

Stress shift in Slavic and Phase Theory

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Introduction

- This talk reviews and sketches a phonological analysis of structural conditions on stress shift in Russian PPs
- Slides and general info can be found at github.com/antidanyar
- The results of the project "Languages of Russia: morphosyntax and its interaction with other modules", carried out within the framework of the Basic Research Program at the National Research University Higher School of Economics (HSE University) in 2022, are presented in this work.

Prosody of Russian prepositions

Russian prepositions are clitics, the host bears the stress (3).
However, the stress shifts to the preposition sometimes (4).

- (1) a. po pól'yu
 'through a/the field'
 b. na rúku'
 'on one's arm'

- (2) a. pól' polyu
 'through a/*the field'
 b. ná ruku
 'on one's arm'

Lexical restrictions

The stress shift is lexically restricted wrt. both nouns and prepositions (Gribanova & Blumenfeld 2013).

- (3) a. p^ó polyu
 ‘through a/*the field’
 b. *ná^d polem
 (‘above a field’)

- (4) a. *p^ó polyane
 (‘through a meadow’)
 b. *ná^a ladon’
 (‘on one’s arm’)

We aim to explain the distribution of shifted/non-shifted stress in those PPs that allow for both variants.

Goals of the talk

- Review the properties of the stress shift
- Review the solution to it by [Gribanova & Blumenfeld \(2013\)](#)
- Suggest an analysis that assumes a transparent syntax-phonology interface based on spell-out ([Scheer 2012](#); [d'Alessandro & Scheer 2015](#))

Structural conditions on the stress shift

“Locality” of the shift

Russian stress shift in general, it appears, is only possible from the nearest syllable – the first syllable of the noun/verb/numeral.

- *ne bylá* / **né byla* ‘she was not’
- *ne býlo* / *né bylo* ‘it was not’
- *ne býl* / *né byl* ‘he was not’

This is true of the stress shift in PPs as well.

- (5) *po doróge* / **pó dorge*
‘down a road’

Non-branching requirement

The noun that undergoes stress shift cannot host any modifiers, even in a postnominal position.

- no adjectives
- no possessors
- no participle or relative clauses

(6) Adjective

**ya gulayu pól polyu raznotsvetnomu*

I walk through field multi-colored

‘I walk through a multi-colored field.’

(7) Possessor (inanimate)

**pó polyu bitvy*
through field battle.GEN

‘through a battlefield’

(8) Possessor (animate)

**nā ruku Natashi*
on arm Natasha.GEN

‘onto Natasha’s arm’

(9) Participle clause

**ya gulayu pó polyu, ukrashennomu tsvetami*
I walk through field decorated by.flowers

‘I walk through a field decorated by flowers.’

(10) Relative clause

**ya gulayu pó lesu, chto sazhal moy ded*
I walk through forest which planted my grandpa

‘I walk through the forest, which my grandpa planted.’

Argument-adjunct asymmetry

Blumenfeld (2011): Prepositions whose spatial or temporal semantics is transparent are more likely to undergo stress shift than those which are idiosyncratically selected by the verb; likely has to do with the argument-adjunct distinction.

(11) PP with the stress shift should be adjoined

- a. *vystupat'* *zá* *gorod*
step out outside city

'To step out of the city'

- b. **vystupat'* *zá* *gorod*
defend outside city

'To defend the city'

(in the context of city as a concept, even)

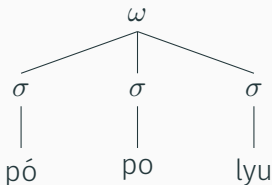
Summarizing properties

- The nominal phrase should be sufficiently small
- The PP should be an adjunct
- Stress may shift only if the nominal is stress-initial

Solution by Gribanova and Blumenfeld

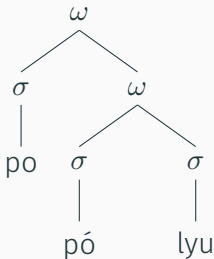
The prosodic structure

Gribanova & Blumenfeld (2013): stress shift \Leftarrow all syllables are contained in a single prosodic word



The prosodic structure

B&G: no stress shift \Leftarrow the preposition syllable is not contained in the same minimal prosodic word



Two prepositions

B&G postulate two phonological spell-outs of the same preposition (in syntax); only one may cliticize in the minimal prosodic word

(12) Insertion rules

- a. $P \leftrightarrow \text{po-} / ___ \text{ minimal N}$ (cliticizes)
- b. $P \leftrightarrow \text{po}$ (doesn't cliticize)

B&G: major drawbacks

- Two different phonological entities – theoretically unfavorable
- The only property that's accounted for is the size of the nominal
- Given Bare Phrase Structure, how can the translation from syntax to phonology distinguish between minimal and maximal projections?

Our analysis

Our assumptions

- Morphosyntactic boundaries exist in phonology as a by-product of cyclic Spell-Out (d'Alessandro & Scheer 2015)
- Boundaries are encoded as empty CV units (Scheer 2012)

Tying together syntactic conditions

Recall: (a) the nominal should be small; (b) the PP should be an adjunct

Our reformulation: the noun and the preposition should be in the same spell-out domain

The spell-out condition

Smallness of the nominal: no cyclic/phasal node in between P and N (like D)

Adjunct requirement: if PP is an argument, the NP spells out before P due to the weak PIC

If PP is an adjunct, it spells out together (Stepanov 2007; Privoznov 2021)

The syntactic result: stress shift results from the same-domainness of preposition and nominal, not via indirect formation of prosodic structure (as B&G argue)

The phonological side

One way or another, we need to tie together spell-out domains and stress assignment

Procedural way: stress is assigned at the first spell-out (cf. Marvin 2013)

Representational way: the spell-out domain boundary (empty CV) blocks stress assignment to the preposition

Representational way

Enguehard (2016): Russian stress is represented by a CV unit on the **right** of the syllable

Enguehard (2014): empty CV-as-boundary and empty CV-as-stress may be the same CV

That gives the prediction that preposition will always be stressed (not the case)

Another stress system

Faust & Ulfsgjorninn (2018): grid projection account based on two ideas

(a) empty CVs may project

(b) their grid markers are incorporated by contentful nuclei

The problem: they assume that incorporation goes to the left (same wrong prediction)

How to capture the word-initiality

We assume that words with word-initial stress have it due to stress assignment rules (Basic Accentuation Principle; Melvold 1989)

Therefore, once the preposition is in the same domain (whatever way we achieve that), it becomes the initial syllable

Summary

Russian stress shift can be analysed only using the cyclic spellout without resorting to postulating distinct homophonous entities

However, the precise phonological implementation is a complicated manner

Thank you! You can find the slides and extra info on github

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Daniar



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