The behavior of Bulgarian Noun Phrases for Approximation in a Subject Position

The paper considers the characteristics of a specific noun phrase in Bulgarian in a subject position. This specific noun phrase has the following pattern: a word of approximation (preposition or adverb), a numeral and a noun. Various approaches towards the syntactic internal analysis of these phrases are considered within the Head-driven Phrase Structure Grammar (HPSG). I view some alternative analyses and finally propose that the maximal nominal projection is a noun phrase, and within it the word for approximation together with the numeral make a constituent that modify the head noun.

The noun phrases with approximation have the following pattern: a preposition or an adverb + numeral + noun. For example:

a) *Над 300 души* пострадаха при наводненията. (Over 300 people were affected by the floods)

b) *Около 15 села* получиха финансова помощ по европейски проекти. (About 15 villages received financial support from EU projects)

c) *Близо 2800 души* са били подслушвани или следени през 2017 г. (Approximately 2800 people were overheard or followed in 2017)

It has to be noted that such constructions are typical also for languages like English and other Slavic languages. However, in each language the behavior of these phrases in subject position has their own language specific features. For example, see Maekawa (2017) for analyses about English.

The alternatives that are addressed are as follows:

- The maximal projection is a PP that can serve as subject. The analysis of sentence c) would be [**PP** *Близо* [**NP** *2800 души*]] *са били подслушвани или следени през 2017 г.*

- The maximal projection is an NP, in which the numeral and the noun form a nominal phrase, and the addition of the word of proximity projects the maximal NP. In such a case the analysis of c) would be: [**NP** *Близо* [**NP** *2800 души*]] *са били подслушвани или следени през 2017 г.*

- The maximal projection is an NP again. However, this time the word of approximation modifies the numeral. The projection is a specifier phrase (noted here as XP). The noun is the head being modified by this specifier phrase and in turn projects the maximal NP. The analysis would be: [**NP** [**XP?** *Близо* 2800] *души*] *са били подслушвани или следени през 2017 г.*

It can be seen that on the maximal projection scene there are two alternatives: PP or NP. Within the two NP-oriented analyses there are two other possibilities that reflect the internal relations among the elements.

The first alternative is suppressed by the fact that a PP is difficult to be projected from an adverb, a numeral and a noun. Also, other tests are provided in order to reject this alternative. The second and third alternatives are both adequate at the level of the maximal NP projection but differ in the presentation of the internal relations. Thus, the question is whether the word of proximity modifies the numeral first and makes a phrase with it, or it comes later and modifies the 'numeral+noun' phrase. I chose the former analysis, since semantically it seems more feasible than the latter where the combination of a proximity word and a noun (without the numeral) would be ungrammatical. Cf. **близо души* (*approximately people). In this respect I follow the approach in (Pollard and Sag 1994).

Further I present also cases where combinations of words of approximation have been attested in a corpus of Bulgarian. These combinations include: a) two prepositions and b) adverb and preposition.

The fact that a limited set of prepositions and adverbs can serve as words of approximation is taken into account as well.

The XP projection in the third alternative that was preferred in our final analysis is viewed as a special type of NumP.

Literature

Pollard, Sag 1994: Pollard, C., I. Sag. *Head-driven Phrase Structure Grammar*. University of Chicago Press, Chicago, Illinois, USA.

Maekawa 2017: Maekawa, T. English prepositional numeral constructions. – In: Stefan Mueller (Editor) *Proceedings of the 24th International Conference on Head-Driven Phrase Structure Grammar*, CSLI Publications, pp. 233–247.