

**Polarity in Russian and Typology of Predicate Ellipsis**  
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## **1. Introduction**

The paper deals with the phenomenon of predicate ellipsis, which has attracted much attention during the last two decades. In the growing amount of literature on predicate ellipsis (among the most important works on this phenomenon, see first of all Chao 1987, Lobeck 1995, Lopez 1995), the large variety of predicate ellipses with respect to syntactic structure (syntactic category of the elided site) and information partition of the sentence (status of the remnants of deletion as topics, foci, etc.) has been demonstrated. Specifically, it was noted that at least the following different structural phenomena can be subsumed under predicate ellipsis: deletion of a VP (1), «pseudogapping», i.e. deletion of the verb which retains the auxiliary and (some of) verbal dependents, and deletion of an IP or a TP (3):

- (1) Michael went to Moscow, and Peter ~~went~~ to New York.
- (2) Bill ate the peaches and Harry did ~~eat~~ the grapes.
- (3) Michael went to Moscow, but I don't know [<sub>CP</sub> with whom [<sub>IP</sub> ~~Michael went to Moscow~~]].

A problem which has attracted special attention concerns licensing conditions on predicate ellipsis. Lobeck (1995) has argued that deletion processes affecting a phrase which contains a verb (VP, IP, etc.) are possible only when the empty category (*pro*) in place of the elided phrase is in “strong agreement” relation with the head immediately c-commanding it, e.g. with the I(nfl) in (2), with the C(omp) in (3). “Strong agreement” is defined in a special way so that it is available in configurations where predicate ellipsis is possible, and unavailable otherwise.

Within variety of predicate ellipses, quite special problems arise, however, in connection with elliptic constructions where a polarity marker is retained, as e.g. in (4) from English and in (5) from Basque:

- (4) Mary has bought a book, but Peter \*(has) not.

(5) Marik liburuaerosi du eta Peruk (\*du) ez (\*du).  
 Mary.ERG book bought has and Peter has no has  
 Mary has bought a book and Peter hasn't.

The central question concerning such constructions is why in some languages, like English, they retain the auxiliary, but in others, like Basque, the auxiliary is deleted.

Attempting to explain this difference between English and Basque, Laka argues that the two languages differ in the order of functional projections: in English, the TP hosting the auxiliary is above the projection headed by the polarity marker (the  $\Sigma$ P, in Laka's terms), whereas in Basque the TP is below that projection:

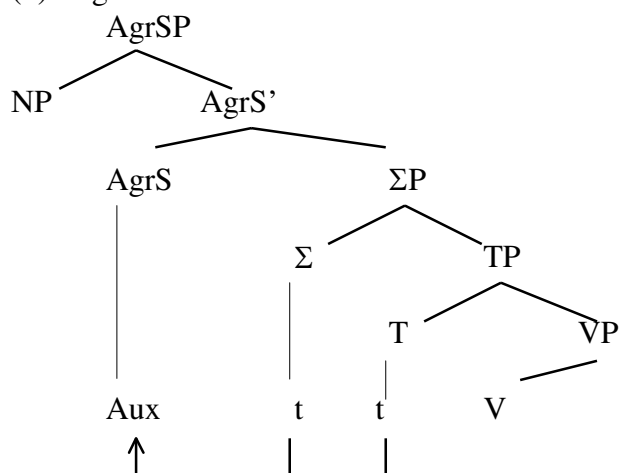
(4') Mary has bought a book, but Peter [<sub>TP</sub> has [ <sub>$\Sigma$ P</sub> not [<sub>VP</sub> ~~bought a book~~]]].

(5') Marik liburuaerosi du eta Peruk [ <sub>$\Sigma$ PEZ</sub> [<sub>TP</sub> [~~liburuaerosi~~—~~du~~]]]  
 Mary.ERG book bought has and Peter no book bought has  
 Mary has bought a book and Peter hasn't.

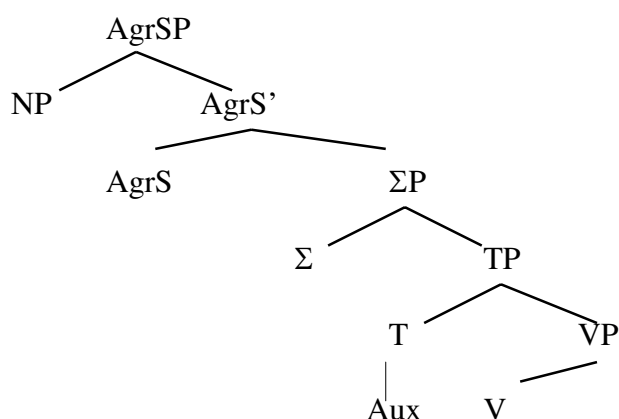
The generalization which falls out under such analysis is that whenever a polarity marker is retained under predicate ellipsis, the phrase which is the complement of the polarity marker (VP in English, TP in Basque) is elided.

Lopez (1995), instead, suggests that the  $\Sigma$ P is uniformly above the TP. He treats ellipsis which retains a bare polarity marker uniformly with "English-style" VP-ellipsis. Working within Pollock's (1989) split-INFL hypothesis, Lopez argues for the following uniform order of projections: [AgrSP [ $\Sigma$ P [TP [VP ]]]]. Considering predicate ellipsis in Spanish, where, similarly to Basque, the auxiliary is not retained, Lopez argues that there the auxiliary does not adjoin to the head of the polarity projection (the  $\Sigma$ P), whereas in English this adjunction obligatorily takes place, for special reasons outlined by Lopez. Under this analysis, predicate ellipsis in English and in Spanish both affect the complement of the polarity marker, differences between the remnants being due to differences in head-movement processes, as shown schematically in (6) and (7):

(6) English



(7) Spanish



In Spanish, deletion of the complement of the  $\Sigma P$  affects the auxiliary which stays in T, but in English the auxiliary escapes from the deletion site. The difference between English and Basque, under this approach, presumably would be explained in the same way as the difference between English and Spanish.

Although the approaches of Laka and Lopez differ in particular configurations they assign to predicate ellipses, they both make the same prediction: the two types of predicate ellipsis — the one retaining and the other one not retaining the auxiliary — cannot cooccur in a language (at least if we do not want to allow variability of order of projections in a given language). This follows from the requirement for the elided constituent to be the complement of the polarity marker ( $\Sigma$ ): obviously, it is impossible that the VP and the constituent built by the auxiliary and the VP simultaneously are complements of the polarity marker.

In the present paper I will show that this prediction cannot be treated as universally correct. In particular, it obviously does not hold for Russian, where two types of predicate ellipsis are possible, one retaining a polarity marker without the auxiliary (cf.(8)) and the other one retaining a polarity marker with the auxiliary (cf.(9)):

- (8) a. Petja prišel, a Vasja (\*byl) net (\*byl).  
 P. came but V. AUX no AUX  
 Peter came, but Vasja did not.

- b. A: Ty pogovoril i s Vasej, i s Petej?  
 you talked and with V. and with P.  
 Have you talked both to Vasja and to Petja?

- B: S Vasej da, a s Petej net.  
 with V. yes but with P. no  
 I've talked to Vasja, but I haven't talked to Petja.

- (9) Ja budu pomagat' Pete, a Kolja ne budet [<sub>VP</sub> Ø ].  
 I will to.help P. but K. NEG will  
 I will be helping Petja, but Kolja will not.

In (8), neither the main verb nor an auxiliary is present in the sentences where ellipsis takes place. Below I will refer to elided constructions of this type as *da/net*-constructions, by the name of the polarity markers which occur in them. In contrast, the ellipsis in (9) does not affect the auxiliary; in this way, the construction looks similar to what is standardly acknowledged as VP-ellipsis.

The conclusion which I will draw based on Russian data in the present paper is that predicate ellipsis retaining a polarity marker does not always require that the elided constituent be the complement of the polarity category. Thus the theories imposing this requirement on predicate ellipsis which retains a polarity marker are too restrictive. We will see that in Russian elliptic constructions like (9) the ellipsis of the VP cannot be licensed by the polarity, and presumably is licensed by Tense.

Russian data supports the hypothesis about the special role of polarity in predicate ellipsis, but at the same time refines it in some way. Although it is generally not the case that VP-ellipsis (as well as any other ellipsis retaining a polarity marker) is possible only when the elided constituent is the complement of a polarity marker, the comparison of Russian with English, Basque and some other languages suggests that the following generalization is true: if polarity is focussed with predicate ellipsis, the elided site must be the complement of the projection headed by the polarity marker. Other licensors of predicate ellipsis are possible only when polarity is not focussed. I will attempt to argue that this state of affairs is predicted by the current theory of focus suggested in Drubig (1994).

The paper will be organized as follows. Section 2 comments on some assumptions which the subsequent argumentation is crucially based on. Specifically, it discusses the distinction between gapping, under which deletion processes are subsumed which affect bare heads, and ellipsis, which affects phrases. It is shown, with reference to the expanded previous research in this field, that key properties of ellipsis are well accounted for under the hypothesis that an empty pronominal occurs in the elided site. Section 3 studies the Russian predicate ellipsis which has among its remnants the polarity markers *da* ‘yes’ or *net* ‘no’, but not an auxiliary. Adopting Laka’s approach to similar constructions in Basque, I will argue that the elided constituent in these constructions of Russian is not a VP, but rather some projection within the “split-Infl” zone (for presentational purposes, in Section 3 I follow a somewhat simplified version of tree structure of Russian sentence, the same as Laka suggests for Basque, and demonstrate that under this version the elided constituent should be the TP; in Section 4, however, I argue for some complication of this tree structure, under which the elided constituent is the AgrSP rather the TP). Section 4 concentrates on predicate ellipsis retaining the auxiliary in Russian. I will show that they can be of two structural types, only in one of which the elided constituent actually is the VP. In conclusion of Section 4, I will discuss some aspects of Russian VP-ellipsis which show that the functional skeleton of Russian sentence should include two polarity projections. Finally, Section 5 deals with some typological and theoretical implications of the proposed analysis of Russian predicate ellipsis.

## 2. Some concepts and assumptions

A syntactic distinction crucial for the present paper is the one between ellipsis and gapping. This distinction is based on a contrast between different types of syntactic compression first noticed at least as early as in Jackendoff (1972) (see also Neijt 1979), where it was mentioned that deletion of VP (10) can take place both in

coordinate and in subordinate structures of English, whereas verb gapping (11) is restricted to coordinate structures:

- (10) a. I will help Michael, but Peter will not [<sub>VP</sub> Ø ].  
b. I will help Michael if Peter will not [<sub>VP</sub> Ø ].

- (11) a. I will talk to Michael, and Peter Ø to John.  
b. \*I will talk to Michael if Peter Ø to John.

Another difference between VP deletion and verb gapping concerns possible location of the antecedent with respect to the deletion site. In English, verb gapping never can operate backwards:

- (12) \*I Ø to Michael and Peter will talk to John.

VP deletion, by contrast, can operate backwards in a number of contexts, namely when the elided VP is inside a subordinate clause:

- (13) Because Sue didn't [Ø], John ate meat.

By contrast, backward VP-ellipsis is impossible in coordinate structures (14) and in the matrix clause when the antecedent is in the embedded clause (15):

- (14) \*Sue didn't [Ø] but John ate meat.  
(15) \*John didn't [Ø] because Sue ate meat.

This restriction on VP deletion is parallel with the Backward Anaphora Constraint initially proposed in Langacker (1966): the antecedent cannot follow the pronoun unless the pronoun is lower than the antecedent in syntactic structure:

- (16) a. [When she<sub>i</sub> entered the University] Mary<sub>i</sub> was very happy.  
b. \*She<sub>i</sub> was very happy [when Mary<sub>i</sub> entered the University].

Note that the same constraint precludes backward pronominal anaphora in coordinate structures:

- (17) a. Mary entered the University, but she was not happy about it.  
b. \*She entered the University, but Mary was not happy about it.

In this way, the Backward Anaphora Constraint, initially put forward for pronominals, is sufficient to account for the observed restrictions on VP-ellipsis (the idea that VP-ellipsis obeys it was first put forward by Schachter (1977); see also Lopez 1995:Ch.3).

Further parallelism between pronouns and deleted VPs is the possibility of antecedent-contained pronominals (18) and antecedent-contained empty VPs (19) (see Choe 1987:107ff., Fiengo & May 1992, Lappin 1993):

- (18) [The man who said he<sub>i</sub> was there]<sub>i</sub> could not remember anything.  
(19) John [<sub>VP</sub> told me everything that Bill did [<sub>VP</sub> Ø<sub>i</sub> ]]<sub>i</sub>.

Still another property of empty VPs which makes them similar with pronominals is that empty VPs can have an antecedent outside the sentence in which they occur, or even a non-linguistic antecedent, i.e. an antecedent which can only be pragmatically inferred. For example, the following sentence is possible when the action is not mentioned in the context, but is recoverable from the situation (for relevant discussion and references, see Chao 1987:118ff):

(21) I will [e] if you do [e].

By contrast, a non-linguistic antecedent is excluded for a gapped verb. E.g. (20) is impossible even when the contexts allows to unambiguously reconstruct the verb as *eat*:

(22) \*I Ø apples and you Ø bananas.

The similarities between deleted VPs and pronouns listed above (for still more similarities, see Lopez 1995:93ff) can be accounted for if another important parallelism between the two categories is taken into consideration: the material which an empty VP or a pronoun substitute for must be a single syntactic constituent. Obviously, this contrasts pronouns and elided VPs with gapped verbs.

It turns out that VP-ellipsis is not the only instance of predicate ellipsis which contrasts with gapping by the properties listed above. Thus, Lobeck (1995) argues that the properties we have just illustrated for VP-ellipsis are observed also for the ellipsis of IPs governed by a [+WH] complementizer, as in (23):

(23) Somebody has come, but I don't know [ who [C<sub>[+WH]</sub>] [IP *e* ]].

Crucially, this type of ellipsis also must affect the whole constituent, as shown by (24):

(24) Although [exactly when *e* (\*to Honolulu)] is unclear, we heard Linda was going to Hawaii.

Following Lobeck, I will use the term “ellipsis” only for constructions where a whole constituent is elide, i.e. for *phrase* ellipsis. Lobeck suggests that the elided predicate is generated as a *pro* occupying the respective position (VP, IP, etc.). Under this analysis, the similarities between predicate ellipsis and pronominal anaphora fall out for free.

It should be mentioned that long before Lobeck the “pronominal” approach particularly to VP-ellipsis, a similar approach was suggested by Wasow (1972) and Williams (1977), who, rejecting the analysis which treats empty VP constructions as the result of deletion, proposed that an empty VP is generated with full syntactic structure, the terminal nodes being occupied by dummy heads. However, Lopez (1995:96ff) has suggested a number of strong arguments in favor of treating empty VP as a “weak” proform, i.e. an empty *pro* which does not have an internal structure. One of his arguments has to do with the empty object position in elided VPs: if an empty VP which is headed by a transitive verb has full syntactic structure, it has to involve the empty object position; however, it is well known that empty objects are not

licensed in English. Below I will assume that all instances of predicate ellipsis which show the pronominal properties have the structure with a “weak” proform rather than with dummy terminal nodes, although nothing seems to hinge on this particular choice for the discussion throughout this paper (put see Section 3.2. for some discussion)<sup>1</sup>. Following Lopez, I will mark proforms occurring in the predicate position as *pro*<sub>PRED</sub>.

### 3. Predicate ellipsis in Russian (1): bare polarity markers as remnants

This section is dedicated to *da/net*-constructions in Russian, examples of which in (8) are repeated here:

(8) a. Petja prišjol, a Vasja (\*byl) net (\*byl).  
P. came but V. AUX no AUX  
Peter came, but Vasja did not.

b. A: Ty pogovoril i s Vasej, i s Petej?  
you talked and with V. and with P.  
Have you talked both to Vasja and to Petja?

B: S Vasej da, a s Petej net.  
with V. yes but with P. no  
I’ve talked to Vasja, but I haven’t talked to Petja.

I will argue that ellipsis in this construction is licensed by a polarity marker which is obligatorily focussed and heads its own functional projection. Then it will be shown that the polarity marker is always focussed in *da/net*-constructions, and remnant phrases are contrastive topics.

#### 3.1. The $\Sigma$ P and predicate ellipsis in Russian

The analysis I am going to suggest for the predicate ellipsis constructions illustrated in (8) is basically the same as Laka (1990, 1993) puts forward for similar constructions in Basque. This subsection for most part merely reproduces (a part of) Laka’s arguments in application to the Russian data.

First let us make sure that the deletion illustrated in *da/net*-constructions demonstrates key characteristics of ellipsis. Note, first, that the deletion in *da/net*-constructions is not restricted to coordinate structures. As (25) shows, it is available in subordinate clauses as well:

(25) Do Peti moja pis’mo došlo, poetomu  
to P. my letter reached therefore  
stranno, čto do Koli eščo net.  
strange that to K. still no  
My letter has reached Peter, therefore it is strange that it still has not reached Kolja.

<sup>1</sup> The treatment of empty VPs as proforms allows to explain why in a number of languages including German we get a construction similar to English VP-ellipsis in many respects but requiring an overt pronoun in the position of the VP (see Klein 1993, Lopez & Winkler 1999).

Both in subordinate and in coordinate structures, the deletion satisfies the Backward Anaphora Constraint:

- (26) \*Do      Peti      moja      pis'mo      **da**,      poetomu  
          to      P.      my      letter      **yes**      therefore  
          stranno,      čto      do      Koli      eščo      ne      došlo.  
          strange      that      to      K.      still      no      reached  
          My letter has reached Peter, therefore it is strange that it still has not reached Kolja.  
          (cf. (25))

- (27) a. \*Petja **net**,      a      Kolja poedet      v      Peterburg.  
          P.      **no**      but      K.      will.go      to      StPetersburg  
          *lit.* Peter will not, but Kolja will go to StPeterburg.

b. Petja poedet v Peterburg, a Kolja **net**.

Note also that the deletion in *da/net*-constructions is possible when the antecedent exists in the context, but is outside the sentence where the deletion takes place, as shown by (8b).

In section 2.1 we saw that the properties listed above are typical of ellipsis, a process which, unlike gapping, affects integral phrasal constituents rather than single words or arbitrary word strings. Therefore, the ellipsis site in the *da/net*-construction must be a phrase (XP) of some category.

Furthermore, some characteristics of *da/net*-constructions allow us to see what the exact category of the deleted phrase is. I assume that in Russian finite sentences, either an auxiliary (in analytic verbal forms) or a finite verb (in synthetic verbal forms) ends up in the head of the TP (see section 4.1 for some discussion). Imagine, then, that the polarity marker takes some position lower than the TP. Since both auxiliaries and finite verbs must undergo deletion in *da/net*-constructions, this would yield a structure where the ellipsis does not apply to an integral phrase:

- (28) Petja      prišjol, a      [<sub>TP</sub> Vasja [<sub>T</sub><sup>0</sup> \_\_\_\_ [<sub>net</sub> [<sub>VP</sub> \_\_\_\_ ]]]].  
          P.      came but      V.      no  
          Peter came, but Vasja didn't.

By contrast, if we locate the polarity marker above the TP, the ellipsis will affect an integral phrase, i.e. either the TP itself or a larger projection containing the TP:

- (29) Petja prišjol, a Vasja [<sub>net</sub> [<sub>TP</sub> \_\_\_\_ ]].

Another implication of the facts just observed is that the polarity markers *da* and *net* head certain projections. A priori one could instead suggest that these markers occupy some specifier or adjunct position instead. The deletion site, however, must begin right after the polarity marker, to the effect that e.g. (30) is ungrammatical:

- (30) \*Petja      prišjol, a      Vasja net      ko      mne.  
          P.      came but      V.      not      to      me  
          Pete came, but Vasja did not come to me.



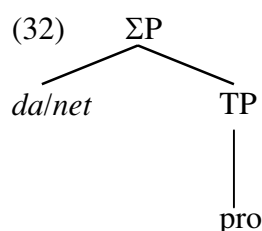
In order to capture the ungrammaticality of sentences like (30), one should assume that the elided site in *da/net*-constructions is the sister of the polarity marker. But if a polarity marker is an adjunct or a specifier, then its sister is not an integral constituent, i.e. a phrase with all its dependents, which is the only possible target of ellipsis (see 2.1). I conclude, therefore, that the polarity markers are heads, taking the elided site as their complement.<sup>2</sup>

It is easy to see that *da* and *net* head one and the same projection. As shown by (31), they cannot cooccur in one sentence, which is expected if they occupy the same structural position, but not expected otherwise:

- (31)\*Petr        prišjol, a        Ivan    da        net.  
                  P.        came        but    Ivan    yes        no

In the following subsections we will see that both *da* and *net* behave similarly in that they must be focussed. Similar behavior with respect to information partition as well as the complementary distribution seem to be reasons firm enough to believe that *da* and *net* head one and the same functional projection. Following Laka, I will call the projection which can be headed either by the affirmative or by the negative polarity markers the “ $\Sigma P$ ”<sup>3</sup>.

The structure I have suggested for *da/net*-constructions is schematically represented in (32):



Given that the elided site begins immediately after *da* and *net*, it must be the sister of the polarity marker heading the  $\Sigma P$ , which in the present structure is the TP. As a matter of fact, in the following section we shall see that the functional “superstructure” of Russian sentence is likely to be more complex than shown in (32), specifically that some projections should be viewed between the  $\Sigma P$  and the TP, and that these projections also undergo ellipsis in *da/net*-constructions. For the purposes of the present section, however, this somewhat oversimplified structure is sufficient.

The structure in (32) also provides us with a simple explanation of the above mentioned distribution restriction on *da/net*-constructions, namely that this ellipsis can occur only in tensed sentences. As shown in (33)-(34), the deletion of infinitives or gerunds with *da/net* is never possible:

<sup>2</sup> Brown (1999) argues that the Russian negative particle *ne*, which combines with verbs, also heads a separate projection (see 4.3 for some discussion).

<sup>3</sup> There is an asymmetry between *da* and *net* which I will not treat in the present paper. The construction with *da* is possible only when a construction with *net* is present in the same complex sentence, as is the case in (6b). Elliptic constructions where *da* is present, but *net* is not are ungrammatical:

(i)\*Petjane        prišjol, a        Vasja    da.  
                  Pete NEG    came    but        Vasja    yes  
                  Pete didn't come, but Vasja did.

(33) a. Povidavšis' s Mišej, a s Petej ne  
 having seen with M. but with P. NEG  
 povidavšis', ja uexal.  
 having seen I left  
 Having seen Misha, but not Petja, I left.

b.\* a. Povidavšis' s Mišej, a s Petej net  
 having seen with M. but with P. no  
 ja uexal.  
 I left

(34) a. Vzjat' s soboj Mišu, a Petju ne vzjat'  
 to.take with REFL M. but P. NEG to.take  
 vrjad li vozmožno.  
 hardly possible  
 To take along Misha, but not to take Peter is hardly possible.

b.\*Vzjat' s soboj Mišu, a Petju net  
 to.take with REFL M. but P. no  
 vrjad li vozmožno.  
 hardly possible

Interestingly, this distribution restriction disambiguates some constructions which would have been ambiguous otherwise. Thus, (35) can only be interpreted in the way under which not just the infinitive, but also the main verb constitute the elided site:

(35) Oni mogu pozvat' Kolju, a Petju net.  
 they can call K. but P. not  
 They can invite Kolja, but cannot invite Petja.  
 ≠ They can [invite Kolja, but not invite Petja].

In other words, lexical insertion of *da* and *net* is impossible when the verb in the antecedent clause is not specified for tense. Given the order of projections in (36), this would mean that *da* and *net* should c-command the TP which is occupied by *pro*<sub>PRED</sub> but is specified for Tense. To accommodate this requirement in structural terms, we might need to postulate head adjunction of the *pro*<sub>PRED</sub> to  $\Sigma$ , with subsequent insertion of *da* or *net* in the position of the complex head in the PF:

(36) Aff + *pro*<sub>PRED</sub> <+past/+present/+future> → *da*

(37) Neg + *pro*<sub>PRED</sub> <+past/+present/+future> → *net*

The specification of T as <+past> or <+present> or <+future> in the above PF rules excludes appearance of *da* or *net* in non-finite sentences, where T, if at all present, does not have any of these features. At the same time, under the structure in (36) the head movement of T to  $\Sigma$ , which is needed for this lexical rule, does not violate the Head Movement Constraint (Travis 1984) given the structure in (40), where the  $\Sigma$ P immediately dominates the TP and thus the trace of the head movement is properly governed. Moreover, Lopez (1999) has argued on independent grounds that adjunction

of *pro*<sub>PRED</sub> to the head of the constituent immediately above it universally takes place in overt syntax.

The lexical rules in (36)-(37) explain also why *da* and *net* are impossible if predicate ellipsis does not take place, cf.:

- (38) Vasja      ne/\*net                      poedet              v              Peterburg.  
          V.           NEG/no                   will.go              to              StPetersburg  
 Vasja will not go to StPeterburg.
- (39) Vasja      (\*da) poedet              v              Peterburg.  
          V.           yes      will.go              to              StPetersburg  
 Vasja will go to StPeterburg.

Here the position of the TP is not occupied by *pro*<sub>PRED</sub>, therefore the rules in (40)-(41) are not applicable.<sup>4</sup>

Since it is assumed that the subject resides in the Spec of the TP where the Nominative case feature is checked, we should expect that the subject in *da/net*-constructions undergoes deletion, as a part of the TP<sup>5</sup>. As a matter of fact, above we have already seen that *da/net*-constructions are possible both with (27b) and without (25) the subject among the remnants. I will argue in the next section that when the subject is retained, it is actually a contrastive topic undergoing extraction into a position designated for contrastive topics in Russian.

In this respect, Russian differs from English, which requires that subject always be retained together with the polarity marker in predicate ellipsis constructions:

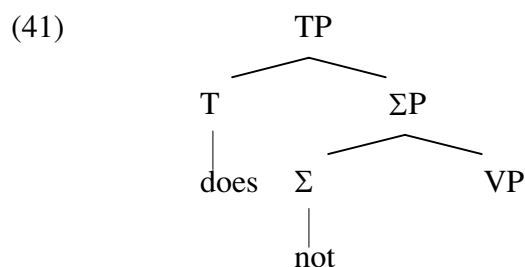
- (40) A: Did you see John?  
 B: \*(I) didn't.

As shown by Laka, this requirement correlates with another property of English: there the  $\Sigma$ P, which hosts the negation in (40B), is below the TP, which is manifested by the linear precedence of the negation to the auxiliary which resides in the TP (Chomsky (1989) and Pollock (1989) argue for the same relative order of the TP and the polarity projection in English):

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<sup>4</sup> As kindly pointed out to me by Hans-Bernhard Drubig, the constraint illustrated by (42)-(43) shows that *da/net*-constructions cannot be analyzed along the lines of Tancredi's (1992) account of English VP-ellipsis as a (special type of) deaccentuation of a VP: ellipsis in *da/net*-constructions cannot be the result of deaccentuation of TP because no TP can be overtly expressed with *da* or *net*.

<sup>5</sup> As I mentioned above, the structure which I assume for Russian clause in the present section is somewhat oversimplified, for its compatibility with Laka's analysis. In Section 4 I will argue for a certain complication of Russian clause structure. Specifically, I will suggest that some more projections, exist between the TP and the  $\Sigma$ P, including the AgrSP in the Spec of which the subject resides; under such analysis, the elided site in *da/net*-constructions will be the AgrSP rather than the TP. For explanation of the differences between *da/net*-constructions and VP-ellipsis constructions in English, however, this complication of the analysis is not relevant.



Given that the subject in English resides in the Spec of the TP, or rather in the Spec of a certain projection above the TP, presumably the AgrSP, the structure in (45) predicts that the subject is obligatorily present in English predicate ellipsis constructions retaining the polarity marker, which are therefore known as VP-ellipsis constructions.

Thus in the predicate ellipsis constructions of both Russian and English, the elided site is the sister of the polarity marker, but given the arguably different configurations of functional projections in these languages, the elided sites are of different categories: in Russian the elided site is the TP, but in English it is the VP.<sup>6</sup>

### 3.2. Remnants in *da/net*-constructions

Remnants of ellipsis in *da/net*-constructions can originate from the matrix or infinitival clause, as shown by (42) and (43) respectively:

- (42) Vanja prišjol, a Petja net.  
 V. came but Peter no  
 Vanja came. But Peter didn't.

- (43) V Moskvu ja xoču exat', a v Peterburg net.  
 to Moscow I want to.go put to StPeterburg no.  
 I want to go to Moscow, but I don't want to go to StPeterburg.

<sup>6</sup> As already mentioned in the introduction, Lopez (1995), comparing English VP-ellipsis with predicate ellipsis in Spanish, where, similarly to Russian *da/net*-constructions, the auxiliary is not retained, suggests an analysis which views a uniform order of projections in these two languages, but acknowledges different head movement processes. Specifically, Lopez suggests that the ΣP is uniformly above the TP, but below AgrSP where the subject ends up. The auxiliary, as Lopez argues, stays in T in Spanish, but rises into Σ (and presumably further to AgrS) in English; the elided site in predicate ellipsis constructions is uniformly the TP complement of Σ, which includes the auxiliary in Spanish, but does not include it in English due to head movement. In this way, Lopez achieves higher degree of structural uniformity than Laka does: in addition to one and the same licenser of predicate ellipsis in the two languages, he gets the same order of projections for them. However, there is one problem with Lopez's analysis of Spanish which will also arise if his analysis is applied to Russian: his analysis is not able to account, in a non-stipulative fashion, why the subject in Russian and Spanish predicate ellipses must be contrastively topicalized. Since the Spec of the AgrSP is above the elided site, it is expected that the subject may stay there rather than move into a position for topics. This expectation, however, is not borne out in both languages. In contrast, under Laka's approach which I adopt here for Russian, it is predicted that the subject in predicate ellipses retaining the auxiliary, if present, be a contrastive topic: the subject position is below the ΣP and thus is not present under ellipsis licensed by Σ; the only way for a subject to be retained, then, is to occupy some position above the ΣP, what is possible for contrastive topics, but not for backgrounded elements.

By contrast, remnants cannot originate from a tensed complement or from a non-L-marked clause in terms of Chomsky (1986), i.e. from sentential subjects, adjunct and relative clauses, which regularly serve as barriers for syntactic movement in Russian, cf.:

- (44) \*Kogda Petja prišjol, ja obradovalsja, a Vasja net<sup>7</sup>.  
 when P. came I was.glad but V. No  
 I was glad when Petja came, but I was not glad when Vasja came.

- (45) \*Ja videl mašinu, kotoruju kupil Petja, a Vasja net<sup>8</sup>.  
 I saw car which bought P. but V. No  
 I saw the car which Petja bought, but I didn't see the car which Vasja bought.

The contrast between (42)-(43) on the one hand and (44)-(45) on the other hand is readily explained on the assumption that remnants are extracted out of TP prior to the ellipsis (see below for some theoretical problems with this solution, however).

My task now is to find out what motivates this extraction. Let me start with the observation that remnants of deletion in the *da/net*-constructions cannot be anaphorically deaccentuated. This becomes obvious from a simple restriction: among remnants, no constituent is allowed which is identical to a constituent of the antecedent clause:

- (46) \*Petja v Peterburg poedet, a Vasja v Peterburg  
 P. to StPetersburg will.go but V. To StPetersburg  
 net.  
 no

Peter will go to StPetersburg, but Vasja will not go to StPetersburg.

It turns out that a stronger point can be made about remnants in *da/net*-constructions: they obligatorily get a contrastive interpretation. Remnants enter into contrastive relations with respective constituents of the antecedent clause, or with some participants present in the discourse or in the situation. If we have more than one remnant, the order of the remnants tends to repeat the order of the respective constituents in the antecedent clause:

- (47) a. Petja v Moskvu poedet, a Kolja v Peterburg  
 P. to Moscow will.go but K. to StPetersburg  
 net.  
 no

Peter will go to Moscow, but Kolja will not go to StPetersburg.

b. ??Petja v Moskvu poedet, a v Peterburg Kolja net.

<sup>7</sup> This sentence is possible with the meaning 'I was glad when Petja came, but Vasja was not.' Obviously, under such interpretation the remnant does not originate from the adjunct clause.

<sup>8</sup> Again, this sentence is possible when it means 'I saw the car which Petja bought, but Vasja has not seen it.'

This reminds an observation about verb gapping which goes back to Kuno (1979): remnants build up pairs with constituents of the antecedent clause, and contrastive relations are observed in each pair:

(48) Ben went to New York, and Pete to Los Angeles.

There is, however, an important difference between remnants of verb gapping and those of the *da/net*-constructions. With gapping, at least one of the remnants must be contrastively focussed (see e.g. Kuno 1979). In *da/net*-constructions, however, phrasal remnants cannot be focussed. As we will see in 3.3, focus in *da/net*-constructions is obligatorily located on the polarity marker. The impossibility for phrasal remnants to be focussed is evidenced not only from impossibility of pitch accent on a phrasal remnant, but also from impossibility for phrasal remnants to be accompanied by focus particles:

(49) \*Vsje prišli, tol'ko Vanja net.  
all came only V. no  
Everybody came, only Vanja did not come.

(50) \*Vasja ne prišjol, i daže Petja net.  
V. NEG came and even P. No  
Vasja did not come, and even Petja did not.

It is well known, however, that contrastive interpretation is available not only for foci, but also for topics. By topic, I mean the part of the sentence that 'we are talking about' and that relates the sentence with the previous discourse (see Reinhart 1982, 1995, Vallduvi 1993). When a topic is termed contrastive, it is chosen out of a restricted set of potential candidates, and is not identical with the topic of the immediately preceding discourse. Given that remnants of TP-ellipsis receive a contrastive interpretation, but cannot be foci, for them to be contrastive topics in fact is the only remaining possibility. Before considering this possibility, however, let me mention some relevant properties of contrastive topicalization in Russian.

First, contrastive topics in Russian regularly occupy the leftmost position in the sentence (King 1993). This is especially clear in constructions with verb gapping: those remnants of gapping which are foci take the rightmost linear position, and those remnants which are topics take the leftmost linear position. This does not depend upon grammatical relations which the remnants bear, so that the «subject-object» order is obligatory with gapping if the subject is a contrastive topic and the object is focussed, and the «object-subject» order is required in the opposite case:

(51)a.A: Kto poexal v Moskvu, i kto v Peterburg?  
who went to Moscow and who to StPetersburg  
Who went to Moscow and who went to StPetersburg.

B1: V Moskvu poexal Kolja, a v Peterburg Petja.  
to Moscow went K. but to StPetersburg P.  
Kolja went to Moscow, and Petja went to StPetersburg.

B2: ?? Kolja poexal v Moskvu, a Petja v Peterburg.

b.A:Kuda poexal Kolja, i kuda Petja?  
 where went K. and where P.  
 Where did Kolja go, and where did Petja go?

B1: Kolja poexal v Moskvu, a Petja v Peterburg.  
 B2: ?? V Moskvu poexal Kolja, a v Peterburg Petja.

Second, contrastive topics in Russian are subject to locality constraints, as demonstrated by the ungrammatical sentences (52)-(53), where the contrastive topics originate from the adjunct and relative clause respectively:

(52)\*Petja ja obradovalsja, kogda prišjol.  
 P. I was.glad when came  
 As for Peter, I was glad when he came.

(53)\*Petju ja ne znaju čeloveka, kotoryj ljubit.  
 P. I NEG know person which loves  
 As for Peter, i don't know any man who loves him.

These two properties of contrastive topics strongly suggest that they undergo obligatory syntactic movement to the left periphery of the sentence where they occur. This straightforwardly accounts both for the leftmost position of contrastive topics and for locality constraints imposed on them.

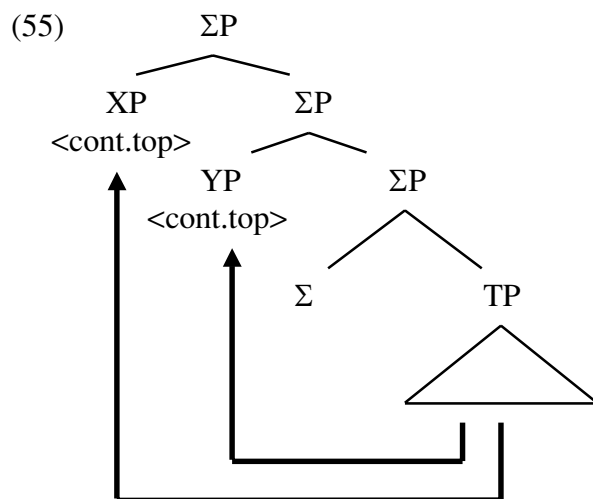
At the same time, the observed properties of contrastive topics hold true for remnants in *da/net*-constructions as well. We have already seen that they also observe locality constraints. Also, in all the examples of *da/net*-constructions considered above, remnants occupy the rightmost position in the sentence. As shown by (54), the leftmost position is unavailable for them:

(54) \*Petja poedet v Moskvu, a Kolja net v Peterburg.  
 P. will.go to Moscow but K. no to StPetersburg  
 Peter will go to Moscow, but Kolja will not go to StPetersburg.

To conclude, we have seen that (1) remnants in *da/net*-constructions are interpreted as contrastive topics and (2) contrastive topics undergo obligatory syntactic movement in Russian. This allows us to suggest that remnants in *da/net*-constructions occupy a position designated for contrastive topics.

Note that the status of remnants as contrastive topics is not unique for the Russian elliptic constructions under study. Lopez (1995:170ff) argues that in Spanish remnants of predicate ellipsis are contrastive topics, too. The discussion in Laka (1993:259) makes one think that remnants of predicate ellipsis in Basque have a similar status. Remarkably, in these languages, like in Russian, auxiliaries are not retained under predicate ellipsis. By contrast, no instance of “English-style” VP-ellipsis retaining an auxiliary is known which would require contrastive topicalization of remnants. Under Laka’s analysis which I have adopted here for Russian, this difference may be explained as long as it is assumed that the position for contrastive topics, unlike the one for foci, is outside the TP and thus contrastive topics, but not foci can be retained with TP-ellipsis.

Although nothing in this analysis hinges on the choice of particular position where the contrastive topics end up, I suggest that contrastive topics are adjoined to the  $\Sigma P$ . This explains the possibility of multiple contrastive topics, as e.g. in (51a)<sup>9</sup>. The phrase marker in (55) illustrates the proposed analysis:



Obviously, if there is more than one phrasal remnant in a *da/net*-construction (as in (47)), (55) assigns them identical structural positions. This seems to be at odds with the common assumption about uniqueness of the position of topic. Therefore, it would be tempting to suggest that in *da/net*-constructions with two phrasal remnants, one remnant is the topic and the other one is the focus. There are, however, some clear indications that this is not the case. First, we have already seen that no remnant can combine with particles which mark contrastive focus (cf. (49), (50)). Second, below we will see that in *da/net*-constructions focus is always on the polarity marker.

At the same time, it has to be mentioned that multiple phrasal remnants in *da/net*-constructions are acceptable not for all speakers: many speakers allow *da/net*-constructions with only one phrasal remnant. It means that for such speakers, the requirement of uniqueness of a contrastive topic holds.

One more remark concerning (55) has to be made. If we assume that extraction of contrastive topics takes place, then remnants get their case in the positions of their traces. However, this makes it impossible to view a proform without internal structure (*pro*<sub>PRED</sub>, in Lopez's (1995) notation) in the position of the elided constituent: lacking internal structure, a proform of course cannot involve positions for case marking of traces. Lopez (1995:96ff) argues that for English VP-ellipsis, an alternative analysis cannot be maintained, under which the elided VP gets full syntactic structure, with terminal nodes occupied by dummy heads. I do not discuss here the question whether his arguments are valid for Russian TP-ellipsis as well, just noting that if they are, an

<sup>9</sup> Treating contrastive topics as adjuncts to the CP is impossible because in subordinate clauses contrastive topics follow the complementizer, whereas adjuncts in Russian take the position to the left from the head:

(i) A:Ty                zavtra                pridjoš?  
           you            tomorrow        will.come  
 Will you come tomorrow?  
 B:Dumaju,        čto        zavtra        net.  
           I.think        that        tomorrow        no  
 I think that tomorrow I will not.



obvious structural paradox will be observed in (55): a proform without internal structure occurs in the position of the TP, but extractees of the TP have to get there case inside the TP.

The structure in (55) is also able to account for possibility of *da/net*-constructions without any phrasal remnants. Since remnants must be contrastive topics, mere negating or affirmation of an antecedent sentence in Russian is expressed by bare polarity marker *da/net*; remnants may appear only when the speaker wants to emphasize that the proposition would be true for an element in contrastive relation with the remnant. Thus, in (56) below B1 is possible only when it is implied that the person will come on some other day; if this is not implied, B2 is the only way of negative answer to A using *da/net*:

(56)A: Ty        zavtra        pridjoš?  
           you        tomorrow    will.come  
 Will you come tomorrow?

B1: Zavtra    da/net.  
       tomorrow yes/no  
 Tomorrow I will/will not.

B2: Da/Net.  
       yes/no  
 Yes/No.

The «bare *da/net*» sentences share the key characteristics of the TP-ellipsis. For example, they can occur in subordinate structures, and can have antecedent inferred by the context. (57B) illustrates both points<sup>10</sup>:

(57) A: Kolja pridjot?  
           K.        will.come  
           Will Kolja come?

B: Ja dumaju,        čto    net.  
       I    think        that    no  
 I think that he will not.

This parallelism with TP-ellipsis containing remnants is easily explained if it is assumed that the «bare *net*» sentences are the result of TP-ellipsis which is not accompanied by contrastive topicalization. If there is no contrastive topic, the deletion leaves no remnant. In this way, the possibility of «bare *da/net*» constructions is natural under the proposed analysis.

### 3.3. Licensing of the empty category in *da/net*-constructions

<sup>10</sup> Laka (1990:166ff), considering the Spanish equivalent of (64B), notes that the possibility of such sentences confirms the position of the ΣP below the CP. In English, where the equivalent of (64B) is ungrammatical, *yes* and *no* head the CP according to Laka's analysis:

(i) \*I think that no.

Now I turn to the question about licensing of the *pro*<sub>PRED</sub> in *da/net*-constructions. I would like to argue that it is licensed in the same fashion as Lopez (1995) and Lopez and Winkler (1999) suggest the empty category is licensed in the VP position of VP-ellipsis constructions of English.

According to Lopez and Winkler, the negative and affirmative morphemes in VP-ellipsis constructions are always focussed (this is the case of polarity focus in terms of Drubig 1994 or “Verum-focus” in terms of Höhle 1992). This is evidenced by obligatory pitch accent on these morphemes and the impossibility to contract an auxiliary marking positive polarity, cf. (58) (Lopez and Winkler’s (33)):

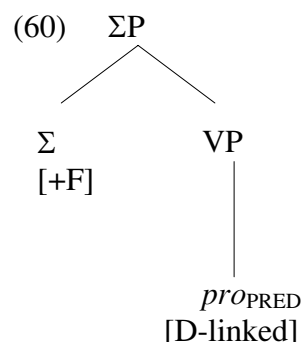
- (58)a. Jan said that he has read Dostoevsky’s Idiot, but he HASN’T\ [e].
- b. \* Jan said that he has read Dostoevsky’s Idiot, but he hasn’t [e].
- c. Jan said that he hasn’t read Dostoevsky’s Idiot, but he HAS\ [e].
- d. \* Jan said that he hasn’t read Dostoevsky’s Idiot, but he has / he’s [e].

Lopez (1995:157ff) argues that the stressed affirmative auxiliary in (58c) is the head of the  $\Sigma$ P in the same way as the negative auxiliary in (58a) is. Given that in English the  $\Sigma$ P immediately dominates the VP (see (41)),  $\Sigma^0$  occupies the position from where it governs the VP. In this way, *pro*<sub>PRED</sub> is licensed by the focussed  $\Sigma^0$  which governs it.

This licensing mechanism agrees with predictions of the current theory of focus. Selkirk (1984) has argued that location of the [+ F(ocus)] feature in English is dependent upon argument structure. Specifically, the following rules of focus assignment were proposed (see Drubig (1994) for an extensive discussion and illustrations):

- (59) (i) An accented head is assigned a focus feature.
- (ii) A focus-assigned head licenses the focus interpretation of its projection.
- (iii) A focus assigned internal argument licenses the focus assignment of its head.

A consequence of these rules is that a functional head can be focussed when its complement is out of focus. Naturally, an elided VP has to be construable from the discourse, or D(iscourse)-linked, in terms of Pesetsky (1987). Therefore, the [+F] feature cannot reside on an elided VP. Given this, in constructions with VP-ellipsis the [+F] feature is expected on the head of the projection whose complement the VP is, i.e. on  $\Sigma$ :



In other words, the configuration needed for licensing of ellipsis is expected in elliptic constructions on independent grounds.

Turning to Russian *da/net*-constructions, it is easy to see that they are possible only if the polarity marker bears pitch accent and therefore is focussed. If the polarity is contextually construable, no construction with *da/net* can occur:

(61) A: Kto iz vas poedet v Moskvu?  
           who of you will.go to Moscow  
           Who of you will go to Moscow?

B: \*Kolja da.  
       K. yes  
       Kolja will.

(62) A: Kto iz vas ne ljubit muzyku?  
           who of you NEG loves music  
           Who of you does not like music?

B: \*Kolja net.  
       K. no  
       Kolja doesn't.

In both examples, the truth value of the predicate (i.e. that someone will go to Moscow in (61), that someone likes music in (62)) is stated in the utterances A; therefore in the utterances B it is construable from the discourse and cannot be expressed by *da/net*.

By contrast, in (63B) the predicate is D-linked, but its truth value is not construable from (63A), therefore in (63B) it is focussed, yielding the possibility of the *da/net*-construction:

(63)A: Ty poedeš v Moskvu?  
           you will.go to Moscow  
           Will you go to Moscow?

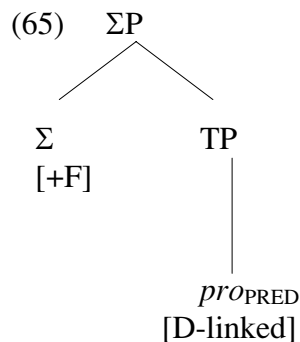
B: Da.  
       yes  
       Yes.

(64)A: Ty ljubiš muzyku?  
           you love musik  
           Do you love musik?

B: No.  
       no  
       No.

Therefore, it is plausible to suggest that *pro*<sub>PRED</sub> in the position of the TP in *da/net*-constructions is licensed in the same fashion as deletion of VP in English is: the  $\Sigma^0$  is focussed and as such licenses the *pro*<sub>PRED</sub> which it governs.

If this hypothesis is correct, then the only difference observable between English and Russian appears to be in location of the  $\Sigma$ P: in English it governs the VP, but in Russian it governs the TP, as I have argued above. In both cases focussed  $\Sigma^0$  licenses *pro*<sub>PRED</sub> which it governs, cf. (60) above for English and (65) for Russian:



It could be suggested, however, that the parallelism between English VP-ellipsis constructions and Russian *da/net*-constructions is not complete because they differ in the type of focus located on the polarity. Following the tradition well established in the literature on focus (see Chomsky 1972, Rochemont 1986, Drubig 1994, Kiss 1998, among others), I will distinguish between presentational (information) focus and contrastive focus. It has been argued especially by Drubig (1994) and Kiss (1998) that the two types of focus are phenomena quite different in nature. Contrastive focus was shown to be an operator and as such to undergo movement, either in syntax or at LF (for arguments in favor of this, crucially based on locality constraints, see especially Drubig (1994)). Presentational focus is defined merely as an utterance which is not D-linked; as such, it does not need to be licensed by an operator. Presentational focus it is generally expected to be the most prominent element of the intonation domain. However, focussed material is not always restricted to that element: it can be licensed «by integration» on a larger constituent, according to Selkirk's rules outlined in (59). Syntactically, presentational focus, however, does not give evidence for movement. Therefore it has been suggested that presentationally focussed elements stay in situ at all levels of representation.

For English VP-ellipsis, Lopez and Winkler (1999) have argued that polarity must be presentationally focussed. Contrast on polarity in VP-elliptic constructions is possible, but not obligatory. This is evidenced e.g. by (66), where the positive polarity is merely incremented as new information, without contrasting with any other polarity meaning present in the discourse:

- (66) A: Will Mary go to the cinema?  
 B: She [<sub>ΣP</sub> will [<sub>proPRED</sub>]].

Trying to build a Russian equivalent for (66), with the expressed subject and polarity in the answer, we can only get contrastive focus of the polarity:

- (67) A: Pojdjot li Maša v kino?  
           will.go Q Masha to cinema  
           Will Masha go to the cinema?  
 B: Ona da.  
     she yes  
     She will.

(67B) obligatorily implies that someone else, unlike Masha, will not go to the cinema — an implication absent in (66B). The comparison between (66) and (67) thus makes

one suggest that in *da/net*-constructions, unlike English VP-ellipsis constructions, polarity obligatorily bears contrastive focus. If this is so, then the licensing mechanism suggested by Lopes & Winkler (1999) for English VP-ellipsis cannot be automatically valid for Russian, *pace* the differences in projections order. This is because the above mentioned structural differences between contrastive and presentational foci.

However, it turns out that contrastive focus of polarity actually is not an innate characteristic of *da/net*-constructions. It is indeed necessary when a phrasal remnant is present, as in (67B) and in the examples considered in section 3.2. However, when a *da/net*-construction consists only of a polarity marker, it is not implied that the polarity meaning is contrasted with any other polarity meaning present in the context. The complete semantic equivalent of (66) in Russian would be (68), where the subject is not repeated in the answer:

- (68)A: Pojdjotli      Maša v      kino?  
           will.go Q      Masha to      cinema  
           Will Masha go to the cinema?  
 B: Da.  
       yes  
       Yes.

The answer in (68B) does not presuppose that somebody else will not go the cinema, or that Masha, going to the cinema, will not do something else, etc. Here the positive polarity is merely incremented as a new information.

I conclude, therefore, that English VP-ellipsis and Russian TP-ellipsis are licensed under identical conditions: the  $\Sigma$  which governs the elided site is must be presentationally focussed. The obligatorily contrast of the polarity under Russian TP-ellipsis with a phrasal remnant might be semantically inferred by contrastive topicalization of the remnant (see section 3.2). In section 4 we will see that the requirment of contrastive topicalization of phrasal remnants in predicate ellipsis depends not (only) upon the language, but also upon the category of the elided site. Specifically, it will be shown that phrasal remnants of Russian VP-ellipsis, unlike those of TP-ellipsis, are not obliged to be contrastive topics.

To sum it up, acknowledging the different orders of functional projections for English and Russian, we can arrive at a generalization which states that in both languages elided predicate category must be governed by focussed polarity. The difference in elided categories is predictable under such account: VP-ellipsis is licensed when the  $\Sigma$ P is below the TP, as in English, and TP-ellipsis is licensed when the  $\Sigma$ P is above the TP, as in Russian. One could even suggest, following Laka (1990), that this generalization might have a broader typological value. Indeed, in the other languages for which it has been argued that the  $\Sigma$ P there is above the TP, polarity in elliptic sentences is not supported by an auxiliary, what under the present analysis means that TP-ellipsis rather than VP-ellipsis takes place there (see Laka (1990, 1993) for Basque, Zanuttini (1989, 1991) for Southern Romance languages). This opens a way to explaining why VP-ellipsis takes place in a very restricted number of languages (see Introduction): VP-ellipsis occurs only in languages where the  $\Sigma$ P is dominated by the TP, which for reasons so far unknown are few. However, some further Russian data discussed in the following section will show that this generalization is not entirely correct: contrary to expectation, VP-ellipsis is possible in Russian as well.

## 4. Predicate ellipsis in Russian (2): auxiliaries as remnants

### 4.1. VP-ellipsis is possible in Russian

“English-style” VP-ellipsis in Russian is possible in constructions with analytical verbal forms. First let me briefly give some comments on the structure of sentences with these forms. Analytical forms in Russian are required in imperfective future and in the passive voice. Below I only consider the former. The auxiliary *byt’* ‘to be’ used in these verbal forms agrees with the subject and is followed by the infinitive:

- (69) Vasja budet ezdit’ v Moskvu.  
V. will to.travel in Moscow  
Vasja will travel to Moscow.

There are reasons to suggest that the auxiliary in (69) head-adjoins T, but the infinitive remains in the position of V. One piece of evidence favoring this analysis comes from Subject-Verb inversion which takes place in Russian yes/no-questions. The inverted finite verb takes the leftmost position in the sentence, followed by the interrogative particle *li*:

- (70) Poexal li Vasja v Moskvu?  
went Q V. to Moscow  
Did Vasja go to Moscow?

The particle *li* occupies the position of C, as evidenced by (71), which shows that it is not compatible with another overt complementizer in the subordinate clause:

- (71) Ja ne znaju, (\*čto) poexal li Vasja v Moskvu.  
I NEG know COMP went Q V. to Moscow  
I don’t know whether Vasja went to Moscow.

I will assume that the inverted verb is head-adjoined to the C occupied by the interrogative particle, although nothing in the reasoning below hinges on this particular choice. Prior to this adjunction, *poexal* in (70) head-adjoins to T as a finite verb.

Crucially, when the Subject-Verb inversion takes place in a sentence with an analytic verbal form, the auxiliary, but not the infinitive undergoes inversion:

- (72) a. Budet li Petja prixodit’?  
will Q P. to.come  
Will Petja come?

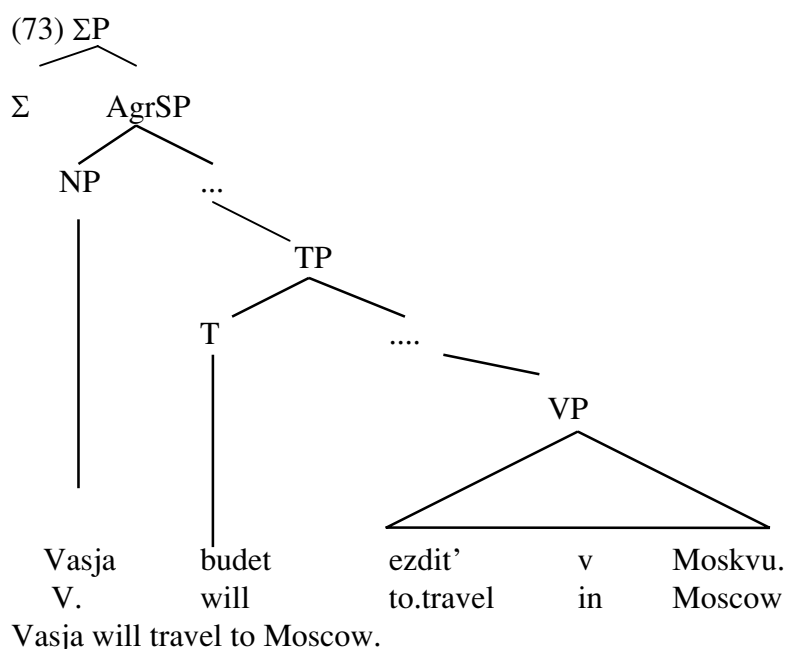
- b. \*[Budet prixodit’] li Petja?  
c. \*Prixodit’ li budet Petja?<sup>11</sup>

<sup>11</sup> (72c) is OK if the infinitive is understood as focus of the question: ‘Will Pete COME or will he do something else?’

The contrast between (72a) and (72b-c) shows that, prior to inversion, the auxiliary, but not the main verb occupies the position of T in constructions with analytic future: otherwise it would be expected that (72b-c) where the main verb undergoes inversion is grammatical. I conclude, therefore, that the T node in uninverted constructions with analytic future is occupied by the auxiliary.

Since the Nominative case of the subject is possible in Russian only in tensed sentences, the case of the subject must be checked in the Spec of the TP. I would like to claim, however, that the subject does not remain in that position, but proceeds higher, presumably into the Spec of the AgrSP. This is evidenced by the fact that between the tensed verb or the auxiliary and the subject certain constituents may occur which undergo movement into a position higher than T. Specifically, in 4.2 we will see that contrastive focus ends up in this zone, and in 4.3 Brown's (1999) conclusion will be introduced that a polarity projection which hosts syntactically extracted NPIs also occupies this zone. To account for these facts, we need to acknowledge a structure of Russian clause where the verb stays in T, but the subject ends up in the Spec of the AgrSP. In this way, it is expected that there are certain structural positions which separate the subject from the verb.

Above I have attempted to argue that the  $\Sigma$ P is above the TP in Russian. At the same time, we have seen that in *da/net*-constructions, where the complement of  $\Sigma$  is elided, the subject is not licensed unless it moves into the position designated for contrastive topics. Given that the subject ends up in the Spec of the AgrSP, we have to conclude that the AgrSP is not present in *da/net*-constructions either. This forces us to view the position of the  $\Sigma$ P above the AgrSP (in section 4.3 we will see that this is not the only polarity projection in the functional skeleton of Russian sentence; another one is located immediately lower):



Consider now the construction in (74). Here the main verb and the object are deleted in the second clause, but the auxiliary is retained. Given the structure in (73), this sentence, at least on the surface, looks like an “English-style” VP-ellipsis construction:

(74) Ja budu pomogat' Pete, a Kolja ne budet [<sub>VP</sub> Ø ].  
 I will to.help P. but K. NEG will  
 I will be helping Petja, but Kolja will not.

The deletion process illustrated in (74) demonstrates the key properties of ellipsis mentioned in Section 2. Thus, it obeys the Backward Anaphora Constraint:

(75) a. Esli Vasja ne budet, ja budu pomogat' Pete  
 if V. NEG will I will help Pete  
 If Vasja will not, I will help Pete.

b. \*Ja budu, esli Vasja ne budet pomogat' Pete.  
 I will if Vasja NEG will help Pete  
 \*I will, if Vasja will not help Pete.

It allows an antecedent to be outside the sentence where the deleted VP occurs:

(76) A: Kto budet pomogat' Pete?  
 who will be.helping P.  
 Who will be helping Petja?

B: Ja točno ne budu.  
 I surely NEG will  
 I surely will not.

Also, antecedent-contained deletion is allowed for VPs in Russian:

(77) Petja budet razgovarivat' so vsemi, s kem  
 P. will talk with everyone with whom  
 budet i Kolja  
 will also Kolja  
 Pete will talk to everyone to whom Kolja also will.

Therefore, I conclude that the deletion process under consideration shows the key properties of ellipsis. But if the elided site is the VP, this type of ellipsis challenges any approach to VP-ellipsis under which it is uniformly licensed by  $\Sigma$ . In the next section I will study this elliptic construction in more details and conclude that it manifests two quite different structural types, for only one of which I will claim that it is true VP-ellipsis; for the other one, it will be argued that it is rather an instance of TP-ellipsis, with the auxiliary adjoining to  $\Sigma$ . Some theoretical consequences of this approach will be discussed in subsequent section.

## 4.2. True vs. apparent VP-ellipsis

In this subsection I will argue that what appeared as VP-ellipsis in 4.1 actually is not uniformly such. Predicate ellipsis retaining the auxiliary in Russian allows different



options for information partition of the sentence, and the variability of information structure yield variability of syntactic structure as well.

#### 4.2.1. The data

Let us consider the information status of remnants in elliptic constructions retaining the auxiliary. We have seen above that in *da/net*-constructions all remnant phrases are contrastive topics. For elliptic constructions which retain the auxiliary, contrastive topicalization of remnants is possible as well, as shown e.g. by (74). However, it is not required. Consider (78), where the subject remnant is focussed:

(78) A: Kto budet ezdit' v Moskvu?  
           who will travel to Moscow  
           Who will travel to Moscow?

B: Petja budet.  
     Pete will  
     Pete will.

The auxiliary is not obligatorily retained in (78B). Moreover, for some speakers (78B) is seriously improved when the auxiliary is not there. Nevertheless (78B) is grammatical. By contrast, a *da/net*-construction is entirely unacceptable if one of the remnants is focussed, as we have seen in 3.2.

In question/answer pairs like (78), the subject is focussed, but there is no evidence for its contrastive interpretation: the answer merely conveys new information that it is Pete who will go to Moscow, without the implication that nobody else will go there. However, in (79) the particle 'only' signals the contrastive focus of the remnant:

(79) A: Kto budet ezdit' v Moskvu?  
           who will travel to Moscow  
           Who will travel to Moscow?

B: Tol'ko Petja budet.  
     only Pete will  
     Only Pete will.

Crucially, not all remnant dependents in the elliptic constructions with retained auxiliary are free to be either contrastive or presentational foci. The restrictions mainly concern presentational focussing. It turns out that presentational focussing is available only for subjects (78) and, somewhat more marginally, for temporal or locative adverbs, as in (80) below:

(80) A: Kogda ty budeš čitat' kurs tipologii?  
         when you will read course of typology  
         When will you give the course in typology?

B: (Ja) v etom godu (budu).  
     I in this year I.will  
     (I) will (give the course in typology) this year.

Object NPs and PPs cannot be presentationally focussed when they are remnants of predicate ellipsis retaining the auxiliary. In (83a)-(85a) the B answers are inappropriate. Instead, one has to use there a construction where the focussed constituent is not accompanied by the auxiliary, i.e. is the only remnant (this type of ellipsis is usually termed Stripping). However, retaining the auxiliary becomes possible in (81b)-(83b), where the same object NPs and the same object PP are contrastively topicalized, in combination with the focussed auxiliary:

(81)A:Kakoj kurs ty budeš čitat' v etom semestru?  
 which course you will read in this semester  
 What course will you give in this semester?

B: a.Kurs tipologii (\*budu).  
 course of.typology will  
 I will (give) the course in typology.

b. Kurs tipologii budu, a kurs sintaksisa ne budu.  
 course of.typology will but course of.syntax not will  
 I will (give) the course in typology, but I will not (give) the course in syntax.

(82)A:Komu ty budeš čitat' kurs tipologii?  
 whom you will read course of.typology  
 Whom will you give the course in typology?

B: a.Tretjemu kursu (\*budu).  
 third year will  
 (I) will (give it) to third year students.

b.Tretjemu kursu budu, a vtoromu kursu ne budu.  
 third year will but second year not will  
 (I) will (give it) to third year students, but (I) will not (give it) to second year students.

(83) A:Kuda Vasja bol'she ne budet ezdit'?  
 where Vasja further not will go  
 Where Vasja will not travel anymore?

B: a.V Moskvu (\*ne budet).  
 to Moscow not will  
 (He) will not (travel) to Moscow.

b.V Moskvu ne budet, a v Peterburg budet  
 to Moscow not will but to StPetersburg will  
 (He) will not (travel) to Moscow, but (he) will (travel) to StPetersburg.

The contrast in grammaticality becomes still sharper when an object NP or PP is followed by a contrastive particle: (84B(b)) and (85B(b)) are perfect against the background of the very marginal (84B(a)) and (85B(a)):

(84) A: Komu ty budeš pomogat’?  
 whom you will help  
 Whom will you help?

B: a.\*Pete budu.  
 Pete will  
 I will (help) Pete.

b.Ja vsem budu pomogat’, daže Pete budu.  
 I everybody will help even Pete will  
 I will help everybody, (I will) help even Pete.

(85) A:Kakoj jazyk ty budeš učit’?  
 which language you will study  
 Which language will you study?

B: a.\*Francuzskij budu.  
 French will  
 I will (study) French.

b.Anglijskij ja ne budu učit’, ja tol’ko francuzskij budu.  
 English I NEG will study I only French will  
 I will not study English, I (will study) only French.

To conclude, our first observation concerns focussing: if the VP is deleted but the auxiliary is retained, presentational focussing is possible for subjects and temporal/locative adjuncts, but not for objects; contrastive focussing, however, is available for any kind of remnant.

Contrastive topicalization also is permitted for any remnant, including subject (86), temporal adjunct (87), and object (88):

(86)A: Kogda vy budete čitat’ kurs tipologii?  
 when you(pl.) will read course of.typology  
 When will you(pl.) give the course of typology?

B:Ja v etom godu budu, a Petja v tom.  
 I in this year will but Pete in that  
 This year I will (give it), but next year Pete will (give it).

(87) A:Kto budet čitat’ kurs tipologii?  
 who will read course of.typology  
 Who will give the course in typology?

B: V etom godu ja budu, a v tom Petja.  
 in this year I will but in that Petja  
 I will (give it) this year, and Petja will (give it) next year.

(88) A:Kto budet čitat’ kursy tipologii i sintaksisa v  
 who will read courses of.typology and of.syntax in

etom godu?

this year

Who will give the courses in typology and syntax this year?

B: Kurs tipologii ja budu, a kurs sintaksisa Petja.  
Course of.typology I will but course of.syntax Pete

I will (give) the course in typology, and Pete the course in syntax.

To conclude, we see that remnants of the predicate ellipsis we are studying can be contrastive topics or contrastive foci irrespective of their syntactic role, whereas presentationally focussed remnants must be either subjects or temporal or locative adverbs, but never objects.

Let us finally consider the possibility of backgrounded (= given) remnants, i.e. remnants which are neither focussed nor contrastively topicalized. For object NPs and PPs, backgrounding is definitely unavailable. In (89B), where the auxiliary is focussed, the PP can be retained only if it is interpreted as a contrastive topic; in other words, the answer in (89B) obligatorily implies that there are some other cities (or at last one city) where it could also be expected that the speaker will go, but he actually will not:

(89) A: Ty budeš ezdit' v Moskvu?  
you will travel to Moscow  
Will you go to Moscow?

B: V Moskvu budu.  
to Moscow will  
To Moscow, I will go.

Similarly, in (90B(a)) the Accusative NP which precedes the focus obligatorily is interpreted as a contrastive topic: this answer implies that the speaker is also going to teach somebody else, but not to teach him/her French (French is thus interpreted as a contrastive focus, which we saw is available for objects). The word order in (90B(b)) is impossible. It does not allow the Accusative NP to be interpreted as a contrastive topic, since contrastive topics must take the leftmost position in Russian sentence, and thus the Accusative NP is merely backgrounded, what is prohibited for object remnants:

(90) A: Čemu ty budeš učit' Petju?  
what you will teach Pete  
What will you teach Pete?

B: a. Petju francuzskomy jazyky budu  
Pete French language will  
(I) will (teach) Pete French.

b. \*Francuzskomy jazyku Petju budu.  
French language Pete will

The question about subject remnants and temporal/locative adjunct remnants is less certain. If a contrastively focussed phrase exists in the elliptic construction, backgrounding of the subject is possible, cf. (85b). If, however, the subject is the only phrasal remnant and focus is on the auxiliary, interpretation of the subject as a contrastive topic is preferred. Moreover, for some speakers backgrounding of the subject is completely ruled out in such constructions. For them, (91B) obligatorily implies that there is some other person in the context who is not going to help Kolja:

(91) A: Petja budet pomogat' Kole?  
           Pete will help Kolja  
           Will Pete help Kolja?

B: Petja budet.  
       Pete will  
       Pete will.

The same holds true for temporal and locative adjuncts. Retaining the auxiliary in (92B) is preferable when it is assumed that on some other relevant date the speaker is not going to work, that is, when the adverb is a contrastive topic, although for some speakers (92B) is marginally possible without this implication:

(92) A: Ty budeš zavtra rabotat'?'  
           you will tomorrow work  
           Will you be working tomorrow?

B: Zavtra budu.  
       Tomorrow will  
       Tomorrow (I) will (be working).

Despite of some variability of informants' judgments, it seems plausible to conclude, with some reservations, that only subjects and temporal/locative adjuncts can be backgrounded remnants in the elliptic constructions we are studying.

We see, therefore, that among the four possible information statuses — contrastively focussed, contrastively topicalized, presentationally focussed, and backgrounded — object NPs and PPs can only have the first two, whereas subjects and temporal/locative adjuncts can have all the four statuses.

Now a few remarks about information status of the auxiliary are in place. Lopez and Winkler (1999) argue that in English VP-ellipsis constructions the auxiliary always is focussed. This is evidenced by obligatory pitch accent on the auxiliary as well as by impossibility to contract it (see 3.3). The latter kind of evidence unfortunately is unavailable in Russian, because Russian does not have contracted auxiliary forms. As far as pitch accent is concerned, it occurs on the auxiliary to signal that it is interpreted as focus, as e.g. in (74), where the other remnant is a contrastive topic, or in (91B), where the other remnant may also be backgrounded. If, however, one of the remnants is focussed, as e.g. in (84B(b)), pitch accent does not occur on the auxiliary, but only on the focussed constituent. Lopez and Winkler argue that in similar cases in English the auxiliary actually is focussed, the absence of pitch accent being due to a phonetic rule proposed by Liberman and Prince (1977), which disallows two adjacent syllables to be realized with equally strong stress. This is

supported by pairs like in (93), where the auxiliary is not stressed when the focussed subject is immediately adjacent to it, but is stressed when some non-focussed material is interspersed between the auxiliary and the subject (pitch accent is marked by capitalization):

(93) A: Who has left?

B: (a) JOHN has.

(b) JOHN probably HAS/\*has.

In Russian, however, no phonosyntactic evidence is available which would show that pitch accent on the auxiliary is required in such environments. Although no special acoustic studies of this question have been undertaken, speakers generally agree that the auxiliary is pronounced with one and the same intonation in (79B) above and in (94B), where the adverb occurs between the focussed subject and the auxiliary:

(94) A: Kto budet ezdit' v Moskvu?  
           who will travel to Moscow  
           Who will travel to Moscow?

B: Tol'ko Petja, navernoe, budet.  
      only Pete probably will  
      Only Pete probably will.

It has to be admitted that sentences like (94B) can be considered as poor evidence because the word order in them is somewhat unnatural for Russian, where adverbs expressing modality normally occur to the left from the subject. Nevertheless, we see that Russian does not give independent evidence for obligatory focussing of the auxiliary in VP-ellipsis constructions. I will assume, therefore, that it is not required in the case when one of the phrasal remnants is focussed. In the next section we shall see that postulating obligatory focussing of the auxiliary would also produce certain problems with explanation of the data discussed above.

#### 4.2.2. An analysis

I would like to claim that the asymmetries we have observed in the previous section can be captured under the hypothesis about the order of functional projections which I have proposed for Russian under (73) above. As the reader remembers, under this hypothesis the  $\Sigma$ P is above the AgrSP in Russian, the subject ends up in the Spec of the AgrSP, but the verb stays in T. Under this structure, temporal and locative adverbs, usually analyzed as IP-adjuncts, can be treated as adjoined to the TP as long as the IP is “split” into several projections. In this way, we get the following descriptive generalization: elements which can only be contrastively topicalized or contrastively focussed in the elliptic construction we are studying, correspond to a VP-internal position, but elements which, in addition, can be presentationally focussed or backgrounded, correspond to a VP-external position (the Spec of the TP; a TP-adjunct).

This generalization can be accounted for if different structures are acknowledged for different instances of the elliptic construction we are studying, depending upon the information status of the remnant. Now I would like to consider

one by one structural representations of the various possibilities of information partition of the elliptic construction under study.

Consider first the case of contrastive topicalization of remnant(s) accompanied by focussing of the auxiliary, as e.g. in (81b)-(83b). I would like to argue that in this particular case, the auxiliary head-adjoins to  $\Sigma$ , and the complement of the  $\Sigma P$  is elided, that is, the elided site is presumably the same as in *da/net*-constructions and is not a VP.

Focussing of an auxiliary retained in the construction we are studying always results in polarity focus. This can be concluded from the following. First, every clause where ellipsis takes place in (81b)-(83b) has the polarity meaning opposite to the clause it coordinates with. Second, every clause in (81b)-(83b) can be replaced without change of meaning by a *da/net*-construction, where, as the reader remembers from section 3, the polarity always is focussed:

(83b') V        Moskvu        net,    a        v        Peterburg        budet.  
          to        Moscow        not    but       to       StPetersburg    will  
 (He will) not (travel) to Moscow, but (he) will (travel) to StPetersburg.

In section 3 we have seen that in *da/net*-constructions focussed polarity markers reside in  $\Sigma$ . Therefore, postulating head movement of the focussed auxiliary to  $\Sigma$ , we achieve a uniform structural representation of polarity focus. Note also that Lopez and Winkler (1999) consider focussing of the auxiliary in English VP-ellipsis constructions as evidence that the auxiliary occupies the position of  $\Sigma$ ; Lopez 1995:Ch2 treats impossibility of stressing an auxiliary in Spanish as evidence that auxiliaries never adjoin to  $\Sigma$  in that language.

If we propose that the focussed auxiliary in our construction head-adjoins to  $\Sigma$ , we will also be able to explain why a backgrounded remnant is impossible if another remnant is contrastively topicalized and the auxiliary is focussed. This is true even for subject remnants, which, as we saw above, can be backgrounded under other circumstances (cf. (91), (92)):

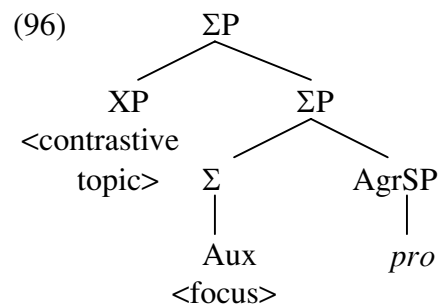
(95) A:Kakie kursy        Petja    budet    čitat'?'  
          what    courses        Pete    will       give  
 Which courses will Pete give?

B:(\*Petja)        kurs        tipologii        (\*Petja)        budet, a        kurs  
          Pete        course of.typology        Pete        will       but       course  
 sintaksis        ne        budet.  
 of.syntax        not        will  
 (Pete) will (give) the course of typology, but will not (give) the course of syntax.

If (95B) was an instance of VP-ellipsis, the impossibility to express the backgrounded subject would have come as a surprise. However, if the elided site in these sentences is the complement of the  $\Sigma P$ , as in *da/net*-constructions, the impossibility of the backgrounded subject falls out for free: the subject position (the Spec of the AgrSP) belongs to the elided site, and the subject may be expressed only if it occupies some position above  $\Sigma$ . But in section 3 we have seen that only contrastive topics and Wh-

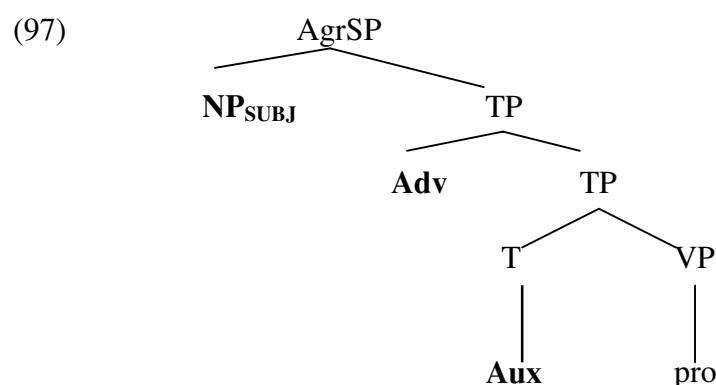
words, but not backgrounded constituents occur above  $\Sigma$  in Russian (cf. ungrammaticality of (49)-(50)).

Thus, in whatever way the requirement that phrasal remnants in *da/net*-constructions be contrastive topics is explained, this explanation will be valid for the same requirement in elliptic constructions where the auxiliary is the only focussed element. This, together with the more general considerations outlined above, allows us to adopt the following structure for the elliptic construction where the remnant is contrastively topicalized and the auxiliary is focused:



Obviously, this structure has no space for backgrounded subject. This structure differs from the one I proposed for *da/net*-constructions in (55) only in that here the auxiliary is adjoined to  $\Sigma$ . In this way, for one type of the elliptic construction where the auxiliary is retained we can conclude that it is actually not an instance of VP-ellipsis, although it looks very similar to it on the surface.

Let us now turn to the ellipsis with presentationally focussed remnant(s), as in (79) and (81). If we assign these sentences the same structure as in (97), we would not be able to explain the remnants, which have to adjoin to the  $\Sigma P$  in (97), this time are foci rather than contrastive topics. In contrast, explanation of this fact will not look problematic if we treat (79B) and (81B) as instances of VP-ellipsis, with the subject remnant residing in its standard position in the Spec of the AgrSP, and locative adverbs being adjoined to the TP:



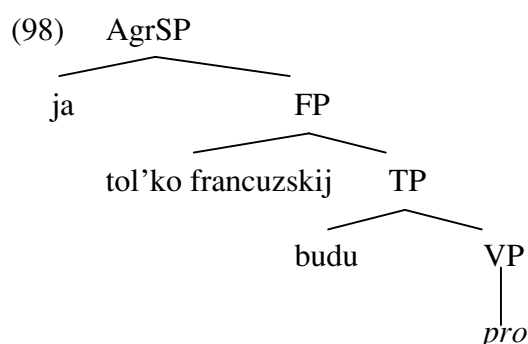
The VP-ellipsis does not affect either the subject in the Spec of the AgrSP or an adjunct to the TP. The possibility to interpret these elements as presentational foci thus follows from the structure in (97). As I have already mentioned, according to the theory of focus adopted in this paper, presentational focus does not have the status of an operator and does not move into any designated position. Given that (97) does not



postulate any kind of movement of the remnants which are outside the VP, the possibility for them to be presentational foci is explained.

At the same time, (97) correctly predicts that VP-internal elements cannot be presentationally focussed with predicate ellipsis which retains the auxiliary ((81a)-(83a)). This is so because, in order to be retained in such constructions, they have to occupy a position outside the VP; this, however, could be achieved only by syntactic movement, which is not expected for presentational foci.

Now let us turn to sentences where one of the phrasal remnants is contrastively focussed, as in (84b) and (85b). Recall that in the theory of focus adopted in the present paper contrastive focus as an operator must occupy a designated structural position either in syntax or at LF. Following the minimalist approach of Lopez and Winkler (1999), I will assume that contrastive focus is a syntactic feature which selects for TP<sup>12</sup>. If we acknowledge that (84b) and (85b) are true instances of VP-ellipsis, we will be able to explain why contrastive focussing is possible in such sentences. Given that the TP is not elided, the T head, and therefore the T feature is present. For this reason, the contrastive focus feature selecting for T should be present as well, which is exactly the case if the elided site is restricted to the VP. Under this analysis, e.g. the second clause of (85b) gets the following structure:



Note that the requirement for focus to select the T feature also correctly predicts that contrastive focussing is unavailable for phrasal remnants in *da/net*-constructions (see (49)-(50) above), since there the *pro*<sub>PRED</sub> occupies the position higher than the TP and thus no T feature is present (Lopez and Winkler (1999) give the same explanation for impossibility of contrastive focussing of remnants in Spanish analogues of *da/net*-constructions<sup>13</sup>).

The structures in (97) and (98) do not postulate adjunction of the auxiliary to  $\Sigma$ . In all Russian constructions for which I have suggested above that adjunction of a polarity marker (*da/net*, an auxiliary) to  $\Sigma$  takes place, the polarity was focussed. This was the case for *da/net*-constructions and for constructions where an auxiliary is

<sup>12</sup> Russian gives some special evidence that this really is the case. Contrastively focussed constituents bearing pitch accent may undergo movement out of infinitive clauses into the position following the matrix subject, but preceding the matrix tensed verb:

(i) Ja Vasju xoču videt'.

I Vasja want to.see

I want to see VASJA.

The possibility of this word order, obviously correlating with contrastive focussing, suggests that there is indeed a position hosting contrastive focus immediately above the TP.

<sup>13</sup> Lopez and Winkler nevertheless treat such constructions in Spanish as instances of VP-ellipsis; see section 5 for some comments on the difference between their approach and the approach adopted in this paper.

combined with topicalized remnant(s). As far as constructions with focussed phrasal remnants are concerned, we have seen in 4.2.1 that there focussing of the auxiliary does not take place. Therefore, the fact that the auxiliary does not adjoin to  $\Sigma$  when the remnant is focussed does not bring in inconsistency to the proposed analysis. On the contrary, it allows to maintain that an overt element occurs in the position of  $\Sigma$  (or adjoins to  $\Sigma$ ) in Russian only if the polarity is focussed. In the next section I will argue, following Brown (1999), that non-focussed polarity is expressed in a different structural position in Russian sentence.

Note also that if we view obligatory adjunction of the auxiliary to  $\Sigma$ , we will run into serious problems with constructions where remnants are focussed or backgrounded. We will have to admit that in such constructions, the complement of  $\Sigma$  is deleted, since otherwise we will not be able to explain that no remnant may occur to the right of the auxiliary. Given this, however, we will need to explain why in *da/net*-constructions, deletion of the complement of  $\Sigma$  can only leave contrastive topics as remnants, but in constructions retaining the auxiliary other information statuses of remnants are also possible. In contrast, if it is assumed that the auxiliary is not obliged to adjoin to  $\Sigma$  under VP-ellipsis, the possibility for subjects and locative/temporal adjuncts to be focussed gets a simple structural explanation.

Let us now consider constructions with backgrounded remnants. We assume that backgrounded phrases do not undergo movement into any designated structural position, but stay *in situ*. E.g. a backgrounded object takes a position inside the VP, and a backgrounded subject is located in the Spec of the AgrSP. Given this, we can correctly predict that backgrounded objects cannot be among remnants (cf. (89)-(90)): they are inside the VP, but the VP is elided. The possibility of the backgrounded subject in (85b) also is explained, because in the structure assigned to this sentence in (98) the subject is in the Spec of the AgrSP.

Special comments need to be made concerning the marginal status of elliptic constructions where the phrasal remnant (subject or locative/temporal adjunct) is backgrounded, and the auxiliary is focussed (cf. (91B), (92B)). The marginality of such constructions can be explained on our assumption that focussed auxiliary obligatorily adjoins to  $\Sigma$ . If it does so, remnants can only be contrastive topics, but cannot be backgrounded, as we saw above.

To conclude, if my analysis is correct, what seems to be VP-ellipsis in Russian is not always such. Russian possess several types of predicate ellipsis under which the auxiliary is retained, differing in information structure. I have attempted to argue that if the auxiliary is contrastively focussed in an elliptic construction, it undergoes head adjunction to  $\Sigma$ , and from there it licenses ellipsis of the complement of the  $\Sigma$ P, i.e. in this case we have an instance of TP- rather than VP-ellipsis. With other information statuses, however, the retained auxiliary stays in T; in such cases the elliptic construction is an instance of “true” VP-ellipsis.

This result, if correct, has an interesting implication. The auxiliary staying in T can license *pro*<sub>PRED</sub> in the position of its complement. But this means that  $\Sigma$  is not the only possible licenser of VP-ellipsis, it may also be licensed by T. The particular licensing mechanism might be the same as was proposed by Lobeck (1995) for English: VP-ellipsis is licensed by T under the condition of “strong agreement”, which, under Lobeck’s definition, takes place between T occupied by an auxiliary and its complement VP. As shown by Lopez and Winkler (1999), this account is not correct for English, where the auxiliary in VP-ellipsis constructions always head-

adjoins to  $\Sigma$ . However, we saw that uniform adjunction of this kind is problematic in Russian. Russian, therefore, suggests that licensing of VP-ellipsis by  $\Sigma$  is not the only possibility available in human language, and that some licensing mechanism similar to the one suggested by Lobeck is necessary, too.

Below I will discuss some theoretical and typological consequences of this conclusion. Before doing this, however, I would like to make a few remarks on the implications of the proposed analysis for structural representation of negation in Russian. I turn to this in the next section.

### 4.3. VP-ellipsis and negation

Let me start with an observation about NPIs in VP-ellipsis contexts. They can be among remnants of “true” VP-ellipsis even when they occupy an object position, including the case when they are backgrounded:

(99)A: Kto    ni za kogo                    ne        budet   golosovat’?  
           who    for noone (NPI)        NEG   will    vote  
 Who will not vote for anybody?

B: Ja    ni za kogo        ne        budu  
       I    for noone        not        will  
 I will not (vote) for anyone.

In (99B), the subject is presentationally focussed, which means, under the analysis suggested in 4.2.2, that we have here “true” VP-ellipsis. We saw above that VP-internal elements, like the PP in (99B), cannot be among remnants in “true” VP-ellipsis construction unless they undergo extraction out of the VP. On the assumption that backgrounded elements do not undergo syntactic movement of any kind, we expect that they cannot be among remnants of VP-ellipsis, and we saw in 4.2 that this expectation is indeed borne out. As a matter of fact, replacement of the NPI by a backgrounded non-quantificational PP makes the construction implausible:

(100) A: Kto    ne        budet   golosovat’        za        Putina?  
           who    NEG   will    vote                    for        Putin  
 Who will not vote for Putina?

B: \*Ja za        Putina ne        budu.  
       I    for        Putin not        will  
 I will not (vote) for Putin.

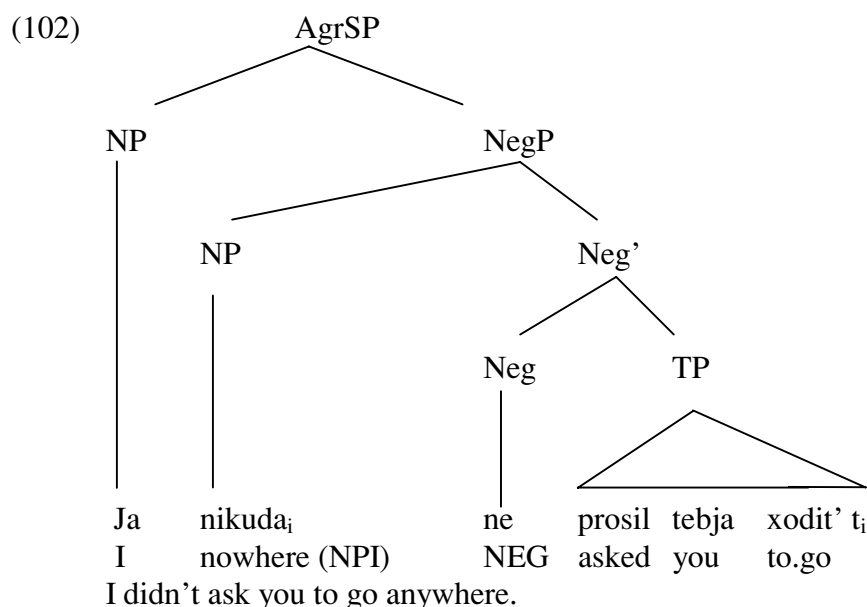
The PP *za Putina* ‘for Putin’, being backgrounded, stays *in situ* and therefore cannot be retained when the VP is elided. In order to explain the contrast of grammaticality between (99B) and (100B), we have to view movement of the NPI into some position outside the VP in (99B). Actually this movement has been proposed for Russian by Brown (1999:25ff), who has shown that what is usually taken to be NPIs in Russian actually are negative quantifiers which have to move into the Spec of the NegP to check off the “Neg”-feature, and that this movement may take place either at LF or in syntax. Evidence for syntactic movement comes from the possibility to

extract an NPI out of a subordinate clause, and from the tendency for NPIs to occur in the position immediately before the auxiliary or the finite verb, even when this position is not acceptable for the corresponding non-negative constituent:

(101) a. Ja      nikuda      ne      prosil   tebja   xodit'.  
           Inowhere (NPI)      NEG   asked   you   to.go  
 I didn't ask you to go anywhere.

b. ??Ja k      Vasje ne      prosil   tebja   xodit'.  
       I to      Vasja NEG   asked   you   to.go  
 I didn't ask you to go to Vasja<sup>14</sup>.

In order to account for (101a), Brown suggests some more developed functional "superstructure" of Russian clause than I have been assuming throughout this paper. Specifically, she postulates a NegP projection, which she puts above the TP, because extracted NPIs precede the finite verb. The NegP is headed by the negative particle *ne*. The diagram in (102) shows how this analysis accounts for the word order in (105a):



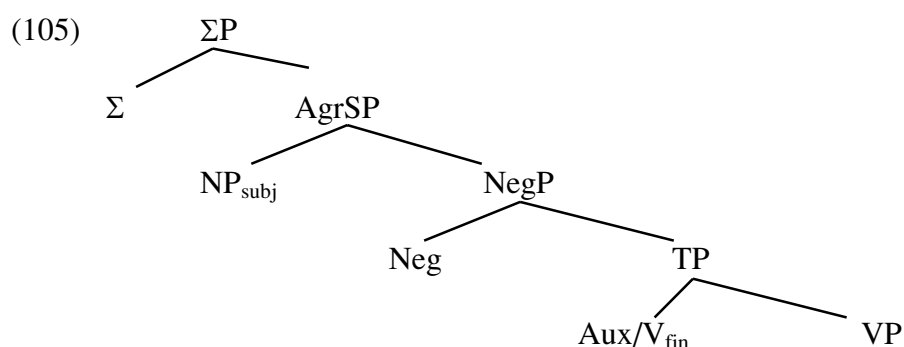
Another argument for existence of a separate negative projection which is below the subject in Russian is given by Brown & Franks (1995) and is based on Relativized Minimality effects (Rizzi 1990). As indicated by (103), negation blocks antecedent-government of WH-traces in embedded clauses in Russian. A way to account for the ungrammaticality of (103) coupled with full acceptability of (104) is to assume that the matrix sentence of (103) includes the negative projection with an empty operator in its Spec. This operator blocks antecedent-government of the trace in accordance with the Relativized Minimality:

<sup>14</sup> (101b) is possible for some speakers if the PP *k Vasje* 'to Vasja' is contrastively topicalized. However, the preverbal position of the NPI in (99B) cannot be explained by its status of a contrastive topic, because contrastive topicalization is unavailable for NPIs.

- (103) \*Gde ty [NegP Neg-Op [Negne]] skazal, čto Ivan ukral  
 where you NEG said that Ivan stole  
 den'gi?  
 money  
 ?\*Where<sub>i</sub> didn't you say that Ivan stole the money t<sub>i</sub>?

- (104) Gde ty skazal čto Ivan ukral den'gi?  
 where you said that Ivan stole money?  
 Where did you say that Ivan stole money?

To conclude, we see that certain characteristics of VP-ellipsis together with some evidence based on extraction facts show to the existence of a negative operator projection which is below the subject position in Russian. Coupled with our observation in section 3, this means that in the functional skeleton of Russian sentence, there are two projections which can host negation. One of them is the  $\Sigma$ P, which hosts focussed negative or affirmative polarity, the other one is the projection which hosts NPIs and is below the AgrSP where the subject resides<sup>15</sup>:



The existence of two projections hosting the negation is in line with hypotheses found in recent literature (see Drubig (1994), Schaffar and Chen (1999)) that for proper treatment of polarity, two polarity projections are needed in the functional skeleton of a sentence, one low enough in the split-INFL zone, the other one higher, in the split-COMP zone.

A hypothesis has been also put forward by the above mentioned authors that the two projections differ in licensing possibilities: the "higher" projection can associate with focus, and the "lower" projection can license NPIs. For Russian, however, this cannot be exactly the case. In (106), the negation which follows the subject and thus is located in the "lower" projection associates with focus:

- (106) Ja ne videl Petju.  
 I NEG saw Pete.  
 I haven't seen PETE.

As far as licensing of NPIs is concerned, the situation is a bit more complex. That the "lower" projection can license NPIs is known from the above mentioned

<sup>15</sup> As the reader remembers, in section 4.2 I have argued that a projection which hosts contrastive focus selects for T. I do not involve this projection in the present diagram, because the question of relative order of this projection and the NegP is beyond the scope of the present paper.

work by Brown, who has shown that the Spec of this projection hosts NPIs either in syntax or at LF. In *da/net*-constructions, the focussed  $\Sigma$  cannot be combined with an overt NPI:

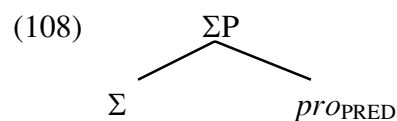
- (107) \*Petja kogo-to videl, a ja nikogo net.  
Pete somebody saw but I nobody(NPI) no  
Pete has seen somebody, but I (have) not (seen anybody).

This, however, can have purely semantic reasons: remnants in *da/net*-constructions must be contrastive topics, but NPIs cannot undergo contrastive topicalization.

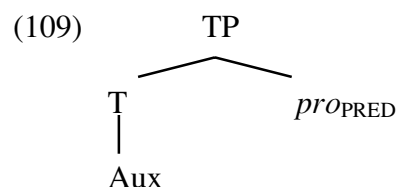
All in all, at a first glance Russian does not seem to support the idea of different licensing possibilities of the "higher" and "lower" polarity projections. The evidence for viewing the two projections, however, looks quite firm if my analysis of *da/net*-constructions and constructions with VP-ellipsis is correct.

## 5. Some typological and theoretical consequences

Given the observations in the previous sections, one cannot claim that VP-ellipsis is restricted to languages where the  $\Sigma P$  is below the TP: in Russian the  $\Sigma P$  arguably is above the TP, but nevertheless VP-ellipsis is possible. This proves false the idea that VP-ellipsis is uniformly licensed by the focussed  $\Sigma$ , in the structure schematically represented in (108):



I have argued that Russian suggests the existence of an alternative possibility of licensing VP-ellipsis, shown in (109):



The exact mechanism of licensing *pro*<sub>PRED</sub> in (109) was not discussed in the present paper. It was just noted that the configuration represented in (109) reproduces the one Lobeck (1995) has proposed for VP-ellipsis, where *pro*<sub>PRED</sub> is licensed under strong agreement with the licensing head, defined in some special way. Whether Lobeck's account is applicable for Russian or not, the data discussed in the previous section shows that (109) does not represent the only possibility of licensing VP-ellipsis in human language.

At the same time, comparison of conditions on predicate ellipsis in Russian and in English shows that polarity nevertheless does play a special role in licensing predicate ellipsis: whenever a polarity marker is focussed in an elliptic construction, the elided site must be exactly the complement of that marker. In English, VP is

always immediately subjacent to the projection headed by focussed polarity ( $\Sigma P$ ). In Russian, whenever polarity is focussed, the elided site should be the TP, which is the complement of the  $\Sigma P$ , rather than the VP.

The analysis of Russian predicate ellipsis which I have suggested here, if correct, also has another interesting implication: it proves untenable uniform treatment of ellipsis retaining polarity markers as VP-ellipsis. An example of such approach is found in Lopez (1995), who treats the Spanish analogue of *da/net*-constructions, retaining the polarity marker *si* ‘yes’ or *no* ‘no,’ but always deleting the auxiliary, as an instance of VP-ellipsis. According to Lopez, the deletion site in these constructions is the same as in English VP-ellipsis: it is the complement of  $\Sigma$ . The proposed difference between English and Spanish is that in English the auxiliary is head-adjoined to  $\Sigma$  (and actually moves further on to AgrS, as Lopez argues), but for the auxiliary in Spanish this adjunction is impossible, to the effect that the auxiliary stays below  $\Sigma$ . Although I do not attempt to argue against Lopez’s analysis of Spanish, I believe that the data discussed above clearly show that it is not applicable to Russian. First, we have seen that the auxiliary in Russian actually can be adjoined to  $\Sigma$ , as shown by the tree diagram in (96), and in order to treat *da/net*-constructions as instances of VP-ellipsis we will need to explain why in their particular case this adjunction does not take place. Second, viewing the same deletion site in *da/net*-constructions and VP-ellipsis constructions in Russian will fail to explain why the latter, but not the former allows the subject and other VP-external elements to be backgrounded and presentationally focussed. In contrast, under my analysis, which views different deletion sites in the two constructions, this difference falls out for free: in VP-ellipsis these elements may stay *in situ*, where they are either backgrounded or presentationally focussed, but in *da/net*-constructions, in order to be retained, they have to be extracted into the position designated for contrastive topics.

What the conclusions made in the present paper do not allow us to do, however, is to see what predicts whether in a given language an auxiliary is deleted or retained in predicate ellipsis constructions expressing polarity. But whatever explanations to this distribution are proposed in the future, they have to allow coexistence of the two options in a language.

## 6. Conclusion

In this paper, I have studied predicate ellipsis accompanied by overt expressing of polarity in Russian, comparing it systematically with English and sporadically with some other languages. I have attempted to argue that the Russian data proves false the assumption shared by a number of today’s approaches to predicate ellipsis, namely that (1) any given language can have either predicate ellipsis which retains an auxiliary together with a polarity marker, or predicate ellipsis which deletes an auxiliary when a polarity marker is retained, but not the two types of predicate ellipsis simultaneously, and (2) both types of predicate ellipsis are possible only when a polarity marker is focussed. Russian demonstrates two types of predicate ellipsis with expressed polarity, one retaining, the other one not retaining the auxiliary. The theory of predicate ellipsis therefore probably should be less restrictive than it is assumed.

Analyzing predicate ellipsis in Russian, we have also encountered some evidence in favor of existence of two polarity projections taking different positions in the functional skeleton of Russian sentence. The putative differences between these

two projections with respect to various licenses possibilities, however, are subject to further research.

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