Information Structure, Perspectival Structure, Diathesis Alternation, and the Russian Genitive of Negation: The Handout^{1,2}

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1. Introduction and Background

The Russian Genitive of Negation construction (Gen Neg) involves case alternation between Genitive and the two structural cases, Nominative and Accusative. The factors governing the alternation have been a matter of debate for many decades, and there is a huge literature. Here we focus on one central issue and its theoretical ramifications.

The theoretical issue is the following. The same or similar truth-conditional content can often be structured in more than one way; we believe that there is a distinction between choices in how to structure *a situation to be described*, and choices in how to structure *a sentence describing the (already structured) situation*. The distinction may not always be sharp, and the term Information Structure may perhaps cover both, but we believe that the distinction is important and needs closer attention.

1.1. The Genitive of Negation construction

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

- (1) a. Otvet iz polka ne prišel.

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

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¹ We are grateful for valuable discussion of these topics over a number of years to Elena Paducheva, Ekaterina Rakhilina, Leonard Babby, Petr Sgall and Eva Hajičová, Wayles Browne, Catherine Chvany, Nomi Erteschik-Shir, Hana Filip, David Perlmutter, Tanya Yanko, and too many others to name; see acknowledgements in our earlier papers as well. For introducing us to Hanging Topics and discussion inspiring the new ideas in this paper, we are especially grateful to Maria Polinsky. This material is based upon work supported by the National Science Foundation under Grant No. 0418311 to Partee and Borschev for a project entitled, "The Russian Genitive of Negation: Integration of Lexical and Compositional Semantics."

² This version of the handout incorporates some additions made at the time of delivery of the paper, not all of which we had time to actually present in the oral form. And the handout in turn supersedes the paper in the Proceedings at those points at which they disagree (principally in the second half.)

A Nom- or Acc-marked NP is more likely to be interpreted as definite or specific, while a Gen Neg NP often has 'decreased referentiality' and tends to be '(existentially) quantificational' (Babby 1980, Bailyn 2004, Jakobson 1971/1936, Neidle 1988, Pesetsky 1982, Timberlake 1975) if the NP permits it; but even pronouns and proper names sometimes alternate. Sentence (3a) suggests that Masha is present but hidden, (3b) that she is not present.

- (3) a. Maša ne vidna.
 Masha-NOM.F.SG NEG seen-F.SG 'Masha isn't visible.'
 b. Maši ne vidno.
 - Masha-GEN.F.SG NEG seen-N.SG 'Masha isn't to be seen.'

Especially for Object Gen Neg, many factors contribute to the choice of Gen, including decreased 'individuation' of NP, decreased transitivity of verb (Mustajoki and Heino 1991, Timberlake 1975, Ueda 1993). A detail that will be important later is that with Subject Gen Neg, the sentence becomes "impersonal" and the verb is invariantly Neuter singular, as in (1b), (3b).

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

Babby (1980):

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

 Answer-**NOM.**M.SG from regiment arrived-M.SG 'The answer from the regiment has arrived.'
 - b. *Prišel otvet iz polka*.

 Arrived-M.SG answer-**NOM.**M.SG from regiment 'There was an answer from the regiment.'

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

Babby also argued that intransitive (existential) Gen Neg sentences are thetic sentences, whereas their Nominative counterparts, with NP subject as Theme, are categorical. Note that this means that Babby considers the thetic/categorical distinction a matter of Information Structure.

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

2. Arguments against the Theme-Rheme analysis and for Perspectival Structure

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

- Our main argument: the existence of Gen Neg examples in which the NP in the genitive can be argued to be the Theme, or part of the Theme, rather than the Rheme.
- (5) Sobaki u menja net. (Arutjunova 1976)
 dog-GEN.F.SG at I-GEN not.is
 'I don't have a dog.' [Context: talking about dogs, perhaps about whether I have one.]

- (6) [Ja iskal kefir.] Kefira v magazine ne bylo. [I looked-for kefir-ACC.M.SG Kefir-GEN.M.SG in store NEG was-N.SG '[I was looking for kefir.] There wasn't any kefir in the store.' (Borschev & Partee 2002a)
- A second, indirect, argument concerns Babby's theses that the main determinant of Gen Neg is scope of negation, and that Theme is outside the scope of negation, Rheme inside. But there are examples of Nom/Gen alternation in NPs with the NPI *ni odin* 'not a single', which occurs only under clausemate negation.
- Context for (7) and (8): *My nadejalis'*, *čto na seminare budut studenty*. 'We hoped that (some of the) students would be at the seminar'.
- (7) No ni odin student tam ne byl.

 But NI one-NOM.M.SG student-NOM.M.SG there NEG was-M.SG 'But not a single one of the students was there.'
- (8) No ni odnogo studenta tam ne bylo.

 But NI one-GEN.M.SG student-GEN.M.SG there NEG was-N.SG

 But there was not a single student [or: not a single one of the students] there.'
- Difference in interpretation: (7) presupposes a specific group of students to be quantified over, whereas (8) does not. Both are clearly under the scope of negation.
- So either Theme/Rheme does not determine Nom/Gen, or it does not correlate with outside/inside scope of negation.
- Our alternative analysis (Borschev and Partee 2002a, 2002b) invokes a different kind of structure which we call *Perspectival Structure*.
- Common starting point: V(THING, LOC); two different diatheses. Cf (1a-b), (3a-b), (7-8).
- In a predicative sentence (1a, 3a, 7), THING is the Perspectival Center.
- In an existential sentence (1b, 3b, 8), LOC is the Perspectival Center.
- We give the analogy of "what the camera is tracking": the protagonist when THING is Perspectival Center, the 'scene' when LOC is perspectival center.

Note:

- Existence in an "existential sentence" is relative to Perspectival Center LOCation
- Hence Russian existential sentences can have proper names or pronouns as 'subj'
- (9) [Ja iskal Petju.] On ne byl na lekcii. [I looked.for Petja.] He-NOM.M.SG NEG was-M.SG at lecture [I looked for Petja.] He wasn't at the lecture.
- (10) [Ja iskal Petju.] Ego ne bylo na lekcii. [I looked.for Petja.] He-GEN.M.SG NEG was-N.SG at lecture [I looked for Petja.] He wasn't at the lecture.
- In (9) and (10), the sentence-initial Theme is the same (*on/ego* 'he-nom/he-gen').
- In (9), the THING Petja is chosen as the Perspectival Center: we consider Petja, and where he was, and we give the partial information that he was not at the lecture.
- In (10) the LOCation is the Perspectival Center; this suggests that either in or before my search for Petja, I went to the lecture expecting to find him, but Petja was not among those at the lecture.

BUT:

Our analysis is still close to Babby's, and Perspectival Structure has much in common with

information structure. Perspectival Structure does not correspond exactly to any established linguistic distinction, as far as we know, so we do not consider the debate to be settled.

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

- *kefira* in (6) is Rhematic but Given: Babby's account of (1b), (5), (6): since Gen Neg marks NP as Rhematic, word order can be used to mark something else³, in this case Given vs. New; so the Gen Neg NPs we have called Theme, he would call Rhematic but Given.
- Similarly, Erteschik-Shir (1997 and p.c.) would propose that in any existential sentence the real Topic is an implicit "Stage-topic" (including a possible overt LOC), and within the Focus there may be subordinate information structure, with *kefira* in (6) a "subordinate Topic".
- A similar idea is found in Padučeva (1985: 119-20), citing Kovtunova (1976). Padučeva discusses the "dislocation of part of a complex rheme", in which the "rheme proper" is left at the end of the sentence with the main accent, and the remainder of the Rheme is dislocated leftward, usually to sentence-initial position, receiving secondary stress with falling intonation.
 - Padučeva (p.c.) holds that example (6) can have two communicative structures: in the context in (6), *kefira* would indeed be Theme and unaccented, but the same sentence could occur with no prior mention of kefir, only of the store, and then *kefira* would be a dislocated part of the Rheme, with secondary falling stress.
 - But if Padučeva is correct, it would not support Babby's approach, because a dislocated part of the Rheme represents 'new' information, and it is only when *kefira* is part of the Theme that it would be interpreted as 'given'. Babby was trying to account for a 'given' interpretation still being part of the Rheme.
- What is the Rheme in (6)? Tests for possible contrast suggest that the LOCation in (6) is still a Theme; so if *kefira* is also Theme, what is the Rheme? The sentence might be a case of Verum-focus, and these have special properties; see our discussion in Borschev and Partee (2002a); we leave these issues open.

Presuppositionality:

• Babby's analysis provided a source for the greater presuppositionality of NPs marked Nom or Acc, since Themes are generally taken to be more presuppositional than Rhemes (Hajičová 1973, and many other authors).

- We make a similar claim for Perspectival Center with a similar basis: in order to structure a sentence from the perspective of some participant of a situation, that participant must be presupposed to exist.
- We believe that it is easier to extend our analysis to the kind of presupposition found in examples (7-8), where it is the domain of quantification that must be presupposed to exist and be familiar, than to accept such a negatively quantified expression as *ni odin student* 'not a single student' as a Topic or Theme.
- **Provisional conclusion:** Gen Neg is NOT dependent on Theme-Rheme structure, but on Perspectival Structure. The task remains to better motivate and articulate Perspectival Structure and its relation to Argument Structure, and to show how it is distinct from, or else a particular subspecies of, Information Structure.

³ Recall from Section 1.2 that in affirmative sentences like (4a-4b), word order marks the difference between categorical/predicative sentences and thetic/existential sentences. In Negative sentences, word order is freer.

3. Hanging Topics and Genitive-Initial Sentences. Sorting out Information Structure, Perspective Structure, and Argument Structure in "Genitive Topic" sentences.

In our paper in the Proceedings⁴, we said some things about Genitive Topics that we now believe were mistaken. In the rest of the talk, we have two aims: (i) to correct what we said in the paper, by drawing on Franks' (1995) work on Genitive Initial Sentences in Russian, distinguishing them from instances of Hanging Topic constructions, and (ii) to show how our *kefira* sentences and these Genitive Initial Sentences are two different instances of thematic genitives, and how they help contribute to the broader questions of (a) when a "weak NP" can be thematic and (b) the ways in which Genitive is used in Russian to mark "non-canonical" subjects and objects, often expressing the "weakening" and/or "demotion" of a subject or object NP.

3.1. The data of non-agreeing Genitive "Topics": Hanging Topics or not?

In our paper in the Proceedings, we discuss "Hanging Topics", topics which are not necessarily integrated into a given sentence, like the well-known Japanese *wa*-topic in (11).

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(11) Sakana-wa tai-ga oishi-i. fish-TOPIC red snapper-SUBJECT be delicious-NONPAST 'As for fish, red snapper is delicious.'
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Polinsky (p.c.) analyzes as Hanging Topics instances of genitive topics in Russian which cannot be the result of movement because the putative source would be ungrammatical.

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(12) a. Teatrov v gorode bylo dva.
theater-GEN.PL in town was-N.SG two
'Of theaters, there were two in town.'
b. dva teatra
two theater-GEN.SG two theater-GEN.PL
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The numeral *dva* 'two' in Russian governs genitive singular on the noun; hence, Polinsky argues, the genitive plural *teatrov* 'of theaters' must be a Hanging Topic generated *in situ*. Polinsky (p.c.) further raised the interesting possibility that the Hanging Topic construction might itself provide a non-veridical operator licensing Genitive, opening up the worry that our counter-examples to Babby's analysis might be examples not of Gen Neg, but of Genitives licensed by the Hanging Topic construction. In our paper we argued that the relevant examples which most resemble Hanging Topics, including (5) and our *kefira* example (6), are <u>not</u> Hanging Topics but a kind of 'Genitive Subject' with the post-verbal quantity expression involving a kind of quantity-predication on a Genitive subject, and that they do not in the end provide counterarguments to our arguments against Babby's claims about Theme-Rheme structure.

We offered examples similar to our *kefira* example with and without negation and with and without agreement conflicts between the initial (presumably topical) Genitive and its putative source position in the sentence. The examples use the genitive plural *deneg* 'money' and the mass genitive singular *vodki* 'vodka'.

(13) a. Deneg u nego bylo mnogo/malo. (Also OK: U nego mnogo/malo deneg.) money-GEN.PL at him-GEN was-N.SG much / little 'He had a lot of/ little money.' or 'Of money, he had a lot/little.'

b. Deneg u nego sovsem ne $bylo^5$. money-GEN.PL at him-GEN altogether NEG was-N.SG

⁵ We are no longer sure that (13b) belongs in this group, and even less sure if *sovsem* 'altogether, at all' is removed. See the discussion of Genitive-Initial Sentences below; we leave it open for now whether (13b) is one.

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⁴ See (Partee and Borschev 2006), http://www.nytud.hu/lola9/proceedings/partee.pdf.

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'He didn't have any money at all.' or 'Of money, he didn't have any at all.'
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- c. Deneg u nego do čërta. (Also OK: U nego do čërta deneg.) money-GEN.PL at him-GEN to devil 'He has a hell of a lot of money.' or 'Of money, he has a hell of a lot.'
- d. Vodki bylo zalejsja. (??Bylo zalejsja vodki.) vodka-GEN.F.SG was-N.SG pour-your-fill-IMP.SG 'Of vodka there was 'pour-your-fill'.'
- e. Vodki bylo kot naplakal. (*Bylo kot naplakal vodki.) vodka-GEN.F.SG was-N.SG cat wept 'Of vodka there was [so little that] the cat wept.'

Examples (13a-e) all seem to involve predications of amounts – how much money he had, how much vodka there was. The amount 'predicates' include both common quantifiers *mnogo*, *malo* 'much, little', which routinely take Gen-marked noun complements, and idiomatic quantity expressions (a PP in (13c), an imperative verb in (13d), and a clause in (13e)) which vary in the degree to which they can be used as derived quantifiers from easily to not at all.

In discussing (13d,e) in the paper, we started by following Polinsky and claiming that *vodki* 'of vodka' in (13d,e) must be a Hanging Topic if it is a Topic at all, since the "source" is bad, while expressing some reservations based on the second author's intuitions and on Babby's (1980, Ch. 4) discussion of 'quantificational' genitives alternating with Nom subjects and Acc objects. We also noted the impossibility of 'comma intonation' in (14), a natural construction whose agreement mismatch rules out a movement derivation⁶.

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

More recently we have discovered Franks' (1995) work on this topic, where he cites earlier work of his own and others (Crockett 1976, 318-335, Franks and House 1982, House 1982, Pesetsky 1982, 233-236), referring to the construction as the "Genitive Initial Sentence (GIS)". He includes under this rubric both examples like (15), which have no "disagreement" properties, and examples like (16), which provide evidence against a movement analysis.

- (15) a. *Mal'čikov ostalos'*/* *ostalis' sem'*. (Both verb forms possible in 'plain' word order.) boys-GEN.M.PL remained(-N.SG/-PL) seven 'The number of boys that remained was seven.' (Franks 1995, p.186, ex. 145a)
 - b. *Interesnyx* knig ja pročital pjat'. interesting-GEN.F.PL books-GEN.F.PL I read five 'The number of interesting books I read was five.' (Franks 1995, p.186, ex. 145b)
- (16) a. *Knig ja pročital tol'ko odnu.* (*odnu knig; OK: odnu knigu(AccSg)) books-GEN.F.PL I read only one-ACC.F.SG 'The number of books I read was only one.' (Franks 1995, p.187, ex. 146a)
 - b. *Publiki na ploščadi bylo jabloku negde upast'*.

 public-GEN.F.SG on square was-N.SG apple-DAT.F.SG nowhere to-fall 'The public in the square was wall-to-wall' (Franks 1995, p.187, ex. 148a)

Like *kot naplakal* 'the cat wept' in (13e), the idiomatic phrase *jabloku negde upast*' 'there was nowhere for an apple to fall' in (16b) does not accept a genitive complement at all. Franks cites further examples from Crockett (1976b) showing the variation in the kinds of phrases that

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⁶ Added during the talk: on reflection, we believe that example (14) is of particular interest, since it apparently exemplifies *both* the Gen Neg construction (because of *ni odnogo*) *and* the "Genitive Initial Sentence" construction (introduced just below), which provides the 'non-agreeing' initial genitive *studentov*.

follow the verb in the position that would normally be occupied by subject or object NP; they also include complete NPs with their own genitive noun, as in (17a,b), further ruling out a movement analysis of the genitive. As Franks notes, what is crucial is that the focused final phrase, whatever its syntactic category, be semantically capable of specifying the cardinality of the set indicated by the initial genitive.

- (17) a. Studentov bylo devjat' čelovek. students-GEN.PL was-N.SG nine persons-GEN.PL 'The number of students was nine persons.' (after Franks 1995, p.187, ex. 150a)
 - b. Vremeni prošlo dve nedeli .
 time-GEN.N.SG passed-N.SG two weeks-GEN.F.SG
 'The amount of time that passed was two weeks.' (Franks 1995, p.187, ex. 150b)

Franks does not include any examples of *negative* GIS sentences. Are there any? Yes: example (14) seems to be a GIS sentence, and it also exhibits Gen Neg in the final focused part. What about our *kefira* example (6), and what about (13b)? Those are less clear: they seem to lack a final focused quantifier. To count them as GIS sentences would require allowing the focused negation to be equivalent to focusing a 'none at all' kind of quantifier.

Franks contrasts these examples with Hanging Topic constructions (which he calls Topic-Comment structures, apparently in contrast with Theme-Rheme structure).

- "GIS structures, however, require more than just a minimal degree of contextual relatedness between the bare genitive and the quantificational element, as shown by the following contrast from Franks and House (1982)." (Franks 1995, p. 188.)
- (18) a. *Milicionerov na stole ležalo dve furažki.

 policemen-GEN.M.PL on table lay-N.SG two service-caps.

 'The number of police that lay on the table was two caps.' (Franks 1995, p.188, ex. 151a)
 - b. *Milicionerov* za stolom sidelo dva seržanta.

 policemen-GEN.M.PL on table lay-N.SG two sergeants.

 'The number of police that sat at the table was two sergeants.' (Franks 1995, p.188, ex. 151b)
- (19) *Milicionery,* na stole ležalo dve furažki.
 policemen-NOM.M.PL on table lay-N.SG two service-caps.

 'The number of police that lay on the table was two caps.' (Franks 1995, p.188, ex. 152)

Example (19) is presented as an example of a base-generated topic adjoined to CP, and which is well-formed in colloquial speech as long as what follows the topic can be construed as giving information about it: a Hanging Topic. The fact that (19) is felicitous while (18a) is ill-formed simultaneously demonstrates that the GIS structures are not Hanging Topic structures and that Russian Hanging Topics show up in Nom case, not Gen⁷.

• Franks also notes that a Hanging Topic can co-occur in colloquial speech with a bare genitive; the Hanging Topic must come first.

(20) Knigi /*knig, romanov ja pročital malo. books-NOM.F.PL /-GEN.F.PL novels-GEN.F.PL I read few 'Speaking of books, the number of novels I read was few.' (Franks 1995, p.188, ex. 153⁸)

Franks argues that "non-argument bare genitives ... appear to be base generated as adjoined to the left of IP. This positioning may account for their topic-like interpretation, leading us in

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⁷ Maria Polinsky should not be held in any way responsible for our earlier adoption of some ideas of hers which we are now rejecting; she offered them tentatively in informal discussion, and it is we who were premature in putting them in print.

⁸ We have changed the last phrase of Franks' example here, since the second author found the original less than fully felicitous.

Franks and House (1982) in fact to dub such Incomplete Quantifier Expressions genitive themes." (p. 188-9).

We will not go into the details of his suggested analysis, but just sketch relevant aspects briefly:

- The bare genitive, like partitives and other "Incomplete Quantifier Expressions", is a QP that includes a null quantifier that governs genitive case. A null quantifier was also part of Pesetsky's (1982) analysis of Gen Neg. We have argued against the null quantifier for Gen Neg, but those arguments would not apply here, since proper names and personal pronouns do not occur in the GIS construction. So *knig* 'books' in (16a) is [OP [O ei] [NP:GEN knig]].
- The phrase in argument position following the verb, which we have seen can be of any of a wide variety of phrase types, "undergoes Quantifier Raising at LF to a position c-commanding the bare genitive, so that coindexing will result in proper binding." That phrase supplies the semantic value to the null Q in the bare genitive, and by some further coindexing tricks, the resulting filled-in QP functions semantically as the argument of the verb.
- Of particular relevance for us: as we suggested in the conclusions of our paper in the Proceedings, the GIS construction involves a kind of deformation of parts of the content of the sentence, and does require base generation of the bare genitive, but not as a Hanging Topic external to the sentence. The thematic bare genitive is crucial to the well-formedness of the sentence; without it, some of the focussed quantity phrases we have seen would be impossible, especially those of idiomatic clausal form like *kot naplakal* in (13) and *jabloku negde upast'* in (16b), which can't be understood as elliptical normal QPs.

3.2. Thematic genitives

In revising the conclusion of our paper in the Proceedings, we now want to claim that our *kefira* sentences and these Genitive Initial Sentences are two different instances of thematic genitives, and that they help contribute to the broader understanding of (a) when a "weak NP" can be thematic and (b) the ways in which Genitive is used in Russian to mark "non-canonical" subjects and objects, often expressing the "weakening" and/or "demotion" of a subject or object NP. What makes these cases challenging is the *prima facie* mismatch between the "weakening" associated with the Genitive and the "presuppositionality" or groundedness normally associated with Themes or Topics.

In our earlier work on Subject Gen Neg, we have said that in that construction, and in existential sentences more generally, it is as if a Perspectival Center LOCation "wants to be subject". Three possibilities:

• The syntax allows the LOC to become syntactic subject: Chicheŵa (Bresnan and Kanerva 1989). At least one author (Kondrashova 1996) analyzes existential sentences in Russian as having a LOC subject.

But the plural genitive pronominal forms *nas* 'us-GEN.PL', *vas* 'you-GEN.PL', and *ix* 'they-GEN.PL' are regularly used to ask cardinality questions, as in (ii), so we take it as a challenge to semanticists to include them in an account of GIS sentences rather than as an argument against positing a null quantifier with these initial genitives.

⁹ On second thought, that claim may be too strong. There are GIS sentences with initial genitive *nas* 'us-GEN.PL', as in (i) below, and similarly with *vas* 'you-GEN.PL', and *ix* 'they-GEN.PL'.

⁽i) Nas tam bylo mnogo/kot naplakal/dvoe / pjatero / pjat' čelovek.
us-GEN.PL there was-N.SG many/cat cried / two-COLL/ five-COLL/ five persons-GEN.PL
'The number of us there was many/ terribly few/ two/ five/ five persons.'

⁽ii) Vas skol'ko? you-GEN.PL how many 'How many of you are there?'

- The syntax doesn't allow LOC to become syntactic subject, but does provide some non-canonical structure that "demotes" the NP. English: introduce an expletive subject and demote the subject to a non-canonical position, as an "associate" of the expletive subject. Similarly in many analyses of Russian (Perlmutter and Moore 2002), in various ways. Some make the NP a non-subject, some make it a 'non-canonical' subject.
- We consider it quite possible that in some languages no changes in syntactic structure are made other than whatever is that language's means of marking theme and rheme; that is very close to Babby's (1980) analysis of Russian. (In Babby's later work, he has changes to the syntactic structure as well, with those changes motivated by Theme-Rheme structure.)

In other words, the diversity of languages' solutions to the problems of how to "promote a LOCative" and "demote an NP" to express a marked Perspectival Structure seems to range from changes in Argument Structure proper to changes in Information Structure only. In the middle are cases of changes that affect argument structure only modestly, as suggested by Ackerman and Moore for some other phenomena (Ackerman and Moore 2001): not changing what is the Subject, but marking it as "demoted" in some way.

Russian "genitive subjects", in both the Gen Neg construction and the GIS construction, are evidently manifestations of such "demotions".

As Franks (1995) notes, following Crockett, House, and Pesetsky, "one particularly curious aspect of the GIS structure ... is that even when the "subject" appears in the nominative case, as in ... (21), the verb still fails to display agreement."

(21) Druzej prišlo odna Maša. friends-GEN.M.PL arrived-N.SG one-NOM.F.SG Masha-NOM.F.SG 'Of my friends Masha alone came' (Franks 1995, p. 191, ex. 158)

The postverbal nominative NP in (21), then, even though it looks very much like a subject, is argued by Franks not to be in IP-specifier position, and to get its nominative case through an indirect route¹⁰. So in (21) neither the bare genitive nor the postnominal NP is a canonical subject, and the mechanism Franks (1995) proposes involves a fair amount of work going on at LF to combine the parts of those two non-subjects into a QP meaning and structure that could constitute an argument for the verb at LF.

In the case of the GIS construction, both its syntax and its semantics suggest that the Theme status of the bare genitive is essential to the construction and is a major motivation for the unusual syntax.

- The domain of quantification is singled out as what the sentence is about in a Theme-Rheme sense of aboutness, and the specification of quantity is focussed. In this case, what makes the "weak" Genitive QP compatible with Themehood is that it is the 'kind', or an 'open set' that is the Theme, and that is a sort of denotation that a common noun phrase or a Genitive phrase can easily have.
- The GIS is not a matter of marked information structure alone, since the construction has a number of quite specific properties, and other Slavic languages with similar freedom of word order and similar ways of marking Theme-Rheme structure do not all have such a GIS construction (Franks 1995).

¹⁰ Franks and others have argued that this construction is limited to Unaccusative verbs, while noting apparent exceptions with verbs like *work*, similar to apparent exceptions to Unaccusativity restrictions in Subject Gen Neg. We remain agnostic about the status of the Unaccusativity constraint for both Gen Neg and GIS.

In the case of Gen Neg, on the other hand, Babby's generalization holds in most cases, and one has to hunt for examples like the *kefira* example (6) to show that a Gen Neg NP can sometimes be Theme.

- Examples with Gen Neg NPs as Theme often involve an intensional prior mention, as in (6), setting up the kind as 'what we are talking about'.
- But these examples are enough to show that the Theme-Rheme distinction does not make quite the right distinction for the licensing of Gen Neg, and to support our positing of Perspectival Structure as a structure more closely connected to alternative diathesis choices.
- As we noted in the Proceedings, it remains to investigate alternative notions of information structure such as those described in Maslova and Bernini (In press) to see if our Perspective Structure coincides with any of them.

We have argued that the Nom/Gen and Acc/Gen alternations in Gen Neg reflect a diathesis alternation which in turn reflects different ways of structuring a described situation rather than different ways of structuring a sentence, but Maslova and Bernini argue convincingly that both kinds of structuring are essentially involved in many kinds of topic constructions, so there may be a way to construe our Perspective Structure as a kind of information structure in the end, though our Perspectival Center is *not* a Hanging Topic and is *not* (on its own) a Theme. One can ask: what kind of Information Structure, if any, relates to Diathesis choice, as in the spray/load alternation? That's what we believe our Perspectival Structure to be like, as we've discussed in our earlier papers.

For future work, we want to explore more fully the relationship between the Gen Neg construction and the GIS construction, especially the question of those sentences that may exemplify both at once, and the question of whether all intransitive GIS sentences are existential, as Babby and we have argued for intransitive Gen Neg sentences. We close with two hypotheses and one question raised by this work that we want to explore further:

Hypothesis 1: There are at least the following three patterns of Theme-Rheme structure for intransitive Gen Neg sentences¹¹ (negative existential sentences):

Pattern 1, the default case: Theme is Perspectival Center, i.e. the LOCation, and the NP is (part of) the Rheme, as in (22a,b).

- (22) a. Na seminare ne bylo odnogo studenta. NEG was-N.SG NI one-GEN.M.SG student-GEN.M.SG at seminar 'At the seminar there was not a single student.'
 - b. Na seminare ne bylo studentov. at seminar NEG was-N.SG student-GEN.M.PL

'At the seminar there were no students.'

Pattern 2, Verum Focus: Both the Perspectival Center (the LOCation) and the non-Center (the THING argument) are included in the Theme, and only the polarity is Rhematic, as in (23a,b).

- (23) a. Na seminare studentov student-GEN.M.PL NEG was-N.SG at seminar 'At the seminar there were no students.'
 - b. Studentov na seminare ne bylo. student-GEN.M.PL at seminar NEG was-N.SG 'There were no students at the seminar.'

¹¹ We are still working on how best to extend our analysis of intransitive Gen Neg sentences to transitive Gen Neg sentences, which have much in common with them but cannot in general be considered to be 'existential sentences'. We expect that the relation between Gen Neg and GIS will turn out to be the same for object genitives and for subject genitives, but we state our hypotheses here just for subject genitives.

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The semantic or pragmatic difference between the two word orders in (23a,b), if any, is not one we know how to describe other than to suggest that the initial constituent is more Thematic than the one that follows it (as in Praguian Functional Sentence Perspective). Sentence (23b) has an initial plural genitive, but is it a GIS? As discussed above with respect to example (13b), we suspect that it is not, and we hypothesize that all GIS's must have the third kind of Theme-Rheme structure, below.

Pattern 3, G.I.S: On this pattern, instead of just a THING and a LOC argument, the THING argument is "split" into a "KIND" constituent and a "QUANTITY" constituent, generated to some extent independently, as the *kot naplakal* examples show. The Theme consists of the "KIND" plus the Perspectival Center LOCation, and the Rheme contains the focused QUANTITY phrase, as in sentence (24) below; sentence (14) was also an example of this type.

(24) Studentov na seminare ne bylo ni odnogo. student-GEN.M.PL at seminar NEG was-N.SG NI one-GEN.M.SG 'There was not a single student at the seminar.'

<u>Hypothesis 2</u>: GIS sentences have the same Perspectival Structure as Gen Neg sentences plus a marked Theme-Rheme structure. What the GIS construction adds is additional structure that makes it possible to "split" the NP argument into two parts and put one part in the Theme and the other in the Rheme. That added structure is full of puzzles, as discussed by Franks. We have nothing so far to add about the syntax, nor about the semantics, except that our goal would be to analyze the semantics so that it delivers something closer to the kind of paraphrase Franks provides for examples like (15) and(16): "The number/quantity of NP-GEN (at LOC) that ... is/was QUANT." This would suggest that we do not want to reassemble the genitive NP and the Quant expression into a single constituent at LF as proposed by Franks, but to exploit the possibilities of lambda-abstraction to keep them separate while making explicit how their parts indirectly combine to characterize the argument of the verb.

If it should turn out to be correct that GIS sentences involve a diathesis choice that corresponds to the same Perspectival Structure as that of Gen Neg sentences, then studying them together may shed new light on both. Gen Neg sentences are by definition all negative sentences, but GIS sentences, if we are correct, can be affirmative or negative. GIS sentences all have a particular marked Theme-Rheme structure; Gen Neg sentences, if we are correct, can have a variety of Theme-Rheme structures.

Question: Are there indeed negative GIS's, and is it correct that sentences (24) and (14) exemplify both GIS and Gen Neg? And is it correct that our *kefir* example (6) and (23b) above are not GIS's because they lack a focused QUANT phrase? And then what about (25a,b) below, and (13b) which in a sense are 'between' (6) and (14)? Like (6), they lack anything which can be interpreted as supplying a cardinality or measure, but the emphatic adverbial *sovsem* 'at all' functions similarly to a quantifier like *ni odnogo* 'not a single' in providing a focusable constituent, and it is in some ways quantifier-like. It seems that with *sovsem* added, either the sentence no longer has verum focus, and might be a GIS sentence, or *sovsem* modifies the negation itself, and the sentence *is* an instance of verum focus; these possibilities remain to be investigated.

- (25) a. Studentov na seminare ne bylo sovsem. student-GEN.M.PL at seminar NEG was-N.SG at all 'There weren't any students at all at the seminar.'
 - b. Studentov na seminare sovsem. ne bylo. student-GEN.M.PL at seminar at all NEG was-N.SG 'There weren't any students at all at the seminar.'

To conclude: we have strengthened our arguments that Theme-Rheme structure is not a determinant of Genitive choice for Gen Neg, and have compared Gen Neg with the Genitive Initial Sentence construction, which does seem to essentially involve a Thematic Genitive NP. Among examples of the GIS construction, we have found some that simultaneously exemplify the Gen Neg construction. In our speculative concluding hypotheses and questions, we have raised further issues concerning the different possible Theme-Rheme structures for Gen Neg and have hypothesized that a common Perspectival Structure motivates the marked constructions of both Gen Neg and GIS.

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