

# Case and agreement with genitive of quantification in Russian

Bošković (2006)

## 1 Introduction

- last week: possessor case stacking in Udmurt → multiple case assignment in syntax, case morphology resolved in post-syntax via fusion (Assmann et al. 2014)
- this week: quantificational case stacking in Russian → depending on the structural configuration either one or the other case is assigned, external rules regulate case assignment

++ case morphology shows interactions with subject-verb-agreement

## 2 The Phenomenon

Inside complex Russian noun phrases certain numerals show up with genitive case on the noun. The genitive of quantification (GQ) is restricted to structural case contexts.

- |   |   |
|---|---|
| (1) <i>structural case contexts:</i>  | (2) <i>inherent case contexts:</i>  |
| a. Ivan kupil odnu mašinu.<br>Ivan bought one.ACC car.ACC<br>'Ivan bought one car.'   | a. Ivan vladeet odnoj fabrikoj.<br>Ivan owns one.INS factory.INS<br>'Ivan owns one factory.'          |
| b. Ivan kupil pjat' mašin.<br>Ivan bought five cars.GEN<br>'Ivan bought five cars.'   | b. Ivan vladeet pjat'ju fabrikami.<br>Ivan owns five.INS factories.INS<br>'Ivan owns five factories.' |
| c. *Ivan kupil pjat' mašiny.<br>Ivan bought five cars.ACC<br>'Ivan bought five cars.' | c. *Ivan vladeet pjat' fabrik.<br>Ivan owns five factories.GEN<br>'Ivan owns five factories.'         |

GQ NPs as subjects can trigger singular as well as plural agreement.

- (3) Pjat' devušek rabotali/rabotalo tam.  
five girls.GEN worked.PL/SG there  
'Five girls worked there.'

Singular agreement is excluded if the GQ NP is preceded by a demonstrative pronoun marked for nominative case:

- (4) Èti pjat' devušek rabotali/\*rabotalo tam.  
these.NOM five girls.GEN worked.PL/SG there

‘These five girls worked there.’

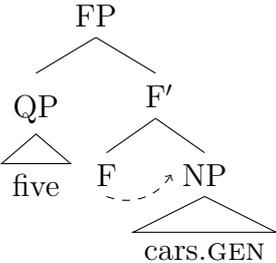
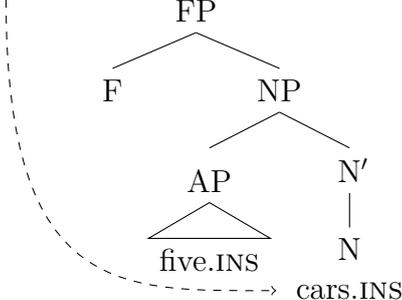
It is important that the nominative demonstrative pronoun is pre-numeral, not post-numeral:

- (5) Pjat’ \*èti/ètix devušek rabotali tam.  
 five these.NOM/GEN girls.GEN worked.PL there  
 ‘These five girls worked there.’

### 3 The Proposal

#### 3.1 Structural vs. inherent case

Bošković (2006) assumes that numerals come out of the numeration without categorical information. The following two structures for complex NPs containing numerals are possible now:

- (6) QP pattern, see (1-b):
- 
- (7) AP pattern, see (2-b):
- 

*Assumption I: F assigns GEN case to its complement iff it has a specifier (Burzio)*

- case assignment is implemented as *feature movement*: case feature of the NP raises on LF to the head of the case assigner (Chomsky 1995)
- both QP and AP patterns compete with respect to economy
- AP patterns will always require longer case licensing paths - therefore, QP patterns are forced in structural case contexts
- inherent case contexts show AP patterns due to another assumption, see below

*Assumption II: A verb that assigns inherent case will  $\theta$ -mark its object iff it assigns it the inherent case in question*

*Question:* What is the problem with (1-a)?

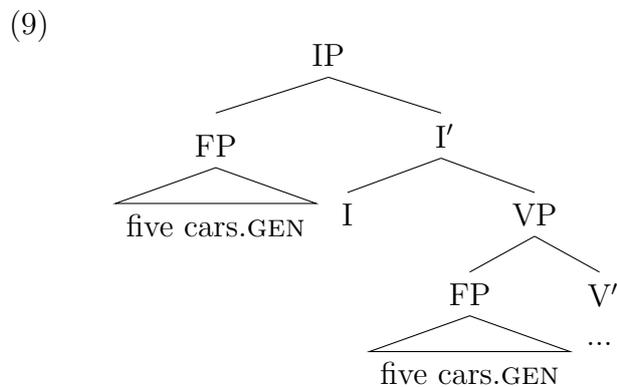
Evidence for the null case assigner F comes from the *po*-construction: *po* is a preposition whose complement is distributed over individuated arguments; *po* can assign structural dative case to numerals while the noun has to be genitive

- (8) po pjati rublej/\*rubljam  
 DIST five.DAT rubles.GEN/DAT  
 ‘five rubles’

Since dative marking on the noun is not possible, an AP pattern is excluded. This leaves us with the QP pattern. Since the same element cannot assign case and be assigned case at the same time, QP cannot act as a case assigner for the genitive case on the noun. Thus, null F is needed.

### 3.2 Optional Agreement

Franks (1994) has reasons to assume that GQ subjects occupy different structural positions depending on the agreement they trigger: subjects triggering plural agreement are in Spec,IP, subjects triggering singular agreement are in Spec,VP



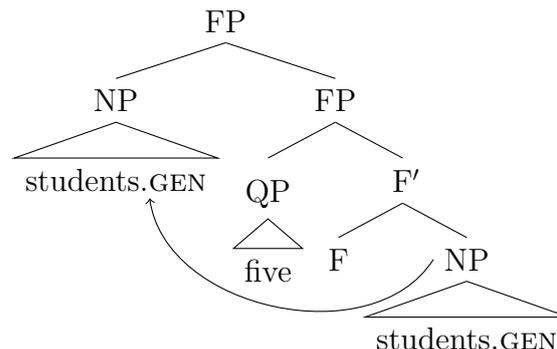
- only plural GQ subjects can bind subject-oriented anaphora
- only plural GQ subjects can control PRO
- only plural GQ subjects have a COMP-trace effect when extracted

*Generalization:* GQ subjects move to Spec,IP if they want to agree with the verb. This results in plural agreement. Singular agreement is a default and results from GQ subjects in Spec,VP.

Bošković (2006) provides a new argument for the different structural positions based on the approximate inversion construction (AXP) which is only possible with singular agreement.

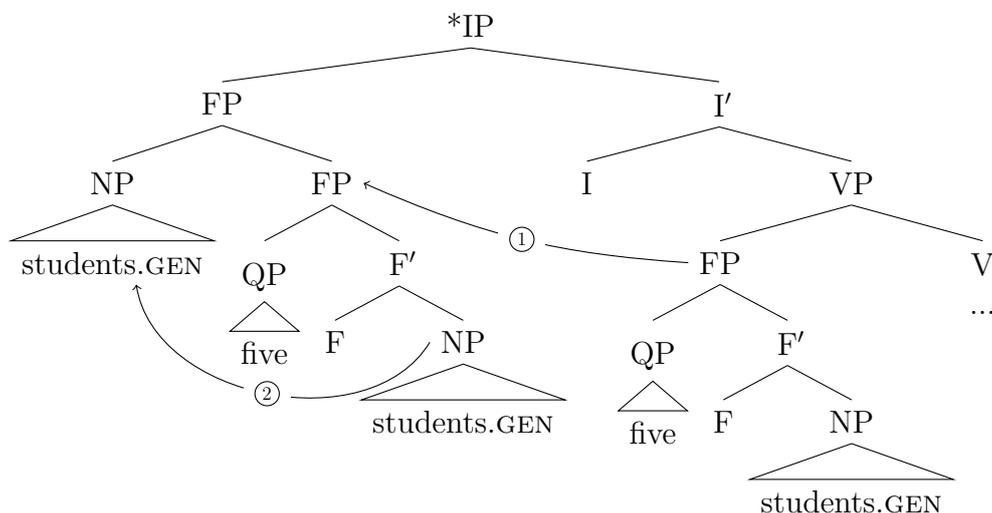
- (10) Studentov pjat' \*sdali/sdalo èkzamen.  
 students five passed.PL/SG exam  
 ‘About five students passed the exam.’

(11) AXP subjects, following Franks (1994):



Following Takahashi (1994), adjunction to the head of a non-trivial chain is disallowed. This prevents a structure like (11) from moving, see (12). Thus they have to stay in Spec,VP where they can only lead to default singular agreement. Adjunction cannot take place before movement to Spec,IP because adjunction has to be counter-cyclic.

(12)



Support for the analysis comes from the observed ban on AXP with inherently case marked objects and objects containing *one* (GQ objects are fine). Recall, they have AP patterns, shown in (7), and only maximal projections can move.

(13) \*Direktor upravljaet fabrikami pjat'ju.  
 director manages factories.INS five.INS  
 'The director manages about five factories.'

(14) \*Oni privezli tonnu odnu.  
 they brought ton.ACC one.ACC  
 'They brought about one ton.'

*Question:* Why is this argument not very convincing?

Agreement only seems optional because the form for *pjat'.NOM/ACC* is identical to a caseless form which e.g. can be observed in the *po* construction:

(15) po pjat'/pjati rublej  
 DIST five/five.DAT rubles.DAT  
 'five rubles'

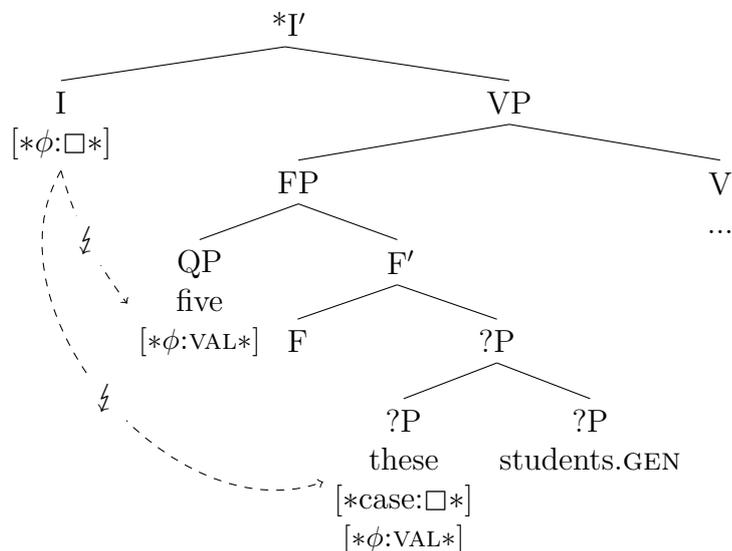
Since the singular agreement option is unavailable if the subject is clearly case marked for nominative, as e.g. shown with demonstrative determiners in (4), Bošković (2006) proposes the following:

*Assumption III: Nominative case marking requires licensing in Spec,IP.*

- the pl (agreeing) option is only possible in the presence of a nominative → GQ subject is in Spec,IP; *pjat'* carries nominative  $\emptyset$  marking
- the sg (non-agreeing) option is only possible in the absence of a nominative → GQ subject is in Spec,VP; *pjat'* is caseless

Why can post-numeral demonstratives not be nominative, as shown in (5)? Caseless *pjat'* acts as a defective intervener: due to its caseless status it is inactive and thus cannot agree in  $\phi$ -features with Infl, nevertheless it acts as an intervener as it is closer to Infl than the demonstrative.

(16)



## 4 Discussion

- at which point does agreement take place?
- until the defective intervention data, agreement seemed to be tied nominative case assignment which happens in Spec,IP
- the analysis in (16) relies on agreement happening before movement to Spec,IP
- does the EPP help?
- is nominative case assignment realized via feature movement?

## References

Assmann, A., Edygarova, S., Georgie, D., Klein, T., and Weisser, P. (2014). Case Stacking below the surface: On the possessor case alternation in Udmurt. *The Linguistic Review*, 31:447–485.

- Bošković, Željko. (2006). Case and agreement with genitive of quantification in Russian. In Boeckx, C., editor, *Agreement Systems*, pages 99–121. John Benjamins, Amsterdam/Philadelphia.
- Brattico, P. (2011). Case assignment, case concord, and the quantificational case construction. *Lingua*, 121:1042–1066.
- Chomsky, N. (1995). *The Minimalist Program*. The MIT Press, Cambridge, Massachusetts.
- Franks, S. (1994). Parametric properties of numeral phrases in Slavic. *Natural Language and Linguistic Theory*, 12:570–649.
- Takahashi, D. (1994). *Minimality of Movement*. PhD thesis, University of Connecticut.

## A Appendix

Bošković (2006) focusses on numerals 1 and 5. Russian numerals 2, 3, and 4 seem to show a different behaviour in that they assign genitive singular (diachronically nom/acc dual). These numerals seem to be possible with a QP, see (17-b), as well as an AP pattern<sup>1</sup>, see (17-a).

- (17) a. Ja sosčital četyřex soldat.  
I counted four.GEN soldiers.GEN.PL
- b. Ja sosčital četyre soldata.  
I counted four.ACC soldiers.GEN.SG
- c. \*Ja sosčital četyřex soldata.  
I counted four.GEN soldiers.GEN.SG  
'I counted four soldiers.'

Brattico (2011) proposes a different analysis for GQ nouns:

- case assignment via multiple Agree, nouns act as goals for more than one case probe
- inherent case probes assign strong case features, structural case probes assign weak case features → features compete
- numerals assign case in GQ environments, i.e. in (17-b), not in (17-a)
- in AP configurations, i.e. in (17-a), numerals are not case probes
- a numeral is a case probe iff it carries the (semantically) uninterpretable singular feature → it does so in (17-b) but not in (17-a)

*Question:* How can Bošković (2006) account for 2, 3, and 4 numerals? How would these numerals have to behave inside GQ subjects?

---

<sup>1</sup>"An accusative animate noun may be realized as a genitive." (Brattico 2011:1046)