Lecture 11: The Russian Genitive of Negation, Existential Sentences, and Diathesis Alternation: Interaction of Lexical and Compositional Semantics[1]

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0. Introduction

In many languages, existential sentences have a special syntactic shape, different from regular subject-predicate sentences. This has traditionally been thought of as a distinct construction, rather than an instance of verbal diathesis, although there have long been approaches which have suggested that either of two arguments of *be* might become the subject, or subject-like (Chvany 1975, Moro 1997). In Russian, with its "freedom" of word order and lack of articles, the difference between existential and "plain" sentences is not so obvious.

(1) a. *V gorode byl   doktor.*
        In town   was-M.SG doctor-NOM.M.SG
        'There was a doctor in town.'[2]
    b. *Doktor   byl   v   gorode.*
        doctor-NOM.M.SG was-M.SG in town
        'The doctor was in town.'

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[2] Under a marked intonation, this sentence could also be a variant of 'The doctor was in town.' Our examples should be read with neutral intonation.

- The sentences in (1) seem to differ only in Theme-Rheme structure and word order (and correspondingly in definiteness of the bare NP); but under negation, the well-known "Genitive of Negation" (GenNeg) phenomenon distinguishes the two types sharply.

(2) *Otvet   ne prišel   -- Otveta   ne prišlo.*
    Answer-**NOM**.M.SG NEG came-**M.SG** –   Answer-**GEN**.M.SG NEG came-**N.SG**[3]
    'The answer didn't come.'   'No answer came.'

- Intransitive GenNeg sentences are always "impersonal": the verb is always **N.SG** .

- Terminology (Babby 1980): "Negated declarative sentences" (NDS), for the sentences with nominative subjects, (3a). (Also called "Locative sentences" if the predicate is locative.) "Negated existential sentences" (NES), for those with genitive "subjects", (4a). Corresponding affirmative sentences: (ADS and AES) in (3b) and (4b).

(3) NDS   (a) *Otvet   iz polka   ne   prišel.*
               Answer-**NOM.**M.SG   from regiment NEG arrived-M.SG
               'The answer from the regiment has not arrived.'

    ADS   (b) *Otvet   iz polka   prišel.*
               Answer-**NOM**.M.SG from regiment arrived-M.SG
               'The answer from the regiment has arrived.'

(4) 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   otvet   iz   polka.*
               Arrived- M.SG answer-NOM**.**M.SG   from regiment
               'There was an answer from the regiment.'

- Word order: An affirmative AES obligatorily has a postverbal subject, while in a negative NES, where the difference is marked by case, the word order can vary.

- Common view: NES's are impersonal, but not AES's[4]: "These sentences are impersonal only when negated. If one removes the negation, they become personal." (Peškovskij, 1938, p.334)

Examples (5-8) illustrate alternating pairs and cases where either Gen or Nom is obligatory.

(5) a. NDS: *Stok   talyx vod   ne   nabljudalsja.*
               Runoff-**NOM**.M.SG melted water NEG   was.observed-M.SG
               'No runoff of thawed snow was observed.'
        NES: *Stoka   talyx vod   ne   nabljudalos'.*
               Runoff-**GEN**.M.SG melted water NEG   was.observed-**N.SG**
               'No runoff of thawed snow was observed.' (= There was no runoff.)

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[3] In glossing our examples, we use the following abbreviations:

NOM	nominative	SG	singular
GEN	genitive	PL	plural
ACC	accusative	1	first person
M	masculine	2	second person
F	feminine	3	third person
N	neuter		

We use boldface to highlight the relevant occurrences of **NOM** and **GEN** on nouns and **N.SG** on non-agreeing verbs. We do not gloss irrelevant morphology.

[4] Perlmutter and Moore (2001) consider even the affirmative counterparts of these sentences, where the "subject" is necessarily nominative, to be impersonal constructions; so does Babby (2001).

(6) a. NDS: *Moroz   ne   čuvstvovalsja.*
Frost-**NOM**.M.SG NEG be.felt-M.SG
'The frost was not felt.' (E.g. we were dressed warmly).

   b. NES: *Moroza   ne   čuvstvovalos'.*
Frost- **GEN**.M.SG NEG be.felt-**N.SG**
'No frost was felt (there was no frost).'

(7) a. NDS: *(#) Somnenija   ne   byli.*
Doubts-**NOM**.N.PL NEG   were-N.PL

   b. NES: *Somnenij   ne   bylo.*
Doubts- **GEN**.N.PL NEG   were- **N.SG**
'There were no doubts.'

(8) a. NDS: *Lena   ne   pela.*
Lena-**NOM**.F.SG NEG   sang-F.SG
'Lena didn't sing.'

   b. NES: *(#) Leny   ne   pelo.*
Lena-**GEN**.F.SG NEG   sang-**N.SG**

- **Subject Gen Neg and Object Gen Neg.** In addition to "subject Gen Neg" as sketched above, there is "object Gen Neg", in which direct object 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 matter of being inside/outside the scope of negation. Chvany (1975), Perlmutter (1978), Pesetsky (1982) and most Western scholars believe that the two cases should be viewed as a single phenomenon. In some Slavic languages, the two phenomena clearly diverge. 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 effect. Wereturn to this issue in Section 4.

1. Babby on "Declarative" and "Existential" sentences

1.1. Information structure and the scope of negation.

Babby's first main proposal about the distinction is shown in his chart (9) (Babby 1980: 72) below: DS's and ES's differ in their "scope of assertion/negation".

(9)

	AFFIRMATIVE	NEGATED
EXISTENTIAL	$[_{\text{Scope of A}}$ VP NP$]$ $\Rightarrow_{\text{NEG}}$	$[_{\text{ne}}$ VP NP$_{\text{gen}}]$
DECLARATIVE	NP $[_{\text{Scope of A}}$ VP$]$ $\Rightarrow_{\text{NEG}}$	NP$_{\text{nom}}$ $[_{\text{ne}}$ VP$]$

Thus the declarative sentence (5a) presupposes that there was some runoff of thawed snow and asserts that it was it was not observed, i.e. negates only that it was observed. The corresponding ES (5b) is used to negate the very existence of any runoff of thawed snow. The ES also negates "was observed", i.e. it negates the whole sentence; but in this case *nabljudalsja* 'was.observed' functions as a "weak verb" (often described as "semantically empty"). The notion of "weak" or "empty" verbs was at the center of the work reported in B&P (1998a); we will mention it in Section 3.

Babby relates chart (9) to the *categorical* vs. *thetic* distinction (See Kuroda's (1972) discussion of Brentano and Marty; and see von Fintel (1989), Ladusaw (1994).)

Babby's second main proposal is that the scope of assertion/negation can be equated with the Rheme of the sentence according to the division of the sentence into Theme and Rheme (or Topic and Focus). (Babby (2001) maintains the same correlation but adds a syntactic layer of analysis so that morphology does not have to interface with information structure directly.) On Babby's view, an AES or NES is a "rheme-only" sentence (plus optional thematic locative.)

Babby's (1980) rule of genitive marking in NES's:

(10)

              NEG
$[_{\text{Rheme}}$ V NP$]$ $\Rightarrow$ $[$ ne V NP$_{\text{gen}}]$

   Conditions: (a) NP is indefinite
                  (b) V is semantically empty

(One approximate contemporary translation: If the subject does not escape from the VP via topicalization, and the verb can be an 'existential verb', then negation licenses Genitive marking of the subject and Existential Closure (Diesing 1992) applies.)

Our first principal amendment in B&P (1998a,b): existence is always relative to a "LOCation", which may be implicit[5]. We accept Jackendoff's (1972, 1990) metaphorical-structural extensions of "being in a location" to include "being in some state", "occurring in some spatiotemporal region", "being in someone's possession", extending also to "being in the speaker's (or an observer's) perceptual field" (Padučeva 1992, 1997). Then whereas Babby analyzed ES's as "Rheme-only", with a possible optional Thematic Location, we argued that the LOCation, either given or contextually presupposed, is a semantically obligatory part of the construction and is the Theme. The assertion (Rheme) is that the/a "THING" described by the subject NP exists in that LOCation.

1.2. Alternatives to Babby's analysis: Unaccusativity.

- Babby (1980, 2001): All *subject* Gen Neg sentences are existential. Not all unaccusative verbs can occur with Gen Neg (see (11))[6], and some unergative verbs can (see (12)).

(11) *Za vse   vremja suda u nee na lice ne   drognul ni odin   muskul.*
during whole time   of-trial at her on face NEG twitched not one.**NOM** muscle.**NOM**
'Not a single muscle twitched on her face during the entire trial.' (Babby 2001, p.43)

(12) ..., tam ne   rabotaet ni odnogo inženera.
..., there NEG works not one.**GEN** engineer.**GEN**
'there hasn't been a single engineer working there' (Babby 2001, p.50)

- Proponents of the Unaccusative analysis, starting with Perlmutter (1978) and Pesetsky (1982), would argue that being an underlying direct object is a necessary but not a sufficient condition for the occurrence of Gen Neg, so (11) needs further explanation but is not a "counterexample"; and would presumably argue that the verb has been shifted to an Unaccusative in (12). Both the restrictions needed for (11) and the shifts illustrated in (12)

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[5] The claim that existential *be*-sentences always have an obligatory Locative argument is also made by Yokoyama (1986), Kondrashova (1996), Comorovski (1995). Chvany (1975) emphasizes that no such argument is syntactically obligatory, while Kondrashova (1996) goes so far as to make the location the subject at her level of NP-structure.

[6] We have recently found that sentences like (11) are possible when they contain the emphatic negative focus particle *ni*; these are not existential sentences, and we are working on them separately for now. See Section 4.3.

are clearly related to the semantics of the construction, which is our main concern.

- Unaccusative sentences and Existential sentences share the property of "non-Agentivity". We remain agnostic about the Unaccusativity requirement, noting only that given the openness of the class of possible "genitive verbs", this approach will have to permit verbs to shift in and out of the Unaccusative class. More on 'verb shifts' in Section 3.

There are a great many analyses of Gen Neg in the literature, too many to discuss. Most Western Slavists consider Unaccusativity at least a necessary condition; few are explicit about the semantics of the construction other than that it occurs within the scope of sentential NEG. Babby and we are among the few to argue that subject Gen Neg sentences are existential.

In our joint work, we have tried to understand the semantics of the construction and the interplay of lexical, compositional, and contextual factors at work. In this talk we will discuss those aspects of the semantics most relevant to the possibility of analyzing the construction in terms of diathesis alternation. Here we mention a few key semantic pointers that come from previous work.

- A Gen Neg subject is typically indefinite, but not always. (Babby, Timberlake.)
- The verb in a Subject Gen Neg sentence is often described as 'semantically empty' (Babby).
- Intransitive Gen Neg sentences are Thetic (Babby). (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 P&B 2002).
- A Gen Neg NP (subject or object) has decreased referentiality and tends to be '(existentially) quantificational' (Jakobson, Timberlake, Babby, Neidle, Pesetsky, Bailyn).
- Especially 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 (Timberlake, Musatjoki, Ueda).

2. Our approach. Existential vs. locative. "Perspective structure."

2.1. It's not Theme-Rheme that distinguishes existential sentences: the *kefir* sentences.

As we have argued in several papers (B&P 1998b, 2002a,b; P&B 2002), we doubt the correlation of the NES - NDS distinction with the postulated difference in Theme-Rheme structure. Thus in Arutjunova's example (13) and our example (14), the words *sobaki* 'dog-**GEN**.F.SG', and *kefira* 'kefir-**GEN**.M.SG' are the Themes (or part of the Theme) of these sentences. Both their most natural intonation pattern and their (most likely) interpretation in the given contexts support this point of view, which argues against the generalization in (10).

(13) *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.]

(14) [*Ja iskal   kefir.*] *Kefira   v magazine ne   bylo*.
      [I looked-for kefir-ACC.M.SG Kefir-**GEN**.M.SG in store   NEG was-**N.SG**
      '[I was looking for kefir.] There wasn't any kefir in the store.'   (B&P 1998b, 2002a,b)
So we agree with Babby that what is crucial is the distinction between plain and existential sentences, but not about the centrality of Theme-Rheme structure. We believe that what Babby observed was a non-accidental correlation but not a crucial one.

2.2. What distinguishes "existential sentences"?

2.2.1. Making Location part of the story.

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":

(15) *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.'

We have used different terms for the same notions: LOCation, THING, and BE.

One could say that THING and LOC are *roles* of the verb *byt'* 'be', but it is undoubtedly better to consider them roles of the *participants of the situation* (or *state*) of existing or of being located. Thus, in the *kefir* sentence (14), THING is (what is denoted by) *kefir* 'kefir', and LOC is (what is denoted by) *v magazine* 'in the store'.

The LOC may be given explicitly, as in (14), (15), or it may be implicitly understood, as in (2) or (6b). Existence is always understood with respect to some LOCation. An implicit LOCation must be given by the context. For (2), the LOC is the place where someone is awaiting a letter which "didn't arrive"; for (6b), it's the location of the perceiver who is "feeling (or not feeling) the frost".

So one of the principles behind our analysis is as follows.

(16) **"EXISTENCE IS RELATIVE" PRINCIPLE:**
      Existence (in the sense relevant to AES's and NES's) is always relative to a LOC(ation).

Which location is an important question that we have addressed elsewhere and will not discuss here; see B&P 1998a, 2002a,b.

2.2.2. Existential sentences: LOC as Perspectival Center.

There seems clearly to be a distinction, discussed by many authors in many frameworks, involving a contrast in two kinds of sentences each having the parts we call "BE (THING, LOC)", where BE stands for any "potentially existential" verb which can be used in both kinds of sentence. In an existential sentence, it is as if 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 (2000) have proposed differences in syntactic structure, without taking a definite stand on the resulting semantics. We propose in Borschev and Partee (2002a,b) that in addition to topic-focus structure there is a relevant '**Perspectival Structure**', relating to an often observed difference in predication in existential vs. predicational sentences. Both types have a verb with two arguments we call THING and LOCation.

In the unmarked structure, the THING is chosen as "**Perspectival Center**"; this is Babby's "Declarative Sentence" (DS), a predicational sentence. In an ES, the LOC[7] is chosen as "Perspectival Center"; in some sense it turns the predication around: saying of the LOC that it has THING in it. If the LOC is implicit, this is a "thetic judgment".

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[7] 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.

(17)   **PERSPECTIVE STRUCTURE:**
        An "existence/location situation" BE(THING, LOC) may be structured from the perspective of the THING or of the LOCation. We use the term *Perspectival Center* for the participant chosen as point of departure for structuring the situation.

The Camera analogy: "what the camera is tracking". A predicational sentence keeps the camera fixed on the protagonist (THING as Center); an ES is analogous to the way a security camera is fixed on a scene and records whatever is in that location (LOC as Center).

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

    From principle (18) it will follow that the nominative subjects in NDS's are normally presupposed to exist, whereas in NES's, only the LOCation is normally presupposed to exist, and the perspectival structure does not provide any existence presupposition for the THING. This is confirmed by examples like (19).

(19) (a) *Petja   na koncerte ne   byl.   Koncerta ne   bylo.*
        Petja-**NOM**.M.SG 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**.M.SG at concert   NEG   was-**N.SG.** Concert   NEG   was-**N.SG**
        'Petja was not at the concert . #There was no concert.'

In the case of quantified NPs, the presupposition of existence becomes rather a presupposition that the domain of quantification is not empty. The nominative subject in (20) presupposes the existence of a non-empty set of students who 'might have been there', whereas the genitive subject in (21) carries no such presupposition.

(20) [*My nadejalis', čto na seminare budut studenty.*]   *No ni odin*
      [We hoped,   that at seminar will.be students]   But NI one-**NOM**.M.SG
      student   tam ne   byl
      student-**NOM**.M.SG there NEG   was-M.SG
      ['We hoped that (some of the) students would be at the seminar.] But not a single one of the students was there.'

(21) [*My nadejalis', čto na seminare budut studenty.*]   *No ni odnogo*
      [We hoped,   that at seminar will.be students]   But NI one-**GEN**.M.SG
      studenta   tam ne   bylo.
      student-**GEN**.M.SG there NEG   was-**N.SG**
      ['We hoped that there would be students at the seminar.] But there was not a single student [or: not a single one of the students] there.'

(22)   **THE SEMANTICS OF NESs:**
        An 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. There are also cases, like (23), in which the implicit Perspectival Center location is simply "the actual world," yielding a literal denial of existence.

(23)   Edinorogov   ne   suščestvuet.
        Unicorns-GEN-m-pl NEG exist-sg
        'Unicorns do not exist.'

In Borschev and Partee (1998a), we related principle (22) to the following principle:

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

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

    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 1998a and illustrated briefly in Section 3.

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

• Perspectival structure is basically a structuring at the model-theoretic level, like the telic/atelic distinction, or the distinction between Agents and Experiencers. These properties reflect cognitive structuring of the domains that we use language to talk about, and are not simply "given" by the nature of the external world. Correspondingly, all of them are properties with respect to which we find differences from language to language.

• A V(THING, LOC) situation may be described with the THING as Perspectival Center, or with the LOCation as Perspectival Center. Analogy: "what the camera is tracking."

• When the THING is chosen as Perspectival Center, its existence is presupposed, and the sentence speaks of its LOCation 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 are not in that situation and potentially 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: 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 it.

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

3.1. The camera metaphor and diathesis shifts.

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

    It is not the same as information structure, although it has some similarity with it, and a chosen Perspectival Center may by default also be the Topic: but not always, as we showed with our *kefir* example (14). 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. And in this it has something in common with 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 they may involve a combination of the two, in languages where

diathetic alternations are accompanied by morphological alternations in the verb, additions of particles, etc.)

- 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 for verbs like *spray, load* or like *give, send.* (For *give, send* too there is a debate about whether the diathesis alternation corresponds to differences in semantics (Krifka 2000) or in information structure (Levin and Rappaport Hovav 2002)).

- Other recent work on the semantics of diathetic alternations shares our goal of integrating lexical and compositional semantics by exploring which 'axioms' are contributed by lexical semantics and which by the semantics of the constructions (Ackerman and Moore 2001, Bresnan 1994, Dowty 2001, Kiparsky 1997, Krifka 2000). The relevant concept of diathesis originated in the Moscow School[8], and research on the semantics associated with diathetic alternations has a long history in Russian semantics. We believe that research in this area can be greatly advanced if work in these two traditions can be brought together.

- What is the semantic difference between *load the truck with hay* and *load the hay on the truck*? No systematic truth-conditional difference, but oft-noted differences in which argument is understood to be 'completely' affected, namely the one chosen as direct object, which is also the one more likely to be a definite NP. Is there a difference in the meaning of *load* when the argument structure shifts in this way? Yes (see more below.) We see these questions as similar to our questions about the status of the THING and LOC arguments in the two sentence types.

- It is interesting to see that 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. Both Levin and Rappaport Hovav (2002) and a number of Russian linguists (Yanko, Paducheva, and others) are convinced that certain lexical items may select in part for the information-structure roles of certain of their arguments, in ways that may be connected to differences in presuppositional/assertional status of parts of their meanings. So while (Krifka 2000) and L&RH (2002) are in agreement about many issues concerning the semantics of diathesis alternation, they disagree about the English dative alternation. Both Krifka and L&RH believe that there is a real semantic difference in the *spray/load* alternation, with the syntactic direct object as the semantically "affected object" in the two diathetic frames. (Fill the truck, or load all the hay.) But they believe that in the dative alternation, it's a matter of pragmatic implicature rather than semantic entailments. The issue is still open.

Comparing English and Russian *spray/load* alternation sentences reveals considerable differences between the two languages. At first the examples look quite parallel.

(25)　　a.　We loaded the truck with hay.　("Container/location" as direct object)
　　　　b.　We loaded hay on the truck.　　("Substance" as direct object)

(26)　**The *zagruzit'* alternation.**
　　a.　*Ja zagruzil gruzovik senom.*
　　　　I　loaded- Pf　truck-Acc　hay-Instr
　　　　'I loaded the truck with hay.'
　　b.　*Ja zagruzil seno na gruzovik.*
　　　　I　loaded-Pf　hay-Acc　on　truck-Acc
　　　　'I loaded the hay on a/the truck.'

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[8] Mel'chuk and Xolodovič (1970) and Xolodovič (1970) were the first to draw a distinction between *voice* and *diathesis*, using *diathesis* as the more general term for syntactic patterns of argument structure realization, reserving the term *voice* for diatheses marked on the verb (e.g. active/passive). The semantics of diathetic alternations continues to figure prominently in Russian lexical semantics (Paduceva 2002).

But in English, the two constructions in (25a-b) can be used in examples with quantifiers, and then they do seem to be identical in truth-conditions, i.e. describe the same situation.

(27)　　a.　I loaded 5 trucks with 20 tons of hay.
　　　　b.　I loaded 20 tons of hay onto 5 trucks.

But our Russian colleagues report that at least (27b) is not so good with the *za*-prefixed verb *zagruzit'*. It may not be totally impossible, but it's uncomfortable. It seems to be because *za*- emphasizes 'filling it full' in (26a), or 'using up all of it' in (26b). It was suggested that one would probably use *pogruzit'* to translate 'load' in (27b)[9].

The differences between English and Russian illustrated with the "load" examples are considerable. English does more with syntax. Russian makes much more use of the derivational morphology of verbs – different prefixes, and imperfective vs. perfective forms – and morphosyntactic marking of arguments. In English, it is common to find diathetic alternations in which only the syntax visibly changes; in Russian it is rare to find such alternations without a change in the prefix on the verb or a change in aspect or both. *Za*- is one of only a very few prefixes that allows such a diathetic alternation without a change in prefix or aspect.

As noted by Paducheva (p.c.), in the pair (26a-b), **three things change:**
(i) the 'rank' of two of the participants (internal argument vs. oblique);
(ii) the scope of the semantic effect of *za*- (a "completive", "completely affected", entailment, which targets the direct object in each case, i.e. different 'participants' of the situation);
(iii) the thematic roles of the participants: what is explicitly "means" in (26a) is neutralized in (26b), and conversely for what is interpreted as "location" in (26b).

In some theories, these 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 difference in the behavior of English and Russian examples may help explain why. The current drive in Western theories, tracing in part to the work of (Dowty 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.

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

But the fact that this alternation occurs only in negative sentences makes it different from many familiar diathetic shifts; we return to this issue presently.

3.3. Evidence for lexical shifts: semantic "bleaching".

In the framework of Borschev and Partee (1998) we assume that the lexical verbs have their normal lexical meanings, whatever those are. Then we ask: what types of further axioms can we find holding for the given S in the given context, i.e. contained in the "theory" of the given S in the given context, whose presence could contribute to making the equivalence in (24) a "locally

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[9] Vladimir Borschev would find *pogruzit'* better in (26b) as well as in (27b); but Elena Paducheva find *zagruzit'* normal in both of (26a-b). We have not done a corpus search.

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valid" theorem? We argue that such axioms may come from the dictionary, from common knowledge, or from particular contextual information or inferences. The speaker will choose the structure that gives Gen Neg to convey the presupposition in (24), and the hearer should be able to recognize or infer information in the content or the context to support that presupposition. A very few examples are given below, but we omit discussion here.

▪ **"Dictionary axioms".**

(28) a. NES: *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:
　　　Na gorizonte belel   parus   <==> Na gorizonte byl   parus
　　　On horizon   shone-white-m.sg sail-NOM.m.sg <==> On horizon   was-m.sg sail-NOM.m.sg
　　　'A sail shone white on the horizon.' <==> 'There was a sail on the horizon.'

　　c.'Dictionary axiom' (part of lexical semantics):
　　　belet'   <==> *byt' belym* (in the field of vision)
　　　to shine-white <==> to be white

　　d. Dictionary or encyclopedic axiom; 'common knowledge':
　　　Parus   kak pravilo   belyj.
　　　Sail-NOM.m.sg   as rule   white- NOM -m-sg
　　　'Sails as a rule are white.'

▪ **Dictionary + contextual axioms**
　　Modification of the previous example:

(29) a. NES:
　　　Ne   belelo   domov   na gorizonte..
　　　NEG shone-white-n-sg houses-GEN-m-pl on horizon
　　　'No houses were shining white on the horizon.' [Infelicitous in most contexts, OK in a context where all houses are white, and the horizon is visible, and there is an observer, ...]

▪ **Axioms about characteristic actions or states for given kinds of things.**
(30) a. NES:
　　　V našem lesu ne   rastet   gribov.   (Babby 1980, p. 66, ex. (71a))
　　　In our   forest NEG grows-sg mushrooms-GENm-pl
　　　'There are no mushrooms growing in our forest.'

The general form for axioms of this kind is: for a thing of such-and-such a kind to exist (in a given location) is for it to perform a characteristic action or activity or be in a characteristic state (in that location).

　　b. NDS for contrast: (Babby 1980 p. 67, ex. (72b), from Mir priključenij)
　　　Zdes' daže trava   ne   rosla.
　　　Here even grass-NOM-f-sg NEG grew-f-sg
　　　'Even grass couldn't grow here'

▪ **"Genitive" verbs.**
　　Let us return to the issue of which verbs can be "genitive" and the nature of their "weakness." What we conclude is that NES's may contain any verb which in a given context for one reason or another may be considered equivalent to *be* (or *appear* - "begin to be," etc.). If we

take the equivalence in (24) as a presupposition of the construction, associated with this diathesis choice, we can view the resultant "semantic bleaching" of these verbs as a coerced lexical shift. Some of these shifts may be lexicalized; see the discussion of Mel'čuk's 'lexical functions' in B&P 1998a.

Since the axioms supporting this equivalence may come in part from the context in which the sentence is used, a "list" of such verbs is impossible, as noted by Babby and others. When such axioms cannot be reasonably assumed, the NES construction is impossible: its presupposed equivalence is inconsistent with presuppositions of the verb or of other parts of the sentence, or with our representation of reality, or with our suppositions about the given context. The factors identified by Timberlake, Ueda, and other authors may be seen as factors making such a lexical shift easier or harder. And conversely, some verbs virtually "demand" genitive, when the verb's meaning directly entails equivalence with *be*. With such verbs, like *suščestvovat'* 'to exist', the nominative is normally impossible: compare the impossible (31) with the normal example (23) cited earlier.

(31) *#Edinorogi   ne   suščestvujut.*
　　　Unicorns-NOM-m-pl   NEG exist-pl
　　　'Unicorns do not exist.'

3.4. Why only under negation?

One of the puzzles concerning Gen Neg is why the Nom/Gen and Acc/Gen alternations occur only in negative sentences. This problem presents itself in different ways for different approaches, and accounts for the great wealth of literature on the syntax of the construction. For a diathesis-based account, it raises the question of how the verb and the negation are related.

- Babby's 1980 account was explicit but stipulative, treating it as a construction, much as we have made it sound like in our account so far.
- Pesetsky (1982) made progress toward an explanatory connection with negation when he posited that the Gen Neg NPs were all headed by a null NPI quantifier, which itself received the Nom or Acc case of its subject or object position, but assigned Gen to its complement, as many Russian quantificational heads do. Such an account also offered insight into the semantic property of 'decreased referentiality' often ascribed to Gen Neg NPs.
- But Pesetsky's account has problems with the fact that Gen Neg NPs are not always bare indefinites; they may have explicit quantifiers of their own (which then show up with Genitive case, not Nom or Acc), as in (21), and they may be headed by demonstratives, or be proper names, as in (19b).
- It would be tempting to posit a 'negated verb' with its own diathesis shift. There are attested examples of languages with separate negated verbs, especially negations of 'be' or 'have', with their own argument structure, and in many Slavic languages, sentential negation is marked with a preverbal clitic or even a prefix. But as Bailyn (2004) describes, a number of accounts have foundered on the fact that the same negation that licenses Gen Neg only on the direct object of transitive verbs or the subject of some intransitive verbs also licenses NPIs (including negative concord *n*-words) in higher positions such as subject of a transitive or unergative verb.
- Bailyn (2004) himself proposes that sentential Neg, in a relatively high position itself, licenses or checks a Q feature on the verb, and that Q-marked verb may select for a genitive internal argument. That account has some features in common with Pesetsky's original idea, and also with the idea of (Jakobson 1971/1936), modernized in Neidle (1982, 1988), that genitive NPs are in some sense more quantificational than referential.

- We believe that something along such lines could be semantically interpreted in a compositional way that could do justice to the interplay of compositional and lexical semantics and contextual factors. But that will require further study of the issue of Object Gen Neg, to which we turn.

4. What is the relation between Subject Gen Neg and Object Gen Neg?

4.1. Background

Are Subject and Object Gen Neg in Russian the same construction? Franks (1995), referring to arguments by Pesetsky (1982) and Neidle (1982, 1988) that Gen Neg applies only to underlying internal arguments (direct objects), states "Their arguments that the genitive of negation pertains exclusively to objects are incontrovertible, I believe, ..." (p. 197). But we are not so certain, and our Russian colleagues remain skeptical.

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".

A problem for the Object-centered approach is that it does not explain why some but not all passive sentences allow Gen Neg subjects. With the verb *polučit'* 'receive', we find parallel behavior[10] and interpretation between the object and a passive subject, illustrated in (32).

(32) 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 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.

(33) a. *Ja ne čital ètoj knigi.*
   I NEG read this-**GEN.**F.SG book-**GEN.**F.SG
   'I didn't read this book.'
 b. **Ètoj knigi ne bylo pročitano.*
   this-**GEN.**F.SG book-**GEN.**F.SG NEG read
   (Intended meaning: 'This book wasn't read.')

Our hypothesis about why the Gen is possible for the passive subject of *polučen(o)* but not for the passive subject of *pročitan(o)* is that the passive predicate *polučen(o)* is a bleachable

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[10] Thanks to Alexander Letuchiy in BHP's semantics class at RGGU in Moscow in spring 2003 for bringing up this issue and helping to find these examples.

'existential' predicate similar to *prišlo*. It doesn't presuppose the existence of its subject, just as *polučit'* doesn't presuppose the existence of its object. *Pročitan(o),* on the other hand, cannot be construed as an existential predicate; it presupposes the existence of its subject.

We still need much more study of transitive verbs of different semantic classes. But even by itself this piece of data seems to constitute one argument against the Unaccusative Hypothesis. They predict that whenever the object of a transitive verb can occur in Gen Neg, the subject of the corresponding Passive should be able to occur in Gen Neg as well. Whereas if the Subject Gen Neg rule and the Object Gen Neg rule have partly different conditions, with only Subject Gen Neg crucially demanding an "existential" reading, we potentially have a nice account about the semantic licensing of passive Subject Gen Neg by the "existential reading" (bleachability) that some passive predicates have and others don't.

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

Hypothesis: Wherever we see Nom/Gen and Acc/Gen alternation (both under negation and under intensional verbs), Nom or Acc represents an ordinary e-type argument position ('referential'; of course it may be quantified, etc.,), whereas a Gen NP is always interpreted as property-type: $\langle e,t \rangle$, or $\langle s, \langle e,t \rangle \rangle$.

A related hypothesis is 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 1992b) 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 correlates with a change in verbal valency: When the verb is negated, it takes a 'weaker' kind of object, marked by Genitive.

In the case of the intensional verbs like *ždat'* 'expect, wait for' in (34), one can argue that there is a shift in verb sense correlated with the shift in the interpretation of the object. So part of the hypothesis should be that the verb selects for the type of its object.

(34) a. *On ždet podrugu.*   (Neidle 1988, p.31)
   He waits girlfriend-Acc
   'He's waiting for his girlfriend.'
 b. *On ždet otveta na vopros.*
   He waits answer-Gen 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".

As Neidle notes, there can be different ways of characterizing the difference: in terms of

relative specificity of the NP object, or in terms of "the specification of the NP either within or outside of the scope of the action of the verb" (Neidle). She would like to say that in either case we are looking at differences in interpretation "associated with differences in the scope of the operation that I will refer to as 'specification'." (p.31)

The idea that such differences may reflect type differences relates closely to the work of Ede Zimmermann (Zimmermann 1992), who argued for an alternative to Montague's treatment of intensional verbs. Montague treated verbs like *ždat'* as taking type $<s<<e,t>,t>>$ arguments, i.e. intensions of generalized quantifiers. Zimmermann argued that they rather take type $<s,<e,t>>$, properties of entities. We resisted that idea for some time 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 we expect that our counterarguments could be explained away with a little work.

Another clear connection is to the work of Helen de Hoop (de Hoop 1989, de Hoop 1990, de Hoop 1992, de Hoop 1995). She argued for a distinction between "weak case" and "strong case" for direct objects in Germanic languages, with both syntactic and semantic properties. Objects with "strong case" can move to topic position, can escape the scope of various operators, and are interpreted as e-type (or as generalized quantifiers if they are quantified). Objects with "weak case" cannot move far from the verb; they have to stay inside the VP, and consequently they fall under the scope of any operators that affect the VP. And they are interpreted quasi-adverbially: they are of a type to take a transitive verb as argument and give an intransitive verb (phrase) meaning as result. This part of the proposal is slightly weak, because their adverb-like meaning appears to be just a type-lifted version of an existentially quantified argument-type meaning. But at least they are thereby restricted to having narrow scope indefinite meanings. This last point relates also to Diesing's work (Diesing 1992a, Diesing 1992b, Diesing and Jelinek 1993).

There is a similar connection to the work of van Geenhoven (van Geenhoven 1995, van Geenhoven 1996, van Geenhoven 1998, Van Geenhoven 1998), who treats 'weak' object NPs in West Greenlandic as "incorporated to the verb": they are not fully independent objects, but get an existential quantifier from the verb.

Yet another connection, and part of our immediate inspiration, is to the work of Ackerman and Moore (Ackerman and Moore 2001): variation in the semantic type of the object could be a species of diathesis, even if they are considered direct objects in both cases. Ackerman and Moore argue that "diathesis" should not be restricted only to cases where the actual grammatical relation changes, as in shifts from object to oblique, but also 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.

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.

Returning to the issue of Subject Gen Neg and Object Gen Neg

Now, to connect the speculations above, which have mainly concerned Acc/Gen alternations, with Subject Gen Neg: this line of thinking may be helpful in connecting the two.

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 (32a), but not in (33a), for instance. But if we study the arguments of

McNally (McNally 1992, McNally 1997, McNally 1998) and some recent work of Landman (Landman 2002), and ongoing work by Kamp and Bende Farkas, they all have argued that the NP in an existential sentence does not have normal type e (nor generalized quantifier) meaning, but rather a property type meaning ($<e,t>$ or $<s,<e,t>>$). We have resisted that so far, because BHP has argued that that's the type for the predicate of copular sentences and NOT the type for the NP in existential sentences. But we could be wrong. Or this distinction in semantic types could be too rough to capture all the semantic distinctions that really need to be made.

If we could find more support for the arguments that the NP in an existential sentence is interpreted as property type $<e,t>$[11], 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 $<e,t>$-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.

4.3. Things to explore further.

Is it ONLY in existential sentences that the subject becomes type $<e,t>$. If so, why? If not, what else? There are examples of derived intensionality in subject position, such as in the passives of intensional verbs (*is needed, was sought*, etc.) and in the presence of modal verbs and modal sentential adverbs: we should see whether we can find systematic differences between intensionality resulting from sentential operators and intensionality resulting from argument structure of the verb. A version of the unaccusativity hypothesis could be relevant here.

As noted in a footnote early on, we have recently found some examples of Subject Gen Neg that are not existential sentences – so we have to look at them in this context too. Example (11) above actually has a grammatical variant (35) with Gen Neg, contrary to the claim made by (Babby, 2001) and repeated by us several times since then.

(11) *Za vse vremja suda u nee na lice ne drognul ni odin muskul.*
during whole time of-trial at her on face NEG twitched not one.**NOM** muscle.**NOM**
'Not a single muscle twitched on her face during the entire trial.' (Babby 2001, p.43)

(35) *Za vse vremja suda u nee na lice ne drognulo ni odnogo muskula.*
during whole time of-trial at her on face NEG twitched-**N.SG** not one.**GEN** muscle.**GEN**
'Not a single muscle twitched on her face during the entire trial.'

Sentence (35) has an Unaccusative verb[12] but is NOT an existential sentence. It does not at all suggest that she has no muscles on her face (only 'no twitching muscles'). And the verb *drognut'* 'twitch' is not a 'weak verb' in this sentence; it has not been 'bleached' to become contextually equivalent to 'be'.

Similar examples are actually not difficult to find, and we are quite nonplussed by the fact that we had never realized their existence before. The GenNeg sentences below are analogous to (35) above; and like (35), these also have nominative variants analogous to (11).

(36) [*Jaščik s pivom upal s gruzovika, no*] *ni odnoj butylki ne razbilos'.*
[case with beer fell from truck, but] not one.**GEN** bottle.**GEN** NEG broke-**N.SG**
A case of beer fell from the truck, but not a single bottle broke.

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[11] We will say $<e,t>$ for simplicity even though it may really be $<s,<e,t>>$.
[12] That is Babby's classification of the Russian verb *drognut'* 'twitch'. Angelika Kratzer (p.c.) notes that the corresponding verb in German behaves as an Unergative.

(37) [*V biblioteke byl požar, no*] ni odnoj knigi ne sgorelo.
   [in library was fire, but] not one.**GEN** book.**GEN** NEG burned.up-**N.SG**
   In the library there was a fire, but not a single book burned up.

Neither (36) nor (37) is an existential sentence, and their main verbs are not here paraphrasable by 'be'. These sentences are clearly counterexamples to our claim and Babby's that intransitive Gen Neg sentences are all existential sentences.

These examples may also pose problems for the Unaccusative Hypothesis. As Babby (2001) notes, a number of proponents of the Unaccusative hypothesis have agreed that not all unaccusative verbs can occur in the GenNeg construction[13], and some have added the condition that the sentence be an existential sentence as well as that the verb be Unaccusative (e.g. (Brown, 1999)). And all proponents of the Unaccusative hypothesis take the main semantic correlate of the Gen Neg construction to be scope of negation; but the sentences above, which all have negated subjects with the negative 'strengthener' *ni odin* 'not one', do not seem to show any scope of negation difference between their nominative and genitive alternants. They do show presupposition differences analogous to those discussed earlier: While sentence (37) above could be continued with an explanation that in fact there weren't any books in the library at the time of the fire, such a continuation would incur presupposition violation in the case of the corresponding sentence (38) with nominative subject.

(38) [*V biblioteke byl požar, no*] ni odna kniga ne sgorela.
   [in library was fire, but] not one.**F.NOM** book.**F.NOM** NEG burned.up-**F.SG**
   In the library there was a fire, but not a single book burned up.

So we believe that these sentences do also have a difference in Perspectival Structure analogous to what we have proposed for existential sentences, although they are not existential sentences.

These sentences present problems for others as well as for Babby and us, but they are particularly serious problems for Babby and us (and for Paducheva, since these sentences are not perception-report sentences either.)

We don't yet know what to say about these sentences. Possibilities that we will explore:

(i) We and Babby are just wrong, and the right story should concentrate on figuring out the semantics of unaccusativity and of scope of negation, and not try to give such a special place to existential sentences. [But then we lose our nice account of what's going on in semantic bleaching, and much else related to Perspective Structure. Also, we need an account of which sentences are possible only when there is an intensifier like *ni odin* 'not one, not a single'.]

(ii) More likely, we think: These sentences have something important in common with existential sentences that we need to discover so as to find a more adequate generalization about intransitive GenNeg. Hints that this is so: (a) Paraphrasability with English sentences like "There wasn't a single bottle broken", "There wasn't a single book destroyed"; (b) Although the most natural understanding of these

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[13] We used to be certain that the verb *isčeznut'* 'disappear' was one clear example of an Unaccusative verb which could not occur with GenNeg, and we had an explanation for it in terms of conflict between presupposition and assertion. But now it turns out that examples similar to (35-37) can be constructed with *isčeznut'* as well, e.g. if one says that since the time that the serial killer was captured, not a single girl has disappeared. So now we do not know of *any* Unaccusative verb which categorically forbids the GenNeg construction. Note however that the sentence pattern (35-37) requires an intensifier like *ni odin 'not one, not a single'*, whereas Gen Neg in existential sentences *can normally occur without any such intensifier. It is still true that isčeznut'* 'disappear' cannot occur with Gen Neg in **existential** sentences.

GenNeg sentences does presuppose the existence of the Genitive-marked NP referents, that presupposition does not come from the construction, as the presupposition contrast between (37) and (38) shows.

(iii) Just as we need to study the semantics of diathesis shifts more generally in order to understand the semantics of Object Gen Neg, it may be that the Locative vs. Existential alternation with intransitive sentences is just the most prominent GenNeg-relevant diathesis alternation among intransitives, and not the only one. BHP suspects that Unaccusativity is probably indeed an important piece of the story, and we intend to work on the problem of identifying semantic correlates of a possible Unergative-Unaccusative diathesis shift, building on work of Levin and Rappaport, Ackermann and Moore, and others, along with our explorations of the semantics of diathesis shifts in the transitive GenNeg cases.

Potential gains if this idea proves fruitful:

This would let us connect traditional claims that Gen NPs are "less referential, less individuated" than Nom/Acc NPs, together with 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 – especially important if it works – together with existing work on existential sentences. What would be new, we think, 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.

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