

**UNTANGLING THE RUSSIAN
PREDICATE AGREEMENT KNOT**

Hyun-Jong Hahm and Stephen Wechsler
University of Texas at Austin

Proceedings of the LFG07 Conference
Miriam Butt and Tracy Holloway King
(Editors)

2007

CSLI Publications

<http://csli-publications.stanford.edu/>

Abstract

Russian predicates show a puzzling pattern of number agreement with their subjects. For example, the single-addressee use of the polite second person plural pronoun *vy* triggers *plural* number on Short Form predicate adjectives but *singular* on Long Form predicate adjectives. To solve this and other related puzzles, we draw upon several independently motivated assumptions: (i) the INDEX vs. CONCORD agreement distinction (Wechsler and Zlatic 2003; King and Dalrymple 2004); (ii) the analysis of singular target forms as marked both morphologically and semantically, with plurals filling in elsewhere (Wechsler 2004, 2005); and (iii) the nominal ellipsis analysis of Long Form predicate adjectives (Babby 1973; Siegel 1976; Bailyn 1994).

1 Introduction

Russian predicates exhibit a puzzling pattern of number agreement with their subjects, apparently conditioned in complex ways by both the type of agreement ‘target’ such as a finite verb or predicate adjective, and the semantics and form of the subject agreement ‘trigger’. For example, like many other languages, Russian allows an honorific use of its second person plural pronoun *vy* to address a single person politely. Consider whether such a pronoun, used for a single addressee, triggers singular agreement (reflecting the meaning) or plural agreement (reflecting the form) on various targets. Russian predicate adjectives appear in two possible forms, the so-called Short Form (SF, see (1a)) and the Long Form (LF, see (1b) and (1c)). It turns out that a single-addressee use of *vy* triggers *plural* on SF adjectives (1a) but *singular* on LF adjectives (1b):

- (1) a. Vy byli sčastlivy.
 2PL be.past.PL happy.SF.PL
 ‘You (one formal addressee or more than one addressee) were happy.’
- b. Vy byli sčastlivyj.
 2PL be.past.PL happy.LF.Nom.Masc.SG
 ‘You (one formal male addressee) were happy.’
- c. Vy byli sčastlivye.
 2PL be.past.PL happy.LF.Nom.PL
 ‘You (more than one addressee) were happy.’

In addition to showing the contrast between SF and LF adjectives, these data also illustrate *mixed agreement*, where a single subject triggers two different

agreement values: in (1b) the finite verb is plural while the adjective is singular.

It is a complex but ultimately fairly straightforward matter to *describe* such puzzling agreement patterns by stipulating every allowable combination of trigger and target form. But one would like to go beyond a mere description and also *explain* facts like the ones illustrated in (1).

In this paper we offer such an explanation. To do so we draw upon several independently motivated assumptions: (i) the INDEX vs. CONCORD agreement distinction (Wechsler and Zlatic 2003; King and Dalrymple 2004); (ii) the analysis of singular targets as *marked* both morphologically and semantically, with plurals filling in elsewhere (Wechsler 2004, 2005); and (iii) the ‘nominal ellipsis’ analysis of Long Form predicate adjectives (Babby 1973; Siegel 1976; Bailyn 1994).

2 Polite Plurals

In many languages a second person plural pronoun can be used politely for a single person. Examples of such forms are French *vous*, Turkish *siz*, Persian *fomâ*, Romanian *Dumneavoastră*, and Russian *vy* and its cognates in other Slavic languages. Number agreement with such forms, when used of a single addressee, varies across languages even within Slavic (Comrie 1975; Corbett 1983). For example, Czech has mixed agreement with *vy*: finite verbs are plural while predicate adjectives are singular, as shown in (2c).

(2) Mixed agreement in Czech (Hahm 2006b)

- a. Ty jsi čestný.
2SG be.2SG honest.Masc.SG
‘You (one intimate male addressee) are honest.’
- b. Vy jste čestní.
2PL be.2PL honest.Masc.PL
‘You (multiple addressees) are honest.’
- c. Vy jste čestný.
2PL be.2PL honest.Masc.SG
‘You (one formal male addressee) are honest.’

Number on the predicate adjective varies depending on whether there is one or more than one addressee.

In contrast to the mixed agreement found in Czech, Serbo-Croatian has uniform agreement with *vi*: plural on both finite verbs and predicate adjectives, as shown in (3b).

(3) Uniform agreement in Serbo-Croatian (Wechsler 2004)

- a. Ti si duhovit / duhovita.
2SG AUX.2SG funny.Masc.SG / funny.Fem.SG
'You (one informal male/female addressee) are funny.'
- b. Vi ste duhoviti.
2PL AUX.2PL funny.Masc.PL
'You (one formal addressee or multiple addressees) are funny.'

Unlike (2b), sentence (3b), with plural on both agreement targets, can be used to address either a single person or more than one.

Turning now to Russian, as noted in the introduction, Russian number agreement on predicate adjectives depends on whether the adjective is a Short Form adjective (e.g. *krasiv* 'beautiful.SF') or a Long Form adjective (e.g. *krasivyj* 'beautiful.LF').¹ The polite, single-addressee use of *vy* triggers plural on SF adjectives but singular on LF adjectives. This contrast was illustrated in (1) above; a more complete paradigm appears here:

(4) Short Form adjectives

- a. Ty byl sčastliv.
2SG be.past.Masc.SG happy.SF.Masc.SG
'You (one informal male addressee) were happy.'
- b. Vy byli / *byl sčastlivy / *sčastliv.
2PL be.past.PL/Masc.SG happy.SF.PL/*SF.Masc.SG
'You (one formal or more than one addressee) were happy.'

(5) Long Form adjectives

- a. Ty byl sčastlivyj.
2SG be.past.Masc.SG happy.LF.Nom.Masc.SG
'You (one intimate male addressee) were happy.'
- b. Vy byli / *byl sčastlivyj.
2PL be.past.PL/Masc.SG happy.LF.Nom.Masc.SG
'You (one formal male addressee) were happy.'
- c. Vy byli sčastlivye.
2PL be.past.PL happy.LF.Nom.PL
'You (more than one addressee) were happy.'

On the basis of (5b) and (5c) it looks like Russian LF adjectives show *semantic* rather than *grammatical* agreement, hence singular when the subject refers to one individual, plural for more than one. That this is not correct is

¹ Semantic differences between SF and LF adjectives are discussed below.

shown by agreement with pluralia tantum nouns, that is, nouns that are always morphologically plural but can refer to one or more than one entity, such as English *scissors* and *pants*. Regardless of whether they are used for singular or plural reference, Russian pluralia tantum nouns such as *očki* ‘glasses’ or *bryuki* ‘pants’ trigger *plural* agreement on both SF and LF adjectives, as shown here:

- (6) SF adjectives
 Èti otčki krasivy / *krasiv.
 these glasses.PL beautiful.SF.PL / *SF.Masc.SG
 ‘These glasses (one or more than one pair) are beautiful.’
- (7) LF adjectives
 Èti otčki krasivye / *krasivyj.
 these glasses.PL beautiful.LF.Nom.PL/*LF.Nom.Masc.SG
 ‘These glasses (one or more than one pair) are beautiful.’

Before tabulating these patterns we add one more type of predicate, namely predicate nominals. In keeping with a strong cross-linguistic tendency (Corbett 1983; Corbett 2000:194-5), Russian predicate nominals consistently show semantic agreement with both *vy* and pluralia tantum subjects (Hahn 2006a):²

- (8) a. Ty byl geroem.
 2SG be.past. Masc.SG hero.Inst.SG
 ‘You (one informal male addressee) were a hero.’
- b. Vy byli geroem.
 2PL be.past.PL hero.Inst.SG
 ‘You (one formal addressee) were a hero.’
- c. Vy byli gerojami.
 2PL be.past.PL hero.Inst.PL
 ‘You (multiple addressees) were heroes.’
- (9) a. Èti očki special'nyj instrument čtoby smotret' fil'm.
 these glasses special.SG tool.SG so.that watch film
 ‘These glasses (one pair) are a special tool to watch a (e.g. IMAX) movie.’

² In Russian, the present tense copula is null as shown in (9).

- b. Èti očki special'nye instrumenty čtoby smotret' fil'm.
 these glasses special.PL tool.PL so.that watch film
 ‘These glasses (>1 pair) are special tools to watch a movie.’

Summarizing our findings on Russian predicate agreement, a normal singular subject triggers singular agreement on all targets, and a normal plural subject triggers plural agreement. When the subject is morphologically plural but semantically singular, we get the pattern shown in Table I.

subject trigger	finite verbs	adjectives		predicate nominals
		SF	LF	
vy (single addressee)	PL	PL	SG	SG
pluralia tantum	PL	PL	PL	SG

Table I. Russian predicate agreement with morphologically plural but semantically singular subjects.

A careful look at Table I should help the reader appreciate the difficulty of the problem. It will not do to stipulate either ‘grammatical agreement’ or ‘semantic agreement’ for LF adjectives since their behavior differs across the two types of trigger. And besides, as noted in the introduction, one would hope to explain rather than merely stipulate a solution. Our explanation involves three independently motivated factors, to which we turn next.

3 CONCORD and INDEX Agreement

Building on Pollard and Sag (1994) and Kathol (1999), Wechsler and Zlatic (2003) propose a theory of agreement based on the distinction between CONCORD and INDEX agreement (Wechsler and Zlatic 2000, 2003; King and Dalrymple 2004). An agreement trigger such as a noun or pronoun carries both CONCORD and INDEX agreement feature sets, which are understood as grammaticalizations of morphological and semantic properties, respectively (but not reducible to them). CONCORD is related to trigger morphology such as declension class and typically determines NP-internal agreement. The referential INDEX determines anaphoric agreement (e.g. between pronoun and antecedent), because anaphoric binding itself is modeled as INDEX-sharing (Pollard and Sag 1994). While CONCORD features reflect the morphological properties of the NP trigger, INDEX features tend to reflect the semantics of the NP trigger.

Normally the CONCORD and INDEX values for person, number, and gender simply match, but some mismatches exist. These mismatches are detectible by the phenomenon of mixed agreement. For example, Serbo-Croatian has a class of singularia tantum nouns like *deca* ‘children’

that trigger feminine singular on targets within the NP and neuter plural on pronouns (Corbett 1983; Wechsler and Zlatic 2003):

(10) Posmatrali smo ovu dobru decu.
 watched.1PL AUX this.Fem.SG good.Fem.SG children.Acc

Ona su se lepo igrala.
 they.Neut.PL AUX.3PL REFL nicely played.Neut.PL

‘We watched those good children. They played well.’
 (example from Wechsler and Zlatic 2003)

deca: $\left[\begin{array}{ll} \text{CONCORD} & \text{fem.sg} \\ \text{INDEX} & \text{neut.pl} \end{array} \right]$

As noted above, NP-internal agreement tends toward CONCORD while anaphoric pronoun agreement is INDEX agreement. Predicate targets are mixed, as we will see below.

Returning next to Russian, we will ascertain the agreement features of the relevant agreement triggers, such as pronouns and pluralia tantum nouns, and the specifications for the various predicate targets.

4 Agreement triggers

Russian pronouns have the familiar paradigm formed by crossing three person values with two number values.

(11) a. *Ja* 'I'
 Ty 'you (SG)'
 On 'he' } ...*byl* 'be.past.Masc.SG' ...

b. *My* 'we'
 Vy 'you (PL)'
 Oni 'they' } ...*byli* 'be.past.PL' ...

The past tense verb forms shown in (11) confirm that Russian has a true number feature cutting across the person values and grouping together the pronouns as shown.³

³ Cysouw (2003) argues that many languages lack a true number distinction in first and second person pronouns. Wechsler (2004, 2005) applies this idea to French mixed agreement, noting that French lacks target forms that cluster together the purported

Based on the agreement facts in Section 2 above, we propose the following lexical entries for polite pronoun *vy* and pluralia tantum nouns:

- (12) a. *vy*: Pron (↑ PRED) = ‘PRO’
 (↑ PERS) = 2nd
 (↑ CONC NUM) = PL
 (↑ INDEX NUM) = (↑_σ NUM)
- b. *bryuki*: N (↑ PRED) = ‘PANTS’
 (↑ CONC NUM) = PL
 (↑ INDEX NUM) = PL

The pronoun *vy* is ‘morphologically plural’, hence its CONC(ord) value is PL(ural). But its INDEX number is tied to its semantic number, as encoded by the last equation in that entry (σ is the semantic projection function). In contrast, *bryuki* ‘pants’ is PL(ural) in both features, regardless of semantic cardinality. Before showing how these specifications work in our analysis, we present some independent evidence to support them.

Recall that the INDEX feature set resides on the referential index, hence it is tracked by anaphoric binding. The pronoun *vy* differs systematically from pluralia tantum nouns like *bryuki* ‘pants’ with respect to number agreement determined on anaphoric pronouns. As shown in (13a), a Russian *pluralia tantum* antecedent binds a plural pronoun, much like in English: *The trousers_i are too tight; they_i need to be altered.* It also takes a plural relative pronoun (see (13b)) ((13) and (14) are from Hahm 2006a):

- (13) a. Ja kupil eti bryuki včera.
 1SG bought.1SG this.PL pants yesterday
- Ja lyublyu ix / *ego.
 1SG love.1SG they.Acc / it.Acc
- ‘I bought a pair of pants yesterday. I love them.’
- b. Èti bryuki, kotorye /*kotoryj dala
 this.PL pants.PL rel-pron.PL/*SG gave
- mne moya babuška, moi lyubimye.
 to.me my grandmother my.PL favorite.PL
- ‘These pants, which my grandmother gave me, are my favorite.’

singular versus plural pronouns. The agreement shown in (11) shows that such an analysis is inappropriate for Russian.

The personal pronoun *ix* and relative pronoun *kotorye* are plural forms, supporting the plural INDEX number on *bryuki* ‘pants.’ However, with *vy* a singular relative pronoun is preferred when used for singular reference (i.e. with one addressee):

- (14) Vy, kotoraja / kotoryj (>>kotorye) stol'ko
 you rel-pron.Fem / Masc.SG (>> PL) so.much
- čitaete, mnogo znaete.
 read.2PL much know.2PL

‘You (one formal addressee), who read much, know much.’

Summarizing, *bryuki* ‘pants’ has a plural index while *vy* ‘you’ has singular or plural index depending on the meaning.

5 Agreement targets

Now let us turn our attention to the agreement targets, considering first the finite verbs and SF adjectives. Recall from Table I above that these targets consistently show ‘grammatical agreement’ across the different types of trigger, hence plural for the grammatically plural *vy* and pluralia tantum nouns. It would seem that the semantics of plurality can be safely ignored. As a first approximation, then, the lexical entries of singular verbs and SF adjectives would contain the equation (\uparrow SUBJ CONC NUM) = SG, while their plural counterparts would have (\uparrow SUBJ CONC NUM) = PL.

However, in Russian as in English, French, and perhaps all languages, agreement always retains some shadow of its semantic side, a semantic side that emerges in special contexts that block the grammatical feature. For example, the number value on predicates with a coordinate NP subject seems to reflect the semantic number of the subject, as in these examples:

- (15) a. [Moj lučšij drug i redaktor moej
 my.SG best.SG friend.SG and editor.SG my.Gen.Fem.SG
 biografii] byl zdes' s vizitom.
 autobiography.Gen.Fem.SG be.past.Masc.SG here with visit

‘My best friend and the editor of my autobiography (referring to one person) was here for a visit.’

- b. [Moj lučšij drug i redaktor moej
 my.SG best.SG friend.SG and editor.SG my.Gen.Fem.SG
 biografii] byli zdes' s vizitom.
 autobiography.Gen.Fem.SG be.past.PL here with visit

‘My best friend and the editor of my autobiography (referring to two different people) were here for a visit.’

With the singular verb in (15a) the subject is understood as singular (the speaker’s best friend is her biographer), while the plural verb in (15b) brings with it a plural interpretation. The same applies to the English translations, incidentally (Farkas and Ojeda 1983; Farkas and Zec 1993; Farkas and Zec 1995).

We are faced by a paradox: these agreement targets seem to show grammatical agreement in some situations, apparently ignoring meaning (see Table I), but show semantic agreement in others.

To solve this paradox we follow Wechsler (2005) in positing that the singular target form is marked for singular both grammatically and semantically, as shown in (16a). Note that this lexical entry has two agreement equations, one for CONCORD and one for the semantic interpretation. The singular form is thus the marked form in the singular / plural opposition. The corresponding plural form is unmarked, exhibiting an ‘elsewhere distribution’, that is, applying whenever the conditions for the singular form are not met. Perhaps pending a more adequate formalization in a sophisticated theory of markedness such as Optimality Theory, we can capture this distribution with the disjunctive specification shown in (16b):

- (16) a. *krasiv*: A (↑ PRED) = 'BEAUTIFUL<SUBJ>
 (↑ SUBJ CONC NUM) = SG
 ((↑ SUBJ)_σ NUM) = SG

- b. *krasivy*: A (↑ PRED) = 'BEAUTIFUL<SUBJ>
 { (↑ SUBJ CONC NUM) =c PL |
 ((↑ SUBJ)_σ NUM) = PL }

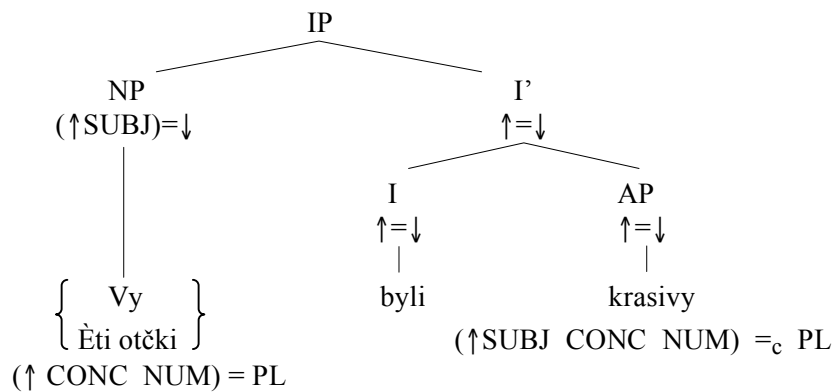
Given the constraining equation in its lexical entry, the plural target form *krasivy* (the SF adjective ‘beautiful’) effectively ‘checks’ the subject for morphological plurality, otherwise imposing plural semantics. That is, if the constraining equation is not satisfied, because the subject lacks a plural CONCORD feature, then the semantic equation must be active. In effect the plural target feature must be motivated either by morphology or semantics.

Let us assume that a coordinate NP as in (15) lacks a CONCORD

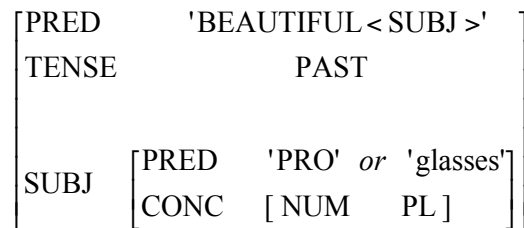
feature entirely, perhaps because it is endocentric and CONCORD (or at least (CONCORD NUMBER)), is non-distributive (King and Dalrymple 2004). Then all the facts surveyed follow: *vy* and pluralia tantum nouns are morphologically plural, i.e. they have a plural CONCORD feature, so the verb or SF adjective cannot be singular, and the plural form does not impose plural semantics. But the coordinate NPs in (15) lack a CONCORD feature, so they allow either singular or plural, imposing semantic singularity or plurality, respectively.

C- and f-structures for representative examples where the subject is grammatically plural are shown in (17):

(17) a. c-structure for *Vy byli krasivy* and *Èti otčki byli krasivy*:



b. f-structure for *Vy byli krasivy* /**krasiv*
 ‘You were beautiful.’
 and *Èti otčki byli krasivy* /**krasiv*
 ‘These glasses were beautiful.’:



In contrast, a coordinate NP subject lacks the $(\uparrow \text{CONC NUM}) = \text{PL}$ equation; hence the constraining equation on the adjective is not satisfied, so the adjective imposes semantic plurality.

6 Long form adjectives

Turning now to LF adjectives, recall that pluralia tantum nouns trigger plural on LF adjectives, but *vy* triggers semantic agreement:

- (18) Èti otčki krasivye / *krasivyj.
these glasses.PL beautiful.LF.Nom.PL/*LF.Nom.Masc.SG
'These glasses (one or more than one pair) are beautiful.'
- (19) a. Vy byli sčastlivyj.
2PL be.past.PL happy.LF.Nom.Masc.SG
'You (one formal male addressee) are happy.'
- b. Vy byli sčastlivye.
2PL be.past.PL happy.LF.Nom.PL
'You (more than one addressee) were happy.'

To understand this fact, we adopt a longstanding proposal that an LF adjective in predicate position is really an attributive adjective modifying a null nominal head (Babby 1973; Siegel 1976; Baylin 1994). That is, (19a) can be paraphrased roughly as 'You are a happy one'. As in many languages, Russian expresses 'one-anaphora' by eliding the head noun from the NP. Within LFG we do not need literally to posit a null head, so we will express this idea differently, but the essential insight is taken from the works listed above.

Let us briefly review the evidence for this analysis of LF adjectives. First, in addition to serving as predicates, LF adjectives can also serve as nominal attributive modifiers, while SF adjectives cannot. This immediately predicts a systematic difference between the two, since we know independently that Russian allows noun ellipsis for one-anaphora. In diachronic perspective this evidence is even stronger: LF adjectives in Old Russian were *only* used as prenominal attributive modifiers and could not be predicative (Bailyn 1994). Also, LF adjectives inflect for case, a property typical of NP-internal items, while SF adjectives do not inflect for case.

There is also compelling semantic evidence. LF predicate adjectives have the partitive semantics typical of one-anaphora, as shown by the following contrasts (Siegel 1976):

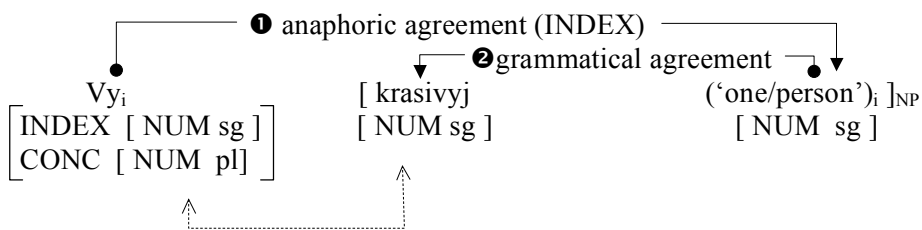
- (20) a. Prostranstvo beskonečno (SF) / *beskonečnoe (LF).
'Space is infinite.' (cp. #Space is an infinite one.)
- b. Vse jasno (SF) / *jasnoe (LF).
'Everything is clear.' (cp. #Everything is a clear one.)

- c. *Prixodit' domoj očen' prijatno* (SF) / **prijatnoe* (LF).
 'To come home is very pleasant.'
 (cp. #To come home is a very pleasant one.)

Compare the English translations. The LF adjectives suggest selection from some presupposed larger set.

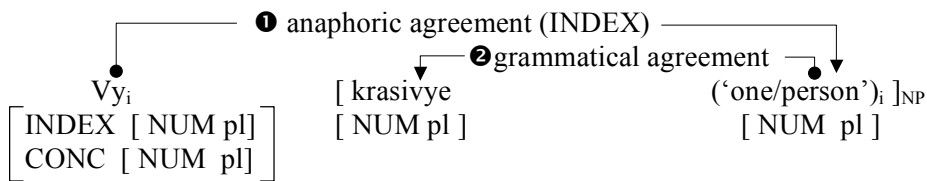
How is this relevant to agreement? We put forth the following proposal. The LF adjective actually shows grammatical (CONCORD) agreement with its null nominal head. That null head, being anaphoric, shows INDEX agreement with its antecedent, the subject. This gives the appearance of INDEX agreement.

- (21) a. *Vy krasivyj*.
 'You (one formal addressee) are beautiful'.

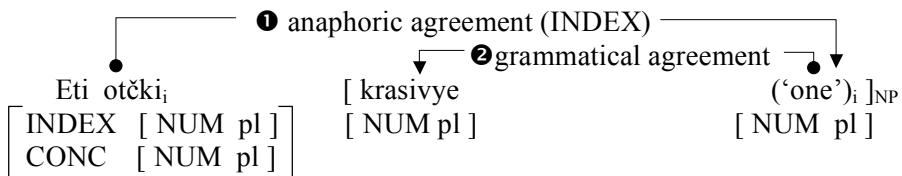


Result: appears to be INDEX agreement.

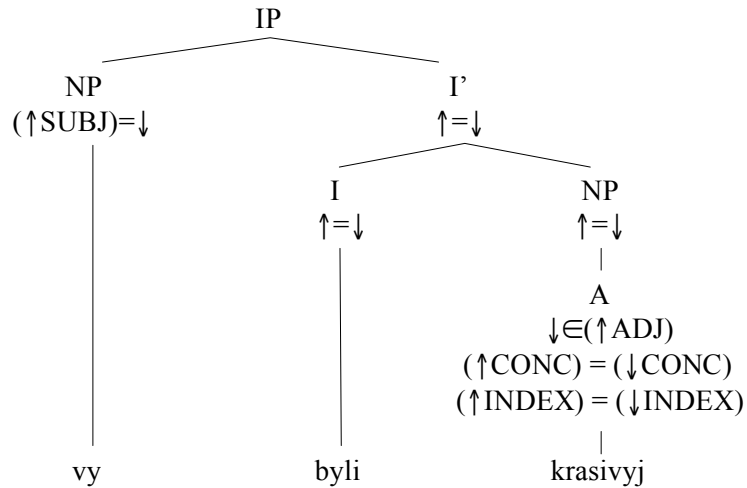
- b. *Vy krasivye*.
 'You (more than one addressee) are beautiful.'



- c. *Eti otčki krasivye*.
 'These glasses (one or more pairs) are beautiful.'



b. c-structure for *Vy byli krasivyj*:



c. f-structure for *Vy byli krasivyj*:

[	PRED	'ONE <SUBJ >']
[	CONC	[NUM SG]]
[	INDEX	[NUM SG] _i]
[	ADJ	{ [PRED 'BEAUTIFUL'] }]
[	TENSE	PAST]
[	SUBJ	[PRED 'PRO']]
[		CONC [NUM PL]]
[		INDEX [NUM SG] _i]

Lastly, for completeness we will consider predicate nominals. Recall from Table I above that predicate nouns show semantic number agreement with their subjects. Hence a singular predicative noun has a lexical entry like the following.

- (24) *instrument*: N (↑ PRED) = 'TOOL <SUBJ >'
 (↑ CONC NUM) = SG
 ((↑ SUBJ)_σ NUM) = SG

This sort of pure semantic agreement is typical of predicate nominals across languages (Corbett 1983). It is probably explained by the fact that nominals can refer, so the number feature semantically modifies the predicate nominal itself. In that sense the correlation between the number of the predicate nominal and the subject may not be agreement at all, strictly speaking, but rather a consequence of semantic composition. On the latter view, in the equation above, the expression $((\uparrow \text{SUBJ})_{\sigma} \text{ NUM})$ would be replaced with $(\uparrow_{\sigma} \text{ NUM})$. Then the singular *instrument* denotes a property of a single tool, and the semantic effects on the subject are just a side effect of semantic composition.

7 Conclusion

The complex agreement patterns described in this paper can be understood as an interaction of independently motivated grammatical factors. First of all, we applied an earlier proposal by Wechsler (2005) that singular agreement targets are marked for both grammatical and semantic singularity, so that the plural counterpart, being distributionally unmarked, fills in the other options. In effect it is disjunctively specified for grammatical or semantic plurality: hence it checks the subject for morphological plurality, imposing semantic plurality if it fails to find that plural feature.

The main innovation of this paper is the idea that LF adjectives behave like anaphors with respect to agreement because they modify an implicit anaphor in the predicate position.

References

- Babby, Leonard H. (1973). The Deep Structure of Adjectives and Participles in Russian. *Language* 49(2): 349-360.
- Bailyn, John (1994). The Syntax and Semantics of Russian Long and Short Adjectives: An X'-Theoretic Account. *Annual Workshop on Formal Approaches to Slavic Linguistics: The Ann Arbor Meeting: Functional Categories in Slavic Syntax*. J. Toman. Ann Arbor, Michigan Slavic Publications: 1-30.
- Comrie, Bernard (1975). Polite Plurals and Predicate Agreement. *Language* 51(2): 406-418.
- Corbett, Greville (1983). *Hierarchies, Targets and Controllers: Agreement Patterns in Slavic*. London, Croom Helm.
- Corbett, Greville G. (2000). *Number*, Cambridge University Press.
- Cysouw, Michael (2003). *The Paradigmatic Structure of Person Marking*. Oxford University Press.

- Farkas, Donka F. and Almerindo Ojeda (1983). Agreement and coordinate NPs. *Linguistics* 21: 659-673.
- Farkas, Donka F. and Draga Zec (1993). *Agreement and Pronominal Reference*. Santa Cruz, CA, Linguistic Research Center, University of California.
- Farkas, Donka F. and Draga Zec (1995). Agreement and Pronominal Reference. *Advances in Roumanian Linguistics*. G. Cinque and G. Giusti. Philadelphia, John Benjamins: 83-101.
- Hahm, Hyun-Jong (2006a). Number Agreement in Russian Predicates. *Proceedings of the 13th International Conference on Head-Driven Phrase Structure Grammar*, CSLI Publications, Stanford.
- Hahm, Hyun-Jong (2006b). 'Uniform or Mixed agreement due to the Personal Pronouns.' Paper presented at Midwest Slavic Conference, Ohio State University.
- Kathol, Andreas (1999). Agreement and the Syntax-Morphology Interface in HPSG. *Studies in Contemporary Phrase Structure Grammar*. R. Levine and G. Green. New York, Cambridge University Press.: 223--274.
- King, Tracy H. and Mary Dalrymple (2004). Determiner agreement and noun conjunction. *Journal of Linguistics* 40(01): 69-104.
- Pollard, Carl and Ivan Sag (1994). *Head Driven Phrase Structure Grammar*. Stanford and Chicago, CSLI Publications and University of Chicago Press.
- Siegel, Muffy (1976). Capturing the Russian Adjective. *Montague Grammar*. B. H. Partee: 293-309.
- Wechsler, Stephen (2004). Number as Person. *Empirical Issues in Syntax and Semantics* 5. O. Bonami and P. C. Hofherr: 255-274.
- Wechsler, Stephen (2005). *Markedness and Meaning in Agreement*. LFG 2005, Bergen, Norway.
- Wechsler, Stephen and Larisa Zlatic (2000). A Theory of Agreement and Its Application to Serbo-Croatian. *Language* 76(4): 799-832.
- Wechsler, Stephen and Larisa Zlatic (2003). *The Many Faces of Agreement*. Stanford, California, CSLI Publications.