

Existential Sentences, BE, and the Genitive of Negation in Russian¹

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0. Introduction

In many languages, existential sentences have a special syntactic shape, different from regular subject-predicate sentences, as illustrated by English (1.a-b).

- (1.) a. *There are two holes in my left pocket.*
 b. *Two holes are in my left pocket.*

Russian: because of (a) great “freedom” of word order and (b) no articles, the difference between existential and “plain” sentences is less obvious in many cases.

- (2.) a. *V gorode byl doktor.*
 In town was-M.SG doctor-NOM.M.SG
 ‘There was a doctor in town/ (The doctor was in town.)’
 b. *Doktor byl v gorode.*
 doctor-NOM.M.SG was-M.SG in town
 ‘The doctor was in town.’

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- It is possible and natural to view the sentences in (2.) as differing only in Theme-Rheme structure and word order (and correspondingly in definiteness of the bare NP); the issue of whether there is any deeper syntactic difference between them is controversial.
- But under negation, a well-known phenomenon distinguishes the two types sharply:

In some negated sentences of Russian, as is well known, two main case forms are possible – nominative case and genitive case: *Otvet ne prišel* -- *Otveta ne prišlo*². The syntactic, semantic, and communicative particulars of the second of these constructions is one of the classic themes of general and Russian grammar, and has given rise to a huge literature. (Apresjan, 1985, p.292)

- (3.) *Otvet* *ne prišel* -- *Otveta* *ne prišlo*.
 Answer-**NOM.M.SG** NEG came-**MSG** – Answer-**GEN.N.SG** NEG came-**N.SG**
 ‘The answer didn’t come.’ ‘No answer came.’

- Another characteristic of intransitive sentences whose subject is marked with the Genitive of Negation (henceforth GenNeg): the non-agreement of the “impersonal predicate” with the subject. I.e., the verb is always **N.SG**.
- Common view: NES’s are impersonal sentences. But not AES’s: “These sentences are impersonal only when negated. If one removes the negation, they become personal³ ...”. (Peškovskij, 1938, p.334)
- Terminology (Babby 1980): “Negated declarative sentences” (NDS), for the sentences with nominative subjects, (4.a). (Also called “Locative sentences” if the predicate is locative.) “Negated existential sentences” (NES), for those with genitive “subjects”, (5.a). Corresponding affirmative sentences: (ADS and AES) in (4.b) and (5.b).

- (4.) 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.’
 (5.) NES (a) *Otveta* *iz polka* *ne prišlo*.
 Answer-**GEN.M.SG** from regiment NEG arrived-**N.SG**
 ‘There was no answer from the regiment.’

² We have changed the noun in Apresjan’s example from a neuter one (*pis'mo* ‘letter’) to a masculine one (*otvet* ‘answer’) to better illustrate the lack of subject-verb agreement in the case of a genitive ‘subject’.

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.

³ 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).

Outline:

- Babby (1980) and many others: DS's and ES's differ in scope of negation. Babby: Scope of negation determined by Theme-Rheme structure. (Section 1)
- Pesetsky (1982) and many others: "object" Genitive of Negation and "subject" Genitive of Negation are a unified phenomenon; Gen Neg always applies to underlying objects, hence in the "subject" case, the verbs are all unaccusative. No special notion of "existential sentences" appealed to. For Babby, all Subject Gen Neg sentences are existential [one exception to be discussed]. For Paduceva (1997), there are two cases of subject Gen Neg: existential sentences and perception-report sentences. (Section 1).
- Borschev and Partee (1998a,b): followed Babby in use of Theme-Rheme structure. We added an obligatory LOC role in ES's (following many earlier authors). and made proposals integrating lexical and compositional semantics and Theme-Rheme structure. But Borschev and Partee (2002) argue that the needed distinction is not identical to the Theme-Rheme distinction. We introduce a "Perspective Structure", which we believe may be related to diathesis choice, although we remain agnostic about the syntactic implementation. "Perspectival Center" is proposed in place of Babby's use of Theme. (Section 2)
- A related issue that has been a classic problem in Russian syntax and semantics concerns the forms and meanings of the verb *byt'* 'be' in existential and other sentences, and its interaction with Gen Neg. (Section 3).
- We close in Section 4 with summary conclusions and a mention of some of the important related problems that were not touched on in this presentation.

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 (10.) (Babby 1980: 72) below: DS's and ES's differ in their "scope of assertion/negation".

(10.)

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

Thus the declarative sentence (6.a) 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 (6.b) 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 Borschev and Partee (1998a); we will discuss it in Section 3.

Babby relates chart (10.) to the *categorical* vs. *thetic* distinction (cf. Kuroda's (1972) discussion of Brentano and Marty.) But that important issue will not be discussed here.

present tense, Gen Neg and *net* ‘there isn’t/aren’t’ are used in both NES and NDS. We return to the problems of *byt*’ in Section 3.

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 (13.)), and some unergative verbs can (see (14.)).
- (13.) *Za vse vremena suda u nee na lice ne drognul ni odin muskul.*
 during whole time of-trial at her on faceNEG twitched not one.NOM muscle.NOM
 ‘Not a single muscle twitched on her face during the entire trial.’ (Babby 2001, p.43)
- (14.) ..., tam ne rabotaet ni odnogo inženira.
 ..., 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 (13.) needs further explanation but is not a “counterexample”; and would presumably argue that the verb has been shifted to an Unaccusative in (14.).
 - Unaccusative sentences and Existential sentences are clearly different classes; one property they share is “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.
 - Paduceva (1997) breaks the subject Gen Neg sentences into two classes: Existential sentences and perception sentences. We believe these can be viewed as two subclasses of existential sentences once we make existence relative to a location (Section 2); in perception sentences, the relevant location is implicitly ‘the perceptual field of the observer’.

There are a great many analyses of Gen Neg in the literature, too many to discuss. Most Western Slavists hold that Unaccusativity is 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 all existential (a property not easily ascribed to object Gen Neg.)

2. Our approach. Existential vs. locative. “Perspective structure.”

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

In the light of comments by colleagues and a review of Arutjunova (1976) and other literature, we came to doubt the correlation of the NES - NDS distinction with the postulated difference in Theme-Rheme structure. Thus in examples (15.-**Error! Reference source not found.**) below, it appears to us that the words *sobaki* ‘dog-GEN.F.SG’, *myšej* ‘mouse-GEN.F.PL’, *kefira* ‘kefir-GEN.M.SG’, and *otveta* ‘answer- 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 (11.).

- (15.) *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.]
- (16.) [*Myši v dome est'?*] – *Net, myšej v dome net.* (Arutjunova 1997)
 [mouse-NOM.F.PL in house is?] No, mouse-GEN.F.PL in house not.is
 [Are there mice in the house?] – No, there are no mice in the house.
- (17.) [*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 and Partee 1998b, 2002)

In (17.), *kefira* 'kefir', in the genitive, is nevertheless part of the Theme.

Evidence:

- (i) The rules governing the interplay of word order and intonation in Russian (Kovtunova 1976, Švedova 1980, Yokoyama 1986)
 - (ii) General principle: the Rheme of one sentence is a favored candidate to become the Theme of the following sentence.
- More details and discussion in Borschev and Partee (2002).

2.2. What distinguishes “existential sentences” – from what? From “locative” 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”:

- (18.) *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 of the core principles behind our analysis is as follows.

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

Which location? Distinctions among different locations associated with different parts of sentence structure and context make it possible to make sense of GenNeg examples which deny the existence of the THING in a certain LOCation, possibly a perceiver's perceptual field, while presupposing existence of that THING in “the actual world” or some other LOCation invoked in the interpretation of the sentence in its context. The distinctions in Borschev and Partee (1998a) were based on Theme-Rheme structure; we would now systematically modify them, replacing Theme-Rheme structure by ‘Perspective Structure’.

(20.) **The Common Structure of “Existence/location situations” and their descriptions:**
BE (THING, LOC)

(21.) **PERSPECTIVE STRUCTURE:**

An “existence/location situation” may be structured either from the perspective of the THING or from the perspective of the LOCation. Let us use the term *Perspectival Center* for the participant chosen as the point of departure for structuring the situation. (Our *Perspectival Center* will play the role that “Theme” played for Babby (1980).) (More on Perspective Structure in Section 2.3.)

In the following, we underline the *Perspectival Center*.

BE (THING, LOC): structure of the interpretation of a Locative (“Declarative”) sentence.

BE (THING, LOC): structure of the interpretation of an Existential sentence.

(22.) **PERSPECTIVAL CENTER PRESUPPOSITION:**

Any *Perspectival Center* must normally be presupposed to exist.

Principle (22.) allows us to derive the same presuppositions that were derived in Borschev and Partee (1998a) from the correlation of greater presuppositionality with the Theme of the sentence (Hajicová 1973, 1974, 1984, Peregrin 1995, Sgall et al 1986). In particular, from this principle 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.

(23.) **NES PRINCIPLE:**

An NES denies the existence of the thing(s) described by the subject NP *in the Perspectival center LOCation*.

In Borschev and Partee (1998a), we related principle (23.) to the following principle, where “V” represents any lexical verb.

(24.) **PRESUPPOSED EQUIVALENCE:**

An NES presupposes that the following equivalence holds locally in the given context of utterance:

V(THING, LOC) ⇔ BE(THING, LOC)

We have seen examples with implicit Thematic locations associated with implicit observers. There are also cases, like (25.), in which the implicit Thematic location is simply “the actual world,” yielding a literal denial of existence.

(25.) Edinorogov ne sušcestvuet.
Unicorns-GEN-m-pl NEG exist-sg
‘Unicorns do not exist.’

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” in some cases). Examples involving the interaction of additional “axioms” deriving from lexical semantics, encyclopedic knowledge, and local contextual information are given in Borschev and Partee 1998a.

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 have called “BE (THING, LOC)”.

One kind of sentence is “ordinary”, and has the “THING” as ordinary subject. This kind of sentence doesn’t really have a name except when put in contrast with the other kind; this is Babby’s “Declarative Sentence”, more often called “Locational”, and often subsumed within the larger class of “Predicational” sentences. This also seems to be an instance of the Brentano/Marty “categorical judgment”.

The ES’s do not have that ordinary structure, but exactly what structure they do have is controversial. In some sense they seem to be turning the predication around: saying of the LOCation that it has THING in it. If the LOC is implicit, this is a “thetic judgment”.

But in what way and at what “level” or “levels” 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. We propose a difference in Perspectival Structure, without having a definite proposal for whether and how it is represented in the syntax.

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 verbs like *give*, *send*. An alternative that might be preferred in some frameworks is to permit alternative surface choices from a single underlying structure, as in the “small clause” analyses of Chvany (1976), Moro(1997).

2.2.3. THING and LOC in ‘locative’ vs. existential sentences.

One could say that THING and LOC are *roles* of the verb *byt*’, 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 (17.), (12.), 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 (17.), or it may be implicitly understood, as in (3.) or (7.b). Existence is always understood with respect to some LOCation. An implicit LOCation must be given by the context. This is usually “here” or “there”, “now” or “then”: at the place and time where someone is awaiting a letter which “didn’t arrive”, for (3.), or “feeling (or not feeling) the frost”, for (7.b).

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.

- Two kinds of descriptions of situations containing a THING and a LOC:
- The 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 in the situation.
- 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. Lexical verbs and *byt’* ‘be’ in existential sentences.

3.1. “Weak verbs” and the multiple sources of their existential “axioms”.

In the framework of Borschev and Partee (1998) we assume that the lexical verbs have their normal 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 valid” theorem? We argue that such axioms may come from the dictionary, from common knowledge, or from particular contextual information or inferences. A few examples are given below, but we omit discussion here.

3.1.1. “Dictionary axioms”.

(26.) 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 belet 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 a rule white-NOM-m-sg
‘Sails as a rule are white.’

3.1.2 Dictionary + contextual axioms

Modification of the previous example:

(27.) 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 who is traveling, ...]

3.1.3. Axioms of “free choice”.

(28.) a. NES:

Moroza ne cuvstvovalos’. (Babby 1980, p.59)

Frost-GEN-m-sg NEG was-felt-n-sg

‘No frost was felt/ There was no frost.’

b. Entailed equivalence:

Moroz cuvstvovalsja <==> Moroz byl.

‘Frost was felt’ <==> ‘There was frost.’

c. NDS:

Moroz ne cuvstvovalsja.

Frost-NOM-m-sg NEG was-felt-m-sg

‘The frost was not felt.’

3.1.4. Axioms about characteristic actions or states for given kinds of things.

(29.) 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).

d. 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’

3.1.5. “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.). 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.

And conversely, some verbs virtually “demand” genitive, when the verb’s meaning directly entails equivalence with *be*. With such verbs, like *sušcestvovat* ‘to exist’, the nominative is normally impossible: compare the impossible (30.) with the normal example (25.) cited earlier. The nominative possible only in special cases involving non-standard “Locations”, as illustrated in (31.) (examples from Elena Paduceva, personal communication.)

- (30.) #Edinorogi ne sušcestvujut.
Unicorns-NOM-m-pl NEG exist-pl
‘Unicorns do not exist.’
- (31.) a. Ženšciny dlja nego ne sušcestvujut.
Women-NOM-f-sg for him NEG exist-pl
‘Women for him do not exist.’
- b. Ženšcin dlja nego ne sušcestvuet
Women-GEN-f-sg for him NEG exist-sg
‘Women for him do not exist.’

The difference in interpretation between (31.a) and (31.b) is that (31.a), with the nominative, carries the presupposition that “for me, the speaker” women *do* exist, while (31.b), with the genitive, remains non-committal on this point. The assertion of non-existence in (31.a) does not contradict the presupposition of existence, as it usually would, because of the phrase *dlja nego* ‘for him’: the non-existence assertion is limited to “his world”, which in this case constitutes a Rhematic metaphorical Location. In (31.b), even though the assertion is still an assertion of non-existence in “his world”, there is no longer a presupposition that for me, the speaker, women do exist. “His world” is here the Thematic location, taken as “reference point of view” for the utterance, and “my” point of view is not indicated.

(There are almost certainly some morphological and syntactic requirements as well which cannot be simply reduced to semantic requirements. The verb must normally take a nominative subject, i.e. it must take structural rather than lexical case. And perhaps there is a requirement of unaccusativity, as claimed by Pesetsky 1982 and others, although on this point the independence of syntax and semantics is not clear.)

3.2. Why Babby and others exclude some ‘be’ sentences from the class of existentials.

As noted above, Babby does not claim that his analysis applies to sentences with *byt’*. He argues that since the main assertion in an NES is a denial of existence of the referent of the subject NP, NES’s should normally not permit definite NPs as subjects; but sentences with *byt’* do commonly allow the genitive of negation with proper names and other definite NPs. Babby claims that sentence (12.), repeated below, cannot be an existential sentence because of its definite subject and therefore must be a “locative sentence”, a type of NDS, with “be at the lecture” as the negated part, which goes contrary to the generalization in 1.1 above.

- (12.) *Ivana* *ne bylo* *na lekcii*
Ivan-GEN.M.SG NEG was-N.SG at lecture
‘Ivan wasn’t at the lecture.’

However, *byt'* is in a sense a “basic” verb of existence (“being”) and roughly speaking all NES could be paraphrased as NES with *byt'*:

- (32.) (a) *Otveta ne prišlo = Otveta ne bylo*
 Answer-GEN.M.SG NEG arrived-N.SG = Answer-GEN.M.SG NEG was-N.SG
 ‘No answer came’ = ‘There was no answer.’
- (b) *Moroza ne cuvstvovalos’ (Babby 1980, p.59) = Moroza ne bylo*
 Frost-GEN.M.SG NEG be-felt-N.SG = Frost-GEN.M.SG NEG was-N.SG
 ‘No frost was felt’ = ‘There was no frost.’
- (c) *Posudy na stole ne stojalo = Posudy na stole ne bylo*
 Dishes-GEN.F.SG on table NEG stood-N.SG = Dishes-GEN.F.SG on table NEG were-N.SG
 ‘No dishes stood on the table’ = ‘There were no dishes on the table’

Given the centrality of *byt'* in the understanding of existential (Russian *bytijnnye* ‘be-’) sentences, it would be odd to have to exclude *byt'* from the class of existential verbs, and preferable to find an account for the possibility of definite subjects in some existential sentences.

In Borschev and Partee (1998a), we argued that by making existence relative to a LOCATION, this obstacle to the treatment of sentences containing *byt'* and a definite subject is removed. But there remains a further problem, based on the distribution of two forms of *byt'* in present tense affirmative sentences, and the form *net* ‘there is/are not’ in present tense negative sentences. We raise this problem in the next section, and offer a possibly new way of looking at it, without venturing any definite conclusions.

3.3. Which sentences are the negations of which? A non-trivial issue.

Kondrashova (1996) suggests the following descriptive categorization of BE-sentences in Russian. [from Harves 2002]

(33.) I. Equative

Naš ucitel’ (*est’) Kolja.
 our teacher-NOM *BE Kolja-NOM
 ‘Our teacher is Kolja.’

(34.) II. Predicative

- a. Kolja (*est’) durak.
 Kolja-NOM *BE fool-NOM
 ‘Kolja is a fool.’
- b. Maša (*est’) p’janaja
 Maša *BE drunk-NOM
 ‘Maša is drunk’

(35.) III. Generic/Definitive

Sobaka (*est’) drug celoveka

dog-NOM *BE friend-NOM of-man
'A dog is a man's friend.'

(36.) **IV. Locative**

- a. Kolja (*est') v Moskve.
Kolja-NOM *BE in Moscow
'Kolja is in Moscow.'
- b. Naša mašina (*est') na stojanke.
our car-NOM *BE in parking lot
'Our car is in the parking lot.'

(37.) **V. Locative-Possessive**

- a. Vaše pis'mo (*est') u sekretarja.
your letter-NOM *BE at secretary
'The secretary has your letter.'
- b. Kolja (*est') u sestry.
Kolja-NOM *BE at sister
'Kolja is at (his) sister's place.'

(38.) **VI. Existential**

- a. V Moskve est' tramvai.
in Moscow BE street cars-NOM PL
'There are street cars in Moscow.'
- b. V xolodil'nike est' eda.
in refrigerator BE food-NOM SG
'There is food in the refrigerator.'

(39.) **VII. Possessive**

- a. U Koli est' mašina
at Kolja-GEN BE car-NOM
'Kolja has a car.'
- b. U Koli est' bilet v kino.
at Kolja-GEN BE ticket-NOM to movies
'Kolja has a ticket to the movies.'

Our focus is on the contrast between the types IV "Locative" and VI "Existential". We ignore types I-III here: those are the various kinds of "copular" sentences. We assume, as do others, that the contrast between types V and VII is fully analogous to that between types IV and VI

Chvany (1976) distinguished two different verbs *byt'* in Russian: a main verb *byt'* ("Э") in both existential and locative sentences (Kondrashova's types 4-7), and a grammatical form *byt'* inserted in surface structure in copular sentences (Kondrashova's types 1-3), which she took to have no verb in deep structure. Harves (2002), like Kondrashova, aims to have all kinds of *byt'* inserted as the spell-out of various feature combinations. We do not enter that debate, but note that everyone agrees that there is a major distinction between 1-3 and 4-7, and an important distinction (corresponding to Babby's ES vs DS) within 4-7.

The big problem in facing the attempt to analyze sentences with *byt'* as just like sentences with other verbs with respect to the Existential-Locative distinction shows up most clearly in patterns of affirmative and negative sentences in the present tense.

(40.) Example set “1a”. “Locative” affirmative with *Æ*.

- a. *Kolja v Moskve.*
Kolja-NOM in Moscow
'Kolja is in Moscow.'
- b. *Naša mašina na stojanke*
our car-NOM in parking lot
'Our car is in the parking lot.'
- c. *Vaše pis'mo u sekretarja*
your letter-NOM at secretary
'The secretary has your letter.'

(41.) Example set “1b” Disputed Loc/Exist: Loc-initial order with *Æ*.

- a. *V Moskve Kolja .*
in Moscow Kolja-NOM
'Kolja is in Moscow.'
- b. *Na stojanke naša mašina*
in parking lot our car-NOM
'Our car is in the parking lot.'
- c. *U sekretarja Vaše pis'mo*
at secretary your letter-NOM
'The secretary has your letter.'

(42.) Example set “1c” Disputed Loc/Exist: Loc-init order, def subject, *est'*.

- a. *V Moskve est' Kolja .*
in Moscow BE Kolja-NOM
'Kolja is in Moscow.'
- b. *Na stojanke est' naša mašina*
in parking lot BE our car-NOM
'Our car is in the parking lot.'
- c. *U sekretarja est' Vaše pis'mo*
at secretary BE your letter-NOM
'The secretary has your letter.'

Note: missing type “1d” ungrammatical:

- (43.) **Kolja est' v Moskve.*

Word order as in Locative sentence, but *est'* is not permitted in Locative sentences, only in Existential sentences.

(44.) Example set “2a” Disputed Loc (?) sentence, with *ne*. Sentential or constit neg?

- a. *Kolja ne v Moskve.*
Kolja-NOM NEG in Moscow
'Kolja isn't in Moscow.'

- b. *Naša mašina ne na stojanke*
our car-NOM NEG in parking lot BE
'Our car isn't in the parking lot.'
- c. *Vaše pis'mo ne u sekretarja*
your letter-NOM NEG at secretary
'The secretary doesn't have your letter.'

In present tense with \emptyset verb, we can't see whether *ne* precedes the verb (sentential negation) or follows it (constituent negation). Harves assumes constituent negation only; we disagree.

(45.) Example set “2b” Disputed Neg sentence with *net*, Gen Neg, definite subject, NP-first order.

- a. *Kolja net v Moskve.*
Kolja-GEN NEG-BE in Moscow
'Kolja isn't in Moscow.'
- b. *Našej mašiny net na stojanke*
our car-NOM NEG-BE in parking lot
'Our car isn't in the parking lot.'
- c. *Vašego pis'ma net u sekretarja*
your letter-GEN NEG-BE at secretary -GEN
'The secretary doesn't have your letter.'

(46.) Example set “(2b)′” Disputed Neg sentence with *net*, Gen Neg, definite subject, Loc-first order.

- a. *v Moskve net Koli.*
In Moscow NEG-BE Kolja-GEN
'Kolja isn't in Moscow.'
- b. *Na stojanke net našej mašiny*
in parking lot NEG-BE our car-NOM
'Our car isn't in the parking lot.'
- c. *U sekretarja net vašego pis'ma*
at secretary -GEN NEG-BE your letter-GEN
'The secretary doesn't have your letter.'

(47.) Example set “3a” Past tense analog of “1a”. *Æ* vs *est* neutralized in Past.

- a. *Kolja (togda) byl v Moskve.*
Kolja-NOM (then) was-M.SG in Moscow
'Kolja (then) was in Moscow.'
- b. *Naša mašina byla na stojanke*
our car-NOM was-F.SG in parking lot
'Our car was in the parking lot.'
- c. *Vaše pis'mo bylo u sekretarja*
your letter-NOM was-N.SG at secretary
'The secretary had your letter.'

(48.) Example set “3b” Past tense analog of “1b”.

- a. *v Moskve byl Kolja*
in Moscow was-M.SG Kolja-NOM
'Kolja (then) was in Moscow.'

- b. *Na stojanke byla naša mašina*
in parking lot was-F.SG our car-NOM
'Our car was in the parking lot.'
- c. *U sekretarja bylo vaše pis'mo*
at secretary was-N.SG your letter-NOM
'The secretary had your letter.'

(49.) Example set "4a" Past tense analog of 2a. This is S neg (vs. *byl ne v Moskve*)

- a. *Kolja ne byl v Moskve.*
Kolja-NOM NEG was-M.SG in Moscow
'Kolja wasn't in Moscow.'
- b. *Naša mašina ne byla na stojanke*
our car-NOM NEG was-F.SG in parking lot
'Our car was in the parking lot.'
- c. *Vaše pis'mo ne bylo u sekretarja*
your letter-NOM NEG was-N.SG at secretary
'The secretary had not your letter.'

(50.) Example set "4b" Past tense analog of 2b.

- a. *Koli ne bylo v Moskve.*
Kolja-GEN NEG was-N.SG in Moscow
'Kolja wasn't in Moscow.'
- b. *Našej mašiny ne bylo na stojanke*
our car-NOM NEG was-N.SG in parking lot
'Our car wasn't in the parking lot.'
- c. *Vašego pis'ma ne bylo u sekretarja*
your letter-GEN NEG was-N.SG at secretary-GEN
'The secretary didn't have your letter.'

(51.) Example set "4b"

- a. *v Moskve ne bylo Koli.*
In Moscow NEG was-N.SG Kolja-GEN
'Kolja wasn't in Moscow.' (??)
- b. *Na stojanke ne bylo našej mašiny*
in parking lot NEG was-N.SG our car-NOM
'Our car wasn't in the parking lot.'
- c. *U sekretarja ne bylo vašego pis'ma*
at secretary-GEN NEG was-N.SG your letter-GEN
'The secretary didn't have your letter.'

(52.) "Example set (5?)"

- b. *Naša mašina stoit na stojanke*
our car-NOM stand-SG in parking lot
'Our car is sitting in the parking lot.'
- c. *Vaše pis'mo ležit u sekretarja*
your letter-NOM lie-SG at secretary
'Your letter is sitting with the secretary'

(53.) "Example set (5b)"

- b. *Na stojanke stoit naša mašina*
in parking lot stand-SG our car-NOM
'In the parking lot is our car.'
- c. *U sekretarja ležit vaše pis'mo*
at secretary lie-SG your letter-NOM
'Your letter is sitting with the secretary'

(54.) "Example set (6?)"

- b. *Naša mašina ne stoit na stojanke*
our car-NOM NEG stand-SG in parking lot
'Our car isn't sitting in the parking lot.'
- c. *Vaše pis'mo ne ležit u sekretarja*
your letter-NOM NEG lie-SG at secretary
'your letter isn't sitting with the secretary'

(55.) "Example set (6b)"

- b. [?]*Našej mašiny ne stoit na stojanke*
our car-GEN NEG stand-SG in parking lot
'Our car isn't sitting in the parking lot.'
- c. ^{*}*Vašego pis'ma ne ležit u sekretarja*
your letter-GEN NEG lie-SG at secretary
'Your letter isn't sitting with the secretary.'

(56.) "Example set (6b)'"

- b. *Na stojanke ne stoit našej mašiny t*
in parking lot NEG stand-SG our car-GEN
'Our car isn't sitting in the parking lot.'
- c. [?]*U sekretarja ne ležit vašego pis'ma*
at secretary NEG lie-SG your letter-GEN
'Your letter isn't sitting with the secretary'

(57.) "Example set (7?)"

- b. *Naša mašina stojala na stojanke*
our car-NOM stood-F.SG in parking lot
'Our car was sitting in the parking lot.'
- c. *Vaše pis'mo ležalo u sekretarja*
your letter-NOM lied-N.SG at secretary
'Your letter was sitting with the secretary'

(58.) "Example set (7b)"

- b. *Na stojanke stojala naša mašina*
in parking lot stood-F.SG our car-NOM
'Our car was sitting in the parking lot.'
- c. *U sekretarja ležalo vaše pis'mo*
at secretary lied-N.SG your letter-NOM
'Your letter was sitting with the secretary'

(59.) "Example set (8?)"

- b. *Naša mašina ne stojala na stojanke*
our car-NOM NEG stood-F.SG in parking lot
'Our car wasn't sitting in the parking lot.'

- c. *Vaše pis'mo ne ležalo u sekretarja*
 your letter-NOM NEG lay -N.SG at secretary
 'your letter wasn't sitting with the secretary'

(60.) “Example set (8b)”

- b. *Našej mašiny ne stajalo na stojanke*
 our car-GEN NEG stood-N.SG in parking lot
 'Our car wasn't sitting in the parking lot.'
- c. **Vašego pis'ma ne ležalo u sekretarja*
 your letter-GEN NEG lay -N.SG at secretary
 'Your letter wasn't sitting with the secretary.'

(61.) “Example set (8b)′”

- b. *Na stojanke ne stajalo našej mašiny*
 in parking lot NEG stood-N.SG our car-GEN
 'Our car wasn't sitting in the parking lot.'
- c. *U sekretarja ne ležalo Vašego pis'ma*
 at secretary NEG lay -N.SG your letter-GEN
 'Your letter wasn't sitting with the secretary.'

Examples with indefinite subject

(62.) “Example set (9b)”

- c. *Na polu okurki*
 on floor cigarette-butt-NOM PL
 'On the floor are cigarette-butts.'
- d. *V komnate devočki*
 in room girl-NOM PL
 'In the room are girls.'

(63.) “Example set (9c)”

- c. *Na polu est' okurki*
 on floor BE cigarette-butt-NOM PL
 'On the floor there are cigarette-butts.'
- d. *V komnate est' devočki*
 in room BE girl-NOM PL
 'In the room there are girls.'

(64.) “Example set (10b)′”

- c. *Na polu net okurkov*
 on floor NEG.BE cigarette-butt-GEN PL
 'On the floor there are no cigarette-butts.'
- d. *V komnate net devocek*
 in room NEG.BE girl-gen PL
 'In the room there are no girls.'

(65.) “Example set (11b)”

- c. *Na polu byli okurki*

on floor were cigarette-butt-NOM PL
'On the floor were cigarette-butts.'

- d. *V komnate byli devocki*
in room were girl-NOM PL
'In the room were girls.'

(66.) "Example set (12b)"

- c. *Na polu ne bylo okurkov*
on floor NEG was-N.SG cigarette-butt-GEN PL
'On the floor there were no cigarette-butts.'
- d. *V komnate ne bylo devocek*
in room NEG was-N.SG girl-gen PL
'In the room there were no girls.'

4. Concluding remarks.

Bailyn (1997): until recently an either-or attitude about functionalist vs. syntactic explanations, now generally acknowledged that parts of both may be necessary.

While we are still far from a full account, a picture may be emerging. The Perspectival Center status of the LOCation and the corresponding not-ordinary -subject status of the THING are both marked choices. A language which simply let one make the LOCation the subject would align subject and Perspectival Center, and syntactic predicate with what is predicated of it; that would represent a full 'syntacticization' of the distinction. On the other hand, one could imagine a language in which there was no difference except word order, and the existential sentence was realized just by making the Perspectival Center the Theme and the rest of the sentence the Rheme, indicated by word order. Russian seems to do something in between; the best way to characterize it syntactically is still not clear, but as functional and formal approaches are brought together the pieces are beginning to fall into place.

As for the mysteries of the forms of *byt'*, we are just getting into them now and have no firm conclusions at this stage. However we are optimistic that once the possibility of existential sentences with definite subjects is better understood, the symmetry of the non-*byt'* existential vs. locative sentences may become easier to extend to the *byt'* sentences as well.

Appendix. Unresolved syntactic issues.

Many authors who have worked on the problem of Russian NES have proposed syntactic distinctions of one kind or another between NES and NDS.

- Babby (2000), preserving the Theme/Rheme ideas of Babby (1980), proposes that the assignment of GenNeg in NES's should be mediated by the syntax:
 - NP within Rheme in ES's is an NP dominated by V-bar;
 - NP Theme is syntactically higher, either by starting there or by movement.
- A number of authors point to Diesing's (1992) tree-splitting hypothesis as a relevant parallel. We are not experts on the syntax of these sentences, but compositional semantics can't be done

without syntax. So let us just mention some of the main ideas that have been proposed about the syntax of existential sentences.

(i) Unaccusativity vs. Non-agentivity.

- GenNeg applies to the “subjects” of some intransitives and to the objects of transitive verbs.
- Many have claimed that the verbs that can be used in ES’s are all Unaccusative verbs (Chvany 1975, Pesetsky 1982, Bailyn 1997, Brown 1999), unifying the GenNeg construction.
- Babby (2000) argues against it.
- Unaccusativity gives at most a necessary condition for GenNeg, not a sufficient one. In particular, no one suggests that all and only sentences containing Unaccusatives are ES’s.
- Questions not automatically answered by the Unaccusative hypothesis:
 - (i) Does the underlying object in an NES become surface subject? In an AES?
 - (ii) Are minimal AES/ADS pairs both Unaccusative, with different derived surface structures (if so, what?), or are AES/ADS pairs Unaccusative/Unergative?
 - (iii) A related question: What governs “optional” GenNeg assignment in NDS/NES pairs?
- Babyonyshev (1996): relates the alternation of genitive with nominative and accusative in Russian to the ‘weak-strong’ “Diesing effects” found when NPs in Germanic languages are left in their base-generated positions or topicalized.
- Bailyn (1997): both ES and DS’s involve Unaccusative verbs, with DS’s involving a raising of the THING NP to a position higher than scope of negation.
- Brown (1999): builds on Bailyn’s view, with her negation position higher in the tree than Bailyn’s in order to account for negated subjects in all kinds of sentences. Brown analyzes GenNeg as a phenomenon that affects NPs that start “low enough” in the tree. They may move higher in the course of a derivation, and many of their optional properties are explained as reflecting a choice of interpreting the “head” or the “tail” of the chain created by their movement.

Semantically, it is widely agreed that when the same verb may be used in both ES’s and DS’s, it receives a more agentive reading in the DS and a more stative reading in the ES. Those who are skeptical about the Unaccusative hypothesis generally believe that much of what it is trying to explain should be explained in terms more directly relating to Agentivity. And even if it is correct that all ES’s involve Unaccusative verbs, those verbs still seem to have a “choice” of structures which may correspond to a choice of Perspective in our sense.

(ii) LOCative as subject? “THING” as subject?

- Few authors go so far as to suggest that the LOCative can become the subject in an ES (as it can in Chichewa), but Kondrashova (1996) does make such a suggestion for ES’s with the copula verb.
- Babby (2000): at the opposite extreme, argues that the THING element is still the subject

even in an NES or AES, but is not in “canonical” subject position. The roles of subject are ‘split’ in ES’s, Babby suggests, with the Locative typically fronting to satisfy the Extended Projection Principle.

- Common thread: Subject of DS is “higher”, in “canonical subject position.”
“Subject” of ES is “lower”.
Impression: a Perspectival Center LOCation “wants” to be subject of an ES, but since it is structurally unable to become subject, some non-canonical structure must be found.

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