Syntactic characteristics of emotive predicates in Bulgarian
A corpus-based study

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Abstract

The paper presents a corpus-based study of emotive predicates (verbs and predicative constructions with adjectival, adverbial or noun phrases) in Bulgarian with respect to their syntactic characteristics. The sources of empirical data analyzed here are Bulgarian National Corpus, Corpus of Bulgarian Political and Journalistic Speech and Bulgarian part of Multilingual Comparable Corpora of Parliamentary Debates ParlaMint. The analyzes are organized in terms of morpho-syntactic features of emotive predicates, transitivity, syntactic functions and theta-roles of their arguments. Emotive predicates denote a state or an event involving an affective experience. As part of the special semantic class of psychological/Experiencer verbs, they have been studied in relation to the interaction between lexical semantics and argument realization. Bulgarian data confirm the well-established division of Psych predicates into three classes: Subject Experiencer (*fear* type verbs), Object Experiencer (*frighten* type verbs), Dative Experiencer. The third class is mostly represented by adverbial predicates.

Keywords: Psychological predicates, Emotive predicates, Experiencer, Argument structure

1   Introduction

The main topic of this study is the syntactic realization of arguments to verbal predicates and predicative constructions in Bulgarian expressing positive emotions. The analysis will not be restricted to emotive verbs only, but will represent adjectives, adverbs, or nouns used in constructions which meaning corresponds to the category of the positive emotions. The objectives of empirical data analyzes are to compare the syntactic structure of two types of sentences - with verbal or with adjectival, adverbial or nominal predicates. The focus of our observations is related to the question whether the argument structure of emotional verbs is "inherited" by the corresponding adjectives, adverbs or nouns. Special attention will be paid to the syntactic realization of the central participant in the emotional scenario marked by the semantic role of experiencer.

The sources of empirical data analyzed in this paper are Bulgarian National Corpus (http://dcl.bas.bg/bulnc/; Koeva et al., 2012), Corpus of Bulgarian Political and Journalistic Speech (http://political.webclark.org; Osenova and Simov, 2012) and Bulgarian part of Multilingual Comparable Corpora of Parliamentary Debates ParlaMint (https://www.clarin.eu/resource-families/parliamentary-corpora; Erjavec et al., 2022). In this article we provide statistic data only from Bulgarian National Corpus. The observations are organized in terms of morpho-syntactic features of emotive predicates, transitivity, syntactic functions and theta-roles of their arguments. First, the structure of sentences with emotive verbs *veselya* (rejoice)*, zabavlyavam* (entertain)*, radvam* (make someone happy; glad), and their reflexive counterparts *veselya se, zabavlyavam se, radvam se* will be discussed. Then the results of analyses will be compared with the features of sentences with adjectival, adverbial and nominal constructions with *vesel* (joyful), *zabaven* (amusing), *radosten* (joyful; happy); *veselo* (joyfully), *zabavno* (funny), *radostno* (happily); *veselba* (merriment), *zabava* (entertainment), *radost* (joy). The choice of these particular lexemes is motivated by the fact that two verbs and not just one signify the feeling, as is the case with *strahuvam se* (fear). On the other hand, the group of emotive predicates includes adjectives, adverbs, and nouns corresponding to the verbs of emotion.

Verbs like *plasha* (frighten), *strahuvam se* (fear), *valnuvam* (excite someone) or *valnuvam se* (get excited) have no corresponding adjectives.

2   Emotional scenario

Emotions are mental processes reflecting the experiences, perceptions, and evaluations associated with a particular object or specific stimulus. According to Wierzbicka (1999), all natural languages have lexical means for expressing conceptualized notions of emotional states, evaluations and attitudes. Lexical semantics of the elements from the emotional lexicon provides the relational and semantic frameworks for syntactic structures used to denote different types of emotions.

Apart from subject who can feel or sense something (experiencer), an element of evaluation is present in the emotional scenario. For the predicates under consideration in our work, it is an evaluation of what is happening by the experiencer as something positive for him or her. This evaluation, in turn, is a stimulus for the positive emotion; stimulus affects the experiencer, changing or maintaining his/her emotions. This general scenario specifies the possible syntactic structures of the sentences with emotive predicates. Causative verbs like *veselya* (rejoice), *zabavlyavam* (entertain), *radvam* (make someone happy) are two-argument predicates. The stimulus (cause) and the experiencer must be presented in the sentence. With reflexives *veselya se, zabavlyavam se, radvam se* only one element of the emotional scenario is necessary to be expressed. Since the emotion is conceptualized and separated from its stimulus this argument will represent the experiencer.

3   Psychological (Experiencer) verbs

Emotive predicates are part of a larger group of predicates called mental predicates, affective verbs (Belletti and Rizzi, 1988), psychological verbs (psych-verbs; Levin, 1993), experiencer verbs (experiencer verbs; Pesetsky, 1995). Psych verbs are a class of verbs defined not only by their lexical semantics, but also by the semantic properties of the sentences they function in. As Belletti and Rizzi (1988) first stated, "verbs expressing psychological states have a uniform θ-grid, involving an EXPERIENCER, the individual experiencing the mental state, and a THEME, the

content or object of the mental state" (Belletti and Rizzi, 1988: 291). The second role is more often called stimulus.

Three subtypes of psych verbs are defined based on their lexical semantics: verbs of perception (*see, hear*), verbs of cognition (*know*) and verbs of emotion (*fear, frighten*). Emotive predicates, on the other hand, "fall into two grammatically distinct classes: those whose subject is the animate Experiencer and whose object (if there is one) is the Source (*fear, miss, adore, love, despise*); and those whose object is the animate Experiencer and whose subject is the Source *(amuse, charm, encourage, anger)*" (Fellbaum, 1999: 297).

Most of the emotive verbs in Bulgarian can be used with short reflexive pronoun *se* (self), e.g. *radvam – radvam se, plasha – plasha se*. In this case, *se* is marker for middle voice construction and does not indicate reflexiveness (cf. Asenova and Guentchéva 2022), it occupies the direct object position and those verbs could have only PP or a complement clause as their second argument. In these cases, the difference between verb groups (fear-type with subject experiencer and frighten-type with object experiencer) is also marked by the use of short reflexive pronoun *se*.

4   Types of verbal constructions

4.1.   Transitive constructions

Verbal expressions with psych transitive verbs *radvam,   zabavlyavam,   veselya* display similarities in their argument structure and realizations of experiencer and stimulus of emotion. Usually, both arguments are expressed. NPs in subject position display the features of stimulus (rather than an effector or pseudoagent). Subject may be either animate or inanimate. If the stimulus is animate, it may get agent-like interpretation; if it is inanimate, it will be source of the emotion.

Subject is explicitly expressed mainly by a nominal phrase whose referent is a person. If inanimate nouns with specific reference (object or proposition) are used, they generally denote the result of a person's activity by which an emotional impact is achieved. It is also possible subject to be expressed by nominalizations. The only difference in syntactic patterns concerns the use of complement clauses. *Radvam* and *zabavlyavam* allow complement clauses with *che*,

da, kak, deto, while *veselya* can have only NPs in subject position.

Радва ни, **че** *си оценил нашата търпимост.*

We are glad you appreciated our tolerance.

Близо три часа групите "Сигнал" и Б. Т. Р. веселяха **гостите**.

For nearly three hours, the groups Signal and B. T. R. entertained **the guests**.

Radvam, *zabavlyavam* and *veselya* are (direct; accusative) object-experiencer verbs. Our observations show more limited possibilities for syntactic representation of this argument. Experiencer argument of *veselya* is expressed by NPs denoting an animate object in 77 occurrences and by a pronoun in 35. In comparison, there are 493 occurrences of *radvam* with NP denoting animate object vs. 176 with a pronoun in object position.

If this argument is inanimate the examples can be interpreted as metonymic or metaphorical transfer (*syrceto* 'heart', *ochite* 'eyes', *dushata* 'soul').

Съзнанието за това не веселеше <u>*сърцата*</u> *им както преди.*

The consciousness of it did not rejoice their <u>*hearts*</u> *as before.*

No complement clauses are allowed in object position. Another essential feature of these verbs is that experiencer is always explicit. There are no examples with implicit (null) experiencer.

Along with the nominal phrases representing the experiencer and the stimulus, a prepositional phrase with *s* can also be part of the sentences with *radvam, zabavlyavam* and *veselya*. PPs introduce a means, most often with a specific referential interpretation, by which the animated stimulus achieves the effect on the experiencer. The PP is an adjunct of the predicate, always instrumental and non-animate.

Безобидните артисти, които радват народа **с** *умнеията си.*

The innocent artists who entertain the people **with** *their skills.*

Our observations are represented briefly in the following table.

	stimulus	adjunct
radvam	NP or *che, da, kak, deto* complement clause	s-PP
zabavlyavam		
veselya	NP	

Table 1: Object-experiencer verbs

The corpus data confirms those properties of object-experiencer verbs. The corpus data statistics shows interesting results in respect to the frequency of each type of complement clause. For the verb *radvam* we have 43 examples with *che*-complement clause vs. 9 examples with *da*-complement clause. *Deto* as a complementizer has no occurrences with object-experiencer verbs in corpus data. This result for *deto* is expected due to its colloquial status in contemporary Bulgarian. For *zabalyavam* we observe almost equal number of occurrences in respect to the complementizers: 9 examples with *da* and 7 examples with *che*.

The corpus data confirms our hypothesis concerning the adjunct s-PP, which are always instrumental and non-animate.

4. 1 Intransitive constructions

Radvam se, zabavlyavam se and *veselya se* are subject-experiencer psych verbs. As pro-drop language, Bulgarian allows subject position to be empty. If subject is explicit, syntactic realizations of experiencer include nominal phrases only. There are no examples with complement clauses in subject position.

The intransitive verbs are formally reflexive. Stimulus of the emotion can be syntactically unexpressed. If this element of the emotional scenario is also expressed, a prepositional phrase with *s* or subordinate clauses with *che, da, kak* denote the instrument, effector or situation evaluated by the subject experiencer. *Radvam se* takes these subordinated clauses as complements. The subordinate clause alters with an argument PP with *na* or *za*. On the other hand, *zabavlyavam se* and *veselya se* could have only s-PP in adjunct

position. *Zabavlyavam se* allows also an adjunct instrumental clause with *che, da, kak*.

	stimulus	adjunct
radvam se	na-PP, za-PP che, da, kak	
zabavlyavam se		s-PP che, da, kak
veselya se		s-PP

Table 2: Subject-experiencer verbs

The corpus data shows prevalence of *che*-clauses with *radvam se* – 8336 vs. 3996 occurrences with *da*-clases. We found very few examples with *deto* as a complementizer – only 24, and even less with *kak* – 8 occurrences.

As the subordinate clause is an adjunct for *zabalyavam se*, we found much less examples, most of them with *da*-clauses – 292 occurrences vs. only 20 with *che*-clauses. The hypothesis that *kak* and *deto* could also introduce the subordinate clause is not strongly supported by corpus data – we found only one example with *deto* as a subordinator.

No examples with clausal stimulus to *veselya se* were found in the data.

Concerning the adjunct PPs, the corpus data shows predominance of the commitative PP with animate noun (40 examples for *zabalvlyavam se*) comparing to the instrumental PP (18 examples for *zabalvlyavam se*).

5 Types of constructions with adjectives, adverbs, or nouns

The constructions whose meaning correspond to the meaning of the verbs for positive emotions denote an emotional state. They have the same argument structure as the verbs of emotion – the experiencer and the stimulus.

5.1. Constructions with subject experiencer

The first type of constructions form by an adjective and an auxiliary verb: *radosten sam, vesel sam.* The experiencer argument is obligatory, though it is not always explicit. These two constructions show differences in respect to the realization of the second argument. The stimulus argument for *radosten sam* is PP with *za* or *na*, or a complement clause with *che*, *da, kak, deto*. As for *vesel sam,* it could only have a complement clause with *che* as stimulus argument.

	stimulus
radosten sam	za/na-PP or *che, da, kak, deto* complement clause
vesel sam	*che* complement clause

Table 3: Subject-experiencer constructions

The corpus data shows for *radosten sum* the same tendency as shown for *radvam se* for the predominance of *che*-complement clauses – 145 vs. 60 occurrences with *da*-clause. The data confirms the possibility for *vesel sum* to have *che*-complement clause, but those examples are very rare – we found only two. Concerning *deto*-clauses, we found only one example for each construction.

5.2. Constructions with dative experiencer

The respective constructions with dative experiencer are *radostno mi e, veselo mi e, zabavno mi e*. They can only have a complement clause with *che* or *da* as a stimulus argument. With *radosto mi e, veselo mi e* we also found complement clauses with *deto*, while *zabavno mi e* can have a complement clause with *kak*.

	stimulus
radostno mi e	*che*, *da, deto* complement clause
veselo mi e	
zabavno mi e	*che*, *da, kak* complement clause

Table 4: Dative-experiencer constructions

The corpus data shows very few examples for those two constructions with a complement clause – 3 examples for *che*-clauses with *radostno mi e* and for *veselo mi e,* 13 with *zabavno mi e*. Da-complement clauses are also very rare: 5 with *radostno mi e,* 12 with *veselo mi e*. With *zabavno mi e* we have much more examples with *da*-complement clause – 104.

5.2. Constructions with implicit experiencer

There are also two types of constructions denoting emotion, but with an implicit, generic experiencer. The first of them corresponds to the constructions with dative experiencer – *radostno e, veselo e, zabavno e*. We analyze them separately due to the fact they show differences in respect to the stimulus argument. It could be a complement clause with *che* or *da* (for *veselo e* – only with *da*) or a nominalization – an NP in subject position. In

both cases, a PP with *za* could appear in order to specify the generic experiencer. This is also true for the second construction with generic experiencer with a predicative noun: *radost e, veselba e, zabava e.* Only the first one *radost e* could also have a stimulus argument – a complement clause with *che* or *da* or an NP.

	stimulus	adjunct
radostno e	NP or *che*, *da* complement clause	
zabavno e		
radost e		za-PP
veselo e	NP or *da* complement clause	

Table 4: Implicit-experiencer constructions

The corpus data shows predominance of the examples with *da*-complement clauses in comparison with *che*-clauses: 19 vs. 11 for *radostno e*, 15 vs. 1 for *veselo e* and 238 vs. 15 for *zabavno e*. We observe the same tendencies in the constructions with dative experiencer. *Radost e* could have either *che* or *da* clauses as their complement, again with more occurrences found with *da* as a complementizer (82 vs. 10 with *che*).

As for the adjunct za-phrase, there are single examples with *radostno e* and *veselo e,* 9 with *zabavno e* and 82 with *razost e*. As *za*-PP refers to an animate entity, it competes with dative experiencer, which is possible with *radostno e, zabavno e, veselo e*. The construction *radost e* has no corresponding construction with an explicit experiencer and *za*-PP is the only animate participant, which could possibly appear with that construction.

6. Conclusion

Analyzes on experiencer verbs and constructions based on corpus data show that the experiencer argument is obligatory in the semantic and syntactic structure except for the constructions with nous or adverbials, which could have an implicit experiencer. Only the causative object experiencer verbs have always two-argument structure. The stimulus argument could be an NP, a PP or a complement clause. The verbs and the constructions expressing positive emotion vary in the extent to which they accept all those possibilities for the stimulus argument. The data confirms the observations Becker and Naranjo (2020) for the high degree of variation in the expression of psychological predicates depending on the concept.

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