The syntactic, semantic, morphological or phonological manipulations which result in loss of the idiosyncrasy of the phrase led to the colligation of a set of features, which we call free/non-free phrase markers, listed below:

[+/- motivation] semantic/ pragmatic mismatch of the parts and the whole, fixed pragmatic use;

[+/- analyzability] restrictions on substitutability of elements; syntactic irregularity; single-word paraphrasability;

[+/- literalness] literal equivalent of the semantic whole or of a phrase component;

[+/- figurativeness] encoding of metaphor, metonymy, hyperbole, etc.

[+/- productivity] formal rigidity; preferred lexical realization; restrictions on aspect, mood, voice, etc.; prosodic unregularness.

The detailed definition and description of free/non-free phrase markers is represented in Todorova (2015). We use them as a criterion for the identification of phrase type. They allow graded representation of the continuum between free and non-free phrases, based on the correlation of presence or lack of the feature on a language level, named with the marker. The criterion for defining phrase subtypes on the scale between free and non-free phrases can be formalised as [+/- marker].

3. The observed data

In a previous stage of the study on predicative constructions with a view to conclusions on structural and semantic classification different language resources

were collected and selected (see more detailed on the corpus study of Predicative Constructions in Todorova et al. 2021; Dimitrova et al. 2021; Dimitrova et al. 2022).

On a large collection with predicative constructions, was applied a subset of 883 verbal MWEs from the dictionary of Bulgarian MWEs (Stoyanova, Todorova 2014). The collection was compiled from 10,000 example sentences derived from the Bulgarian National Corpus[2] (Koeva et al. 2012); 927 examples of predicative constructions with parallel examples from a Parallel corpus of Russian and Bulgarian texts, part of the Russian National Corps (described in Todorova et al. 2021 and in Dimitrova et al. 2022); 878 examples of predicative constructions in Bulgarian with parallel examples in Russian, extracted from the Parallel Polish-Bulgarian-Russian Corpus (Kisiel et al. 2017; Sosnowski 2016). The intersection of the collection with examples and the dictionary is based on MWEs' components and the POS annotation of the resources, combined with n-gram approach. The structural typology of the Bulgarian predicative constructions (described in Todorova et al. 2021) was used[3].

After manual validation of the automatically extracted data described above, a list of 731 phraseological predicative constructions and 320 phraseologised predicative constructions was extracted used for the observations and theoretical generalizations of predicative construction types, described below.

4. Predicative construction types

The application of free - non-free phrase markers on the predicative constructions derived from linguistic resources defines their place on the scale between free and fixed phrases and identification of phrase type. Predicative constructions correspond to free phrases, while phraseologised predicative constructions, phraseological predicative constructions and fixed phraseological predicative constructions are non-free phrases with different degrees of phraseologisation. Similar observations are presented by Neonen 2001 (by Stamenov 2001) in another representation of the continuum of structure forms between lexicon and syntax. The *idiomatic adverbials and predicatives* along with *noun phrase idioms* and *verb phrase idioms* are between *compounds → inflected freezes → derivations → monomorphemic words* on one hand and *syntactic freezes → idiom constructions → "marginal sentence types" → sentence constructions → freely combined syntax* on the other.

---

[2] http://search.dcl.bas.bg/

[3] The author thanks to dr. Ivelina Stoyanova for the extraction of MWEs with predicative constructions.

4.1. As already mentioned Predicative Constructions correspond to free phrases (Melchuk 1995) and are formally characterised with the markers [+motivation], [+analysability], [+literality], [-figurativeness], [+productivity].

4.2. Phraseologised predicative constructions are semi-decomposable. Their components are combined according to the general semantic and syntactic rules of the language, but their combination expresses a semantic whole with an additional meaning graded over the meaning of the components. Their forms undergo some of the modifications permitted by the general rules of the language, but are limited in their range of realisations. They are characterised by the combination of the attributes [+motivation], [+analysability], [+/-literality], [-figurativeness], [+/-productivity].

The phraseologisation is represented by structural and, or paradigmatic fixedness. Some of the `Structure` features are violated. The predicative noun position allows only a closed set of lexical substitutions.

The structure of phraseologised predicative constructions comprise an auxiliary verb fixed in 3 p. sg.; and a noun from a limited lexical set and/or fixed in form (sramota `shame`, grehota `sin`, shtastie `happiness`, radost `joy`, gryah `sin`, chudo `miracle`, pozor `shame`, kasmet `luck`). The structure subtypes allow/does not allow the participation of a dative or accusative clitic.

4.3. Phraseological predicative constructions are semi-decomposable phrasemes, in which the meaning of the whole is partially independent of the meaning of the components. This allows only a certain semantic, lexical or pragmatic set of possible realisations. The structure is fixed and they have constrained periphrastic transformations. The auxiliary verb is a part of the constituent structure of the idiomatic PC, it is selected by the noun constituent and is part of the idiomatic predicative whole (Kaldieva 2005, 240). The construction's elements are linked implicitly in a semantic whole and are characterised by figurative and/or metaphorical meaning. The expression fulfils the `Construction` feature requirement of the CG.

Formally their description is represented by the combination of the markers [+/-motivation], [+/-analyzability], [-literality], [+figurativeness], [+/-productivity].

After the automatic extraction of phraseological predicative constructions candidates from the linguistic resources, more than 50% of the examples had to be dropped because of their homonymy with non-phraseological predicative constructions and because of the distant placement of the auxiliary verb, based on the realisation of the features [+/-literalness], [+/-figurativeness] and disambiguation can only be resolved manually.

We focus our further investigation on the features of this group of predicative constructions as the less studied from semantic and morpho-syntactic point of view.

4.4. Fixed phraseological predicative constructions are non-decomposable, the meaning of the whole is independent of the meaning of the components, which do not allow only semantic, lexical or pragmatic variations. They are characterised by figurative and/or metaphorical meaning and by the combination of the markers [-motivation], [-analyzability], [-literality], [+figurativeness], [-productivity].

5. Observations on the phraseological PC data
5.1. Structure types

We grouped the collected data with phraseological predicative constructions in three major types of component structure - plain idiomatic predicative constructions, idiomatic predicative constructions with conjunctions and idiomatic predicative constructions with a prepositional phrase.

The structure of plain phraseological predicative constructions comprises an auxiliary verb and a predicative participle usually modified by a prepositional Ex. (1), noun Ex. (2), adverb/adjective Ex. (3) phrase. Those structures express common semantics - characteristics or attributes of someone or something.

Examples:
1)   izlyazal e ot stroya (lit. he went out of order) `sth. can't be used any more`
2)   e golyama rabota (lit. s.o is big work) `s.o. is very important`
3)   Tip top sam (lit. to be tip- top) `to be ok`

The structure of phraseological predicative constructions with conjunction comprise conjunction, an auxiliary verb and a predicative participle; noun, adjective or adverb phrase. Two structural semantic subgroups are observed phraseological predicative constructions with conjunction with positive semantics Ex. (4) and with negation Ex. (5).

Examples:
4)   kato che sam (As if I am) and participle/NP
5)   Da ne sam (As if I don't) and participle

The structure of phraseological predicative constructions with a prepositional phrase comprise an auxiliary verb, a preposition and a noun phrase. They express semantic of presence or existence in combination with the semantics of the

individual prepositions - location and direction Ex. (6), evaluation Ex. (7), characteristics or attributes of someone or something Ex. (8)

Examples:
6) po pat ni e `sth. is on our way`
7) ne im beshe do horata 's.o. doesn't care about people at all`
8) ot polza e `sth. is in use to s.o`

5.2. Syntactic structure types

The observation on the constituent structure and syntactic realisation of phraseological predicative constructions in the data we defined three main groups: with an implicit subject Ex. (9); with an explicit subject Ex. (10) and with small clauses Ex. (11)

Examples:
9) na kyar sam `s.o. is profited from sth.`
10) jivotat mi e mil `not to dare to do sth risky`
11) nyakoy e gol/a/o/i kato pishtov `s.o is very poor

6. State semantics

The classification of semantic types represented here is based on the ontological presentation proposed by Van Valin and Lapola (1997) and the two big ontological subclasses of state predicatives:

6.1. Locative predicative constructions (I am on/in (x, y)). The phraseological predicative constructions in the data that belong to this group were additionally subgrouped in:
- phraseological predicative constructions for assessment of physical condition
Example (12) Izlyazal sam ot stroya `sth can't be used any more`
- phraseological predicative constructions for assessment of mental or emotional condition
Example (13) na grebena na valnata sam `feel very excited`

6.2. Non-locative predicative constructions with varieties: state or position (broken' (x)); perception (see' (x, y)) knowledge (believe' (x, y)); possession (have' (x, y)); equality (am '(x, y)). The phraseological predicative constructions in the data that belong to this group were additionally subgrouped in:

- ▪ phraseological predicative constructions for assessment of characteristics or attributes of s.o. or sth.

Example (14) gola voda sam `s.o. or sth. is not valuable`
- ▪ The phraseological predicative constructions in the data that belong to this group were additionally subgrouped in:
- ▪ assessment of location

Example (15) na preden plan sam `to be in front`

6.3. Metaphorical phraseological predicative constructions

The markers [+/-literality], [+/-figurativeness] that characterise phraseological predicative constructions combined with the additional meaning of assessment led us to the idea to explore another semantic field of phraseological predicative constructions - the metaphorical meaning. We use it as a starting point to examine the specific lexical groups of phraseological predicative constructions.

Traditionally metaphor is defined as a relation between a set of abstract ideas and conventional knowledge. Metaphorical expressions are considered extraordinary and figurative and their meaning is explained by reduction to some set of literal propositions for everyday activities or objects. At the same time metaphor is a way of explaining, describing, and evaluating ideas.

According to Spasova-Mihaylova (1979) the meaning of the phraseological unit does not derive directly from the objectively logical relations and connections signified by the individual components in the phraseological unit, but from their complete semantic transformation as a result of the fusion of the phraseological components, which is obtained by using metaphor, metonymy, hyperbole, irony.

Using the statement of Gibbs and O'Brien 1989 that idioms are not "dead" metaphors and rather, the meanings of many idioms are motivated by speakers' tacit knowledge of the conceptual metaphors underlying the meanings of these figurative phrases. Kövecses (2002) declares that the meaning of many idioms is not arbitrary, but motivated by the mechanisms: metaphor, metonymy, and conventional knowledge and Verbal phraseological expressions and idioms could be traced back to a limited number of conceptual metaphors. Hashemian and Rahmani, Boers (1999) report that the conceptual metaphors are quite effective on learning idioms by L2 learners.

The idea of conceptual metaphors is based on the idea that most concepts are partially understood in terms of other concepts" (Lakoff and Johnson 1980, 477). According to Lakoff a metaphoric expression is "a linguistic expression (a word, phrase, or sentence) that is the surface realisation of a cross-domain mapping" (Lakoff 2006, 186).

The notion of conceptual metaphor is also considered as a connection between two semantic areas valid for speakers of many languages (Lakoff 1987) and thus language independent. Considering this and the characterise phraseological predicative constructions as semi-decomposable non-literal and figurative expressions we make an attempt to make a typology of semantics of metaphorical phraseological predicative constructions based on the list of Conceptual metaphors of Lakoff and Johnson[4].

We integrate the metaphorical phraseological predicative constructions and their corresponding conceptual metaphor domains into the ontological semantic subgroups described above. The semantic classification is represented in the table 1.

Table 1. Semantic classification of phraseological predicative constructions

Semantic classes of phraseological predicative constructions	Lakoffs' Conceptual Metaphors	Examples
Locative predicative constructions		
assessment of location	States are Locations	e pod krivata krusha `s.o. is far from target`
	Ideas are Locations	neshto mi e v glavata `s.o. has an idea`
Non-locative predicative constructions		
assessment of state or position (broken' (x));	States are Shapes	sam kragal `s.o. is very fat`
	Abilities are Entities inside a person	s dve levi race e `s.o is very clumsy`
	Darkness is a Cover	v syankata na nyakogo sam `s.o is behind sth`
assessment of perception and emotion	Emotions are Entities inside a person	v syankata na nyakogo sam `s.o is behind sth`
	Effect on emotional self is Contact with physical self	dokosnat sam `s.o is impressed`
	Euphoric states are Up	sam s uvisnal nos `s.o. is gloomy`
assessment of possession	Causation is Commercial transaction	na kyar sam `s.o is profited from sth.`
	Comparison of properties is Comparison of physical properties	na kantar sam `s.o is unsure`

---

[4] http://www.lang.osaka-u.ac.jp/~sugimoto/MasterMetaphorList/metaphors/index.htm.

7. Argument structure of the phraseological predicative constructions

We assume that the limitations in the combinability of phraseological predicative constructions constituents is a result from the idiomatic meaning and due to the phraseological transformation of the structural and syntactic relations of their components. This gives us reason to examine the morpho-syntactic structure of phraseological predicative constructions, or their so-called argumentativeness.

Argumentativeness is "the property of the predicate to attach a certain number of variables that correspond to the arguments and their syntactic positions in the sentence" (Koeva 2005, 107). Phraseological predicative constructions correspond to predicative constructions with a certain argument structure. The complex phraseological meaning changes this structure.

Considering this and observing the data we deduced the following types of argumentative positions, resulting from the phraseologisation of the structure and meaning of phraseological predicative constructions.

7.1. Phraseologically fixed arguments

Those are argumentative positions which are occupied by a specific word within the phraseologism (which is rarely interchangeable with a synonym), which, together with the verb, expresses the phraseological meaning. In this case, they lose their argumentative role.

Example (16) e pod krivata **krusha** `s.o. is far from target`

7.2. Phraseologised argumentative positions

Those are argumentative positions which are also preserved in the phraseological meaning and can be occupied by multiple lexical units, as in the non-phraseological verb. Phraseological arguments can be expressed with the short pronominal form in the phraseological structure. Mandatory positions are reflected in the structural description of the phraseologism and are called phraseologised positions described with the words *someone*, *something*. They are decisive when presenting the word order, concordance and periphrasis changes of the different types of phraseologisms. For example, the need to explicate an argument in the position of the indirect object in the examples:

17)   podavam raka na nyakogo 'lend a hand **to someone**'
18)   v syankata na nyakogo sam `s.o is behind **sth**`

7.3. Actual phraseological arguments

Those are semantic argumentative positions determined by the overall meaning of phraseologisms. Examples:

(19)   **nyakoy** e gol/a/o/i kato pishtov `**s.o** is very poor'
(20)   **neshto** mi e po sarce `I like sth very much`

The phraseologically fixed arguments and phraseologically fixed positions are part of the predicate and enter into the paradigm of phraseologisms and therefore into its morpho-syntactic description, only the actual arguments are part of the argumentative structure of phraseological units.

8. Conclusions

Predicative constructions are lexical units, part of the predicate structures. Their specific functions and semantic features place them on the border between morphology and syntax. The grouping of predicative constructions in different semantic classes is an argument in support of the hypothesis that regardless of the composite component structure, predicative constructions are a semantic whole to which universal semantic features apply. They belong to locative and non-locative ontological classes of the state category and are obligatory characterised with the semantic feature assessment. Idiomatic predicative constructions belong to different lexical groups: existence, possession, condition, pure location, perception, cognition, emotion and attributional, which all are typical for state predicates at all.

      The general semantics, combined with formal constraints in the linear arrangement and in the form of components, as well as the affiliation of the elements to a limited set and the selective constraints applicable to whole subgroups show a different point of view to state predicatives. This gives us the presumption that the language-specific conceptualization, lexicalization, and grammaticalization are relevant for the ontological representation of the meaning types expressing state for other languages.

Acknowledgements

References

Dimitrova, Tsvetana, Maria A. Todorova, Valentina Stefanova. 2021. „Езикова реализация на предикативни конструкции за състояние - корпусно изследване" [Linguistic realization of predicative state constructions - a corpus study]. In *Scientific works of Plovdiv University "Paisiy Hilendarski". Vol. 59, № 1, A- Philology.* 198-210. Plovdiv: Plovdiv University Press.

Dimitrova, Tsvetana, Valentina Stefanova, Maria A. Todorova. 2022. „Предикативни конструкции за състояние: корпусно изследване върху български и руски" [Predicative Constructions and State Semantics: A Corpus Study on Bulgarian and Russian]. In *Ontology of Stative Situations - Linguistic Modeling. A Contrastive Bulgarian-Russian Study*. Koeva, Svetla, Elena Ivanova, Yovka Tisheva, Anton Zimmerling (eds.), 359-385. Sofia: Prof. Marin Drinov Publishing House of Bulgarian Academy of Sciences.

Georgiev, Ivan. 1990*. Безличные предложения в русском и болгарском языках* [Impersonal sentences in Russian and Bulgarian]. Sofia: Narodna prosveta. 152.

Goldberg, Adele Eva. 1995 *Constructions: A construction grammar approach to argument structure*. Chicago: University of Chicago Press.

Goldberg, Adele Eva. 2006. *Constructions at work: The nature of generalization in language*. Oxford: Oxford University Press.

Goldberg, Adele Eva. 2013. "Argument Structure Constructions vs. Lexical Rules or Derivational Verb Templates." *Mind and Language* 28 (4): 435-450.

Samani, Elham Rahmani and Mahmood Hashemian. 2012. "The effect of conceptual metaphors on learning idioms by L2 learners". *International Journal of English Linguistics* 2 (1): 249-256.

Fillmore, Charles. 1988. "The Mechanisms of Construction Grammar." *General Session and Parassession on Grammaticalization* 14: 35-55.

Kaldieva-Zakarieva, Stefana. 2005. „Проблеми на съпоставителното изследване на българската и румънската фразеология" [Problems of the comparative study of the Bulgarian and Romanian Phraseology]. Sofia: Prof. Marin Drinov Publishing House of Bulgarian Academy of Sciences.

Kisiel, Anna, Violeta Koseska-Toszewa, and Natalia Kotsyba. 2017. "Polish-Bulgarian-Russian parallel corpus." In CLARIN-PL digital repository. <http://hdl.handle.net/11321/308.> [15.09.2022]

Koeva, Svetla. 2005. "Inflection Morphology of Bulgarian Multiword Expressions." *Computer applications in Slavic studies: proceedings of Azbuky.Net International Conference and Workshop, 24-27 October 2005, Sofia, Bulgaria*, 201-216.

Kövecses, Zoltan. 2002. *Metaphor. A Practical Introduction*. New York: Oxford University Press.

Lakoff, George. 1997. "The internal structure of the self." In *The conceptual self in context: Culture, experience, self-understanding*, ed. by Ulric Neisser and David Alan Jopling, 92-113. Cambridge: Cambridge University Press

Lakoff, George. 2006. "The contemporary theory of metaphor." In *Mouton reader:* Vol. 34*. Cognitive linguistics: Basic readings*, ed. by Dirk Geeraerts, 185-238. Berlin: Mouton de Gruyter.

Langacker, Ronald Wayne. 1991. *Foundations of Cognitive Grammar,* Vol. II: *Descriptive Application.* California: Stanford University Press.

Maslov, Yurii Sergeevich. 1982*. Граматика на българския език* [Grammar of the Bulgarian language]. Sofia: Nauka i izkustvo.

Mejri, Salah. 2003. "Introduction: polysémie et polylexicalité." *Syntaxe et sémantique* 5: 13-30.

Melchuk, Igor. 1995. "Phrasemes in language and phraseology in linguistics." In *Idioms: structural and psychological perspectives*, ed. by Martin Everaert, Erik-Jan van der Linden, André Schenk, Rob Schreuder, 167-232. Hillsdale: Erlbaum.

Nenonen, Marja. 2001. "Idiomaticity in Finnish." In *Nordic and Baltic Morphology: Papers from A NorFA Course, Series: Studies in Languages 36*, ed. by Niemi, Jussi and Janne Heikkinen, 57-65. University of Joensuu Press.

Petrova, Galina. 2018. "Именные предикативы, присоединяющие дательный экспериенцер в болгарском языке: семантика и синтаксис" [Nominal predicates joining the dative experiential in the Bulgarian language: semantics and syntax]. *Russian Abroad* 5: 24-29.

Raymond, Gibbs Jr., Jennifer O'Brien. 1990. "Idioms and mental imagery: The metaphorical motivation for idiomatic meaning." *Cognition* V (1): 35-68.

Rozhnovskaya, Marina. 2002. "Безличные предложения в современном болгарском литературном языке" [Impersonal sentences in the modern bulgarian literary language]. *Questions of grammar of the Bulgarian literary language*, 379-432.

Spasova-Mihaylova, Siyka. 1979. "Семантична характеристика на фразеологичната единица" [Semantic characteristics of the phraseological unit] In *Pomagalo po bŭlgarska leksikologiya*, ed. by Hristo Pŭrvev, 333-348. Sofiya: Nauka i izkustvo.

Todorova, Maria A. 2015. *„Типология и свойства на устойчиви словосъчетания в българския език. Глаголни фразеологизми"* [Typology and Properties of Multiword Expressions in Bulgarian. Verb idioms]*.* PhD Thesis. Sofia: Institute for Bulgarian Language.

Todorova, Maria A., Tsvetana Dimitrova, and Valentina Stefanova. 2021. "Предикативи за състояние в български - разновидности и граници" [Predicatives for the state in Bulgarian - varieties and boundaries]. *Sapostavitelno ezikoznanie* XLVI (4): 21-46.

Sosnowski, Wojciech. 2016. "The parallel Polish-Bulgarian-Russian corpus: problems and solution." In *Computerised and corpus-based approaches to phraseology: monolingual and multilingual perspectives*, ed. by Gloria Pastor Corpas, 339- 349. Geneva: Tradulex.

Stoyanova, Ivelina and Maria Todorova. 2014. "Разработване на речници от съставни единици за български" [Compiling dictionaries of bulgarian multiword expressions for the purposes of computational linguistics]. In *Ezikovi resursi i tehnologii za balgarski ezik*, 185-201. Sofia. Edition of BAS.

Van Valin, Robert and Randy LaPolla. 1997. *Syntax: structure, meaning and function.* Cambridge: Cambridge University Press.

Zimmerling, Anton. 2010. "Именные предикативы и дативные предложения в европейских языках" [Nominal predicatives and dative sentences in European languages]. *Computational Linguistics and Intelligent Technologies: Based on the materials of the annual International Conference "Dialogue"* 9(16): 549-558.