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

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Plan of the Talk

Subject Requirements
Subject in Bulgarian
The specifics of the ‘approximation’ subject
Modeling ‘approximation’ subjects
Corpus evidence on combined ‘approximation’ phrases
Conclusions
Requirements to the typical/non-typical subject

Criteria (Циммерлинг 2017):
- Syntactic nominative case
- Agreement with the predicate
- Non-zero realization

Non-typical subject: In an oblique case (such as the dative subjects in Russian)
Expressing the subject in Bulgarian

With a nominal phrase
With a clause

With a prepositional phrase??
With adverbial phrase??
Data with approximate phrases in subject position

Над 300 души пострадаха при наводненията (Over 300 people suffered during the floods)

Около 15 села получиха финансова помощ по европейски проекти (Around 15 villages received financial support from EU projects)

Близо 2800 души са били подслушвани или следени през 2017 г. (Approximately 2800 people had been overheard or followed in 2017)
Analysis: Challenges

What is the label of the final projection – PP, NP, DP?

What is the type of the constituent relations among the elements: the approximative preposition/adverb; the numeral and the noun.

◦ Preposition and numeral make a phrase that modifies the noun \([\text{about ten people}]\)

◦ Preposition takes the phrase made by numeral and noun as a complement \([\text{about ten people}]\)

What are the labels of the non-final projections

Cardinal-oriented perspective and Subject-oriented perspective

Various evidence from different languages
Modeling final projection possibilities (1)

To accept the idea that a PP can serve as a subject:

Над 300 души пострадаха при наводненията

[PP Over 300 people] suffered during the floods
Modeling final projection possibilities (2)

To view this phrase as an NP

Над 300 души пострадаха при наводненията

[NP Over 300 people] suffered during the floods

Disclaimer: no DP analysis is considered
Modeling intermediate projection possibilities (1)

Complex-determiner analysis (Corver and Zwarts 2006)

PP-complement analysis (Ionin and Matushansky 2018)
Views (from Ionin and Matushansky 2018: 304)

(30 a) [PP around/above [NP ten books]]
Prepositional head

(30 b) [DP [AdvP around/above] [NP ten books]]
Adverbial specifier

(30 c) [DP [D around/above ten] [NP books]]
Complex D

(30 d) [DP [PP around/above ten] [NP books]]
PP specifier
Corver and Zwarts (2006) argue for the PP specifier structure in (30d), considering Dutch

Ionin and Matushansky (2018) argue for PP complement structure in (30a)

Arguments of the latter: the word order in Basque and Hebrew as well as the case assignment in Russian

Considered in the context of other phrases with cardinals (including comparatives and superlatives, between phrases, measure NN phrases, etc.)

**However:** Przepiórkowski and Pastwa (this session) distinguish between two types of ‘around’: a prep and an adnumeral operator. They differ in case assignment.
A bottleneck for the complex-determiner hypothesis: case assignment in Russian (p. 321)


I come.1sg.prfv approximately/near at eight.acc hour.pl.gen

‘I will come approximately at eight o’clock.’

b. Ja pridu okolo vos’mi časov.

I come.1sg.prfv near eight.gen hour.pl.gen

‘I will come at about eight o’clock.’
Tests

- My perspective is the subject position. It should be a nominative NP. A PP projection would violate this requirement. Thus, (30a) is discarded.
- The constituency test around ten books: around ten, but: *around books (also examples in Dutch in (54): around twenty children vs. *around the children)
- The substitution test with another numerical expression: Around 50 people = Many people
Tests

Why internal NP projection?
1a. *Около петдесетте души (*Around fifty-the people)
1b. Тези около петдесет души (These around 50 people) – inside a determiner
1c. Имаше около петдесет души. Те бяха уморени (There were around 50 people. They were tired.) – the whole phrase is an antecedent of the pronoun

Why the noun is the head? Subject-verb agreement:
2a. Измина около една година (Passed.SG around one year.SG)
2b. Изминаха около две години (Passed.PL around two year.PL)
My position

I stay close to the *Complex-determiner analysis*, but in my case it is rather: *Complex-specifier analysis* with differing final and internal projections.

I rely on the HPSG mechanism that specifiers can see their heads, i.e. on the mutual selection mechanism.

In HPSG there is also an approach that combines *modifiers* and *specifiers* into *functors*. (Van Eynde 2006)
The phrase ‘around 60’ is a special specifier phrase. In the book the type ‘too many’ is considered, but the important thing is that the specifier is not a head:

- [NP [SPR around 60] people]

However, the specifier ‘sees’ its head through a special characteristics, and the head selects its specifier.
Specifier phrases have their own structure

The are non-heads

They do not need to be words, they can be complex expressions (even subconstituent/catena-oriented)
Internal structure (1)

\[ \text{[NP [XP? Over 300 ] people]] suffered during the floods} \]

- XP = PP ? (non-typical position for a PP)
- XP = NumP ? (it behaves like a numeral. Viz. 10 new positions vs. around 10 new positions)
  - Limited number of prepositions/adverbs
  - Do not take the noun as a complement but modify the numeral

Thus: \[ \text{[NP [NumP Over 300 ] people]] suffered during the floods} \]
HPSG analysis (2): Maekawa 2017

Light head 1: [around [60 people]]
Light head 2: [around 60] people):
Functor (Van Eynde 2006, 2007)
Prepositional Numerals in Measure NPs

Около два литра вода се загубиха по трасето.
(Around 2 liters water REFL lost on way-the)

Вода се загуби по трасето около два литра.
(Water REFL lost on way-the around two liters)

??Литри вода се загубиха по трасето около два.
(??? Liters water REFL lost on way-the around two)

The topicalization/extraction shows the relation between the noun and the rest, but not between the preposition and the numeral/noun.
Discussion

- The POS status of words of approximation is either prepositions, or adverbs. They behave as hybrid and non-standard categories – between foculizers and specifiers with their own internal structures.
- The focused phrase 'around 10' behaves like a numeral. In Russian it might be treated as follows: the preposition assigns case to the numeral. Then the whole phrase assigns case to the noun.
- For different languages a different analysis might be adequate.
- The analysis depends on the linguistic machinery of the specific theory.
<table>
<thead>
<tr>
<th>Phrase</th>
<th>Frequency</th>
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<tbody>
<tr>
<td>Приблизително около (Approximately around) (Оставали приблизително около 85 места за втория допълнителен конкурс)</td>
<td>11</td>
</tr>
<tr>
<td>Приблизително по (Approximately on) (У всеки един от задържаните са открити приблизително по 10 млн. лева във валута и български пари.)</td>
<td>5</td>
</tr>
<tr>
<td>Едва около (Only around) (Едва около една пета от столичани отдават конфликта на принципни възражения срещу работата на премиера.)</td>
<td>11</td>
</tr>
<tr>
<td>По около (on around) (В същото време в ЕС се произвеждат по около 4 млн. тона сирене.)</td>
<td>171</td>
</tr>
<tr>
<td>По над (On above) (За тях се заделят по над 500 000 нови лева)</td>
<td>60</td>
</tr>
<tr>
<td>Близо над (Approximately above) (По последни данни у нас работят близо над 50 000 деца)</td>
<td>1</td>
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References


Maekawa 2017: English prepositional numeral constructions


Thank you for your attention!