THE ROLE OF VERB SEMANTICS IN GENITIVE ALTERNATIONS: GENITIVE OF NEGATION AND GENITIVE OF INTENSIONALITY

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[1] INTRODUCTION: BACKGROUND AND HYPOTHESES

Genitive alternations, i.e. alternations between Genitive and Nominative case and between Genitive and Accusative case, exist to various degrees in Slavic and Baltic languages. In some cases they have become strongly grammaticized (e.g. Polish Gen-Acc), in some cases virtually lost (e.g. Czech) (Franks 1995).

The most well-studied alternations are those in which Nominative or Accusative may or must be replaced by Genitive under Negation, the so-called Genitive of Negation (Gen Neg); a number of Slavic languages also show substitution of Genitive for Accusative in the objects of some intensional verbs, which we refer to as Genitive of Intensionality (Gen Int). In this paper we focus on Russian Subject Gen Neg and Object Gen Neg, and only briefly discuss Genitive of Intensionality (Gen Int). The Partitive Genitive is another alternating genitive which we will say little about in the present paper, but which we include below in preliminary illustrations of each kind.

We begin with some classic examples of the alternations in (1) and (2).¹ The Subject Gen Neg sentence in (1-d) is normally felt to be the negation of (1-b), an existential sentence, whereas the negated sentence with Nominative subject (1-c) is taken to be the negation of sentence (1-a), which has canonical word order. In the case of Object Gen Neg, there is just a single affirmative form (2-a, 3-a), with two alternative negative forms (2b-c, 3b-c).

[1] Examples (1c-d) are from Ickovič (1974) (cited in Babby 1980); those in (2) are our own. We note that after decades of work on GenNeg, numerous examples highlighting various aspects of the construction have in a sense become common property. We take many of our examples from this collection (sometimes with variations), drawing principally on examples cited by Ickovič (1974), Babby (1980), Apresjan (1980), and Padučeva (1992, 1997). When we need minimal pairs to make a point, we usually invent them.

- (1) SUBJECT GEN NEG: Affirmatives in **a-b**, negatives in **c-d**.
- a. **Otvét**   iz   polka   prišél.
Answer-**NOM.M.SG** from regiment arrived-M.SG
'The answer from the regiment has arrived.'
  - b. Prišél   **otvét**   iz   polka.
Arrived-M.SG answer-**NOM.M.SG** from regiment
'There was an answer from the regiment.'
  - c. **Otvét**   iz   polka   ne   prišél.
Answer-**NOM.M.SG** from regiment NEG arrived-M.SG
'The answer from the regiment has not arrived.'
  - d. **Otvéta**   iz   polka   ne   **prišlo**.
Answer-**GEN.M.SG** from regiment NEG arrived-**N.SG**
'There was no answer from the regiment.'
- (2) OBJECT GEN NEG: Affirmative in **a**, negatives in **b-c**.
- a. Oni postroili **gostinicu**.
They built   hotel-**ACC**
'They built a/ the hotel.'
  - b. Oni ne postroili **gostinicu**.
They NEG built   hotel-**ACC**
'They didn't build the hotel.' (a 'definite' 'planned' hotel)
  - c. Oni ne postroili **gostinicy**.
They NEG built   hotel-**GEN**
'They didn't build a hotel.' (non-specific)
- (3) a. Ja zametil **vodku**   na stole.
I noticed vodka-**ACC** on table
'I noticed the/some vodka on the table.'
- b. Ja ne zametil **vodku**   na stole.
I NEG noticed vodka-**ACC** on table
'I didn't notice the vodka on the table.'
(presuppositional: vodka was there)
- 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: maybe was none)

The Genitive of Intensionality is illustrated in (4). The Genitive choice in (4-b) often signals a 'less specific' interpretation of the object than the Accusative in (4-a). The Partitive Genitive is illustrated in (5-b) with one of the several nouns for which it has a morphologically distinctive form (usually it has the same form as the regular Genitive); this is a different phenomenon, and not discussed in this

paper, but generally considered a historical source for Gen Neg (Kuryłowicz 1971; Levinson 2005); it still shares some semantic properties with Gen Neg and Gen Int.

(4) GEN INT:

- a. Petja ždal (svoj) **avtobus**.
Petja waited-for (self's) bus-ACC
'Petja was waiting for the (his) bus.'
- b. Petja ždal **avtobusa**.
Petja waited-for bus-GEN
'Petja was waiting for a bus.'

(5) PARTITIVE GEN:

- a. Petja vypil **čaj**.
Petja drank up tea-ACC
'Petja drank up the tea.'
- b. Petja vypil **čaju**.
Petja drank up tea-GEN
'Petja drank (some) tea.'

These alternations vary across closely related languages and are subject to historical change. It seems that Gen Neg in Russian was more strongly grammaticized (more nearly obligatory) in the past, and may disappear in the future, as in Czech (and Heritage Russian (Polinsky 2006)). Gen Int is largely lexicalized; only with some classes of objects of some verbs is there alternation between Genitive and Accusative.

A major challenge for the analysis of these three Gen alternations is that there are evidently multiple factors involved in the choice of Genitive case vs. Nominative or Accusative case, including syntactic, semantic, lexical, and stylistic factors. In this paper we focus on semantic factors and especially on the interpretation of the verb, but we do not claim that these factors account for all the variation.

One strict syntactic condition must be noted at the outset: Gen Neg and Gen Int occur only with 'structural arguments' of the verb, subjects or objects which are direct (not prepositional) arguments of the verb and which would otherwise take Nom or Acc. Subject Gen Neg occurs only with intransitive verbs.

Other factors which have been discussed in the huge literature on this topic (see especially (Babby 1980; Corbett 1986; Icković 1982; Timberlake 1975)) include the referential status of the NP, the scope of negation², the 'strength' of negation; topic-focus or theme-rheme structure (Babby 1980); "Perspectival structure" (Borschev & Partee 1998, 2002a,c); Unaccusativity (Neidle 1982; Pesetsky

[2] Jakobson (1971/1936) and others suggested scope of negation as a factor, but Padučeva (1997) argues for a presupposition-oriented approach instead; see also Partee & Borschev (2002).

1980); “style” (conservative, innovative, etc.); and verb semantics (Kagan 2007; Padučeva 1992, 1997).

We begin by outlining some of our previous research and the hypotheses we propose in our present study of the role of verb semantics in these alternations.

First, our view on SUBJECT GEN NEG (section [2]) is that there is a strong semantic component which involves both the semantics of the verb and the semantics of the NP. The Subject Gen Neg alternation is sensitive to a major syntactic/semantic distinction between two sentence types: “existential” (including some “perceptual”) vs. “predicative” sentences. The verbs that may occur in existential sentences are an open class; some are independently characterizable as existential or perceptual, and others may undergo ‘semantic bleaching’ (section [2.3]).

Secondly, for a minority of transitive verbs, verbs of perception and creation, the characteristics of OBJECT GEN NEG (section [3]) are close to those of Subject Gen Neg. However, for many transitive verbs the Gen/Acc opposition seems to have a somewhat different semantic basis from that in Subject Gen Neg: the distinction does not involve different “sentence types”, but rather is “weakly semantic” (a notion we clarify below.) At least one common factor influences both Subject Gen Neg and Object Gen Neg: relative referentiality of the NP (section [3.1.1]). Borschev et al. (2008) capture this with a “demotion” type-shift of the NP to property type (type $\langle e, t \rangle$), an approach to which Olga Kagan has also made important contributions. This is consistent with Padučeva’s (2006) approach, on which an important commonality between Subject Gen Neg and Object Gen Neg is that they both require that the verb carry no presupposition of existence for the given argument.

Thirdly and crucially, as we discuss in section [3.1.3], *a shift in NP type requires, for composition purposes, a corresponding shift in V type* and thus a shift in the verbal semantics. Different classes of verbs have different “routes” to type-shifted meanings, some easier than others. Borschev et al. (2008) argued that this is a major factor in explaining the differences in the distribution and interpretation of Object Gen Neg for different classes of verbs. Sometimes the semantic shift is minimal or almost minimal, and sometimes it involves substantially modifying the lexical meaning of the verb.

As discussed in (Borschev et al. 2008; Kagan 2007), while OBJ GEN NEG and GEN INT share certain similarities, Gen Int involves a rather small number of verbs, each with its own idiosyncratic behavior. We and Kagan have argued that the semantic relation between the two alternate case forms is the same for both, but there is a significantly heavier degree of lexicalization of case-choice for intensional verbs, so that semantics plays a weaker role in Gen Int. We discuss Gen Int briefly in section [3.2].

We will not discuss Partitive Gen in this paper at all; it is a different, though overlapping, phenomenon from the other three. We note, however, that possible

partitive readings reinforce the possibility to have the Genitive form in examples with mass or plural nouns. And since partitives may potentially be fruitfully analyzed as property type, perhaps the similarity and overlap among Partitive Gen, Gen Int, and Gen Neg is not surprising, though we will not discuss partitivity in this paper³.

Another construction we will omit from discussion is one that appears to be a special subtype of Gen Neg: this is Gen Neg with ‘strengthened negation’, involving noun phrases that include such modifiers as *ni odnoj* ‘not a single’, *nikakoj* ‘not any’. It is well known that subjects and objects whose negation is thus ‘strengthened’ often allow Gen Neg in contexts where they would not allow it otherwise (Apresjan 1980; Mustajoki & Heino 1991; Padučeva 1992). The only exceptions known to us to the generalization that Subject Gen Neg sentences are always interpretable as existential sentences are examples involving such strengthened negation, such as (6-a) below⁴. The justification for calling for separate treatment for ‘Strengthened Gen Neg’ construction comes from the new observation that unlike normal Gen Neg, the strengthened kind can even occur with the subject of transitive verbs, as in (6-b), from Yandex⁵. We therefore avoid ‘strengthened negation’ in all examples in this paper.

- (6) a. *Ni odnoj butylki ne razbilos’.*
Not one-GEN.F.SG bottle-GEN.F.SG NEG broke-N.SG

[3] Bailyn (2004) proposes a unification of these different Genitive alternations from a syntactic perspective.

[4] Strengthened negation also provides the only counterexamples we have found via Google to the observation that Gen Neg is good with the ‘existential’ verb *pojavit’sja* ‘appear’ but not with its antonym *isčezat’* ‘disappear’.

Borschev & Partee (2002b) discuss the contrast between (i), with obligatory Genitive, and (ii), from (Padučeva 1992, 53), with obligatory Nominative subject. They note that Gen Neg is impossible with the verb *isčezat’* ‘disappear’, since the lexical semantics of that verb is unsalvageably incompatible with the Presupposed Equivalence.

- (i) a. **(#) Somnenija ne byli*
Doubts-NOM.N.PL NEG were-N.PL
*The doubts were not.
b. *Sommenij ne bylo.*
Doubts-GEN.N.PL NEG were-N.SG
‘There were no doubts.’ (Babby 1980)

- (ii) *Sommenija ne isčezli.*
Doubts-NOM.N.PL NEG disappeared-PL
‘The doubts did not disappear.’

With the verb *pojavit’sja* ‘appear’, both Gen and Nom are possible under negation, since that verb can be used in both existential sentences and predication sentences. Such a contrast between *pojavit’sja* ‘appear’ and *isčezat’* ‘disappear’, both Unaccusative verbs, is further support for Babby’s (1980) contention that what Subject Gen Neg is sensitive to is the existential/predicational sentence type distinction, not simply Unaccusativity. So it is interesting that the claim that *isčezat’* ‘disappear’ never takes Gen Neg also has counterexamples but only with strengthened negation, with *ni odin* ‘not a single’ or the like.

[5] <http://qpr.right-web.net/modules.php?name=Forums&file=viewtopic&t=348>

- ‘Not a single bottle broke.’
- b. Ni **odnogo**   **fonarja**   ne **osveščalo**
 Not one-GEN.M.SG lamp-GEN.M.SG NEG lit-N.SG
 naselënnye punkty srazu   posle granicy.
 villages   immediately after border
 ‘Not a single lamp illuminated the villages immediately after the border.’

[2] SUBJECT GENITIVE OF NEGATION, DIATHESIS CHOICE, AND “SEMANTIC BLEACHING” OF VERBS

[2.1] *Approaches to Subject Gen Neg*

In the Western tradition, [Babby \(1980\)](#) and others, following [Jakobson \(1971/1936\)](#), argue that Subject Gen Neg alternation reflects scope of negation, with Nominative subject being outside the scope of negation, and Genitive subject inside of it. In particular, Jakobson says that Subject Gen Neg “negates the subject itself”, where a corresponding nominative with negation “negates only the action”. Babby ties the scope of sentential negation to Theme-Rheme structure, claiming that Theme is outside the scope of negation, and Rheme inside. Subject Gen Neg applies when the Theme is empty (or includes only a Locative) and the Verb plus Subject constitute the Rheme. [Pesetsky \(1980\)](#) treats the Genitive as triggered by a null NPI determiner that is licensed only in the scope of negation.

As for the relation between Subject Gen Neg and Object Gen Neg, the Unaccusative line of analysis, exemplified by [Pesetsky \(1980\)](#), [Perlmutter \(1978\)](#), [Neidle \(1982\)](#), and others, says that Object Gen Neg is “basic” and can occur with any transitive verb, a claim that is too strong for modern Russian ([Padučeva 2006](#)). On the Unaccusative approach, Subject Gen Neg is argued to be possible only for verbs for which the surface subject is an “underlying object”, i.e. the single argument of an Unaccusative verb.

In the Russian linguistic tradition, Subject Gen Neg and Object Gen Neg are generally considered to be two separate constructions, with Subject Gen Neg having more systematic semantic significance than Object Gen Neg. Within this tradition, [Padučeva \(1997\)](#) argues that Subject Gen Neg is restricted to two lexical classes of verbs: existential verbs and perception verbs. [Babby \(1980\)](#) finds similarities between Subject and Object Gen Neg but argues that Subject Gen Neg applies only to existential sentences; we agree, including sentences with perception verbs as a distinctive subtype of existential sentences (with caveats; see footnote 7).

[Borshev & Partee \(2002a,b,c\)](#) agreed with much of [Babby \(1980\)](#), but argued that Subject Gen Neg is sensitive not to Theme-Rheme structure but to “Perspectival Structure”, involving a diathesis choice with verbs that take both an NP argument and a LOC(ation) argument (implicit or explicit), as described in Section

[2.2]. There are Subject Gen Neg examples in which the Genitive NP can be argued to be the Theme, like *kefira* ‘kefir’ in (8) and *sobaki* ‘dog’ in (7).

- (7) **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.]
- (8) [Ja iskal kefir.] **Kefira** v magazine ne
 [I looked-for kefir-ACC.M.SG] Kefir-GEN.M.SG in store NEG
bylo.
 was-N.SG
 [I was looking for kefir.] ‘There wasn’t any kefir in the store.’
 (Borschev & Partee 2002b)

Later, Partee & Borschev (2004) and Kagan (2005, 2007) independently suggested that the diathesis choice⁶ involved in Subject Gen Neg, and also Object Gen Neg and Gen Int, involves shifting the NP to “property type” $\langle e, t \rangle$ – a position we maintain in the current paper as well and discuss in section [3.1.2]. We first present our analysis of Subject Gen Neg in less formal terms.

[2.2] Our analysis of Subject Gen Neg

Among the central notions needed for understanding existential sentences, Arutjunova (1976, 1997) distinguishes three components in a “classical” existential sentence: a “Localizer” (“Region of existence”), a name of an “Existing object”, and an “Existential Verb”. Borschev et al. (2008) use the terms LOC(ation), THING, and v_{BE} .

- (9) V ètom kraju (Localizer) est’ (Existential Verb) lesa (name of “Existing Object”).
 In that region is/are forests-NOM.M.PL
 ‘There are forests in that region.’ (Arutjunova 1997, 57)

THING and LOC are roles of the participants of the situation (or state) of existing or of being located – not simply roles of the verbs, since with some verbs LOC is not expressed overtly. In the *kefir* sentence (8), the THING is denoted by *kefir*, and LOC is denoted by *v magazine*; in (1-b, d), THING is the answer, and LOC is the implicit location associated with the verb *prišel* ‘arrived’.

One of the core principles behind Borschev & Partee (1998, 2002b) is the following:

[6] This shift in the types of the verb’s arguments is not a prototypical case of “diathesis shift”, but such an extension of the term “diathesis” to involve demotions from canonical subject or object status as well as changes from one argument type to another has been argued for by, among others, (Ackerman & Moore 2001).

- (10) “EXISTENCE IS RELATIVE” PRINCIPLE: Existence (in the sense relevant to existential sentences) is always relative to a LOC(ation).

The relevant location may be implicit or explicit. It may be a physical location, ‘a perceiver’s perceptual field’, the virtual location of ‘in *x*’s possession’, or the whole world, etc. Example (11-b) is a negated existential sentence⁷ with Gen Neg which denies the existence of the THING in a perceiver’s perceptual field while presupposing existence of that THING in a larger context. Sentence (11-b) could be used when we’re looking for Masha, can’t see her, and surmise that she isn’t here. A natural context for sentence (11-a), with nominative, could be while taking a group photo: someone needs to move so that Masha will be visible.

- (11) a. **Maša**   ne   vidna.
           Masha-NOM NEG seen-F.SG
           ‘Masha can’t be seen.’ (but she’s here)
- b. **Maši**   ne   vidno.
           Masha-GEN NEG seen-N.SG
           ‘Masha is nowhere to be seen.’ (and may not be here at all)

The core of the proposal of Borschev & Partee (1998, 2002b) is that the distinction marked by Subj Gen Neg is a distinction between existential sentences and locative (predicational) sentences, two sentences types that may both involve verbs that can express a relation between a THING and a LOCATION (explicit or implicit). We treat the distinction as involving a diathesis choice.

To spell out the proposal, we need some background ontology from Borschev & Partee (1998, 2002b):

- (12) The Common Structure of “Existence/location situations”: v_{BE}
 (THING, LOC) (v_{BE} abbreviates the (open) class of verbs that can occur in existential sentences)
- (13) PERSPECTIVE STRUCTURE:
 An “existence/location situation” may be structured as either centered on the THING or centered on the LOCATION. We use the term PERSPECTIVAL CENTER for the chosen participant.

Borschev and Partee use a camera metaphor to explain the different choices of Perspectival Center: the virtual camera may be ‘tracking the THING’ (THING is Perspectival Center) or be ‘fixed on the LOCATION’ (LOC is Perspectival Center). In the first case, we get a locative subtype of predicative sentence, in the second case,

[7] Borschev and Partee treated intransitive perception sentences like (11-b) as a subtype of existential sentences. But they have a number of distinctive properties and not all of our team agree with this supposition. We leave the issue open for now.

an existential sentence. In the affirmative, the sentence types do not differ in case choice, but when sentential negation is present, they are distinguished by the case of the subject (THING): Nom if locative/predicative, Gen if existential.

- (14) a. **Otec**   ne   byl   na more. (Apresjan 1980)
 Father-NOM.M.SG NEG was-M.SG at sea.
 ‘Father was not at the sea.’ (maybe never in his life)
- b. **Otca**   ne   bylo   na more.
 Father-GEN.M.SG NEG was-N.SG at sea.
 ‘Father was not at the sea.’ “There was no Father there.” (at some given event)

While we are skeptical about the Unaccusativity hypothesis for Gen Neg, this semantic analysis is not incompatible with it; it could in principle provide the semantic motivation for the choice between an Unaccusative and an Unergative structure.

- (15) PERSPECTIVAL CENTER PRESUPPOSITION:
 Any Perspectival Center must normally be presupposed to exist.

So in the first sentence of (16-a), from (Partee & Borschev 2004) the Nom construction presupposes that Petja exists but not that the concert exists. Thus denying that there was a concert is a felicitous continuation. In (16-b), the Gen construction presupposes that the concert exists, and the continuation is thus infelicitous. In sentence (16-b) the *construction* does not provide any presupposition of Petja’s existence; the sentence denies his existence in the given LOCATION (by principle (17) below). But the proper name itself carries a presupposition of existence in the larger context.

- (16) a. **Petja**   na koncerte ne   byl.   Koncerta ne   bylo.
 Petja-NOM at concert NEG was-M.SG. Concert NEG was-N.SG
 ‘Petja was not at the concert. There was no concert.’
- b. **Peti**   na koncerte ne   bylo   #Koncerta ne   bylo.
 Petja-GEN at concert NEG was-N.SG. Concert NEG was-N.SG
 ‘Petja was not at the concert. #There was no concert.’ (P&B 2004)

Borschev and Partee have the following semantic rule capturing the semantics of the Subject Gen Neg sentences:

- (17) THE SEMANTICS OF NEGATED EXISTENTIAL SENTENCES (NES):
 An NES asserts or implicates the non-existence of the thing(s) described by the subject NP in the Perspectival center LOCATION.

Borschev & Partee (1998) derive principle (17) from the literal semantics of $\neg V(\text{THING}, \text{LOC})$, plus the following principle⁸:

- (18) PRESUPPOSED EQUIVALENCE: An NES presupposes that the following equivalence holds locally in the given context of utterance:
 $V_{\text{BE}}(\text{THING}, \text{LOC}) \Leftrightarrow BE(\text{THING}, \text{LOC})$

It is important to stress that perspectival structure reflects 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.

When we choose the LOCATION as Perspectival Center, the sentence speaks about what THINGS there are or are not in that location/situation.

Later, Partee & Borschev (2004) and Borschev et al. (2008), and similarly Kagan (2007), proposed that central to the linguistic manifestation of this diathesis choice of an existential construction (as opposed to the locative/predicative construction), and also central to the related constructions that give rise to Object Gen Neg and Gen Int, is a “demotion” of the NP argument to property type $\langle e, t \rangle$. We discuss this further below.

[2.3] *Bleachable verbs and the nature of semantic bleaching*

It has often been observed that the lexical, non-*be* verbs in Subject Gen Neg sentences seem “bleached”; substituting the verb *byt’* ‘be’ for them often produces a nearly equivalent sentence. Borschev & Partee (1998) argued the lexical verbs occurring with Subject Gen Neg have their normal meanings⁹. But the construction presupposes the equivalence in (18). Then we may ask: can we find or accommodate for the given sentence in the given context further premises whose presence can make the equivalence in (18) “locally valid”? Such premises may come from the dictionary, common knowledge, or the context. Answers range from “Yes, easily” to “Impossible.”

“Dictionary axioms”

Here is an example of how encyclopedic knowledge plus a “dictionary axiom”, allows us to derive the relevant equivalence which enables the use of Subject Gen Neg:

[8] We now consider it likely that the equivalence is an implicature rather than a presupposition, and that it holds for all existential sentences, affirmative and negative. See Borschev et al. (2010).

[9] There is a contradiction between the claim that lexical meanings of verbs in Subject Gen Neg sentences do not change and the earlier claim that with the shift of the NP in a Subject Gen Neg sentence to type $\langle e, t \rangle$, the verb type and verb meaning must also shift. This contradiction is addressed and resolved in a forthcoming paper (Borschev et al. 2010), as briefly described in section [3.1.4] below.

- (19) a. Ne **belelo** **parusov** na gorizonte.
 NEG shone-white-N.SG sails-GEN.M.PL on horizon
 ‘No sails were shining white on the horizon.’
- b. **Presupposed Equivalence:**
 ‘A sail shone white on the horizon.’ $\Leftrightarrow$ ‘There was a sail on the horizon.’
- c. ‘Dictionary axiom’ (part of lexical semantics):
 to shine-white $\Leftrightarrow$ to be white (in the field of vision)
- d. Dictionary or encyclopedic axiom; ‘common knowledge’:
 ‘Sails as a rule are white.’

Assuming that the generic axiom (19-d) holds in the given situation, we can infer that there was a sail on the horizon if and only if there was a *white* sail on the horizon. Then by the lexical axiom in (19-c) relating two Russian verbs, we can derive that there was a white sail on the horizon if and only if a sail *shone* (visibly) *white* on the horizon. Together, this gives us the desired equivalence in (19-b), licensing Genitive.

Dictionary + contextual axioms

Now consider a modification of the previous example:

- (20) Ne **belelo** **domov** na gorizonte. (B&P 1998)
 NEG shone-white-N.SG houses-GEN.M.PL on horizon
 ‘No houses were shining white on the horizon.’

Here, in most contexts the analog of (19-d) will not be valid: houses are often not white. In such contexts, (20) cannot be uttered successfully. When we try to imagine a context in which (20) could be used, we are led to consider a region in which all houses are white, and in which they can be seen from a long distance, and to (for instance) imagine a traveller through such a region looking for signs of habitation. In this way, contextual axioms can add enough information to make the desired equivalence true; Gen becomes acceptable, and the sentence is interpreted as an existential sentence – there were no houses on the horizon.

Examples (18) and (19) involve the same verb, with the same meaning. In (18) Gen is very natural, while in (19) special assumptions about the context are required. We did not require or find any change in the meaning of the verb *belet’*. Hence the “semantic bleaching” phenomenon is not a change in the verb’s meaning. Instead, the perception of meaning change comes from the added assumption that in the given context, “to be (in this Loc) is to Verb (in this Loc)”.

More examples with non-trivial equivalence

- (21) a. **Moroza**   ne   **čuvstvoalos’**.
 Frost-GEN.M.SG NEG be.felt-N.SG
 ‘No frost was felt (there was no frost).’
 (Babby 1980, 59; from Ickovič 1974)
- b. Equivalence: Frost was felt $\Leftrightarrow$ There was frost.
- c. “Locative” S with Nom, no such equivalence:
Moroz   ne   **čuvstvoalsja**.
 Frost-NOM.M.SG NEG be.felt-M.SG
 ‘The frost was not felt.’

Here, the Gen Neg variant in (21-a) is felicitous if it is presupposed that we feel cold if and only if it is cold. This axiom, in (21-b), is the needed equivalence itself. On the other hand, (21-c) does not presuppose any such equivalence. In fact, in (21-c) it is presupposed that the cold did exist at the moment, and it is predicated of it that it just was not felt (perhaps because we were dressed warmly). So depending on whether the context validates (21-b) or not, we have a context for (21-a) or for (21-c). And the meaning of the verb doesn’t change, but in the Gen Neg case it is effectively “bleached”.

- (22) V našem lesu ne **rastet** **gribov**.
 In our forest NEG grows-SG mushrooms-GEN.M.PL
 ‘There are no mushrooms growing in our forest.’ (Babby 1980, 66)

It is “common knowledge” that for mushrooms in the woods, ‘to be is to be growing’. Babby (1980, 67) gives the contrasting example (23), a negated predicative sentence with the same verb but with a Nom subject, saying that if you tried to plant grass here, it wouldn’t grow.

- (23) Zdes’ daže **trava**   ne   rosla.
 Here even grass-NOM.F.SG NEG grew-F.SG
 ‘Even grass couldn’t grow here’

Conclusions about Subject Gen Neg and “Genitive verbs”

Subject Gen Neg can occur with any verb that can support the presupposed equivalence. Since added premises may come from the context, a “list” of such verbs is impossible. Some verbs are easier to find contextual support for than others;

for instance, agentives are usually impossible in Subject Gen Neg. But consider (24)¹⁰:

- (24) Ne **begalo tarakanov**.
 NEG ran-N.SG cockroaches-GEN.M.PL
 ‘There were no cockroaches running around.’

Two things help to make (24), a rare example of Subject Gen Neg with a normally agentive verb, possible: (i) the subject is non-human (and thus has decreased agentivity), and (ii) running around is a characteristic sign of the presence of cockroaches: for cockroaches in a human place of abode, ‘to be is to run around’.¹¹

And conversely, some verbs have meanings so close to *byt’* that they virtually demand Gen Neg, as *suščestvovat’* ‘exist’ normally does. (But even *suščestvovat’* ‘exist’ does not absolutely demand Gen Neg; see discussion of Paducheva’s *suščestvovat’ dlja nego* ‘exist for him’ (‘exist in his world’) examples in (Partee & Borshev 2004).)

[3] OBJECT GENITIVES, SUBJECT GENITIVES, AND THE VERB

[3.1] *The Relation between Subj Gen Neg and Obj Gen Neg*

Are Subject and Object Gen Neg in Russian the same construction? Franks (1995) refers with approval to arguments by Pesetsky (1980) and Neidle (1982, 1988) that Gen Neg applies only to underlying internal arguments (direct objects), so that Subject Gen Neg and Object Gen Neg are actually a single phenomenon. But we are sceptical about this view on empirical grounds, despite its theoretical elegance.

Western Slavists (other than Babby) start from Object Gen Neg and see Subject Gen Neg as a derivative phenomenon involving only “apparent” subjects. This approach does not offer any direct account of the “existential” interpretation of Subject Gen Neg sentences. Russian linguists are more inclined to see Subject Gen Neg as a property of existential sentences, and not to expect the same analysis to apply to Object Gen Neg sentences, which are not in any obvious sense “existential”, although as Padučeva has emphasized in her work, Subject Gen Neg and

[10] This example is based on a line from Turgenev, “Chor’ i Kaliniyč” (1846–47): *meždu brevnami i po kosjakam okon ne skitalos’ rezvych prusakov, ne skryvalos’ zadumčivych tarakanov* ‘between the logs and along the window frames there didn’t wander any frisky red-cockroaches-GEN, there weren’t hiding any brooding (black) cockroaches-GEN’. The verb *skitat’sja* ‘wander’ is normally agentive, normally applied only to human subjects.

[11] In this example there may indeed be a substantive shift in the meaning of the verb, bringing it closer to a non-agentive meaning like ‘teeming’; compare agentive and non-agentive uses of English ‘swarm’ in the diathesis alternation *Bees were swarming in the garden* vs. *The garden was swarming with bees*. See Borshev et al. (2010) for more discussion.

Object Gen Neg are often alike in requiring that the verb not impose an existence presupposition for the NP in the given argument position¹².

A problem for approaches that take Object Gen Neg as basic and extend it to Subject Gen Neg via Unaccusativity is that they do not explain why some but not all passive sentences allow Gen Neg subjects. With the verb *podat* 'submit', we find parallel behavior¹³ and interpretation between the object and a passive subject, illustrated in (25).

- (25) a. On ne podal **zajavlenija** o kraže.
he NEG submit statement-GEN.N.SG about theft
'He didn't submit a statement about the theft.'
- b. **Zajavlenija** o kraže ne **bylo** podano.
statement-GEN.N.SG about theft NEG was-N.SG submitted
'No statement about the theft was submitted.'
- c. On ne podal **zajavlenie** o kraže.
he NEG submit statement-NOM.N.SG about theft
'He didn't submit the statement about the theft.'
- d. **Zajavlenie** o kraže ne bylo podano.
statement-NOM.N.SG about theft NEG was-N.SG submitted
'The statement about the theft was not submitted.'

All are good, and the interpretations are parallel: Acc/Nom presupposes existence of the statement, Gen suggests no statement exists. But that is not true for all transitive verbs.

- (26) a. Oni ne osuždajut **povedenija** molodych chuliganov
They NEG condemn behavior-GEN.N.SG young-GEN thugs-GEN
'They don't condemn the behavior of the young thugs.'
- b. ***Povedenija** molodych chuliganov ne
behavior-GEN.N.SG young-GEN thugs-GEN NEG
osuždaetsja.
condemn-REFL-N.SG
Intended meaning: 'The behavior of the young thugs isn't condemned.'

The pattern we see with *osuždat* 'condemn' in (26) is unexpected on the Unaccusativity approach; since the subject of (26-b) is an 'underlying object', (26-b) should have been as good as (25-b) with *podat* 'submit', but it is not. The pattern can be explained by the fact that (25-b) but not (26-b) can be interpreted as an existential sentence. The passive predicate *podan(o)* 'submitted' is a bleachable,

[12] But as the contrast between (25-a-b) and (26-a-b) below shows, this non-presupposition requirement is much stronger for Subject Gen Neg than for Object Gen Neg.

[13] Thanks to Alexander Letuchiy for bringing up this issue and finding similar examples.

potentially ‘existential’ predicate similar to *prišlo* ‘arrived’. Its subject does not carry a presupposition of existence, just as the object of *podat* ‘submit’ doesn’t carry a presupposition of existence. *Osuždan(o)* ‘condemned’, on the other hand, cannot be construed as an existential predicate; it presupposes the existence of its subject. This doesn’t matter for Obj Gen Neg, but does for Subj Gen Neg.

The contrast between verbs meaning ‘appear’ and ‘disappear’ (both Unaccusative) noted in footnote 4 is also problematic for the Unaccusativity hypothesis, which we believe tries to treat Subject Gen Neg and Object Gen Neg as more alike than they actually are.

Gen Neg marks “demotion” from canonical Subject or Object

We believe that the two alternations are similar in that both involve a DEMOTION of the corresponding argument: a genitive subject is not a first-class subject, and a genitive object is not a first-class object.

But because objects are more closely dependent on the verb, the semantic effects of Object Gen Neg are more variable, while the semantic effects of Subject Gen Neg fall into just one strong pattern, the existential type, with a perceptual subtype, as in *Maši ne vidno* (11-b).

A cross-linguistic difference between subject alternations and object alternations that fits well with the $\langle e, t \rangle$ -type hypothesis comes from incorporation phenomena in various languages: such variation in semantic type and associated grammatical marking is widespread for the “internal arguments” of a verb and rare for subjects. It may well be that existential sentences are the only widespread case of $\langle e, t \rangle$ subjects, and hence not surprising that existential sentences generally form a separate sentence type.

It is not that there are no Object Gen Neg cases that work similarly to Subject Gen Neg. In particular, Padučeva (2006) discusses two classes of verbs for which Obj Gen Neg is closely parallel in semantics to Subj Gen Neg: verbs of creation (cause-exist) like *stroit* ‘build’ are analogous to existential verbs, and transitive perception verbs are naturally parallel to intransitive perception predicates like *vidno* ‘seen, visible’. But Obj Gen Neg applies much more broadly than Subj Gen Neg, and by no means always corresponds to any sort of non-existence in a location, as can be seen in many examples below.

The type-shifting approach to ‘demotion diathesis’

Instead of deriving Subject Gen Neg from Object Gen Neg, we argue for a different generalization covering both, based on semantic types and type-shifting.

Semantic theories distinguish semantic types such as “individual”, “proposition”, “property”. In formal semantics, three main types have been proposed for the meanings of NPs¹⁴: (i) type *e*, “entity-type”, the default type for proper names,

[14] We will use NP as a cover term to include all of NP, QP, and DP.

pronouns, referential NPs (DPs); (ii) type $\langle\langle e, t \rangle, t\rangle$, “generalized quantifier type”, the type for strong quantificational NPs; and (iii) type $\langle e, t \rangle$ ¹⁵, “predicate type” or “property type”, default type for adjectives, common nouns, and predicate NPs. Partee (1986) describes the different types of NP interpretations and offers an account of some of the type-shifting principles that govern their distribution.

Property-type interpretations of NP have been invoked for a number of constructions, including opaque objects of intensional verbs (Zimmermann 1993), “subjects” of existential sentences (Padučeva 1985, 99; McNally 1992, 1997), incorporated nominals (Geenhoven 1998), and Russian small nominals (Pereltsvaig 2006), in addition to predicate nominals (Partee 1986, among others), where they are the default interpretation.

We believe that what is sometimes referred to as the “decreased individuation” or “decreased referentiality” of a Genitive NP (Timberlake 1975; Padučeva 1992) can be best formalized as a shift from a referential or e -type argument interpretation to a property-type or $\langle e, t \rangle$ -type interpretation.

- (27) PROPERTY-TYPE HYPOTHESIS (Partee & Borschev (2004); Kagan (2005, 2007); Borschev et al. (2008)): Where Russian has a Nom/Gen or Acc/Gen alternation, if there is a semantic difference at all, then Nom or Acc preferentially represents an ordinary e -type argument, whereas a Gen NP is preferentially interpreted as property-type: $\langle e, t \rangle$.

The hedges reflect the fact that Acc and Gen forms are sometimes semantically indistinguishable, and semantic effects that do occur are sometimes optional; these issues are discussed briefly below, and more in Borschev et al. (2008).

Shifting the NP, Shifting the Verb

In general, a change in the semantic type of an argument implies a change in the verb’s meaning. There are familiar analogies in other domains, such as shifts in meaning of reflexive versions of verbs like *to hurt oneself*, *to help oneself*, and differences between ‘intensional’ and ‘extensional’ versions of *seeking/looking for*, or *expecting/waiting for*.

The verb *ljubit* ‘love’ has different meanings with human vs. inanimate or abstract nouns. Gen Neg is common with inanimate/abstract objects, for which ‘love’ generally relates to a ‘quality’, but is less common, and for some speakers impossible, when it expresses the typical human-to-human ‘love’-relation. Apresjan (2005) finds Gen Neg ungrammatical for human objects of *ljubit* (suggesting “depersonalization”, insulting.) Others disagree, but most do find a contrast in (28a-b), with (28-b) getting a ‘quality’ interpretation.

[15] Property type is really an intensional type; in some systems it would be $\langle s, \langle e, t \rangle \rangle$.

- (28) a. (*) Ja ne ljublju ètoj ženščiny.
           I NEG love that-GEN woman-GEN
           ‘I don’t love that woman.’
       b. Ja ne ljublju ètoj pevicy.
           I NEG love that-GEN singer-GEN
           ‘I don’t love that singer.’

The role-noun *pevica* ‘singer’ invites an interpretation where the attitude is directed not toward the singer *qua* individual, but to some manifest (presumably musical) qualities of that singer. This is one of many sorts of ‘property’ readings.

Even an ordinary human DP like *èta ženščina* ‘that woman’ can occur in genitive if there is strong contextual help, as in (29); a woman as a normal *e*-type entity does not ‘come in large doses’. (Acc is possible with a property reading, but Gen is impossible without it.)

- (29) Ja ne ljublju ètoj ženščiny, osobenno v bol’six dozax.
       I NEG love that-GEN woman-GEN especially in large doses
       ‘I don’t love that woman, especially in large doses.’

With the verb *zametit’* ‘notice’ in (3b-c), the interpretation with Accusative object under negation is presuppositional, the interpretation with Gen Neg is not. As noted by Dahl (1971), Kagan (2005, 2007), and Borschev & Partee (2008), following Kiparsky & Kiparsky (1970), the same verb takes clausal complements with indicative (factive) or subjunctive (non-factive). On Kagan’s and our analysis, the ‘veridical’ (presuppositional) sense of the transitive verb as in (3-c) takes a type *e* object, marked Acc; the non-veridical sense as in (3-b) takes a property-type object, and could be roughly paraphrased as ‘notice something which seemed to be (a/some) P’.

In general, Obj Gen Neg is less semantically uniform than Subj Gen Neg, but not so lexically idiosyncratic as Gen Int. It is sensitive to verb classes in ways that we explain in terms of different possible paths to type-shifting. Some type-shifting possibilities form recurrent and semi-productive patterns; others are more idiosyncratic, depending on the particular verb and particular NP; some may arise ‘on the fly’ and may depend heavily on the context. We give an overview of the main types of verbal shifts below.

VERBS OF CREATION may be viewed as causatives of inchoatives of potentially *existential verbs*. Under negation, the act of creation is denied, both with Acc and with Gen. Acc nevertheless takes a type *e* object, implying ‘referentiality’: the object is understood as specific, existing perhaps in some world of plans and intentions. See (2a-b): the Acc variant predicates non-creation of a specific ‘planned’ hotel; but in the Gen variant, there is simply no hotel at all, and no plans are presupposed. Both readings are robust.

The variant of the sentence with Gen Neg can be viewed as a species of the PURELY FORMAL “NON-SPECIFIC” SHIFT seen with existential verbs (and the open class of “weak” “bleachable” verbs), discussed in more detail in Borschev et al. (2010). Since indefinites have been argued to have $\langle e, t \rangle$ as their basic type (Landman, McNally, others), when such verbs take bare NP objects with indefinite readings, the NP need not shift at all.

VERBS OF PERCEPTION. With intransitive verbs of perception, as in (11a-b), the Acc variant implies Masha is not seen, but is somewhere ‘here’, while the Gen variant simply asserts her non-existence in the observer’s field of perception, which may be evidence of her absence from the observed location. The behavior of objects of transitive perception verbs, as in (30) below, is very similar. The Acc example (30-a) is compatible with a range of different interpretations, and does not suggest Masha’s absence from a certain area. The Gen example (25-b) simply states that there was no visual evidence of Masha’s presence. The difference, however, is more subtle in the Object Gen Neg than in Subject Gen Neg: the object Genitive does not require the presupposed equivalence in (18) and thus non-existence in the LOCATION, so the difference between the Gen and Acc variants is smaller in (30a-b). But the $\langle e, t \rangle$ -type shift is the same for transitive and intransitive verbs: the relevant argument is shifted into an $\langle e, t \rangle$ -type meaning “being Masha”. The verb ‘see’ then shifts its meaning into something like ‘get visual evidence of the presence of something which is P’. Together and with negation added, that produces ‘didn’t glimpse any trace of Masha’. Proper names shift particularly easily to property type with these verbs.

- (30) a. Ne videl Mašu.
NEG saw Masha-ACC
‘He didn’t see Masha.’ (didn’t take the time to go see her, or ...)
- b. Ne videl Maši.
NEG saw Masha-GEN
‘He didn’t see Masha.’ (no visual evidence ...)

‘PARTITIVE SHIFT’ lets an INCREMENTAL THEME VERB like *pročitat* in (31-a) take Gen Neg with a measure-like interpretation. This contrasts with the interpretation for the Acc variant of the sentence in (31-b) where the two pages are some specific two pages.

- (31) a. Ja ne pročital dvux stranic.
I NEG read two-GEN pages-GEN
‘I didn’t read (even) two pages.’ (I read less than two pages.)
- b. Ja ne pročital dve stranicy.
I NEG read two-ACC pages-ACC
‘I didn’t read those two pages.’

Another type of shift is a “SEMANTIC INCORPORATION SHIFT” to give a “KIND OF ACTION”. With the strongly actional *ubit* ‘kill’, a rather “all or none” action, Gen Neg is rare. But it can marginally be used to denote a “kind” of killing (cf. lexical *matricide*). On this “INCORPORATION” SHIFT, the meaning shifts to a variant ‘to Verb (or try to Verb) something with property P’. Thus the VP in (32) amounts to something like a “be a mother-killer”:

- (32) ?Petja ne ubival **materi**.
 Petja NEG killed mother-GEN
 ‘Petja didn’t kill his mother.’ (‘Petja is not a mother-killer.’)

The pevica ‘singer’ example (28-b) demonstrates the QUALITY-METONYMY SHIFT: an *e*-type argument is turned into a property-type argument denoting a property of that individual – which in (28-b) is most likely the qualities of the singer’s music. The particular property chosen will be influenced by both the combination of the verb and the noun, and the context.

SITUATION-METONYMY. The verb *privetstvovat* ‘greet’ in its more concrete sense of literally saying your greetings to somebody disallows Gen Neg (33-a). But in its more abstract sense of generally welcoming some development the same verb does take Gen Neg even with a human object. The result is then interpreted as (not) welcoming ‘the presence of *x*, the appearance of *x*’. So Gen in (33a-b) is impossible if the sense is ‘concretely greet, shake hands with, etc.’, but OK in the sense of ‘welcome the presence, arrival, appearance of’.

- (33) a. ?On ne privetstvoval **delegacii**.
 He NEG greeted delegation-GEN
 ‘He didn’t greet/welcome (the presence, arrival of) the delegation.’
 b. ?On ne privetstvoval **Nikiti Sergeeviča**.
 He NEG greeted Nikita-GEN Sergeevich-GEN
 ‘He didn’t welcome (the presence, arrival of) Nikita Sergeevich.’

Finally, sometimes there seems to be no substantial shifting, which is why we use the hedges in the Property Type Hypothesis in (27). Many action verbs prefer Acc under Neg. However, sometimes they allow Gen Neg with NO APPARENT SHIFT IN MEANING AT ALL (34a-b). It is hard to tell without much deeper investigation what is going on here: either there are some manifestations of the shift, but too subtle for us to have noticed; or else this usage may well be “persistence of Gen Neg” from an earlier historical norm, where Gen was automatically licensed under negation without apparent interpretational consequences. (Some speakers perceive some differences in some of these examples, suggesting that the historical explanation may be on the right track, but there is considerable variation in judgments.)

- (34) a. Ne otkryval okno.
 NEG opened window-ACC
 'He didn't open the window.'
- b. Ne otkryval **okna**.
 NEG opened window-GEN
 'He didn't open the window.'

Resolving an apparent inconsistency

In fact, Subject Gen Neg also requires a shift in the verb's type so that it takes an $\langle e, t \rangle$ subject; in (Borschev et al. 2010), we show how to resolve the apparent inconsistency between this fact and the claim in the present paper that with Subject Gen Neg, semantic "bleaching" does not require a shift in verb meaning. The heart of the resolution, and a key difference between Subject Gen Neg and Object Gen Neg, is that for Subject Gen Neg, the semantic shift in the verb is a purely "formal", minimal, one, requiring no *substantive* change in the meaning of the verb. We argue in that paper that the shift in verb's type in the Subject case is associated with the existential sentence construction, and happens in both affirmative and negative existential sentences, another difference between Subject Gen Neg and Object Gen Neg.

[3.2] *Relating Genitive of Negation and Genitive of Intensionality*

We will give only a brief illustration of the role of shifts in the verb meaning in Gen/Acc alternations with intensional verbs. We believe that the property-type demotion analysis does also help to unify Gen Neg and Gen Int, while still allowing for substantial differences between them.

In both English and Russian we can observe slightly different verb senses in intensional verbs like *seek*, *expect*, *fear* when they are used with differently interpreted objects. The kind of seeking involved in looking for a lost wallet or a particular woman is different from the kind of seeking involved in looking for the (unknown) perpetrator of a crime or looking for a wife. We see similar differences in the Russian examples in (35).

- (35) a. Ja ždu **podrugu** / **načal'nicu**.
 I wait-for girlfriend-ACC.F.SG supervisor-ACC.F.SG
 'I'm waiting for my girlfriend / the supervisor.'
- b. Oni ždut **spravedlivosti** / **načal'nicy**.
 They await justice-GEN.F.SG / supervisor-GEN.F.SG
 'They are waiting for (expecting, hoping for) justice / a supervisor.'

When *ždat* 'wait for, expect, await' is used with the accusative in (35-a), the existence of the girlfriend or the boss is presupposed, and one is waiting for that individual to 'show up'; we analyze Acc direct objects as of type *e*, and the rela-

tion in this case is extensional. With the genitive in (35-b), the interpretation is intensional: the existence of a referent of the NP is not presupposed, and its existence may be part of what is being awaited or expected. In the case of ‘supervisor’ in (35-b), for instance, ‘they’ may not have any supervisor, and are waiting to be assigned one before starting to work.

Case is however quite lexicalized with intensional verbs; some may shift to property-type objects even without genitive. There are some Acc-only intensional verbs like *podsteregat* ‘lie in wait for’, which with an object like *dobyču* ‘prey’ can be either specific or non-specific. And among Gen-only intensional verbs, the objects of some, like *žazdat* ‘crave’, can only be specific, and of others, like *dostigat* ‘attain’, can be specific or non-specific. Each intensional verb has its own pattern of alternational potential with various classes of nouns. Few examples actually allow free choice. Where there is a choice, Nom and Acc are either synonymous or differ in line with our analysis.

For most intensional verbs, case choice correlates with the “sort” of the DP argument, as described well by Ickovič (1982). The sortal hierarchy relevant for this choice is as follows, with different verbs choosing the borderline differently.

(36) Gen ← abstract > mass > count inanimate > role-animate > animate → Acc

The examples in (37-38) illustrate the hierarchy; cases allowing alternation are boldfaced. With *ždat* ‘expect, wait for’, the alternating pairs are in the intermediate part of the range, while with *iskat* they occur at the more ‘abstract’ end. No two verbs behave exactly alike.

- (37) a. Petja ždal (ot nego) ^{OK}spravedlivosti / *spravedlivost’.
 Petja waited (from him) justice-GEN justice-ACC
 ‘Petja expected (was hoping for) justice (from him).’
 b. Petja ždal ^{OK}**moloka** / ^{OK}(svoe) **moloko**.
 Petja waited milk-GEN (his) milk-ACC
 ‘Petja was waiting for milk (non-specific) / (his/the) milk.’
 c. Petja ždal ^{OK}**avtobusa** / ^{OK}(svoj) **avtobus**.
 Petja waited bus-GEN (his) bus-ACC
 ‘Petja was waiting for a bus/ (his/the) bus.’
 d. Petja ždal ^{OK}**dobroj fei** / ^{OK}**dobruju feju**.
 Petja waited good fairy-GEN good fairy-ACC
 ‘Petja was expecting (awaiting) a good fairy/ was expecting (waiting for) a/the good fairy.’¹⁶

[16] In (37-d) and in (38-b), Gen is unambiguously non-specific indefinite, while Acc may be +/-specific and +/-definite.

- e. Petja ždal ***Maši** / ^{OK}**Mašu**.
 Petja waited Masha-GEN Masha-ACC
 ‘Petja was waiting for Masha.’

Examples like (37-d) are not common, but with a human ‘role’ noun native speakers do sometimes get a good contrast, with the “non-specific” reading especially natural when waiting for the ‘role-person’ to come and fulfill a relevant functional role.

Yakov Testeleets notes that with the object *sud’ja* ‘judge’, the verb *ždat’* can have a Gen Neg object only when waiting for the judge in a court of law, where his arrival is needed for the proceedings to begin. If one is waiting for a judge anywhere other than in court, only Acc is possible. This observation provides additional support for the claim that where there is a semantic difference, Genitive generally signals a non-specific, or property-type reading, Accusative a specific, or *e*-type, reading.

- (38) a. Kol’xaas iskal ^{OK}**spravedlivosti** / ^{OK}**spravedlivost’**.
 Kohlhaas sought justice-GEN justice-ACC
 ‘Kohlhaas sought justice.’
 b. Kol’xaas iskal ^{(?)OK}**moloka** / ^{OK}**moloko**.
 Kohlhaas sought milk-GEN milk-ACC
 ‘Kohlhaas was looking for (non-specific) milk / (the) milk.’
 c. Kol’xaas iskal ***bloknota** / ^{OK}**bloknot**.
 Kohlhaas sought notepad-GEN notepad-ACC
 ‘Kohlhaas was looking for a/the notepad.’
 d. Kol’xaas iskal ***sekretarši** / ^{OK}**sekretaršu**.
 Kohlhaas sought secretary-GEN secretary-ACC
 ‘Kohlhaas was looking for a/the secretary.’

When both cases are possible with a given verb and a given NP, the meanings of the two forms differ in the predicted direction. Even the near-synonymous forms in (38-a) tend to differ subtly: with Acc, the search was for justice as a whole, e.g. hoping to find that it exists, whereas with Gen the search was for an instance of justice (in some case).¹⁷

The Acc forms in (37-d, 38-b) fit a generalization concerning optionality discussed in (Borshev et al. 2008), that whichever case choice in a given example is the “default” choice will tend to have a wider range of possible semantic interpretations, with the non-default choice more strongly signaling its preferred reading. In those examples, Acc is the default preference (because of the animate

[17] In the Russian National Corpus, as object of *iskal* ‘sought’, some instances of *istinu* ‘truth-ACC’ but none of *istiny* ‘truth-GEN’ are capitalized, supporting this idea.

object in (37-d), and in (38-b) because the verb *iskat* ‘seek’ prefers Acc for all except the most abstract objects), hence more ambiguous.

More discussion of Gen Int and its relation to Gen Neg and to Subjunctive can be found in Borschev et al. (2008) and in Kagan (2007). Our conclusion is that if one accepts the arguments of Zimmermann (1993) and Geenhoven & McNally (2005) that opaque objects of intensional verbs are property-type, then the assumption that Russian alternating Genitives are property-type provides a unified basis for an account of Gen Neg and Gen Int, a unification argued for by Dahl (1971), Neidle (1982) and Kagan (2005).

[3.3] *Optionality issues*

In examples like (28) and (29), as well as in (37-d, 38-b) as discussed just above, Acc is possible with a property reading, but Gen is impossible without it; such “optionality” issues frequently arise with Nom/Gen and Acc/Gen alternation. The semantic correlate of the case distinction is not always complementary distribution of two interpretations.

There appear to be factors of several kinds behind the complexity of the data. Some of these are discussed explicitly in Borschev et al. (2008), others will be further discussed in work in progress. We mentioned one factor at the end of the section [3.2] above, and we mention some others here very briefly just to give a flavor of the issues.

In the realm of SEMANTICS AND PRAGMATICS, the property-type reading is more “non-committal”, more inclusive, more “underspecified”. It doesn’t presuppose existence but doesn’t exclude it. Nom and Acc favor “specific” reading, but the line is not sharp. Abstract nouns can easily be analyzed as denoting *e*-type “kinds” or as $\langle e, t \rangle$ -type “properties”, and there can be specific non-existent concrete entities (like the “planned hotel”, etc.) It thus seems that while semantics does require certain differences between the Nom/Acc and the Gen examples, the leeway is quite big, and the distinctions are not always sharp. On the pragmatic side, some differences between Gen and Nom/Acc may be due to blocking effects, with failure to use *e*-type possibly implicating non-existence.

The degree of LEXICALIZATION of the case choice in the Gen alternations differs significantly. It is quite heavily lexicalized with intensional verbs in Gen Int, and to a lesser extent with Gen Neg. Particularly familiar collocations may retain patterns that are no longer productive.

This brings us to the question of history and the “CHANGING NORMS” factor for Gen Neg. Observation of the recent history of Gen Neg in Russian shows that the “old norm”, which is quite recent by language change standards, favored the invariant use of Gen under negation (similarly to modern Polish), while a “new norm” now under development will probably eliminate Gen Neg entirely (as happened in Czech). Old and new norms may be reflected in stylistic or register choic-

es, creating a set of factors orthogonal to the factors coming from lexical and sentence-level semantics.

Summing up, if there is a Gen alternation, when there are semantic differences between Gen and Acc/Nom, they always go in the same direction: Acc/Nom towards specific, Gen towards non-specific. Our type-shift hypothesis is aimed toward formalizing this factor, including explaining when and how proper names and other definite NPs can occur in Genitive what sorts of interpretations they then get, and what corresponding shifts in verb meaning may facilitate or be facilitated by the shifts in NP meaning. The type-shift account is compatible with earlier proposals of “decreased individuation” (Timberlake), “narrow scope” (many), “decreased referentiality” (Paducheva and others).

[4] CONCLUSIONS ABOUT VERB MEANING-SHIFTS WITH GENITIVE ALTERNATIONS

Our goal has been to capture what the different instances of Gen/Nom and Gen/Acc have in common semantically while still respecting the multiplicity of factors involved and not predicting more uniformity than is actually found. Our main idea is to treat Gen Neg and Gen Int as a “diathesis shift”, a “demotion” into a non-canonical subject or object position, semantically of type $\langle e, t \rangle$, thereby accounting for “decreased individuation/ referentiality”.

A crucial corollary is that a shift in NP type requires a shift in VP type, and a corresponding shift in VP semantics. Different classes of verbs have different “routes” to type-shifted meanings, some easier than others. We have argued here and in [Borschev et al. \(2010\)](#) that Subject Gen Neg involves a whole different sentence type, the existential construction, which is one of the few kinds of sentences that regularly have an $\langle e, t \rangle$ -type subject. The corresponding shift in the verb meaning is in most cases a purely formal one, and the “semantic bleaching” found in many Subject Gen Neg sentences does not involve any substantive change in the meaning of the verb, but rather involves finding contextual support for a local “presupposed equivalence” between “to V in a given Loc” and “to be in the given Loc”.

Object Gen Neg, on the other hand, involves a wide variety of verb types and frequently involves a more substantive shift in the meaning of the verb, a number of which we have illustrated.

Our account is in line with the Russian lexico-semantic tradition of paying careful attention to differences between different small word classes. What is still missing, however, and what we are still exploring, is the possibility of a precise framework that would help us move from verbal observations and explanations to testable predictions. We offer this work as a step in the direction of such a system.

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