

The Genitive of Negation in Russian: Multiple Perspectives on a Multi-Faceted Problem¹

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1. Introduction and Background

The Russian Genitive of Negation construction (Gen Neg) involves alternation between Genitive and two structural cases, Nominative and Accusative. The construction and the factors governing the alternation have been intensively studied going back at least to Thomson (1911). Many insights have been gained, and the construction has figured in theoretical discussions and in studies of language acquisition, language loss, typology, and historical change.

All this research has led to an understanding of many factors governing the morphology, syntax and semantics of Gen Neg in Russian and other Slavic languages. But there remain many ongoing debates, and a sense that our understanding of the construction is still incomplete.

In this talk, we reflect on why the problem is so difficult. As our title suggests, we believe that part of the reason is the difficulty of putting together a coherent picture of the interaction of the many factors that interact in determining the distribution and interpretation of Gen Neg sentences. It is well known that there are syntactic, semantic, and morphological factors that play a role, and probably pragmatic and stylistic factors as well, and that there are some frozen or semi-frozen collocations that may not fit the current productive rules. We will focus on our main area of interest, the integration of lexical and compositional semantics, within the context of their interaction with a variety of other factors.

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1.1. The Genitive of Negation construction

The Russian Gen Neg construction involves substituting Genitive case for Accusative or Nominative, usually optionally, with many verbs when the whole sentence is negated (Borschev and Partee 2002a, Partee and Borschev 2002, 2004b). Most researchers have held that a Gen-marked NP under negation, as in (1b) and (2b) below, may have narrow scope with respect to negation, while a Nom- or Acc-marked NP must be interpreted outside the scope of negation.

- (1) a. *Otvet iz polka ne prišel.*
Answer-NOM.M.SG from regiment NEG arrived-M.SG
'The answer from the regiment has not arrived.'
- b. *Otvetu iz polka ne prišlo.*
Answer-GEN.M.SG from regiment NEG arrived-N.SG
'There was no answer from the regiment.'
- (2) a. *On ne polučil pis'mo.*
he NEG received letter-ACC.N.SG
'He didn't receive the (or 'a specific') letter.'
- b. *On ne polučil pis'ma.*
he NEG received letter-GEN.N.SG
'He didn't receive any letter.'

A Nom- or Acc-marked NP is more likely to be interpreted as definite or specific, while a Gen Neg NP often has 'decreased referentiality' and tends to be '(existentially) quantificational' (Babby 1980, Bailyn 2004, Jakobson 1971/1936, Neidle 1988, Pesetsky 1982, Timberlake 1975) if the NP permits it; but even pronouns and proper names sometimes alternate.

- (3) a. *Maša ne vidna.*
Masha-NOM.F.SG NEG seen-F.SG
'Masha isn't visible.' [suggesting that she is present but hidden]
- b. *Maši ne vidno.*
Masha-GEN.F.SG NEG seen-N.SG
'Masha isn't to be seen.' [suggesting that she is not present]

Many factors contribute to the choice of Gen, including decreased 'individuation' of NP, decreased transitivity of verb (Mustajoki and Heino 1991, Timberlake 1975, Ueda 1993). An important fact is that with Subject Gen Neg, as with many quantificational 'subjects' the sentence becomes "impersonal" and the verb is invariantly Neuter singular, as in (1b), (3b).

1.2. More than 100 years of research and still ...

Many, starting with Jakobson (1971/1936), have aimed to relate Gen Neg to other uses of the genitive. The goal is controversial; there is a contrast between the Moscow school tradition of trying to describe each separate use of the genitive, with skepticism about any common denominator, and the Western desire to explain why the genitive is used in all these places.

We focus here on two aspects of the Gen Neg problem. One is the family of issues surrounding the idea that a Gen Neg NP is syntactically 'demoted' or 'lower' than a corresponding Nom- or Acc-marked NP, and that it is correspondingly 'less referential' or 'less individuated'. Such a claim is found in several frameworks, but some kinds of NPs present major stumbling blocks, including proper nouns and pronouns. The other is the relation of Gen Neg to 'quantificational' and 'partitive' Genitives and to Genitives in intensional contexts: can any formal capture the similarities without predicting even more similarity than is actually found? Both problem areas illustrate the difficulty posed by "interacting factors"; we will try to illuminate them but we will not solve them.

2. Theme-Rheme analysis vs. Perspectival Structure

2.1. Babby's (1980) Theme-Rheme-based analysis

Babby (1980):

- Subject Gen Neg sentences are almost always existential.
- Gen vs. Nom marking indicates that the NP is inside vs. outside the scope of negation.
- This in turn follows from whether the NP is part of the Rheme or is the Theme. Compare (1a-b) above with affirmative (4a-4b).

- (4) a. *Otvét iz polka prišel.*
Answer-NOM.M.SG from regiment arrived-M.SG
'The answer from the regiment has arrived.'
- b. *Prišel otvet iz polka.*
Arrived-M.SG answer-NOM.M.SG from regiment
'There was an answer from the regiment.'

As (4a-4b) show, Russian affirmative existential sentences appear to differ from predicative sentences only in word order, which Babby (1980) took to indicate a difference primarily in Theme-Rheme structure.

Babby also argued that intransitive (existential) Gen Neg sentences arethetic sentences, whereas their Nominative counterparts, with NP subject as Theme, are categorical.

Babby's analysis of object Gen Neg also assumed a Theme-Rheme distinction: Thematic Acc-NPs remain outside the scope of negation, and Rhematic Gen-NPs fall within it.

2.2 Against Theme-Rheme structure and for Perspectival Structure

We have argued against ascribing the Gen-Nom and Gen-Acc distinctions to the postulated difference in Theme-Rheme structure.

- Our main argument: the existence of Gen Neg examples in which the NP in the genitive can be argued to be the Theme, or part of the Theme, rather than the Rheme.

- (5) *Sobaki u menja net.* (Arutjunova 1976)
dog-GEN.F.SG at I-GEN not.is
'I don't have a dog.' [Context: talking about dogs, perhaps about whether I have one.]
- (6) [*Ja iskal kefir.*] *Kefira v magazine ne bylo.*
[I looked-for kefir-ACC.M.SG Kefir-GEN.M.SG in store NEG was-N.SG
'[I was looking for kefir.] There wasn't any kefir in the store.' (Borschev & Partee 2002a)

- A second, indirect, argument concerns Babby's theses that the main determinant of Gen Neg is scope of negation, and that Theme is outside the scope of negation, Rheme inside. But there are examples of Nom/Gen alternation in NPs with the NPI *ni odin* 'not a single', which occurs only under clausemate negation.
- Context for (7) and (8): *My nadejalis', čto na seminare budut studenty.* 'We hoped that (some of the) students would be at the seminar'.

- (7) *No ni odin student tam ne byl.*
But NI one-NOM.M.SG student-NOM.M.SG there NEG was-M.SG
'But not a single one of the students was there.'
- (8) *No ni odnogo studenta tam ne bylo.*
But NI one-GEN.M.SG student-GEN.M.SG there NEG was-N.SG
'But there was not a single student [or: not a single one of the students] there.'

- Difference in interpretation: (7) presupposes a specific group of students to be quantified over, whereas (8) does not. Both are clearly under the scope of negation.
- So either Theme/Rheme does not determine Nom/Gen, or it does not correlate with outside/inside scope of negation.
- Our alternative analysis (Borschev and Partee 2002a, 2002b) invokes what we call *Perspectival Structure*, building in part on insights concerning an implicit Observer role in the work of Apresjan (1980, 1986) and especially Padučeva (1992, 1994, 1997).
- Common starting point: V(THING, LOC); two different diatheses, often with a difference in referential status of “THING” argument. Cf (1a-b), (3a-b), (7-8), but also (9-10) below.
- In a predicative sentence (1a, 3a, 7, 9), THING is the Perspectival Center.
- In an existential sentence (1b, 3b, 8, 10), LOC is the Perspectival Center.
- We give the analogy of “what the camera is tracking”: the protagonist when THING is Perspectival Center, the ‘scene’ when LOC is perspectival center.

Note:

- Existence in an “existential sentence” is relative to Perspectival Center LOCation
- Hence Russian existential sentences can have proper names or pronouns as ‘subj’

(9) [Ja iskal Petju.] On ne byl na lekcii.
 [I looked.for Petja.] He-NOM.M.SG NEG was-M.SG at lecture
 [I looked for Petja.] He wasn’t at the lecture.

(10) [Ja iskal Petju.] Ego ne bylo na lekcii.
 [I looked.for Petja.] He-GEN.M.SG NEG was-N.SG at lecture
 [I looked for Petja.] He wasn’t at the lecture.

- In (9) and (10), the sentence-initial Theme is the same (*on/ego* ‘he-nom/he-gen’).
- In (9), the THING Petja is chosen as the Perspectival Center: we consider Petja, and where he was, and we give the partial information that he was not at the lecture.
- In (10) the LOCation is the Perspectival Center; this suggests that either in or before my search for Petja, I went to the lecture expecting to find him, but Petja was not among those at the lecture.

BUT:

Our analysis is still close to Babby’s, and Perspectival Structure has much in common with information structure. Perspectival Structure does not correspond exactly to any established linguistic distinction, as far as we know, so we do not consider the debate to be settled.

Possible lines of defense for a position closer to Babby’s:

- **kefira in (6) is Rhematic but Given:** Babby’s account of (1b), (5), (6): since Gen Neg marks NP as Rhematic, word order can be used to mark something else, in this case Given vs. New; so the Gen Neg NPs we have called Theme, he would call Rhematic but Given.
- Similarly, Erteschik-Shir (1997 and p.c.) would propose that in any existential sentence the real Topic is an implicit “Stage-topic” (including a possible overt LOC), and within the Focus there may be subordinate information structure, with *kefira* in (6) a “subordinate Topic”.
- **Presuppositionality:**
 - Babby’s analysis provided a source for the greater presuppositionality of NPs marked Nom or Acc, since Themes are generally taken to be more presuppositional than Rhemes (Hajičová 1973, and many other authors).

- We make a similar claim for Perspectival Center with a similar basis: in order to structure a sentence from the perspective of some participant of a situation, that participant must be presupposed to exist.
- We believe that it is easier to extend our analysis to the kind of presupposition found in examples (7-8), where it is the domain of quantification that must be presupposed to exist and be familiar, than to accept such a negatively quantified expression as *ni odin student* ‘not a single student’ as a Topic or Theme.

2.3. Genitive Themes.

A construction brought to our attention by Maria Polinsky and discussed in Franks (1995) under the name of “Genitive Initial Sentences” further reinforces the possibility that Gen NPs may be themes, and at the same time raises questions about the relation between Gen Neg and quantificational genitives. We had independently noticed the existence of examples similar to our *kefira* example with and without negation and with and without agreement conflicts between the initial (presumably topical) Genitive and its putative source position in the sentence. Our examples below use the genitive plural *deneg* ‘money’ and the mass genitive singular *vodka* ‘vodka’.

- (11) a. *Deneg u nego bylo mnogo/ malo.* (Also OK: *U nego mnogo/ malo deneg.*)
 money-GEN.PL at him-GEN was-N.SG much / little
 ‘He had a lot of/ little money.’ or ‘Of money, he had a lot/little.’
- b. *Deneg u nego sovsem ne bylo².*
 money-GEN.PL at him-GEN altogether NEG was-N.SG
 ‘He didn’t have any money at all.’ or ‘Of money, he didn’t have any at all.’
- c. *Deneg u nego do čërta.* (Also OK: *U nego do čërta deneg.*)
 money-GEN.PL at him-GEN to devil
 ‘He has a hell of a lot of money.’ or ‘Of money, he has a hell of a lot.’
- d. *Vodka bylo zalejsja.* (??*Bylo zalejsja vodka.*)
 vodka-GEN.F.SG was-N.SG pour-your-fill-IMP.SG
 ‘Of vodka there was ‘pour-your-fill’.’
- e. *Vodka bylo kot naplakal.* (**Bylo kot naplakal vodka.*)
 vodka-GEN.F.SG was-N.SG cat wept
 ‘Of vodka there was [so little that] the cat wept.’

Examples (11a-e) all seem to involve predications of amounts – how much money he had, how much vodka there was. The amount ‘predicates’ include both common quantifiers *mnogo*, *malo* ‘much, little’, which routinely take Gen-marked noun complements, and idiomatic quantity expressions (a PP in (11c), an imperative verb in (11d), and a clause in (11e)) which vary in the degree to which they can be used as derived quantifiers from easily to not at all.

In Franks’ (1995) work on this topic, where he cites earlier work of his own and others (Crockett 1976, 318-335, Franks and House 1982, House 1982, Pesetsky 1982, 233-236), he refers to the construction as the “Genitive Initial Sentence (GIS)”. He includes under this rubric both examples like (12), which have no “disagreement” properties, and examples like (13), which provide evidence against a movement analysis.

- (12) a. *Mal’čikov ostalos’/* ostalis’ sem’.* (Both verb forms possible in ‘plain’ word order.)
 boys-GEN.M.PL remained(-N.SG/-PL) seven
 ‘The number of boys that remained was seven.’ (Franks 1995, p.186, ex. 145a)

² We are no longer sure that (11b) belongs in this group, and even less sure if *sovsem* ‘altogether, at all’ is removed. See discussion in (Partee and Borschev 2006).

- b. *Interesnyx knig ja pročital pjat*.
 interesting-GEN.F.PL books-GEN.F.PL I read five
 ‘The number of interesting books I read was five.’ (Franks 1995, p.186, ex. 145b)
- (13) a. *Knig ja pročital tol’ko odnu.* (**odnu knig*; OK: *odnu knigu*(AccSg))
 books-GEN.F.PL I read only one-ACC.F.SG
 ‘The number of books I read was only one.’ (Franks 1995, p.187, ex. 146a)
- b. *Publiki na ploščadi bylo jabloku negde upast*.
 public-GEN.F.SG on square was-N.SG apple-DAT.F.SG nowhere to-fall
 ‘The public in the square was wall-to-wall’ (Franks 1995, p.187, ex. 148a)

Like *kot naplakal* ‘the cat wept’ in (11e), the idiomatic phrase *jabloku negde upast* ‘there was nowhere for an apple to fall’ in (13b) does not accept a genitive complement at all.

What relation, if any, is there between Gen Neg and the GIS construction? Example (14) below is of particular interest, since it apparently exemplifies *both* the Gen Neg construction (because of *ni odnogo*) and the “Genitive Initial Sentence” construction (introduced just below), which provides the ‘non-agreeing’ initial genitive *studentov*.

- (14) *No studentov tam ne bylo ni odnogo.* (**ni odnogo studentov*)
 But student-GEN.M.PL there NEG was-N.SG NI one-GEN.M.SG
 ‘But there was not a single one of (the) students there.’

But what about our *kefira* example (6), and what about (11b)? Those are less clear: they seem to lack a final focused quantifier. To count them as GIS sentences would require allowing the focused negation to be equivalent to focusing a ‘none at all’ kind of quantifier. This is an open issue we plan to work on in the future.

We believe that our *kefira* sentences and these Genitive Initial Sentences are two different instances of thematic genitives (which can co-occur), and that they help contribute to the broader understanding of (a) when a “weak NP” can be thematic and (b) the ways in which Genitive is used in Russian to mark “non-canonical” subjects and objects, expressing the “weakening” and/or “demotion” of a subject or object NP.

2.4. Summary: Perspective and its role in Existential Sentences.

- Perspectival structure is basically a structuring at the model-theoretic level, like the telic/atelic distinction, or the distinction between Agents and Experiencers. These properties reflect cognitive structuring of the domains that we use language to talk about, and are not simply “given” by the nature of the external world.
- A V(THING, LOC) situation may be described with the THING as Perspectival Center, or with the LOCation as Perspectival Center. Analogy: “what the camera is tracking.”
- When the THING is chosen as Perspectival Center, its existence is presupposed, and the sentence speaks of its LOCation. When we choose the LOCation as Perspectival Center, the sentence speaks about what THINGs there are or are not in that situation.
- The choice of Perspectival Center, as so described, has much in common with the choice of Theme on the one hand, and with the choice of Subject on the other: all three notions involve structuring something so that one part is picked out and the rest is in effect predicated of it.
- A similar cognitive structuring of the domain is Figure-Ground structure (Talmy 1985), reflected, for instance in the choice between saying “A is above B” or “B is below A”. This choice is prior to the choice of Perspectival Structure: in both V(THING, LOC) constructions, the “THING” expression has been selected as “Figure”. When the Figure is also Perspectival Center, the result is a predicative sentence; Ground is Perspectival Center in an existential sentence.

3. Perspectival Structure and Diathesis Shifts.

3.1. The camera metaphor and diathesis shifts.

We noted above that Perspectival Structure is metaphorically similar to making a choice of what to track with a video camera: to follow some THING, or to stay fixed on a LOCation. So where in the grammar might such a notion belong?

It is not the same as information structure, although it has some similarity with it, and a chosen Perspectival Center may by default also be the Topic: but not always, as we showed with our *kefir* example (6). And it is not directly syntax, although it may well be reflected in the syntax. We suggest that it is at least in part encoded in diathesis alternations.

- Other recent work on the semantics of diathetic alternations shares our goal of integrating lexical and compositional semantics by exploring which ‘axioms’ are contributed by lexical semantics and which by the semantics of the constructions (Ackerman and Moore 2001, Bresnan 1994, Dowty 2001, Kiparsky 1997, Krifka 2000).. The relevant concept of diathesis originated in the Moscow School, and research on the semantics associated with diathetic alternations has a long history in Russian semantics, figuring prominently in Russian lexical semantics (Padučeva 2002). We believe that research in this area can be greatly advanced if work in these two traditions can be brought together.
- What is the semantic difference between *load the truck with hay* and *load the hay on the truck*? No systematic truth-conditional difference, but oft-noted differences in which argument is understood to be ‘completely’ affected, namely the one chosen as direct object, which is also the one more likely to be a definite NP. Is there a difference in the meaning of *load* when the argument structure shifts in this way? We see these questions as similar to our questions about the status of the THING and LOC arguments in the two sentence types.

In English, it is common to find diathetic alternations in which only the syntax visibly changes; in Russian it is rare to find such alternations without a change in the prefix on the verb or a change in aspect or both.

- In some theories, diathetic changes are all encoded as changes in the verb and its semantics. In other theories, the verb meaning may stay fixed, and there is a change in the semantic contribution of the construction. Russian linguistics is traditionally verb-centered, Western linguistics typically syntax-centered.
- Ackerman and Moore (2001) believe that both kinds of diathetic alternations are possible, and believe that Western theories may be helped by taking a more verb-centered perspective.

A more verb-centered approach may be helpful in the case of Gen Neg, since not only do we often find semantic differences in the senses of the verbs when used with Gen vs. Nom, or (less commonly but sometimes) with Gen vs. Acc, but we also find that Genitive “Subjects” do not score as highly on tests of subject properties as Nominative Subjects, tests which include both the kinds of semantic properties identified by (Hopper and Thompson 1981) and (Dowty 1991) and syntactic tests proposed by (Keenan 1976). Keenan’s and similar tests have been discussed with respect to Russian by Babby (Babby 1980) and by Testelets (Testelets 2001).

But the fact that this alternation occurs only in negative sentences makes it different from many familiar diathetic shifts.

3.2. Why only under negation?

One central puzzle concerning Gen Neg is why the Nom/Gen and Acc/Gen alternations occur only in negative sentences. This problem takes different forms for different approaches,

and accounts for part of the great wealth of literature on the syntax of the construction. For a diathesis-based account, it raises the question of how the verb and the negation are related.

- Babby's 1980 account was explicit but stipulative, treating it as a construction, much as we have made it sound like in our account so far.
- Pesetsky (1982) made progress toward an explanatory connection with negation when he posited that the Gen Neg NPs were all headed by a null NPI quantifier, which itself received the expected Nom or Acc case of its subject or object position, but assigned Gen to its complement, as many Russian quantificational heads do. Such an account offered insight into the semantic property of 'decreased referentiality' often ascribed to Gen Neg NPs, and into why the corresponding NPs in affirmative sentences, lacking such an NPI quantificational head, show Nom or Acc and are interpreted more referentially.
- But Pesetsky's account has problems with the fact that Gen Neg NPs are not always bare indefinites; they may have explicit quantifiers of their own (which then show up with Genitive case, not Nom or Acc), as in (20b) below, and they may be headed by demonstratives, or be proper names, as in (3b) and (19b).
- It would be tempting to posit a 'negated verb' with its own diathesis shift. There are attested examples of languages with separate negated verbs, especially negations of 'be' or 'have', with their own argument structure, and in many Slavic languages, sentential negation is marked with a preverbal clitic or even a prefix. But as Bailyn (2004) describes, a number of accounts have foundered on the fact that the same negation that licenses Gen Neg only on the direct object of transitive verbs or the subject of some intransitive verbs also licenses NPIs (including negative concord *n*-words) in higher positions such as subject of a transitive or unergative verb.
- Bailyn (2004) himself proposes that sentential Neg, in a relatively high position itself, licenses or checks a Q feature on the verb, and that Q-marked verb may select for a genitive internal argument. That account has some features in common with Pesetsky's original idea, and also with the idea of (Jakobson 1971/1936), modernized in Neidle (1982, 1988), that genitive NPs are in some sense more quantificational than referential.

We believe that something along such lines could be semantically interpreted in a compositional way that could do justice to the interplay of compositional and lexical semantics and contextual factors. This is part of the task we are pursuing in our current research. But it is difficult, because the semantics is only part of the story, and semantic effects are not always found consistently. We turn to the semantics of the "Q feature" in the next section.

4. In Search of the Q-factor

4.1. The Jakobsonian ideal

Citing Franks (1995, p.41): "Jakobson's work constitutes the single most important contribution to classic case theory. His articles on case features have inspired more research and debate in the field of Slavic linguistics than any other set of ideas." In Jakobson's (1971/1936) well-known decomposition of Russian cases into bundles of features (see Franks 1995, Neidle 1988), the feature "quantificational" is assigned to Genitive case (as well as to Locative, which we ignore here), indicating the semantic content of "focusing on the extent to which the entity takes part in the message." As Franks points out, there are many obstacles to Jakobson's ideal of finding a true semantic invariant for this or the other "case features" proposed by Jakobson. But the feature "+Q" invoked by Neidle, Pesetsky, and Bailyn in their analyses of Genitive of Negation is designed to capture, in various ways, what seems right about this part of Jakobson's proposal.

4.2. Genitive of intensionality

It was pointed out by Neidle (1988) that Genitive case is also used to mark opaque objects of certain intensional verbs (although not all, and there is variability in whether it is optional or obligatory.)

- (15) a. *On ždet podругu.* (Neidle 1988, p.31)
He waits girlfriend-Acc
'He's waiting for his girlfriend.' (transparent, NP *de re*)
- b. *On ždet otveta na vopros.*
He waits answer-Gen to question
'He's waiting for an answer to the question.' (opaque, NP *de dicto*)

The puzzle is: why is the same construction used to mark both? Negation is not intensional, and neither is obviously quantificational, so why should negation and intensionality pattern together?

4.3. A possible type-shifting approach to a 'demotion diathesis pattern'.

One hypothesis related to the work of Neidle (1982, 1988) has been raised in our recent work (Partee and Borschev 2004a, 2004b) and in Kagan (2005):

The Property-Type Demotion Diathesis Hypothesis: Wherever there is Nom/Gen or Acc/Gen alternation (both under negation and under intensional verbs), Nom or Acc represents an ordinary e-type argument position ('referential'³), whereas a Gen NP is interpreted as property-type: $\langle e, t \rangle$, or $\langle s, \langle e, t \rangle \rangle$.

This hypothesis is particularly appealing for constructions involving direct objects of transitive verbs (and non-agentive subjects of some intransitive verbs), where one is most likely to find special markings analogous to the Russian genitive of negation. ("Object incorporation" in Greenlandic Eskimo, with obligatory narrow-scope interpretation (Bittner 1987, Van Geenhoven 1998), Accusative-Partitive alternation in Finnish (Kiparsky 1998), and related phenomena in Turkish (Enç 1991) and other languages .

The idea that such differences may reflect type differences corresponds to the work of Ede Zimmermann (1993), who argued for an alternative to Montague's treatment of intensional verbs. Montague treated verbs like *ždat'* as taking type $\langle s, \langle \langle e, t \rangle, t \rangle \rangle$ arguments, i.e. intensions of generalized quantifiers. Zimmermann argued in favor of treating definite and indefinite arguments of intensional verbs, (but not generalized quantifiers) as *properties*, type $\langle s, \langle e, t \rangle \rangle$.

In the case of the potentially intensional verb *ždat'* in (15a-b), we see that its intensional genitive-taking variant in (15b) has all the properties of English *seek*. Its extensional accusative-taking variant, (15a), allows referential NPs and quantificational NPs. We predict that genitive should be disallowed with essentially quantificational NPs such as those formed with *každyj* 'each': this prediction turns out to be correct.

- (16) **On ždet každygo otveta na vopros.*
He waits each-GEN.M.SG answer-GEN.M.SG to question
'He's waiting for each answer to the question.'

There has been recent interest in the idea of 'weak NPs' as property-denoting in certain contexts (Farkas and de Swart 2003, Kamp and Bende-Farkas 2001, Landman 2003, Van

³ Quantified NPs may also end up in e-type positions by any of the commonly posited mechanisms of quantification (different mechanisms in different theoretical frameworks).

Geenhoven and McNally 2005), and in the future we can expect to find new kinds of arguments for and against treating particular examples in this way. Whether this idea is appropriate for Gen Neg is not clear. Here we mention some pros and cons, from (Partee and Borshev In press).

4.4. Are Gen Neg NPs property-denoting?

4.4.1. Evidence in favor: parallels to *ždat'*.

The initial evidence in favor of the hypothesis comes from parallels to the behavior of Gen Neg with the intensional verb *ždat'*, 'expect, wait for', as observed by Neidle (1982, 1988). Compare the two possible negations of the affirmative extensional sentence (35a) and their parallels to the corresponding use of Acc and Gen with *ždat'* in (34a-b).

- (17) a. *Petja našel odgovor.*
 Petja found answer-ACC.M.SG
 'Petja found the/an answer.'
- b. *Petja ne našel odgovor.*
 Petja NEG found answer-ACC.M.SG
 'Petja didn't find the answer.'
- c. *Petja ne našel odgovora.*
 Petja NEG found answer-GEN.M.SG
 'Petja didn't find an answer.'

The accusative variant (17b) implies actual-world existence of an answer (and says that Petja didn't find it), while the genitive variant (17c) does not.

4.4.2. More evidence, but equivocal: Possible Parallels between Gen Neg and Subjunctive.

Kagan (2005) offers some evidence in favor of the Property-Type Demotion Diathesis Hypothesis based on claimed parallels between Gen Neg and Subjunctive in complements. Variants of her examples⁴ below are given in (18): According to Kagan, one can use the negated verb *ne počuvstvovat'* 'not to feel' with either a indicative (18a) or subjunctive (18b) complement, the former carrying the presupposition that it was cold and the latter making no such commitment, parallel to the way in which the same negated verb can take an accusative or genitive NP object (36c-d) with accusative presupposing the existence and the genitive strongly suggesting non-existence.

- (18) a. *Ivan ne počuvstvoval, što stalo lučše* [variant of Kagan 2005 example (25)]
 Ivan NEG felt that became better
 'Ivan didn't feel that it had become better [which it had].'
- b. *Ivan ne počuvstvoval, čtoby stalo lučše*
 Ivan NEG felt that-SUBJUNC became better
 'Ivan didn't feel that it had become better.' i.e., as far as he could tell, it hadn't.
- c. *Ivan ne počuvstvoval xolod.* [Kagan 2005 example (26)]
 Ivan NEG felt cold-ACC.M.SG
 'Ivan didn't feel the cold.'
- d. *Ivan ne počuvstvoval xoloda.*
 Ivan NEG felt cold-GEN.M.SG
 'Ivan didn't feel any cold.' i.e., as far as he could feel, it wasn't cold.

⁴ Thanks to Elena Paducheva, Yakov Testeleets, and Igor Yanovich for examples and discussion. Kagan's original examples also used the verb *počuvstvovat'*, but with different complements which struck some as less felicitous than those used here.

Such parallels, if correct, would help to support a property-type analysis. Another verb which works as Kagan has predicted is *zametit* ‘to notice’.

- (19) a. *Ja ne zametil, čto jubiley GAI praznovali voditeli.*
 I NEG noticed that anniversary GAI celebrated drivers-NOM
 ‘I did not notice that drivers were celebrating the anniversary of the road police.’ (factive)
- b. *Ja ne zametil, čtoby jubiley GAI praznovali voditeli.*
 I NEG noticed that-SUBJUNC anniversary GAI celebrated drivers-NOM
 ‘I did not notice that any drivers were celebrating the anniversary of the road police.’ (non-factive) [a headline from svobodanews.org]
- c. *Ja ne zametil vodku na stole.*
 I NEG noticed vodka-ACC on table
 ‘I didn’t notice the vodka on the table.’ (presuppositional)
- d. *Ja ne zametil vodki na stole.*
 I NEG noticed vodka-GEN on table
 ‘I didn’t notice any vodka on the table.’ (non-presuppositional)

But the number of verbs which show such parallels appears to be extremely limited, and almost no two verbs behave exactly the same way; this parallel is not fully productive.

4.4.3. Evidence casting doubt on property analysis.

We have three arguments against the property analysis for Gen Neg NPs; none of them are unshakeable, but they seem to cast doubt on the analysis and remove some of its initial attractiveness. We are continuing to work on this problem.

(i): proper names

The first argument comes from the fact that proper names, demonstratives, and a number of other prototypically referential NPs participate in Nom-Gen and Acc-Gen alternations under negation. Consider the following pair with negated *videt* ‘see’. As discussed by Chvany (1975) for the Nom-Gen alternation in analogous intransitive sentences, the Accusative choice in (19a) tends to suggest that it was a volitional choice: I didn’t get around to seeing Masha (but it can also be neutral with respect to such an implication). The Genitive choice in (19b) often suggests the opposite: I expected to see Masha but she wasn’t there (though it can also be neutral).

- (19) a. *Ja ne videla Mašu.*
 I NEG see Masha-ACC.F.SG
 ‘I didn’t see Masha.’
- b. *Ja ne videla Maši.*
 I NEG see Masha-GEN.F.SG
 ‘I didn’t see Masha.’

Examples like (19b) cause problems for all “quantificational” approaches to the Genitive of Negation, unless one can defend imputing to the NP in this case a meaning like “any trace of Masha”⁵.

(ii): quantifiers

Further difficulties for the Property-Type Demotion Diathesis Hypothesis come from some of the same kinds of quantificational examples that cause problems for Pesetsky’s analysis,

⁵ Such a suggestion may not be entirely implausible. Compare the English expression, “I looked all around, but no Masha.” The ability of a quantifier like *no* to co-occur with a proper noun is as much in need of explanation as the ability of Russian proper nouns to occur with Gen Neg.

examples of the sort illustrated in (20), discussed in Padučeva (1974), Klenin (1978), Neidle (1988), Harves (2002), and Borschev et al (2006).

- (20) a. *Vanja ne rešil vse zadači.*
Vanja NEG solved all-ACC problems-ACC.F.PL
Vanja didn't-solve all-the-problems, i.e. solved none.
- b. *Vanja ne rešil vsex zadač.*
Vanja NEG solved all-GEN.PL problems-GEN.F.PL
Vanja didn't solve all the problems (less than all).

Examples (20a-b) may differ in scope, as in traditional analyses, or perhaps even by having a 'referential (collective) reading' in (a), but they do not differ in intensionality. We know of no plausible property-interpretation for (20b).

(iii): Subjunctive relative clauses

As in Romance languages, objects of *ždat* 'may be modified by subjunctive relative clauses when the object is interpreted intensionally, by indicative relative clauses when it is interpreted extensionally. This correlates with Gen/Acc marking on the object. But Gen Neg, on the other hand, never licenses subjunctive relative clauses; relative clauses modifying both Gen-marked and Acc-marked objects are indicative (unless subjunctive is licensed independently.)

4.5. Speculative conclusions

A full exploration of the connections among non-veridicality and quantification to the occurrence of Genitive awaits further work. There may be more than one way that the 'reduced referentiality' of Gen Neg NPs comes about, licensed by different classes of verbs and by negated verbs. (Cf. multiple kinds of 'Imperfective' meanings.) The property-type idea may be correct for a number of cases, but other 'quantity'-based ideas may be better for other cases.

5. Problems and Prospects

References

- Ackerman, Farrell, and Moore, John C. 2001. *Proto-properties and grammatical encoding: a correspondence theory of argument selection*. Stanford monographs in linguistics. Stanford, Calif: CSLI Publications.
- Apresjan, Jurij D. 1980. *Tipy informacii dlja poverxnostno-semantičeskogo komponenta modeli "Smysl ⇔ Tekst" [Types of Information for the Surface-Semantic Component of the Model "Meaning ⇔ Text"]*. Vienna/Moscow: Wiener Slavistische Almanach/Škola "Jazyki Russkoj Kultury".
- Apresjan, Jurij D. 1986. Deixis v grammatike i leksike i naivnaja model' mira [Deixis in grammar and lexicon and the naïve model of the world]. *Semiotika i Informatika* 28:5-33.
- Arutjunova, Nina D. 1976. *Predloženie i ego smysl [The Sentence and its Meaning]*. Moscow: Nauka.
- Babby, Leonard H. 1980. *Existential Sentences and Negation in Russian*. Ann Arbor, Michigan: Karoma Publishers.
- Bailyn, John Frederick. 2004. The Case of Q. In *Annual Workshop on Formal Approaches to Slavic Languages: The Ottawa Meeting 2003 (FASL 12)*, eds. Olga Arnaudova, Wayles Browne, María Luisa Rivero and Danijela Stojanovic, 1-35. Ann Arbor: Michigan Slavic Publications.
- Bittner, Maria. 1987. On the semantics of Greenlandic antipassive and related constructions. *International Journal of American Linguistics* 53:194-231.
- Borschev, Vladimir, and Partee, Barbara H. 2002a. The Russian genitive of negation in existential sentences: the role of Theme-Rheme structure reconsidered. In *Travaux du Cercle Linguistique de Prague (nouvelle série), v.4*, eds. Eva Hajičová, Petr Sgall, Jirí Hana and Tomáš Hoskovec, 185-250. Amsterdam: John Benjamins Pub. Co.

- Borschev, Vladimir, and Partee, Barbara H. 2002b. The Russian genitive of negation: Theme-rheme structure or perspective structure? *Journal of Slavic Linguistics* 10:105-144.
- Borschev, Vladimir, Paducheva, Elena V., Partee, Barbara H., Testelefs, Yakov G., and Yanovich, Igor. 2006. Sentential and constituent negation in Russian BE-sentences revisited. In *Formal Approaches to Slavic Linguistics: The Princeton Meeting 2005 (FASL 14)*, eds. James Lavine, Steven L. Franks, Mila Tasseva-Kurkchieva and Hana Filip, 50-65. Ann Arbor: Michigan Slavic Publications.
- Bresnan, Joan. 1994. Locative inversion and the architecture of Universal Grammar. *Language* 70:72-131.
- Chvany, Catherine V. 1975. *On the Syntax of BE-Sentences in Russian*. Cambridge, MA: Slavica.
- Crockett, Dina. 1976. *Agreement in Contemporary Standard Russian*. Cambridge, MA: Slavica.
- Dowty, David. 1991. Thematic proto-roles and argument selection. *Language* 67:547-619.
- Dowty, David. 2001. The semantic asymmetry of 'argument alternations' (and why it matters). In *Groninger Arbeiten zur germanistischen Linguistik Nr. 44*, eds. Geert van der Meer and Alice G. B. ter Meulen. Groningen: Center for Language and Cognition.
- Enç, Mürvet. 1991. The semantics of specificity. *Linguistic Inquiry* 22:1-25.
- Erteschik-Shir, Nomi. 1997. *The Dynamics of Focus Structure*: Cambridge Studies in Linguistics 84. Cambridge; New York: Cambridge University Press.
- Farkas, Donka F., and de Swart, Henriëtte. 2003. *The Semantics of Incorporation: From Argument Structure to Discourse Transparency*: Stanford Monographs in Linguistics. Stanford, CA: CSLI Publications.
- Franks, Steven, and House, Richard. 1982. Genitive themes in Russian. In *CLS 18: Proceedings of the Chicago Linguistic Society*, 156-168. Chicago.
- Franks, Steven. 1995. *Parameters of Slavic Morphosyntax*. Oxford: Oxford University Press.
- Hajičová, Eva. 1973. Negation and Topic vs. Comment. *Philologia Pragensia* 16:81-93.
- Harves, Stephanie A. 2002. Unaccusative Syntax in Russian, Princeton University: Ph.D. dissertation.
- Hopper, Paul, and Thompson, Sandra. 1981. Transitivity in grammar and discourse. *Language* 56:251-299.
- House, Richard. 1982. The Use of Genitive Initial Sentences for the Specification of Quantity in Russian, Cornell University: Ph.D. dissertation.
- Jakobson, Roman. 1971/1936. Beitrag zur allgemeinen Kasuslehre: Gesamtbedeutungen der russische Kasus. In *Selected Writings II*, 23-71. The Hague: Mouton (originally published in 1936).
- Kagan, Olga. 2005. A modal analysis of genitive case in Russian. Ms. Jerusalem.
- Kamp, Hans, and Bende-Farkas, Agnes. 2001. Indefinites and binding: From specificity to incorporation. Lecture notes from the 13th ESSLLI summer school in Helsinki. Ms. Stuttgart.
- Keenan, Edward. 1976. Towards a Universal Definition of "Subject". In *Subject and Topic*, ed. Charles Li, 303-333. New York: Academic Press.
- Kiparsky, Paul. 1997. Remarks on denominal verbs. In *Complex Predicates*, eds. Alex Alsina, Joan Bresnan and Peter Sells, 473-500. Stanford: CSLI Publications.
- Kiparsky, Paul. 1998. Partitive case and aspect. In *The projection of arguments: Lexical and compositional factors*, eds. Miriam Butt and Wilhelm Geuder, 265-307. Stanford: CSLI Publications.
- Klenin, Emily. 1978. Quantification, partitivity, and the genitive of negation in Russian. In *Classification of Grammatical Categories*, ed. B. Comrie, 163-182. Edmonton: Linguistic Research, Inc.
- Krifka, Manfred. 2000. Manner in dative alternation. In *WCCFL 18: Proceedings of the Eighteenth West Coast Conference on Formal Linguistics*, eds. Sonya Bird, Andrew Carnie, Jason D. Haugen and Peter Norquest, 1-14. Somerville/Medford, MA: Cascadilla Press.
- Landman, Fred. 2003. *Indefinites and the Type of Sets*: Explorations in Semantics. Oxford: Blackwell Publishing.
- Mustajoki, Arto, and Heino, Hannes. 1991. *Case selection for the direct object in Russian negative clauses. Part II: Report on a Statistical Analysis*: Slavica Helsingiensia 9. Helsinki: Department of Slavonic Languages, University of Helsinki.
- Neidle, Carol. 1982. The Role of Case in Russian Syntax, Linguistics and Philosophy, MIT: Ph.D. dissertation.
- Neidle, Carol. 1988. *The Role of Case in Russian Syntax*: Studies in Natural Language and Linguistic Theory 10. Dordrecht: Kluwer.

- Padučeva, E.V. 1974. *O semantike sintaksisa: materialy k transformacionnoj grammatike russkogo jazyka* [On the Semantics of Syntax: Materials toward the Transformational Grammar of Russian]. Moscow: Nauka.
- Padučeva, E.V. 1992. O semantičeskom podxode k sintaksisu i genitivnom sub"ekte glagola BYT' [On the semantic approach to syntax and the genitive subject of the verb BYT' 'BE']. *Russian Linguistics* 16:53-63.
- Padučeva, E.V. 1994. From Puškin to Nabokov: narrator in the position of observer. *Russian Literature* 36.
- Padučeva, E.V. 1997. Roditel'nyj sub"ekta v otricatel'nom predloženíi: sintaksis ili semantika? [Genitive subject in a negative sentence: syntax or semantics?]. *Voprosy Jazykoznanija* 2:101-116.
- Padučeva, E.V. 2002. Diateza i diatetičeskij sdvig ('Diathesis and diathesis shift'). *Russian Linguistics* 26:179-215.
- Partee, Barbara H., and Borschev, Vladimir. 2002. Genitive of negation and scope of negation in Russian existential sentences. In *Annual Workshop on Formal Approaches to Slavic Linguistics: the Second Ann Arbor Meeting 2001 (FASL 10)*, ed. Jindrich Toman, 181-200. Ann Arbor: Michigan Slavic Publications.
- Partee, Barbara H., and Borschev, Vladimir. 2004a. The Russian genitive of negation and diathesis alternation: interaction of lexical and compositional semantics. Handout for TAG+7: 7th International Workshop on Tree Adjoining Grammars and Related Formalisms, Simon Fraser University, Vancouver, May 20-22, 2004. Ms.
- Partee, Barbara H., and Borschev, Vladimir. 2004b. The semantics of Russian Genitive of Negation: The nature and role of Perspectival Structure. In *Proceedings of Semantics and Linguistic Theory (SALT) 14*, eds. Kazuha Watanabe and Robert B. Young, 212-234. Ithaca, NY: CLC Publications.
- Partee, Barbara H., and Borschev, Vladimir. 2006. Information structure, Perspectival Structure, diathesis alternation, and the Russian Genitive of Negation. In *Proceedings of Ninth Symposium on Logic and Language (LoLa 9), Besenyőtelek, Hungary, August 24–26, 2006*, eds. Beáta Gyuris, László Kálmán, Chris Piñón and Károly Varasdi, 120-129. Budapest: Research Institute for Linguistics, Hungarian Academy of Sciences, Theoretical Linguistics Programme, Eötvös Loránd University.
- Partee, Barbara H., and Borschev, Vladimir. In press. Pros and cons of a type-shifting approach to Russian Genitive of Negation. In *Proceedings of the Sixth International Tbilisi Symposium on Language, Logic and Computation (Batumi 2005)*, eds. Balder ten Cate and Henk Zeevat. Berlin: Springer.
- Pesetsky, David. 1982. Paths and Categories, MIT: Ph.D. dissertation.
- Talmy, Leonard. 1985. Lexicalization patterns: Semantic structure in lexical forms. In *Language typology and syntactic description*, ed. Timothy Shopen, 57-149: Cambridge University Press.
- Testelets, Yakov G. 2001. *Vvedenie v obščij sintaksis* [Introduction to General Syntax]. Moscow: Rossijskij Gosudarstvennyj Gumanitarnyj Universitet (RGGU).
- Thompson, A. 1911. Zur Genetivreaktion des Verbuns im Baltischslavischen. *Indogermanische Forschungen* 29:249-259.
- Timberlake, Alan. 1975. Hierarchies in the Genitive of Negation. *Slavic and East European Journal* 19:123-138.
- Ueda, Masako. 1993. Set-membership interpretations and the genitive of negation. *Russian Linguistics* 17:237-261.
- Van Geenhoven, Veerle. 1998. *Semantic Incorporation and Indefinite Descriptions: Semantic and Syntactic Aspects of Noun Incorporation in West Greenlandic*: Dissertations in linguistics. Stanford, Calif.: CSLI Publications.
- Van Geenhoven, Veerle, and McNally, Louise. 2005. On the property analysis of opaque complements. *Lingua* 115:885-914.
- Zimmermann, Thomas Ede. 1993. On the proper treatment of opacity in certain verbs. *Natural Language Semantics* 1:148-171.