

The Russian *be*-possessive: subjecthood and argument structureAysa Arylova  
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**Abstract.** *The paper touches upon two aspects of the Russian be-possessive: subjecthood and argument structure. A brief presentation of subjecthood tests (reflexive binding, word order, presupposed reference and substitution by PRO) demonstrates that the PP-possessor is the subject of the construction, although morphological subject characteristics embellish the possessum. A look at the argument structure of the be-possessive constitutes a step towards the understanding of the idiosyncrasies of the construction. I consider a range of the existing analyses of the argument structure of the be-possessive and argue that the construction should be analyzed as a dyadic unaccusative, as proposed in Chvany (1975).*

## 1 Introduction

The Russian *be*-possessive construction consists of a Nominative possessum, the verb *byt'* 'be', and a possessor expressed as a PP:<sup>1</sup>

- (1) a. [U Van-i] est' sobak-a.  
at Vanja-GEN is dog.F-NOM.SG  
'Vanja has a dog.'
- b. [U nas] byl bol'sh-oj dom.  
at we.GEN be.PST:M.SG big-M.NOM.SG house.M:NOM.SG  
'We had a big house.'
- c. [U menja] bud-ut problem-y.  
at I.GEN be.FUT-3PL problem-NOM.PL  
'I will have problems.'

The Nominative possessum imposes agreement on the verb *byt'* 'be': gender and number in the past tense (1b), and person and number in the future (1c); the form of the verb *byt'* in the present tense is the non-agreeing invariant form *est'*.

Despite the observed case and agreement pattern, the subject status in the construction is generally ascribed to the prepositional possessor, which makes the *be*-possessive one of the few Russian constructions where subjecthood and case/agreement diverge.<sup>2</sup> Explaining the

1 I follow the Leipzig glossing rules in the examples.

2 Other constructions with oblique subjects are arguably Dative inversion, Locative inversion and OVS inversion – (i), (ii) and (iii), respectively:

- i. Soldat-am vidn-a dorog-a.  
soldier.M-DAT.PL seen-F.SG road.F-NOM.SG  
'Soldiers can see the road.'
- ii. Na posadočnu-ju polos-u prizemli-l-sja samoljot.  
on landing.ADJ-F.ACC.SG line.F-ACC.SG land-PST-M.REFL plane.M-NOM.SG  
'An airplane landed on the runway.'
- iii. Ivan-a volnu-jut svo-i podčinjonn-ye.  
Ivan-ACC worry:PRS-3PL REFL-3PL subordinate-NOM.PL  
'Ivan is worried by his subordinates.'

idiosyncrasies of the *be*-possessive with regard to case/agreement and distribution of grammatical roles is a task that I hope to accomplish in future work, here I limit myself to the issues of argument structure which can give us a clue for dealing with the above problems.

The article adheres to the generative (minimalist) framework. I review the existing analyses of the argument structure of the *be*-possessive and argue for a revival of the dyadic unaccusative analysis of Chvany (1975) which has not taken root in the generative tradition – the field has largely been dominated by the Small-Clause type analyses.

Section 2 reviews the classic arguments in favor of the subject status of the prepositional possessor – such as reflexive binding, leftmost position – and provides additional evidence in the form of presupposed reference and control. Section 3 presents the existing analyses of the argument structure of the *be*-possessive: Chvany (1975), Freeze (1992), Dyakonova (2007), and Bailyn (2004). I conclude the paper by suggesting that an analysis close to that of Chvany (1975) has the potential of dealing best with a range of properties of the *be*-possessive presented in section 4.

## 2 *Possessor is the Subject*

In languages with a Nominative-Accusative case system, Nominative case and predicate agreement are generally considered to be subject characteristics – thus in the *be*-possessive, as can be seen in (1), the possessum has the morphological encoding of a subject. However, numerous scholars have argued that the subjecthood status in the construction belongs to the prepositional possessor, referring to reflexive-binding and word-order facts (Chvany, 1975; Freeze, 1992; Bailyn, 2004; Corbett, 2006; Dyakonova, 2007, among others).

In (2a) the possessor can bind the reflexive *s soboj* 'with himself', and in (2b-c) the possessor binds into the possessum, irrespective of word order:

- (2) a. U Ivan-a<sub>i</sub> byl-i den'gi s soboj<sub>i</sub>.  
 at Ivan-GEN be.PST-PL money.PL with self.INST  
 'Ivan<sub>i</sub> had money on him<sub>i</sub>.'
- b. U Ivan-a<sub>i</sub> est' svo-ja<sub>i</sub> mašin-a.  
 at Ivan-GEN is REFL-F.NOM.SG car.F-NOM.SG  
 'Ivan has his own car.' (Chvany 1975)
- c. Svo-j<sub>i</sub> sobstvenn-yj dom byl u nas<sub>i</sub>.  
 REFL-M.NOM.SG own-M.NOM.SG house.M-NOM.SG be.PST:M.SG at we.GEN  
 'We had our own house.' (Bailyn 2004)

The ungrammatical sentences in (3) are meant to illustrate that the possessum cannot bind into the possessor:

- (3) a. \*Mašin-a<sub>i</sub> est' u svoe-go<sub>i</sub> vladel'ts-a.  
 car.F-NOM.SG is at REFL-M.GEN.SG owner.M-GEN.SG  
 'Its<sub>i</sub> owner has a/the car<sub>i</sub>.'

- b. \*U svo-ej<sub>i</sub> mater-i est' Denis<sub>i</sub>.  
 at REFL-F.GEN.SG mother-GEN.SG is Denis  
 'His<sub>i</sub> mother has Denis<sub>i</sub>.'
- c. \*Tol'ko Maš-a<sub>i</sub> est' u sebja<sub>i</sub>.  
 only Maša-NOM is at REFL.GEN  
 'Maša has only herself (to rely on).'

The fact that the possessor can bind reflexives (including reflexives within the possessum), while the possessum cannot bind into the possessor, renders the possessor as more subject-like.

The word-order argument simply exploits the fact that subjects in Russian generally come leftmost and in the *be*-possessive the neutral word order is the one seen in (1), where the possessor precedes the possessum.

In the works cited above reflexive binding and word order were considered sufficient subjecthood evidence; in search of additional tests I consulted Keenan's seminal (1976) article. Not all of Keenan's tests can be used in the context of this article: some of the tests have been proven to be irrelevant for subjecthood, some cannot be applied to the Russian language, or the *be*-possessive in particular – for these reasons and also for reasons of space I limit myself to two additional tests here, the presupposed reference test and substitution by PRO.

### 2.1 Presupposed Reference/Existence

Keenan (1976) suggests that while the reference of “normally referential” NPs can be suspended under certain operations (such as negation, questioning, conditionalization), the reference of a subject is generally harder to suspend. In the *be*-possessive the element whose reference is relatively stable turns out to be the possessor.

In (4a) and (4b) the word *feja* 'fairy' is placed in the position of the possessor and the possessum in a negated sentence. In order to check the availability of presupposition, I use a statement denying the existence of fairies. In (4a), where 'fairy' is in the possessum position in the negated sentence, it is possible to continue with a general denial of the existence of fairies – I take it to mean that the referent of 'fairy' in (4a) is not presupposed. In (4b) the negated sentence contains 'fairy' in the possessor position, and the existence-denial statement brings in pragmatic incoherence, presumably due to the presupposition of 'fairy' in the first sentence. Thus, the reference of the possessor is harder to suspend under negation.

- (4) a. U menja net sobstvenn-oj fe-i. Fe-j ne  
 at I.GEN is.not own-F.GEN.SG fairy.F-GEN.SG fairy.F-GEN.PL NEG  
 suščestvu-et.  
 exist-3SG  
 'Nobody has a personal fairy. Fairies do not exist.'
- b. U fe-i net xvost-a. #Fe-j ne  
 at fairy.F-GEN.SG is.not tail.M-GEN.SG fairy.F-GEN.PL NEG  
 suščestvu-et.  
 exist-3SG

'A fairy does not have a tail. Fairies do not exist.'

Under questioning, the reference of the possessor is also more stable than that of the possessum. Sentences in (5) present question-answer pairs. The answer in (5a) is a legitimate answer to the question where 'dragon' is expressed in the possessum position: nobody can be claimed to have a dragon because dragons do not exist. The answer in (5b) is viewed as more pragmatically non-cooperative: speaker A asks whether dragons possess a particular property, with a presupposition that dragons exist, and speaker B denies that presupposition, instead of answering the question.

- (5) a. A: U kogo-nibud' est' drakon? – B: Net, potomu što drakon-ov  
 at anybody.GEN is dragon.M:NOM.SG no because dragon.M-GEN.PL  
 ne byva-et  
 NEG exist-3SG  
 'Does anybody have a dragon? – No, because dragons do not exist.'
- b. A: Est' li u drakon-a soprotivljaemost' k magi-i? –  
 is Q at dragon.M-GEN.SG immunity.F-NOM.SG to magic.F-DAT  
 B: #Net, potomu što drakon-ov ne byva-et.  
 No because dragon.M-GEN.PL NEG exist-3SG  
 'Is a/the dragon immune to magic? – No, because dragons do not exist.'

The presupposition of reference continues to correlate with the possessor in conditional sentences. (6a) states that a flying carpet would have existed in the speaker's possession given the condition of living in a fairy-tale world, but since this is no fairy tale, there are possibly no flying carpets at all. In (6b) the fact that the speaker does not live in a fairy-tale world does not cancel the presupposition of the existence of a flying carpet – the way (6b) is built, flying carpets do exist in the speaker's world, only without gears.

- (6) a. Esli by my žil-i v skazk-e, u menja by byl  
 if SBJV we.NOM live.SBJV-PL in fairy.tale.F-LOC.SGat I.GEN SBJV  
 be.SBJV:M.SG  
 kovjor-samoljot.  
 carpet.M:NOM.SG-plane.M-NOM.SG  
 'If we lived in a fairy-tale, I would have a flying carpet.'
- b. Esli by my žil-i v skazk-e, u  
 if SBJV we.NOM live.SBJV-PL in fairy.tale.F-LOC.SGat  
 kovr-a-samoljot-a byl-a by korobk-a peredač.  
 carpet.M:GEN.SG-plane.M-GEN.SG be.SBJV-F.SG SBJV gears  
 'If we lived in a fairy-tale, a flying carpet would have gears.'

To recapitulate, the data in (4-6) suggest that it is more difficult to suspend the reference of a DP if it is encoded in the possessive *u*-PP – from this I conclude that the prepositional possessor in the *be*-possessive behaves more subject-like with regard to the presupposed reference test.

2.2 *Substitution by PRO*

Subjects should be able to undergo Equi-NP deletion, according to Keenan (1976).<sup>3</sup> Substitution by PRO, or control, has remained a sturdy subjecthood test through the years: a noun that in a finite clause has claims for the subjecthood status should be substitutable by PRO in a control infinitive. In Russian there is an extra condition: only Nominative DPs can be substituted by PRO.

The control test cannot be applied to the possessor of the *be*-possessive, as the possessor is expressed by a prepositional phrase, but it does not mean that the test is of no use to us at all, as we can apply it to the Nominative possessum.

Sentences in (7) involve the subject-control predicate *mečtat'* 'dream': the subject of the matrix clause controls the PRO in the infinitive, as illustrated in (7a). In (7b) the subject *sobaka* 'dog' is set up to control PRO that stands for the possessum – the sentence is ungrammatical, which is unexpected for an analysis that might try to ascribe the subject status to the Nominative possessum.

- (7) a. Ja<sub>i</sub> mečta-ju [PRO<sub>i</sub> vyigra-t' million evro].  
 I.NOM dream:PRS-1SG win-INF million:ACC.SG euro  
 'I dream about winning a million euros.'
- b. \*Sobak-a<sub>i</sub> mečta-et [PRO<sub>i</sub> byt' u menja].  
 dog.F-NOM.SG dream:PRS-3SG be.INF at I.GEN  
 '#A/The dog dreams about me having it.'

(8) presents the object-control predicate *razrešit'* 'allow' which establishes a control relation between the object of the matrix clause and PRO in the infinitival complement, as shown in (8a). The possessum, again, cannot be substituted by PRO in (8b).

- (8) a. Ja razreši-l-a syn-u<sub>i</sub> [PRO<sub>i</sub> pojti na večerink-u].  
 I.NOM allow-PST-F.SG son-DAT.SG go.INF on party.F-ACC.SG  
 'I allowed (my) son to go to the party.'
- b. \*Putin razreš-il šest-i zamestitel-jam<sub>i</sub> [PRO<sub>i</sub> byt' u  
 Putin:NOM allow-PST:M.SG six-DAT deputy-DAT.PL be.INF at  
 ministr-a.  
 minister-GEN.SG  
 '#Putin allowed six deputies to be had by the minister.'

Although the *be*-possessive cannot be embedded under control predicates, I suggest that the data in (7) and (8) can still be used as negative evidence with regard to the possessum: the possessum bears Nominative case and if one adheres to the possessum-as-subject analysis, one should expect the possessum to be substitutable by PRO – but it turns out not to be possible. This

3 'Equi-NP deletion' is a transformational grammar term for the phenomenon that in the current generative literature is referred to as control – a dependency between the understood subject of an infinitival complement (PRO) and an argument of the matrix predicate.

circumstance diminishes the claims of the possessum for subjecthood, and, I argue, grants a firmer subjecthood ground to the possessor.

### 2.4 Subjecthood: Summary

Although it is the possessum that bears the Nominative case and imposes agreement on the verb – characteristics that traditionally have been ascribed to subjects in Russian – a range of scholars have argued on the basis of several other subjecthood tests that the subjecthood status in the *be*-possessive belongs to the prepositional possessor. The subjecthood tests discussed in section 2 are summarized in Table 1:

Table 1. Subjecthood tests

	Possessor	Possessum
Reflexive binding	✓	*
Normally leftmost	✓	*
Presupposed reference	✓	*
Substitution by PRO	N/A	*

The tests on reflexive binding, word order and presupposed reference favor the possessive *u*-PP as the subject. Furthermore, the generally reliable PRO-substitution test gives negative results for the Nominative possessum, thus decreasing the claims of the possessum for subjecthood.

Thus, on the basis of the subjecthood tests presented in section 2, I conclude that the possessor in the *be*-possessive construction should be analyzed as the subject.<sup>4</sup>

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4 An anonymous reviewer cites a number of works describing constructions from the Northwest-Russian dialects, where the prepositional phrase '*u* + DPgen', which is used to express the possessor in the *be*-possessive construction discussed here, has a more unambiguous subject status (Trubinskij 1988; Jung 2007):

- (i) a. U nego uexa-no bylo.  
 at he.GEN leave-PRT be.PST  
 'He had left.'  
 b. U syn-a žene-no-s'.  
 at son-GEN marry-PRT.N-REFL  
 '(My) son is married.'  
 c. U menja uže korov-a podoi-vši.  
 at I.GEN already cow-NOM milk-PRT  
 'The cow is already milked by me.'

(Trubinskij 1983)

I thank the reviewer for bringing this phenomenon to my attention, I intend to consider these constructions and their possible implications for the analysis of the *be*-possessive in future work.

### 3 *Argument Structure: Existing Analyses*

In the previous section we have established that the Russian *be*-possessive has the possessive *u*-PP as subject. How does such a non-canonical configuration come about? A proper analysis of the argument structure is an important step towards the understanding of the construction. The literature contains a number of different analyses of the argument structure of the *be*-possessive. A work that has been quite influential in the literature on possessives cross-linguistically and thus must be mentioned in this article is Freeze (1992).

Freeze (1992) unifies existentials, locatives and possessives under one common “locative” paradigm and derives the three constructions from one underlying structure, while the potential differences between the three constructions are explained derivationally.

In Freeze's analysis of the Russian *be*-possessive, the preposition *u* 'at' heads the PP projection hosting the possessum in its specifier and the possessor in the complement position, the verb *byt'* 'be' is a functional element projected in Infl.

- (9) a. U menja byl-a                   sestr-a.  
       at I.GEN be.PST-F.SG   sister-NOM.SG  
       'I had a sister.'  
       b. [IP [I' was [PP sister [P' at me]]]] (Freeze 1992)

In order to derive the possessor-initial word order, Freeze suggests that the P' containing both the preposition *u* 'at' and the possessor DP moves to SpecIP due to the Definiteness effect.

One of the reasons for me not to consider Freeze (1992) is that the preposition *u* 'at' and the possessor DP are not treated as a constituent. The representation in (9b) suggests a certain structural flexibility of the *u*-PP, for example that the Genitive possessor DP can strand the preposition, or the preposition can follow the possessor DP. In the meantime, the *u* preposition and the possessor DP behave as a unit, they have to be adjacent, their ordering with regard to each other does not vary. Furthermore, Freeze (1992) is a popular paper that does not suffer any lack of publicity – in this article I wish to concentrate on three other analyses of the *be*-possessive: Chvany (1975), Dyakonova (2007) and Bailyn (2004).

#### 3.1 *Dyadic Unaccusative*

Chvany (1975) presents a view of the *be*-possessive where the existential *byt'* 'be' is a lexical predicate taking the possessor and the possessum as its two internal arguments – the structure can be termed as the 'dyadic unaccusative'. Chvany places the possessum in the Direct Object/Theme position on the basis of the Genitive of Negation data (to be discussed in section 4.2); the possessor is assigned to the Indirect Object/Goal position, based on semantic closeness to the Goal argument in a ditransitive construction. The lexical treatment of existential *byt'* 'be' is motivated by the interpretative contribution of the verb to the sentence, existence of lexical derivatives, and distributional differences between existential *byt'* and copular *byt'*. Chvany's ternary-branching structure of the VP in (10b) can be interpreted into the binary-branching representation in (10c) where the possessor c-commands the possessum, reflecting the c-

command relations between the Goal and the Theme in the Russian double object construction.<sup>5</sup>

- (10) a. U Ivan-a est' svo-ja mašin-a.  
 at Ivan-GEN is REFL-F.NOM.SG car.F-NOM.SG  
 'Ivan has his own car.'

b. [S [VP is [NP car] [NP Ivan]]] (Chvany 1975)

c. [TP [VP [u Ivan-a] [v' is [DP car]]]]

Chvany (1975) treats the *u*-possessor as an NP, considering the *u*-PP as a morphological form diachronically connected to the Dative marker *-u*; note to this effect that the *u*-PP does not behave as a PP in terms of c-command, as the possessor DP can bind out of the *u*-PP. Chvany argues against the locative preposition treatment of *u* 'at' in *be*-possessives by pointing out that although *u* in combination with inanimate nouns means 'near, by' (*u okna* 'by the window', *u stola* 'by the table'), it never has a pure locative meaning when combined with animates (*u Ivana* '\*near Ivan').<sup>6</sup>

Viewing the *be*-possessive as an unaccusative with two internal arguments is certainly a marked option nowadays – the generative landscape is dominated by small clause analyses.

### 3.2 Small Clause

At the moment the small clause analysis of possessives seems to be the predominant analysis cross-linguistically. For Russian, I will consider Dyakonova (2007) which is primarily developed to deal with the Russian double object construction, but also covers the *be*-possessive.

In Dyakonova (2007) the possessum and the *u*-PP originate in a small clause headed by an abstract locative head *Pred*: the possessum is the subject of the small clause and the *u*-PP is a locative predicate. The *u*-PP acquires possessor semantics when it moves to the specifier of  $V_{APPL}$  – an applicative lexical predicate that introduces such theta-roles as Benefactor, Malefactor, Experiencer and Possessor. Dyakonova builds her notion of  $V_{APPL}$  on such works as Pylkkanen (2002) and McIntyre (2006). Note that the movement of the *u*-PP to  $SpecV_{APPL}P$  is movement into a theta-position – a problem that Dyakonova herself acknowledges. In the bracketing notation in (11b) the angle brackets “<...>” represent traces.

- (11) a. U menja est' osnovani-ja polaga-t'...  
 at I.GEN is reason.N-NOM.PL think-INF  
 'I have reasons to think that...'

b. [TP [PP at me] [V<sub>appl</sub>IP <at me> [V<sub>appl</sub>I' Pred [SC reasons [Pred' <Pred> <at me>]]]]] (Dyakonova 2007)

On its way to  $Spec V_{APPL}P$ , the *u*-PP moves over the possessum in the subject position of the small

5 Dyakonova (2007) presents extensive argumentation that in the Russian double object construction the Goal argument should be projected above the Theme argument.

6 There is a locative reading where *u Ivana* can be interpreted as 'at Ivan's place', but in those cases the *u*-phrase is presumably an attributive modifier of a silent locative element.



clause, so in order to make the movement of the *u*-PP conform to the locality conditions Dyakonova has to posit another movement – incorporation of Pred to  $V_{APPL}$ , which obviates a potential Minimal Link Condition violation by extending the domain for the movement of the *u*-PP. The Pred+ $V_{APPL}$  complex is spelled out as *byt'* 'be'. From Spec $V_{APPL}$ P the possessor proceeds to the subject position of the clause, SpecTP.

Dyakonova's analysis is by far the most detailed and intricate of the three analyses considered here.

### 3.3 Regular *vP*

The argument structure of the *be*-possessive is relevant for Bailyn (2004) only in as much as it provides a suitable configuration for Bailyn's arguments on the interaction of binding and inversion processes – the structure itself is not defended in any way, but it is worth mentioning here as an existing view on the *be*-possessive. Bailyn (2004) includes the *be*-possessive in the range of inversion constructions together with locative inversion, adversity impersonals, dative experiencer constructions, among others. Movement in the inversion constructions has A-properties in that it affects the binding configuration.

The *be*-possessive in Bailyn (2004) is given a *vP*-structure: the verb *byt'* 'be' is projected in V and takes the possessor phrase as a PP complement, whereas the possessum is located in the specifier position of *vP*. SpecIP can be filled either by the possessum moving from Spec*vP* (basic derivation), or by the possessive PP raising from the complement position of V (inversion) – the latter scenario is presented in (12b). The EPP movement of the PP is accompanied by the movement of V to I (via *v*), due to a condition on the checking of the uninterpretable [+T] feature (the Overt Tense Condition, see Bailyn (2004) for details).

- (12) a. U nego byl-a interesn-aja žizn'.  
 at he.GEN be.PST-F.SG interesting-F.NOM.SG life.F-NOM.SG  
 'He had an interesting life.'

- b. [IP [PP *at him*] [I' *v+V* [*vP* life <*v+V*> [*vP* <V> <*at him*>]]]] (Bailyn 2004)

Bailyn employs the Conditions of the Binding Theory and Weak Crossover data to argue that the *u*-PP indeed moves to the subject position, and not to some high A'-position.

A characteristic that Bailyn (2004) shares with Chvany (1975) is that the verb *byt'* 'be' is analyzed as a lexical predicate (presumably, Bailyn would not grant a lexical status to copular *byt'* 'be'). Like Dyakonova (2007), Bailyn posits the possessive *u*-PP below the possessum in the initial configuration.

### 3.4 Analyses: Summary

In section 3 I presented three types of analyses of the argument structure of the Russian *be*-possessive: the dyadic unaccusative (Chvany 1975), small clause (Dyakonova 2007), and regular *vP* (Bailyn 2004). The next section considers how these analyses deal with the various empirical issues concerning the *be*-possessive.

#### 4 The properties of the *be*-possessive

Section 4 goes through the properties of the *be*-possessive that an analysis of argument structure of the construction should be able to account for.

The first class of properties, discussed in section 4.1, concerns the differences between the *be*-possessive and classic examples of small clauses in Russian - constructions with adjectival and nominal predicates. The differences include the distribution of the verb *byt'* 'be' in the present tense and the occurrence of the Genitive of Negation.

The second class of properties has to do with the c-command relations between the possessor and the possessum in the underlying structure: information structure and quantifier scope, presented in section 4.2.

##### 4.1 The *be*-possessive vs. AP/NP small clauses

Constructions with adjectival and nominal (AP/NP) predicates, illustrated in (13), are small clauses par excellence across most analyses.

- (13) a. Len-a      byl-a                      krasiv-aja.  
Lena-NOM be.PST-F.NOM.SG beautiful-F.NOM.SG  
'Lena was beautiful.'
- b. Ivan          byl                                  načal'nik-om.  
Ivan:NOM be.PST:M.NOM.SG manager.M-INST.SG  
'Ivan was a manager.'

AP/NP predicate constructions employ the verb *byt'* 'be', and it might thus be enticing to extend the analysis of these constructions to the *be*-possessive. The *be*-possessive, however, behaves differently from AP/NP predicate constructions, most prominently with regard to the verb *byt'* 'be'. The *be*-possessive employs the existential variant of the verb *byt'* 'be', which differs from copular *byt'* (used in constructions with AP/NP predicates) at least in two related respects: distribution in the present tense and the negated form.

Copular *byt'* must be omitted in the present tense:

- (14) a. *predicate NP*  
Ivan          (\*est') student.  
Ivan:NOM      is      student.M:NOM.SG  
'Ivan is a student.'
- b. *predicate AP*  
Len-a          (\*est') krasiv-aja.  
Lena-NOM      is      beautiful-F.NOM.SG  
'Lena is beautiful.'

The distribution of existential *byt'* in the present tense can be said to be governed by semantic restrictions, such as (in)alienability of possession (Chvany 1975, Paduceva 2008):

- (15) a. *alienable possession*  
 U menja est' sobak-a.  
 at I.GEN is dog.F-NOM.SG  
 'I have a dog.'
- b. *inalienable possession*  
 U nego (\*est') sin-ie glaz-a.  
 at he.GEN is blue-NOM.PL eye.M-NOM.PL  
 'He has blue eyes.'

Another difference, connected to the distribution of the existential and the copula in the present tense is the negated form (Chvany 1975). The negation-existential complex is spelled out as *net*, presumably a conflation of the forms *ne* and *est'* (16a). In copular sentences only the negation marker is spelled out, since the copula is obligatorily omitted in the present tense, (16b).

- (16) a. U menja net sobak-i.  
 at I.GEN is.not dog.F-GEN.SG  
 'I don't have a dog.'
- b. On ne geroj.  
 he.NOM not hero.M-NOM.SG  
 'He is not a hero.'

The dyadic unaccusative analysis of Chvany (1975) and the regular *vP* analysis of Bailyn (2004) are compatible with the differences between existential *byt'* and copular *byt'*, as both analyses view existential *byt'* as a lexical predicate, distinct from copular *byt'*. The small clause analysis of Dyakonova (2007) of the *be*-possessive would have to do some extra footwork to account for the differences in (14-16). For Dyakonova (2007) one obvious difference between the *be*-possessive and AP/NP predicate constructions is that the latter do not host a  $V_{APPL}$  projection – remember that in Dyakonova (2007)  $V_{APPL}$  introduces Possessors, Benefactors, Malefactors and Experiencers. In the *be*-possessive the Pred+  $V_{APPL}$  complex is spelled out as *est'* in the present tense, whereas in an AP/NP construction the bare small clause head fails to be spelled out. However, a solution relying on  $V_{APPL}$  would be problematic in the context of existential sentences, where *est'* is also spelled out, as there is no motivation to posit  $V_{APPL}P$  in existential constructions presented in (17):

- (17) a. Bog est'.  
 God:NOM.SG is  
 'God exists; There is God.'
- b. V Boston-e est' metro.  
 in Boston-LOC is metro  
 'Boston has metro.'

Thus, the distribution of the existential and the copula in the present tense seems to be

unaccounted for within the small clause analysis.

The next property that distinguishes the *be*-possessive from AP/NP predicate constructions concerns the occurrence of the Genitive of Negation. The general description of the Genitive of Negation is that it replaces or alternates with structural cases on indefinite Theme arguments (direct objects, subjects of unaccusatives, subjects of passives) under sentential negation. Examples (18-20) are from Pesetsky (1982).

(18) *direct object*

a. Ja ne poluč-il pis'm-o.  
I.NOM not get-PST:M.SG letter.N-ACC.SG  
'I didn't get the letter.'

b. Ja ne poluč-il pis'm-a.  
I.NOM not get-PST:M.SG letter.N-GEN.SG  
'I didn't get a letter.'

(19) *subject of unaccusative*

a. Grib-y zdes' ne rast-ut.  
mushroom.M-NOM.PL here not grow:PRS-PL  
'Mushrooms don't grow here.'

b. Grib-ov zdes' ne rast'-ot.  
mushroom.M-GEN.PL here not grow:PRS-3SG  
'Mushrooms don't grow here.'

(20) *subject of passive*

a. Ni odn-a gazet-a ne byl-a poluč-en-a.  
ni one-F.NOM.SG newspaper.F-NOM.SG not be.PST-F.SG received-F.SG  
'Not one newspaper was received.'

b. Ni odn-ov gazet-y ne byl-o poluč-en-o.  
ni one-F.GEN.SG newspaper.F-GEN.SG not be.PST-N.SG received-N.SG  
'No newspapers were received.'

The Genitive of Negation in examples (18-20) correlates with absence of presupposition: if the original (Nominative or Accusative) case is retained, the referent is presupposed. In negated existential sentences below, including the *be*-possessive in (23), the Genitive case obligatorily replaces the Nominative.

(21) *existential*

Bog-a net.  
God:GEN.SG is.not  
'There is no God.'

- (22) *locative existential*  
 V Boston-e net tramva-ev.  
 in Boston-LOC is.not tram.M-GEN.PL  
 'Boston doesn't have trams.'
- (23) *be-possessive*  
 U menja net sobak-i.  
 at I.GEN is.not dog.F-GEN.SG  
 'I don't have a dog.'

Chvany (1975) uses the Genitive of Negation data to argue that the possessum in the *be*-possessive originates as the Theme argument of the lexical predicate *byt'* 'be' (in fact, all the constructions in (21-23) would be treated by Chvany (1975) as unaccusatives).

It is not clear how the small clause analysis of Dyakonova (2007) would deal with the data in (21-23) as opposed to (24), which represents negated AP/NP small clauses:

- (24) a. Lingvistik-a/-\*i ne nauk-a.  
 Linguistic.F-NOM/-GEN not science.F-NOM.SG  
 'Linguistics is not a science.' Chvany (1975)
- b. Len-a/\*-y ne krasiv-aja.  
 Lena-NOM/-GEN not beautiful-F.NOM.SG  
 'Lena is not beautiful.'

All the constructions in (21-23), as well as the constructions in (24) would be considered small clauses by Dyakonova (2007), differing perhaps only in whether there is an extra lexical layer dominating SC (like  $V_{APPL}P$  in the *be*-possessive). In the discussion of the ditransitive construction, Dyakonova decides to treat the Genitive of Negation as an alternation that is “constrained purely semantically (i.e. only Theme)”, which probably means that the subjects of small clauses in (21-23) would have to be stipulated to be Themes, in contrast to the subjects of the small clauses in (24).

The regular  $vP$  analysis of Bailyn (2004) can potentially deal with the data in (21-23), if it is assumed that the distribution of the Genitive of Negation is constrained semantically and that Themes can originate in  $SpecvP$  (where Bailyn posits the possessum).

#### 4.2 *C-command in the be-possessive*

This subsection deals with the issue of the c-command relation between the possessor and the possessum in the argument structure of the *be*-possessive – whether the possessor c-commands the possessum, as in (25a), or the possessum c-commands the possessor, as in (25b).

- (25) a. [*Possessor* [*Possessum*]]  
 b. [*Possessum* [*Possessor*]]

The c-command tests to be employed here concern information structure and quantifier scope. Dyakonova (2007) uses information structure as a diagnostic to identify underlying scope relations between the Goal and the Theme arguments in the ditransitive construction. Dyakonova points out that there is a correlation between “focus and stress, on the one hand, and depth of embedding and stress, on the other” and refers to Cinque's (1993) Nuclear Stress Rule which states that the main sentential stress should fall on the most deeply embedded constituent. Dyakonova then goes on to analyze the stress patterns in the ditransitive construction:

- (26) a. *Nasty-a kup-il-a Serge-ju mašin-u.*  
 Nasty-NOM buy-PST-F.SG Sergey-DAT car.F-ACC.SG  
 'Nasty bought Sergey a car.'
- b. *Nasty-a kup-il-a mašin-u Serge-ju.*  
 Nasty-NOM buy-PST-F.SG car.F-ACC.SG Sergey-DAT  
 'Nasty bought a/the car for Sergey.' (Dyakonova 2007)

The sentence in (26a), according to Dyakonova, can have either a narrow focus on the Theme argument *mašinu* 'car', or a wide sentential focus, whereas the sentence in (26b) can only have a narrow focus on the Goal *Sergeju*. In accordance with the Nuclear Stress Rule, Dyakonova concludes that in the basic order of the arguments in the Russian ditransitive construction Goal precedes Theme.

We can apply the information structure diagnostic to the *be*-possessive as well:

- (27) a. *U Ivan-a est' mašin-a.*  
 at Ivan-GEN is car.F-NOM.SG  
 'Ivan has a car.'
- b. *Mašin-a est' u Ivan-a.*  
 car.F-NOM.SG is at Ivan-GEN  
 'Ivan has a car.'

Only the sentence in (27a) is compatible with the wide sentential focus, which suggests the basic ordering where the possessor c-commands the possessum, with the assumption that the basic order relevant for information structure is established before any focus-related scrambling operations.

A current interpretation of Chvany's dyadic unaccusative structure in (10c) provides the expected ordering of the arguments.

Bailyn (2004) assumes the reverse basic ordering of the arguments: the possessum in SpecvP c-commands the possessor, and the data in (27) could be problematic for Bailyn's analysis. However, the assumption that Bailyn makes about the nature of inversion may provide a way out: movement of the possessor phrase to SpecIP, though not part of the basic derivation, is not focus-related – it is assumed to satisfy the EPP in the same way the possessum would in a basic derivation. Thus, the information structure data do not directly confute Bailyn's analysis.

In the small clause analysis the possessor starts out lower than the possessum, but the movement of the possessor to SpecV<sub>APPL</sub>P is not driven by focus considerations (it is theta-

checking), such that the cut-off point relevant for the information structure in Dyakonova's analysis is  $V_{\text{APPLP}}$ , which provides the necessary ordering of the arguments – the possessor preceding the possessum.

Additional formal motivation for a particular ordering of the arguments in the structure of the *be*-possessive can be drawn from the quantifier scope data. Kitahara (1996) proposes a chain-based theory of scope interpretation as an alternative to the obligatory LF-rule of quantifier raising: the available quantifier scopes are determined in the process of the derivation up to PF, where the scopes are read off the surface positions and traces.<sup>7</sup> Availability of the inverse scope – a reading where a quantifier scopes over the overtly c-commanding quantifier – presumably points to the inverse c-command configuration at some earlier point of the derivation. An observation of quantifier scope relations in the *be*-possessive can thus yield an insight into the c-command relations between the possessor and the possessum in the underlying structure.

Below I present part of a pilot experiment which was run on 10 native speakers of Russian. The test part consisted of eight sentences – a combination of two word orders (possessor or possessum in the sentence-initial position), modification by either a universal or an existential quantifier, and the form of the existential quantifier (either *kakoj-nibud'* or *kakoj-to*).<sup>8</sup> The part of the experiment presented in this paper concerns the inverse scope of the universal quantifier in sentences with the overt 'some > every' order. The sentences in (27) and (28) can have either a distributive or a collective reading. In the distributive 'every > some' reading the universal quantifier scopes over the existential: for every  $x$  there is a different  $y$ . In the collective 'some > every' reading the existential is said to scope over the universal with the reading that there is one particular  $x$  that is true of every  $y$ . I presented the informants with four different contexts each of which favored a particular quantifier scope and let the informants score the sentences on a scale from one to 10, one marking the sentence which would sound least natural in the given context, 10 the most natural. The common context is set at a (Russian) university library where students are each given out a set of textbooks for the next semester. The mean values of the scores assigned to the sentences in the relevant contexts are given under the examples in (28) and (29):

- (28) a. Kak-*oj-nibud'* učebnik est' u každy-*ogo*  
 some-M.NOM.SG-NIBUD' textbook.M:NOM.SG is at every-M.GEN.SG  
 student-a.  
 student.M-GEN.SG  
 'Every student has some textbook.'  
 'some > every' – 4.88 'every > some' – 6
- b. U kak-*ogo-nibud'* student-a est' každy-*yj*  
 at some-M.GEN.SG-NIBUD' student.M-GEN.SG is every-M.NOM.SG  
 učebnik.  
 textbook.M:NOM.SG  
 'Some student has every textbook (from this list).'  
 'some > every' – 4.75 'every > some' – 3.88

7 See also Ionin (2001) for arguments against the existence of covert quantifier raising in Russian.

8 The 'some' quantifier in Russian can be expressed either by *kakoj-nibud'* or *kakoj-to* which favor the distributive or the collective reading, respectively. I do not consider *kakoj-libo* here for the sake of simplicity.

- (29) a. Kak-oj-to učebnik est' u každ-ogo  
 some-M.NOM.SG-TO textbook.M:NOM.SG is at every-M.GEN.SG  
 student-a.  
 student.M-GEN.SG  
 'Every student has some textbook.'  
 'some > every' – 7.1 'every > some' – 3.25
- d. U kak-ogo-to student-a est' každ-yj  
 at some-M.GEN.SG-TO student.M-GEN.SG is every-M.NOM.SG  
 učebnik.  
 textbook.M:NOM.SG  
 'Some student has every textbook (from this list).'  
 'some > every' – 8.88 'every > some' – 2.63

Under the assumption that inverse quantifier scope is read off the traces of quantifiers, we can test which ordering of the possessor and the possessum correctly predicts the preferred quantifier scope: the ordering in (25a) where the possessor c-commands the possessum in the argument structure, or the ordering in (25b) where the c-command relations are reversed.

The score for the distributive reading for sentence (28a), where the universal quantifier *každyj* 'every' modifies the possessor, is 6. The distributive score for sentence (28b), where the possessum is modified by the universal, is 3.88. In (29) the existential is presented by *kakoj-to*, which favors the collective reading and the distributive scores are thus lower, but the direction of the scores is the same: 3.25 for the universally quantified possessor in (29a) and 2.63 for the possessum in (29b). In both (28) and (29) the universally quantified possessor scores higher in the inverse distributive reading than the universally quantified possessum.

For structure (25a) the distribution of the inverse distributive reading scores is expected. The possessor c-commands the possessum at some point in the derivation, and the distributive reading is read off the configuration where the universally quantified possessor scopes over the trace of the existentially quantified possessum. The universally quantified possessum that is c-commanded by the existentially quantified possessor at PF is not expected to induce a strong distributive score if one adheres to the structure in (25a), as there is no point in the derivation where the possessum c-commands the possessor, such that the relevant scope configuration is not established.

The structure in (25b), on the other hand, wrongly predicts a reverse distribution of the scores: the universally quantified possessum is expected to score higher than the universally quantified possessor on the inverse distributive reading.

The argument structure analyses compatible with (25a) include the dyadic unaccusative analysis, and possibly the Small Clause analysis of Dyakonova (2007); the quantifier scope data are problematic for Bailyn (2004) where the argument structure of the *be*-possessive has the configuration in (25b).

In this subsection I discussed two properties reflecting the c-command relations between the possessor and the possessum in the argument structure: information structure and quantifier scope. All three analyses – Chvany (1975), Dyakonova (2007) and Bailyn (2004) – can deal with the information structure pattern of the *be*-possessive, but only Chvany (1975) can unambiguously account for the quantifier scope effects.



### 4.3 Data: Summary

In section 4 we have looked at the properties of the *be*-possessive that an analysis of the argument structure of this construction should be able to account for. Needless to say, more remains to be said about each of the properties mentioned: the debate on whether the existential and the copula constitute one or two different predicates involves valuable points from both sides, the Genitive of Negation constitutes an extensive area of research, the information structure argument requires a more principled formulation, and the quantifier scope argument must be developed in greater detail. At the moment, the dyadic unaccusative analysis of Chvany (1975) seems to fare best in dealing with the properties of the *be*-possessive. Table 2 presents the summary of section 4; a question mark in the table denotes that there might be problems for the analysis in dealing with the property:

Table 2: *Properties of the be-possessive*

	existential vs. copula	Genitive of Negation	Information structure	Quantifier scope
Small Clause	*	?	✓	?
regular <i>vP</i>	✓	?	✓	*
dyadic unaccusative	✓	✓	✓	✓

## 5 Conclusion

The paper deals with two aspects of the Russian *be*-possessive construction: subjecthood and argument structure. The Russian *be*-possessive is of general theoretical interest in that it is a construction with an oblique subject (possessor) where a Nominative non-subject (possessum) imposes agreement on the verb. A proper account of the underlying structure of the *be*-possessive is an important step towards the understanding of the mechanism of argument-predicate agreement in this construction, which can have consequences for our views on (argument-predicate) agreement in general. I have considered a number of existing analyses of the argument structure of the *be*-possessive and have argued that the analysis of Chvany (1975) fares best with regard to a range of the properties of the construction. I suggest that the possibility of analyzing the *be*-possessive as a dyadic unaccusative should be granted more thought in the generative practice.

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