## Problem Set 3 (5101R)

Due Sunday, September 29, 23:59. Submit on LumiNUS > Files > Student Submission > PS3.

Russian is a nominative/accusative language with case morphology. In negative sentences, some NPs have the option of being in *genitive* case.<sup>1</sup> Genitive NPs are in **bold**.

For example, the object 'letters' in the negative (1) can be *pis'ma* (accusative) or *pisem* (genitive). Without negation, though, the object must be accusative: see (2).

- (1) Ja ne polual {<sup>√</sup>pisma, <sup>√</sup>pisem}.
  I.1sg.Nom not received.1sg letters.PL.ACC letters.PL.GEN
  'I didn't receive letters.'
- (2) Ja polual {√pisma, \*pisem}.
  I.1sg.Nom received.1sg letters.pl.acc letters.pl.gen
  'I received letters.'

The data below shows that some NPs in negative sentences can become genitive but some cannot. Consider the following data and answer the questions on the next page.

Notes on the data:

- Russian negative quantifiers cooccur with 'not' *ne*, which is why (3), (4), (5), (9) look like they have two negations. Don't worry about this.
- Russian nouns come with gender: masculine (MASC), feminine (FEM), or neuter (NEUT).
- INSTR in (4) is another case, *instrumental*.
- (3) a. Ni odna devuka ne poluala nae pismo. not one girl.FEM.SG.NOM not received.FEM.SG our letter.SG.ACC 'No girl received our letter.'
  - b. \* Ni odnoj devuki ne polualo nae pismo. not one girl.fem.sg.gen not received.neut.sg our letter.sg.acc
- (4) a. Ni odin gorod ne byl vzjat vragom. not one city.маsc.sg.noм not was.маsc.sg taken.маsc.sg enemy.instr 'No city was taken by the enemy.'
  - b.  $\sqrt[]{Ni}$  odnogo goroda ne bylo vzjato vragom. not one city.masc.sg.gen not was.neut.sg taken.neut.sg enemy.instr

<sup>1</sup>Data here comes from source of the set of t

- (5) a. Ni odna gazeta ne byla poluena. not one newspaper.fem.sg.nom not was.fem.sg received.fem.sg 'No newspaper was received.'
  - b. **Vi odnoj gazety** ne bylo polueno. not one newspaper.FEM.SG.GEN not was.NEUT.SG received.NEUT.SG
- (6) a. Zdes xoroie ljudi ne suestvujut. here good people.pl.nom not exist.pl'Good people do not exist here.'
  - b. ✓Zdes **xoroix ljudej** ne suestvuet. here good people.PL.GEN not exist.sG
- (7) a. Griby zdes ne rastut. mushrooms.pl.nom here not grow.pl
   'Mushrooms do not grow here.'
  - b. ✓ **Gribov** zdes ne rastet. mushrooms.pl.gen here not grow.sg
- (8) a. Otvet iz polka ne prisel. answer.masc.sg.nom from regiment not arrived.masc.sg 'An answer from the regiment did not arrive.'
  - b. **Otveta** iz polka ne prilo. answer.masc.sg.gen from regiment not arrived.neut.sg
- (9) a. Ni odin rebenok ne prygnul. not one child.маsc.sg.nom not jumped.маsc.sg 'No child jumped.'
  - b. \* Ni odnogo rebenka ne prygnulo. not one child.masc.sg.gen not jumped.neut.sg
- (10) a. V pivbarax kulturnye ljudi ne pjut.
  in beerhalls cultured people.pl.Nom not drink.pl
  'Cultured people do not drink in beerhalls.'
  - b. \* V pivbarax **kulturnyx ljudej** ne pet. in beerhalls cultured people.pl.gen not drink.sg

In case you know Russian: answer this question based solely on the data here.

Questions on next page...

- What is the generalization for which NPs can become genitive in negative sentences? Make sure your generalization accounts for all the data above.
- 2. The verbs 'swim' and 'float' are the same in Russian: *plavat*. See (11a). Explain why *plavat* in (11b) must mean 'float' and cannot mean 'swim'.
  - (11) a. V bassejne nikakoj rebenok ne plavaet. in pool no child.Nom not √float/√swim
     'No child √floats/√swims in the pool.'
    - V bassejne nikakogo rebenka ne plavaet.
      in pool no child.GEN not <sup>√</sup>float/\*swim
      'No child <sup>√</sup>floats/\*swims in the pool.'
- 3. Let's now adopt the following assumptions about Russian:
  - Negation in Russian is a Neg head with a [Case:GEN] feature.
  - Case-assignment in Russian is always *downwards*: from a c-commanding head with a [Case:...] feature to a c-commanded N with [uCase: ].

Which of the following hypotheses is correct for Russian?

- Hypothesis 1: The Hierarchy of Projections is T > (Neg) > v > V.
- Hypothesis 2: The Hierarchy of Projections is T > v > (Neg) > V.
- 4. Russian verbs show  $\phi$ -agreement, which is glossed on verbs in all of the examples above. Explain the pattern of  $\phi$ -agreement in the (a) examples above.
- 5. How does genitive of negation affect  $\phi$ -agreement on the verb? Make sure your answer applies to example (1) as well.

Questions continued on next page ...

- 6. Use the lexicon below to build example (12), repeated from (7a). Show a tree and give the sequence of Merge, Adjoin, Movephrase, and Agree operations.
  - (12) Griby zdes ne rastut. mushrooms.Nom here not grow.PL 'Mushrooms do not grow here.'

(Don't worry about  $\phi$ -agreement actually being on the verb instead of on T.)

## Lexicon:

- [N, φ:3PL, uCase: ] 'mushrooms': griby if NOM, gribov if GEN
- zdes' 'here' • [Adverb]
- [Neg, Case:gen] ne 'not'
- [V, uN] rast-'grow'
- [v] (unpronounced)
- [T, uN\*, Case:Noм, uф: ] (unpronounced)

(Adger has some discussion of "Locality of Matching" and "Intervention"; you can ignore that here.)

- 7. Example (13) below is the genitive of negation variant of (12), repeated from (7b). Based on the system of structure-building we have developed in this class, it is impossible to build (13) as a grammatical structure using the lexical items above. Explain why.
  - (13) Gribov zdes ne rastet. mushrooms.pl.gen here not grow.sg

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