

Pros and Cons of a Type-Shifting Approach to Russian Genitive of Negation¹

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1. Introduction	1
2. What is perspective structure? Where in the grammar is it?	4
3. A possible type-shifting approach to a ‘demotion diathesis pattern’	5
3.1. Non-canonical objects and their ‘reduced referentiality’	7
3.2. Are Gen Neg NPs property-denoting?	8
3.3. Speculative conclusions	12
References	13

1. Introduction

In this introductory section we review the basic facts of the Genitive of Negation, and some of the key points of existing proposals including our own. In Section 2 we briefly review our notion of “Perspective Structure” and the question of where it belongs in the grammar, concluding that it is probably best viewed as a semantic correlate of diathesis shift. In Section 3 we address the principal issue of this paper, the possibility that the relevant diathesis shift in this case involves the demotion of the Genitive-marked NP from a normal referential type *e* to a property type, $\langle e, t \rangle$, raising arguments both for and against such a proposal and pointing to further research which will need to be done.

Intransitive GenNeg sentences are “impersonal”: the verb is always **N.SG**. Babby (1980) introduced the terminology “Negated declarative sentences” (NDS), for the sentences with nominative subjects, (1a), and “Negated existential sentences” (NES), for those with genitive “subjects”, (2a). The corresponding affirmative sentences (ADS and AES) are in (1b) and (2b).

- (1) NDS (a) *Otvét iz polka ne prišel.*
 Answer-NOM.M.SG from regiment NEG arrived-M.SG
 ‘The answer from the regiment has not arrived.’
- ADS (b) *Otvét iz polka prišel.*
 Answer-NOM.M.SG from regiment arrived-M.SG
 ‘The answer from the regiment has arrived.’
- (2) NES (a) *Otveta iz polka ne prišlo.*
 Answer-GEN.M.SG from regiment NEG arrived-N.SG
 ‘There was no answer from the regiment.’
- AES (b) *Prišel otvét iz polka.*
 Arrived- M.SG answer-NOM.M.SG from regiment
 ‘There was an answer from the regiment.’

In addition to “subject Gen Neg”, there is “object Gen Neg”, in which Accusative alternates with Genitive under negation. The semantic effect in that case, if any, is less well understood, although some scholars such as Babyonyshev (1996) believe that is equally a

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matter of the scope of negation. Chvany (1975), Perlmutter (1978), Pesetsky (1982) and most Western scholars treat the two as a single phenomenon, but without proposing any common semantics other than that Gen Neg happens only under scope of negation. In some Slavic languages, the phenomena diverge (Franks 1995). Russian linguists generally view the two constructions as distinct, with subject Gen Neg having clear semantic motivation and object Gen Neg lacking any systematic semantic effect².

Among the generalizations that have been made about the Gen Neg construction(s), some of the most influential are the following.

- A Gen Neg subject is typically indefinite, but not always (Babby 1980, Timberlake 1975).
- The verb in a Subject Gen Neg sentence is often described as ‘semantically empty’ (Babby 1980).
- Intransitive Gen Neg sentences are Thetic (Babby 1980). (A number of authors appeal to (Diesing 1992) for the Nom/Gen alternation as VP-external vs. VP-internal subject.)
- Gen Neg occurs in the scope of sentential negation (just about everyone; but see (Partee and Borschev 2002)).
- A Gen Neg NP (subject or object) has decreased referentiality and tends to be ‘(existentially) quantificational’ (Babby 1980, Bailyn 2004, Jakobson 1971/1936, Neidle 1982, 1988, Pesetsky 1982, Timberlake 1975).
- In the case of Object Gen Neg, many factors contribute to the (probabilistic) choice of Gen vs. Acc: factors favoring Gen include decreased ‘individuation’ of the NP and decreased transitivity of the verb (Mustajoki 1985, Mustajoki and Heino 1991, Timberlake 1975, Ueda 1993).

Let us focus on “Locative – Existential” pairs and their negations in (3). As discussed by Arutjunova (1976) and Arutjunova and Širjaev (1983), these have parts we will refer to as the “THING” (the doctor), the “LOCation” (the city), and a BE-verb. The BE-verb here is the copula *byt* ‘be’, but many verbs can occur in such sentences, as the earlier examples illustrate, and the LOCation may often be implicit rather than explicit.

- (3) a. *V gorode ne bylo doktora.*
 In town NEG was-N.SG doctor-GEN.M.SG
 ‘There was no doctor in town.’
 b. *Doktor ne byl v gorode.*
 doctor-NOM.M.SG NEG was-M.SG in town
 ‘The doctor was not in town.’

We share with many others the intuition that in an existential sentence, the structure is somehow “turned around”, to assert of the “LOCation” that it has the “THING” in it. But in what way and at what “level” of structure is the predication “turned around”?

Babby (1980) proposed that the difference is a difference at the level of Theme-Rheme (or Topic-Focus) structure. A number of linguists including Babby (2001) have proposed differences in syntactic structure, without taking a definite stand on the resulting semantics. We proposed in Borschev and Partee (2002a, 2002b) that in addition to topic-focus structure

² A reviewer wonders why we do not mention other apparent Genitive alternations in Russian. A number of numerals and other quantifiers govern genitive case on their complements but only when the full NP occurs in a position where it otherwise would show nominative or accusative case. And there is the “genitive of animacy”, which is really just morphology: the accusative form of masculine animate NPs has the morphological form of the genitive. We do not discuss such constructions because they are more or less fully grammaticized.

there is a relevant ‘Perspectival Structure’, relating to the difference in predication in existential vs. predicational sentences.

In the unmarked structure, the THING is chosen as “Perspectival Center”; this is Babby’s “Declarative Sentence”, a predicational sentence. In an Existential Sentence, the LOC³ is chosen as “Perspectival Center”, and the sentence says of the LOC that it has THING in it. If the LOC is implicit, this is a “thetic judgment”.

We have previously described this in terms of a “camera analogy”, more specifically an analogy with “what the camera is tracking”. A predicational sentence keeps the camera fixed on the protagonist (THING as Center); an existential sentence is analogous to the way a security camera is fixed on a scene and records whatever is in that location (LOC as Center). The semantics of a negated existential sentence (NES) can be summed up as follows: a NES denies the existence of the thing(s) described by the subject NP *in the Perspectival center LOCation* (not necessarily “in the world”).

We have seen examples with implicit Perspectival Center locations associated with implicit observers. When the implicit Perspectival Center location is simply “the actual world,” as in (4), the result is a literal denial of existence.

- (4) *Edinorogov ne suščestvuet.*
unicorns-GEN.M.PL NEG exist-SG
‘Unicorns do not exist.’

In Borschev and Partee (1998a), we proposed deriving this semantics from the following construction-specific presupposition:

- (5) **PRESUPPOSED EQUIVALENCE:** An NES presupposes that the following equivalence holds locally in the given context of utterance:

$$V(\text{THING}, \underline{\text{LOC}}) \Leftrightarrow \text{BE}(\text{THING}, \underline{\text{LOC}})$$

In the general case, we assume that verbs have their normal literal meaning, which in most cases is not simply “exist” or “be”. If the GenNeg construction is used, the hearer uses contextual information to support an accommodation of the presupposition, perhaps shifting the verb meaning to make it “less agentive”. Examples involving the interaction of additional “axioms” deriving from lexical semantics, encyclopedic knowledge, and local contextual information are given in Borschev and Partee (1998, 2002a).

To summarize: We believe that 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, analogous to different choices of “what the camera is tracking.”

When the THING is chosen as Perspectival Center, its existence is presupposed, and the sentence speaks of its LOCation and potentially about other properties or states or actions.

When we choose the LOCation as Perspectival Center, the sentence speaks about what THINGs there are (or not) in that situation and/or about what is happening in the situation.

The choice of Perspectival Center, as so described, has much in common with the choice of Theme (Topic) on the one hand, and with the choice of grammatical Subject on the other:

³ This is oversimplified; the term “LOCation” must be construed broadly, and the sentences are not only about existence but also ‘coming into existence’, ‘being present’, occurring, being in one’s perceptual field, etc.

all three notions involve structuring something (a situation, a proposition, or a sentence) so that one part is picked out and the rest is in effect predicated of it⁴.

2. What is perspective structure? Where in the grammar is it?

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 have argued in Borschev and Partee (2002a,c).
- And it is not directly syntax, although it may well be reflected in the syntax.
- It seems primarily to be a choice of what structure we want to impose on some piece of reality that we want to describe.
 - Cf. deciding whether to describe a buying or a selling.
 - It is similar in some ways to figure-ground choices, as in choosing whether to say that A is above B or that B is below A.
 - Such choices may involve choosing between distinct lexical items, like *above/below*, or *buy/sell*, or they may involve choosing among different arrangements of argument structure permitted by one and the same predicate, as with *spray/load*, *buy/sell*, or both.
- Our current hypothesis about ‘where in the grammar’ the choice of Perspective Structure is registered is that it is a “diathesis choice”, a choice among two alternative argument structures for verbs that can take both a “THING” and a “LOC” argument, analogous to the argument structure choices (diathetic alternations) for verbs like *spray*, *load* or like *give*, *send*.

Also in the realm of diathesis alternation, the subject of active recent research, there are debates about the relative contribution of lexical semantics, the semantics of the syntactic structures, and the contribution of topic-focus structure.

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. The current drive in Western theories, tracing in part to the work of Dowty (1978) and of Bresnan (1978), to pack as much of the grammar as possible into the lexicon, should help to decrease the gap between approaches. But there are undoubtedly real differences within a language, or between languages, in ‘where’ some of these diathetic alternations are located in the grammar. 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.

⁴ Babby (1980) in fact argued that Gen Neg depends on Theme/Rheme structure; for discussion of what we see as the difference between Theme/Rheme structure and Perspectival Structure, and for arguments that it is Perspectival Structure that is crucial for Gen Neg, see (Borschev and Partee 2002b, Partee and Borschev 2006). [This will be our topic December 6.]

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 (1980) and by Testelets (2001).

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

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. Bailyn (2004) 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 (Pesetsky 1982), 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 conjecture that something along such lines may be semantically interpretable in a compositional way that could do justice to the interplay of compositional and lexical semantics and contextual factors. But that requires further study of the issue of Object Gen Neg, concerning which we are still in the preliminary stages.

3. A possible type-shifting approach to a ‘demotion diathesis pattern’.

One intriguing hypothesis that goes back to the work of Neidle (1982, 1988) has been raised in recent work of our own (Partee and Borschev 2004a, 2004b) and in Kagan (2005). We articulate it here as the Property-Type Demotion Diathesis Hypothesis.

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’⁵), whereas a Gen NP is interpreted as property-type: $\langle e, t \rangle$, or $\langle s, \langle e, t \rangle \rangle$.

A stronger variant of the hypothesis could add that with the transitive analog of the existential sentence, and with verbs that have intensional objects (‘*ždat*’ ‘expect, wait for’, mentioned earlier), the ‘genitive variant’ of the verb has a (possibly implicit) *situation argument* which is higher ranked in some sense than the direct object, causing the direct object to be demoted, although it doesn’t necessarily stop being object.

When the direct object is ‘demoted’, the structure does not provide a (situation-relative) existence presupposition, and the Genitive object may get a non-specific or a ‘property’ reading. In the Acc-taking structure, the (Acc) object is in canonical position, and the argument carries a (situation-relative) existence presupposition. In a Diesing-style (Diesing 1992) approach (Babyonyshev 1996, Brown 1999), the Gen-object version might be the default, with the option of raising the object out of the VP (for Acc). On the lexical perspective this

⁵ 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).

correlates with a change in verbal valency: When the verb is negated, it takes a ‘weaker’ kind of object, marked by Genitive, unless that object escapes the scope of the negated verb.

In the case of the intensional verbs like *ždat* ‘expect, wait for’ in (6), one might further argue that there is a shift in verb sense correlated with the shift in the interpretation of the object. So part of the hypothesis, connecting lexical and structural aspects of diathesis shift, would be that the verb selects for the type of its object.

- (6) a. *On ždet podругu.* (Neidle 1988, p.31)
 He waits girlfriend-ACC.F.SG
 ‘He’s waiting for his girlfriend.’
 b. *On ždet otveta na vopros.*
 He waits answer-GEN.M.SG to question
 ‘He’s waiting for an answer to the question.’

Neidle (1988, p. 31) notes that verbs that lexically govern the genitive in Russian, optionally or obligatorily, “tend to be verbs of desire, aim, request, or achievement.” When there is a choice, Accusative is used for a specific or generic object, indicating that the object is ‘outside the scope’ of the semantic action of the verb. The Genitive is normally used when object is indefinite (existentially quantified) and ‘within the scope’ of the verbal “operator”.

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 $\langle s, \langle e, t \rangle, t \rangle$ 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 $\langle s, \langle e, t \rangle \rangle$.⁶

Zimmermann’s proposal is that a verb like *seek* on its intensional reading denotes a relation between an individual and a property.

In the case of the potentially intensional verb *ždat* in (6a-b), we see that its intensional genitive-taking variant in (6b) has all the properties of English *seek*. Its extensional accusative-taking variant, (6a), 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 not quite clear-cut⁷.

- (7) ? *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.’

In the case of Genitive of Negation, the construction is not intensional. But Russian linguists from Jakobson (1971/1936) to Paduceva (1997, 2004) have argued that Genitive-marked NPs have reduced “referential status”, and Western linguists have generally claimed that they must be “indefinite”.

There has been a great deal of 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 Geenhoven and McNally 2005), and in the future we can expect to find

⁶ BHP defended Montague’s analysis for many years because of sentences like “The police were looking for every witness to the crime”, which does allow an intensional reading for its clearly quantificational object, but overall Zimmermann’s position is strong and such counterexamples can probably be explained away.

⁷ The second author finds this sentence odd but not impossible; some of our informants have rejected it altogether.

new kinds of arguments for and against treating particular examples in this way. Here we focus on some of the arguments for and against treating Russian Gen Neg NPs as property-denoting.

3.1. Non-canonical objects and their ‘reduced referentiality’

Part of our own inspiration in considering this hypothesis is to the work of Ackerman and Moore (2001): variation in the semantic type of the object could be a species of diathesis, even if it is considered a direct object in both cases. Ackerman and Moore argue that “diathesis” should be extended to cases where a subject or object remains subject or object but is ‘weakened’, and they cite alternations such as the well-known Accusative/Partitive alternations in Baltic languages among their case studies.

Variation under Negation is not really *intensional*, but one can argue that there is more than one kind of ‘reduced referentiality’. In the case of intensional NPs, ‘reduced referentiality’ involves considering existence in alternative possible worlds instead of or in addition to the actual world. In the case of indefinites under negation, if they are non-presuppositional then non-existence may be implied or at least rendered plausible and pragmatically implicated. In the case of predicate NPs and property-type NPs, existence claims generally do not arise except on the abstract level at which properties may be said to exist. So we need to look more closely at all the actual arguments invoked in these various analyses and see which of them have resonance with Russian Gen Neg and Russian objects of intensional verbs.

Sometimes, but not always, we can find an analogue of “existential interpretations” with transitive verbs, with Gen Neg suggesting (although not entailing) non-existence of the denotation of the object NP. With the verb *polučit’* ‘receive’, we find parallel behavior⁸ and interpretation between the object (Gen or Acc) and a passive subject (Gen or Nom), illustrated in (8).

- (8) a. *On ne polučil pis'ma.*
 he NEG received letter-GEN.N.SG
 ‘He didn’t receive any letter.’
- b. *Pis'ma ne bylo polučeno.*
 letter-GEN.N.SG NEG was-N.SG received
 ‘No letter was received.’
- c. *On ne polučil pis'mo.*
 he NEG received letter-NOM.N.SG
 ‘He didn’t receive the letter.’
- d. *Pis'mo ne bylo polučeno.*
 letter-NOM.N.SG NEG was-N.SG received
 ‘The letter was not received.’

All are good, and the interpretations are parallel: Acc/Nom presupposes existence of the letter, Gen suggests no letter exists. But that is not true for all transitive verbs, and accordingly not all negated passive sentences take (Subject) Gen Neg, as seen in (9b).

- (9) a. *Ja ne čital (ëtix) knig.*
 I NEG read this-GEN.F.PL book-GEN.F.PL
 ‘I didn’t read (these)/the/any books.’

⁸ Thanks to Alexander Letuchiy in my semantics class at RGGU in Moscow in spring 2003 for bringing up this issue and helping to find these examples.

- b. *(*Ètix*) *knig* *ne* *bylo* *pročitano*.
 this-GEN.F.PL book-GEN.F.PL NEG was-N.SG read
 (Intended meaning: ‘These/the/∅ books weren’t read.’)

We will use these examples as standards for comparison later.

3.2. Are Gen Neg NPs property-denoting?

3.2.1. 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 (10a) and their parallels to the corresponding use of Acc and Gen with *ždat’* in (6a-b).

- (10) a. *Petja našel otvet.*
 Petja found answer-ACC.M.SG
 ‘Petja found the/an answer.’
 b. *Petja ne našel otvet.*
 Petja NEG found answer-ACC.M.SG
 ‘Petja didn’t find the answer.’
 c. *Petja ne našel otveta.*
 Petja NEG found answer-GEN.M.SG
 ‘Petja didn’t find an answer.’

The accusative variant (10b) normally implies actual-world existence of an answer (and says that Petja didn’t find it), while the genitive variant (10c) does not.

3.2.2. More evidence: Parallels between Gen Neg and Subjunctive.

Kagan (2005) offers suggestive evidence in favor of the Property-Type Demotion Diathesis Hypothesis based on parallels between Gen Neg and Subjunctive in complements. Variants of her examples⁹ below are given in (11): According to Kagan, one can use the negated verb *ne počuvstvovat’* ‘not to feel’ with either a indicative (11a) or subjunctive (11b) complement, the former carrying the presupposition that it was had become better 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 (11c-d) with accusative presupposing the existence and the genitive strongly suggesting non-existence.

- (11) a. *Ivan ne počuvstvoval, čto 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 by feeling, 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, there wasn’t any coldness.

⁹ Thanks to Elena Paducheva, Yakov Testeleets, and Igor Yanovich for examples and discussion. The second author and most of our consultants find (11b) ill-formed, even with the most plausible choices of lexical items.

Such parallels, if more and better examples can be found, would help to support a property-type analysis. The number of verbs which show such parallels may be limited, and almost no two verbs behave exactly the same way, but after initial skepticism, the evidence seems to be that the pattern, if not fully productive, is reasonably robust. Three verbs which clearly work as Kagan has predicted¹⁰ are *zametil* ‘to notice’, *videt* ‘to see’, and *pomnit* ‘to remember’. We illustrate relevant uses of *zametil* ‘to notice’ and *pomnit* ‘to remember’; *videt* closely follows the pattern of *zametil*.

- (12) a. *Ja ne zametil, čto jubilej 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 jubilej 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)
- c. *Ja ne zametil vodki na stole.*
I NEG noticed vodka-GEN on table
‘I didn’t notice any vodka on the table.’ (non-presuppositional)
- (13) a. *Ja ne pomnila, čto on byl s nami.*
I NEG remembered that he was with us
‘I didn’t remember that he was with us.’ (factive)
- b. *Ja ne pomnju¹¹, čtoby on byl s nami.*
I NEG recall **that-SUBJUNC** he was with us
‘I don’t recall that he was with us.’ (non-factive)
- c. *Ja ne pomnila vodku na stole.*
I NEG remembered vodka-ACC on table
‘I didn’t remember the vodka on the table.’ (presuppositional)
- d. *Ja ne pomnila vodki na stole.*
I NEG recalled vodka-GEN on table
‘I didn’t recall any vodka on the table.’ (non-presuppositional)

Some verbs seem at first not to work as predicted, but Google searches have overturned most of our skepticism. We list a number of them below, without providing all the examples¹². When noting the presence or absence of e.g. ‘c’ forms, we are referring to the pattern of examples (11a-d), (12a-d), and (13a-d).

- (14) (i) *počuvstvovat* ‘to feel’: See (11). This verb is disputable, though Kagan cites it as working as predicted. Our informants found (11b) ill-formed, as noted. But a search turned up a number of good examples, such as (15) below.

(ii) *slyxat* ‘to hear’: has three of the four forms easily; but when negated with an NP object, Gen Neg is nearly obligatory and the ‘d’ forms sound bad. We did eventually find a very few examples on Google with Accusative NP: see (16i,ii); but our

¹⁰ Thanks to Igor Yanovich for suggesting the verb *zametil* ‘notice’, and to Ljudmila Geist for suggesting the verb *pomnit* ‘remember’.

¹¹ Past tense is also possible here, but present tense is considerably more natural.

¹² It is all too easy to give ‘bad’ examples; what is more difficult is to convince oneself that one has exhausted the possibilities of finding suitable ‘good’ examples.

consultants do not find those examples perfect. It is a somewhat rare and archaic verb, but it apparently does take all four forms, at least for some speakers.

(iii) *predpolagat* ‘to suppose’ – has the first three forms, but when negated, really doesn’t like Acc NP object. But again Google turned up a good example: see (17).

- (15) *V xode peregovorov ja ne počuvstvoval, čtoby naši partnery nagnetali situaciju.*
‘In the course of the talks I did not feel **that-SUBJUNC** our partners forced the situation.’
- (16) (i) *Nikogda ne slyxal ètu pesnju v ispolnenii ženščiny.*
‘I never [before] heard **that-ACC** song-ACC performed by a woman.’
- (ii) *Ty ne slyxal ètu istoriju?*
‘Have you not heard **that-ACC** story-ACC?’
- (17) *Ja dumaju, čto skoree vsego nikto ne predpolagal takoe razvitie sobytij.*
‘I think that most likely no one supposed/foresaw [such a turn of events]-ACC’

This parallelism between indicative-subjunctive and Acc-Gen, both in distribution and interpretation, gives support to Kagan’s arguments in favor of a type-shifting analysis.

3.2.3. Evidence casting doubt on property analysis.

We have three arguments against the property analysis for Gen Neg NPs; none of them are absolutely unshakeable, but until a way around them has been found, they seem to cast doubt on the analysis and remove much of its initial attractiveness.

(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 (18a) 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 (18b) often suggests the opposite: I expected to see Masha but she wasn’t there (though it can also be neutral).

- (18) 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 (18b) 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”¹³. Similar examples with the demonstrative *èto* ‘that’ are well-known; in fact, Mustajoki and Heino (1991) observe, surprisingly, that bare *èto* is far more likely to occur in the Genitive than in the Accusative under negation.

(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,

¹³ 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 (19), discussed in Padučeva (1974), Klenin (1978), Neidle (1988), Harves (2002), and Borschev et al (2006).

- (19) 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 vsež zadač.*
 Vanja NEG solved all-GEN.PL problems-GEN.F.PL
 Vanja didn't solve all the problems (less than all).

Examples (19a-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. There is no plausible property-interpretation for (19b).

(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 by itself licenses subjunctive relative clauses; relative clauses modifying both Gen-marked and Acc-marked objects are indicative (unless subjunctive is licensed independently by something modal in the sentence.)

3.2.4. An alternative approach: non-veridicality.

Giannakidou (1994, 1998), looking especially at Greek, which shows commonalities in the marking of Negative Polarity Items (NPIs, like English *any*, *ever*) under negation and of opaque objects of intensional verbs, suggested that some languages take the main semantic property of NPI-licensing constructions not to be "downward monotone" functions as proposed by Ladusaw (1979, 1980), but to be "non-veridicality", defined as follows:

Definition: Let Op be a monadic propositional operator. Then Op is *veridical* just in case $Op\ p \rightarrow p$ is logically valid. Otherwise Op is *nonveridical*.

The fact that some NPs can occur only in non-veridical contexts (*any student*, *the slightest sound*) increases the plausibility of the conjecture that some NPs (*a student*) may have a "less referential" meaning in a non-veridical context than they do in a veridical context. See also the explorations of related issues concerning Russian indefinites in Pereltsvaig (2000).

Negation is clearly a non-veridical operator. If intensional contexts are also non-veridical, then this may be the unifying property we are looking for. But although the majority of intensional verbs (as well as modal adverbs and other intensional operators not under discussion here) function as non-veridical operators, not all of them do: *know*, for instance, is intensional but veridical. It is intensional because of the failure of substitutivity of co-extensional NPs in its complement to always preserve truth, but veridical because *John knows that p* entails (or more likely presupposes, but in any case requires) the truth of *p*.

But *know* in fact does not license subjunctive complements in Romance languages (except sometimes under negation!) nor in Russian (at all). So the fact that not all intensional contexts are non-veridical may not be a bad thing: non-veridicality may provide the unifying property that connects negative contexts with an appropriate subset of intensional contexts.

A full exploration of the relevance of non-veridicality to the occurrence of Genitive on NPs in such contexts awaits further work. And such work should also take into account the

“quantificational” notions that have played a role in earlier attempts to unify the semantics of Genitive case. 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.

3.3. Speculative conclusions

We are still optimistic that it will be possible to support traditional claims that Gen NPs are “less referential, less individuated” than Nom/Acc NPs, by combining the diathesis ideas we’ve been working on together with existing work on Partitive/Accusative alternations in Finnish and existing work on ‘weak/strong’ NP objects in a number of languages, and together with existing work on existential sentences.

One new ingredient that our work may offer to this line of investigation is an explicit connection between semantics of existential sentences and semantics of weak/strong objects in transitive sentences, and some account of how the verbal diathesis plays a role in both cases. And in the opposite direction, the broader semantic issues discussed here may help shed light on the semantic connection between Subject Gen Neg (the Nom/Gen alternation) and Object Gen Neg (the Acc/Gen alternation).

Given that we have analyzed Subject Gen Neg as always involving existential sentences, we had been having trouble seeing how we could extend a comparable treatment to Object Gen Neg, since only in a small subset of cases does Object Gen Neg involve anything like “existential meanings”: it seems to in (8a), but not in (9a), for instance. But if we study the arguments of McNally (1992, 1997, 1998), recent work of Landman (Landman 2003), and ongoing work by Kamp and Bende Farkas (2001), they all have argued that the NP in an existential sentence in English, German, and possibly in general, does not have normal type e (nor generalized quantifier) meaning, but rather a property type meaning ($\langle e, t \rangle$ or $\langle s, \langle e, t \rangle \rangle$).

If we could find more support for the arguments that the NP in an existential sentence is interpreted as property type $\langle e, t \rangle$ ¹⁴, whereas the subject position of a Locative or other ordinary sentence is type e , then the parallel between Subject Gen Neg and Object Gen Neg would be at a structural level: in each case the relevant argument is “demoted” from e -type to $\langle e, t \rangle$ -type, with syntactic and semantic consequences. The extent of the syntactic consequences apparently varies from language to language, and may vary within a language for Subjects vs. Objects; on many views, the Russian Gen Neg subject is no longer subject, but the Gen Neg object is still an object, although a ‘weakened’ one.

But we are not yet convinced that Gen NPs should all be assigned property type; in Russian in particular proper names occur in sentences that we are inclined to classify as existential, such as (**Fehler! Verweisquelle konnte nicht gefunden werden.b**) above. Quite possibly the proposed distinction in semantic type is both too rough to capture all the semantic distinctions that really need to be made, and too sharp a distinction to capture the fact that in many pairs of examples a Gen NP and a corresponding Nom- or Acc-marked NP may in fact share readings. Non-veridicality might naturally license decreased existential commitment. Intensionality might rather license decreased specificity. But we may very well not have yet identified the most crucial semantic properties; all of the attempts so far have achieved at best a partial account.

¹⁴ We will say $\langle e, t \rangle$ for simplicity even though it may really be $\langle s, \langle e, t \rangle \rangle$.

In conclusion, we have not settled the issue of whether the Gen Neg construction always involves a diathesis shift of the Gen Neg NP to property type or not. We have outlined a number of advantages such an approach might offer and a number of problems that argue against it.

As is often the case in linguistics, we find that no two phenomena are completely alike, but linguistic analysis and cross-linguistic comparisons help us, first, to identify generalizations that need to be accounted for, and second, to find formal properties through which we can capture the similarities and differences among the phenomena we observe. The Genitive of Negation and the ‘intensional’ Genitive in Russian remain a great challenge in part because we still do not have a satisfactory grasp of how broad a generalization their distribution involves. More work on both the empirical generalizations and the identification of explanatorily significant semantic properties still lies ahead.

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