

# INTERNAL MERGE OF NOMINATIVE SUBJECTS AND PRO-DROP IN RUSSIAN

*Egor Tsedryk*  
*Saint Mary's University*

## 1. Introduction

Nominative subjects are not supposed to move to a higher argumental position. From a Government and Binding perspective, such a movement, exemplified in (1), violates the Empty Category Principle (the trace is not properly bound)<sup>1</sup> and the Theta-Criterion (the subject receives more than one  $\theta$ -role). There is also a problem with the Case Filter to the extent that the DP has already received its (nominative) Case in the embedded clause, and nothing forces it to move to a higher Case position. The latter restriction is known as a Last Resort condition on DP movement (Chomsky and Lasnik 1993).

- (1) \*Helen<sub>i</sub> said that \_\_\_\_\_<sub>i</sub> is doing her homework.

Leaving the Empty Category Principle aside, let us consider (1) from a phase-theoretic perspective (Chomsky 2001, 2008), assuming that Last Resort and the Theta Criterion apply locally—that is, at each derivational phase (vP or CP). More precisely, consider a derivational step in (2), where the matrix little *v* has to select an external argument, but the numeration does not have any available candidate (i.e., external Merge cannot be applied); the only option is to remerge/move an argument already available in the structure (internal Merge option).

- (2) [<sub>vP</sub> **DP-NOM** [<sub>v</sub> v [<sub>vP</sub> V [<sub>CP</sub> C [<sub>TP</sub> <**DP-NOM**> [<sub>T</sub> T ...]]]]]]

Note that Spec,vP is not a Case position, which means that moving a Case-marked DP to Spec,vP does not violate Last Resort. If the Theta-Criterion applies at each vP phase (ignoring thematic information from previous phases), remerging the nominative DP in a  $\theta$ -position is not an issue either.

Nevertheless, there are still two conditions that should normally exclude the derivational step in (2): (i) Phase-Impenetrability Condition (PIC) (Chomsky 2000 et seq.) and (ii) Activity Condition (Chomsky 2000, 2001). The former prevents the little *v* from probing into the domain of C (only C and its specifiers are available for operations at the next phase). The latter stipulates that DPs with a valued Case feature become syntactically inactive: they cannot be involved in agreement, nor can they be remerged in an argumental position.

Imagine now a language in which (i) CP is “penetrable” for the little *v*’s selectional features, and (ii) the nominative DP remains syntactically active until the next phase. I will show that Russian is such a language and argue that (2) is an available option for grammar.

---

<sup>1</sup> We could also refer to Rizzi’s (2006) Subject Criterion, combining the Empty Category Principle and the Extended Projection Principle (EPP): once the subject reaches its EPP position (criterial position for the subject), it should not move any further.

In (3), we have an example from Russian replicating (1). The gap in (3) does not necessarily mean that the nominative subject has been remerged into the higher clause, since Russian allows subject ellipsis/pro-drop<sup>2</sup> if there is a discursive or contextual referent, as shown by the question-answer pair in (4). At the same time, availability of pro-drop does not entail that the null subject in (3) should be the same as those in (4).

(3) Lena<sub>i</sub> skazala čto \_\_\_\_\_<sub>i</sub> delaet uroki.  
 Lena.NOM said.F that does.3SG homework.ACC  
 ‘Lena said that she is doing her homework.’

(4) Q: Gde Lena<sub>i</sub>?  
 where Lena.NOM  
 ‘Where is Lena?’

A: \_\_\_\_\_<sub>i</sub> u sebja v komnate. \_\_\_\_\_<sub>i</sub> delaet  
 (she) at herself in room (she) does.3SG  
 uroki.  
 homework.ACC  
 ‘(She is) in her room. (She) does her homework.’

In section 2, I will show that embedded (E-) and matrix (M-) finite null subjects (FNSs) do differ in Russian: M-FNSs, as in (4), are licensed in an A'-position, while E-FNSs, as in (3), are not. In section 3, I will focus on the edge properties of *čto*-clauses (e.g., the embedded clause in (3)), and outline assumptions regarding Case deletion and Activity Condition in Russian. I will then return to E-FNSs and analyze them as internally merged arguments in section 4.

## 2. E-FNSs and M-FNSs in Russian

Russian has person and number (no gender) agreement in the present/future tense, and gender and number (no person) agreement in the past tense. As we can see in (5), FNSs in Russian are not tense- or person-restricted. The third gap in (5) is a null indefinite third person plural pronoun (*pro*<sub>arb</sub>).

(5) Ja/ \_\_\_\_\_ tol'ko čto vstretil Lenu<sub>i</sub>. Ona<sub>i</sub>/ \_\_\_\_\_<sub>i</sub> skazala čto  
 I just met.M Lena.ACC she said.F that  
 ix otdel skoro \_\_\_\_\_ zakrojut.  
 their department.ACC soon *pro*<sub>arb</sub> will.close.3PL  
 ‘(I) have just met Lena<sub>i</sub>. (She<sub>i</sub>) said that their department will be closed soon.’

E-FNSs (i.e., FNSs in *čto*-clauses, excluding *pro*<sub>arb</sub>) must have a matrix antecedent. In (6), the antecedent is outside the matrix clause, and an overt pronoun has to be used in this case (the relevant part of the sentence is in bold).

<sup>2</sup> Some authors do not consider Russian as a canonical pro-drop language, attributing subject gaps to a contextually licensed ellipsis (Franks 1995: ch. 7, Avrutin and Rohrbacher 1997, Fehrmann and Junghanns 2008, and references therein), but see Müller 2006, 2008 and Perlmutter and Moore 2002 for an opposite view. The difference between subject pro-drop and subject ellipsis is not crucial here; I use both terms interchangeably.

- (6) Ja skoro uvižu **Lenu<sub>i</sub>** i ja iskrenne nadejus'  
 I soon will.see.3SG Lena.ACC and I sincerely hope.1SG  
**čto ona<sub>i</sub>/\*\_\_\_\_\_<sub>i</sub> dudet** rada menja vstretit'.  
 that she will.be.3SG happy me.ACC to.meet  
 'I will see **Lena<sub>i</sub>** soon and I sincerely hope **that she<sub>i</sub> will be** happy to meet me.'

In addition, E-FNSs are subject-oriented and pass all diagnostics of obligatory control (local c-command, sloppy identity interpretation under VP-ellipsis, *de se* reading, bound reading, and unavailability of split-antecedence).<sup>3</sup> In (7), I show that the object cannot control an E-FNS (the overt pronoun *ona* has to be used, if it is Lena who has to work all night). In (8), I give an example with a bound reading (see Tsedryk 2012:8 for other tests of obligatory control of E-FNS).

- (7) On<sub>i</sub> predupredil Lenu<sub>j</sub> čto on<sub>i</sub>/\_\_\_\_\_<sub>i</sub>/ona<sub>j</sub>/\*\_\_\_\_\_<sub>j</sub> budet  
 he warned.M Lena.ACC that he she will.be.3SG  
 rabotat' vsju noč'.  
 to.work all night  
 'He<sub>i</sub> warned Lena<sub>j</sub> that he<sub>i</sub>/she<sub>j</sub> will work all night.'
- (8) Tol'ko Lena<sub>i</sub> pomnit čto \_\_\_\_\_<sub>i</sub> rabotala vsju noč'.  
 only Lena.NOM remember.3SG that worked.F all night  
 Only Lena λx [x remembers that x worked all night]  
 \*Only Lena λx [x remembers that Lena worked all night] (OK with an overt pronoun)

There are three properties differentiating E-FNS from M-FNS in Russian: Case of the antecedent (section 2.1), indefiniteness of the antecedent (section 2.2) and co-occurrence of an FNS with a fronted XP (section 2.3).

## 2.1. Nominative chain

E-FNSs can only be nominative (Ø-NOM), and they can only have a nominative antecedent (NOM). In other words, E-FNSs have to be linked by a nominative chain:

- (9) NOM > *čto* > Ø-NOM (> stands for c-command)

Thus, an E-FNS cannot be controlled by a fronted accusative object or a dative subject, as shown in (10) and (11), respectively.<sup>4</sup>

<sup>3</sup> E-FNSs in Russian instantiate what is known as 'finite control' (Landau 2004), but they present a special case of finite control, as they are attested in indicative clauses, which is not expected under Landau's calculus of control (see Tsedryk 2012 for discussion).

<sup>4</sup> Examples (10) and (11) also show that topicalization of a non-nominative antecedent would not increase its chances to become a controller of an E-FNS. Note that dative subject control is possible in Russian; compare (i) and (11).

(i) Lene<sub>i</sub> nel'zja PRO<sub>i</sub> dopustit' ošibku.  
 Lena.DAT it.is.disallowed to.make mistake.ACC  
 [Lit.: 'To Lena<sub>i</sub>, it is not allowed to make mistakes.']

- (10) \*ACC > *čto* > Ø-NOM  
 Lenu<sub>i</sub> \_\_\_\_\_ predupredili čto ona<sub>i</sub>/\*\_\_\_\_\_i budet  
 Lena.ACC *pro*<sub>arb</sub> warned.PL that she \_\_\_\_\_i will.be.3S  
 rabotat' vsju noč'.  
 to.work all night  
 'Lena was warned that she will work all night.'
- (11) \*DAT > *čto* > Ø-NOM  
 Lene<sub>i</sub> kažetsja čto ona<sub>i</sub>/\*\_\_\_\_\_i dopustila ošibku.  
 Lena.DAT it.seems that she \_\_\_\_\_i made.F mistake.ACC  
 [Lit.: 'To Lena<sub>i</sub> it seems that she<sub>i</sub> made a mistake.']

A nominative antecedent cannot control a dative null subject, as in (12), and it is impossible to have a dative subject controlling a dative gap in the embedded subject position, as in (13).<sup>5</sup>

- (12) \*NOM > *čto* > Ø-DAT  
 Lene<sub>i</sub> nadeetsja čto ej<sub>i</sub>/\*\_\_\_\_\_i budet teplo.  
 Lena.NOM hopes.3SG that her.DAT will.be.3SG warm  
 'Lena hopes that she will be warm.'
- (13) \*DAT > *čto* > Ø-DAT  
 Lene<sub>i</sub> kažetsja čto ej<sub>i</sub>/\*\_\_\_\_\_i ne napisat' etu stat'ju.  
 Lena.DAT it.seems that her.DAT not to.write this article  
 [Lit.: 'To Lena<sub>i</sub> it seems that to her<sub>i</sub> it will not be possible to write this article.'] ('It seems to Lena that she will not be able to write this article.')

As for M-FNSs, they do not have to be linked by a nominative chain. In (14), we have an accusative antecedent and a nominative M-FNS. In (15), we have a dative antecedent and two M-FNSs, a nominative and a dative one.

- (14) ACC >> Ø-NOM (>> stands for contextual precedence)  
 Ja tol'ko čto videl Lenu<sub>i</sub>. \_\_\_\_\_i skazala čto naš dom prodan.  
 I just saw.M Lena.ACC (she) said.F that our house sold  
 'I have just seen Lena<sub>i</sub>. (She<sub>i</sub>) said that our house was sold.'
- (15) DAT >> Ø-NOM >> Ø-DAT  
 Lene<sub>i</sub> vdrug stalo dušno. \_\_\_\_\_i vybežala na ulicu  
 Lena.DAT suddenly it.felt suffocated (she.NOM) ran.out on street  
 i \_\_\_\_\_i srazu že polegčalo.  
 and (her.DAT) right away it.felt.better  
 [Lit.: 'To Lena<sub>i</sub> suddenly it felt suffocated. (She<sub>i</sub>) ran outside and (to her<sub>i</sub>) it felt better right away.']

## 2.2. Indefiniteness of the antecedent

M-FNSs cannot have an indefinite antecedent, as shown in (16); compare with an E-FNS in (17).

<sup>5</sup> The second dative in (13) is a dative subject of infinitive. According to Moore and Perlmutter (2000), datives of infinitives are genuine subjects in Russian.

- (16) Kto-to<sub>i</sub> skazal nepravdu. On<sub>i</sub>/\*\_\_\_\_\_i budet za eto  
 somebody.NOM told.M lie.ACC he will.be.3SG for that  
 otvečat'.  
 answer  
 'Somebody told a lie. He will be responsible for that.'
- (17) Kto-to<sub>i</sub> skazal čto \_\_\_\_\_i budet za eto otvečat'.  
 somebody.NOM said.M that will.be.3SG for that answer  
 'Somebody said that he/she will be responsible for that.'

### 2.3. Blocking effects

Moreover, M-FNSs are blocked by a category located on the left edge of the clause. In (18), the subject gap cannot co-occur with the fronted pronoun *mne* (compare with (14)).

- (18) Ja tol'ko čto videl Lenu<sub>i</sub>. Ona<sub>i</sub>/\*\_\_\_\_\_i **mne** skazala čto  
 I just saw.M Lena.ACC she me.DAT told.F that  
 naš dom prodan.  
 our house sold  
 'I have just seen Lena<sub>i</sub>. She<sub>i</sub> told me that our house has been sold.'

In (19) and (20), a topicalized PP prevents the subject from being dropped in the answer to a preceding question.

- (19) Q: Čto Lena<sub>i</sub> delaet po vyxodnym?  
 what.ACC Lena.NOM do.3SG on week-ends  
 'What does Lena do on week-ends?'  
 A: **Po vyxodnym** ona<sub>i</sub>/\*\_\_\_\_\_i rabotaet nad stat'ěj.  
 on week-ends she work.3SG on article  
 'On week-ends, she works on the article.'
- (20) Q: Čto Lena<sub>i</sub> xočet prigotovit' k prazdniku?  
 what Lena.NOM want.3SG to.prepare for holiday  
 'What does Lena want to prepare for the holiday?'  
 A: **K prazdniku** ona<sub>i</sub>/\*\_\_\_\_\_i xočet prigotovit' pirog.  
 for holiday she want.3SG to.prepare pie.ACC  
 'For the holiday she wants to prepare a pie.'

Finally, in (21) we have a similar blocking effect with a fronted *wh*-phrase:

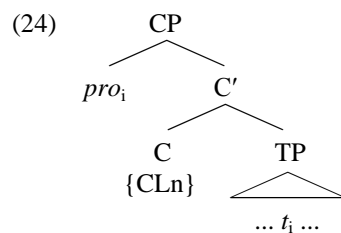
- (21) Čto ona/\*\_\_\_\_\_ delaet na kuxne?  
 what.ACC she do.3SG in kitchen  
 'What does she do in the kitchen?'

E-FNSs are also blocked by a fronted *wh*-word, as in (22), but note that the complementizer *čto* is missing in this case. Otherwise, E-FNSs do not conflict with the fronted material in *čto*-clauses (see (23)).

- (22) Lena ne znala **komu** ona<sub>i</sub>/\* \_\_\_\_\_<sub>i</sub> podarit  
 Lena.NOM not knew.F whom.DAT she will.offer.3SG  
 etu knigu.  
 this.ACC book.ACC  
 ‘Lena didn’t know to whom she would offer this book.’
- (23) a. Lena<sub>i</sub> poobeščala čto \_\_\_\_\_<sub>i</sub> **mne** pokažet  
 Lena.NOM promised.F that me.DAT will.show.3SG  
 svoj dom zavtra.  
 her house tomorrow  
 ‘Lena promised that she will show me her house tomorrow.’
- b. Ja<sub>i</sub> vse<sub>x</sub> predupredil čto **po vyxodnym** \_\_\_\_\_<sub>i</sub>  
 I everybody.ACC warned.M that on week-ends  
 rabotaju nad stat’jėj.  
 work.1SG on article  
 ‘I warned everybody that on week-ends I work on the article.’
- c. Lena<sub>i</sub> skazala čto **k prazdniku** \_\_\_\_\_<sub>i</sub> xočet  
 Lena.NOM said.F that for holiday want.3SG  
 prigotovit’ pirog.  
 to.prepare pie.ACC  
 ‘Lena said that for the holiday she wants to prepare a pie.’

#### 2.4. Interim conclusion

Based on the above observations, I conclude that M-FNSs in Russian are null topics that can be analyzed as a *pro* moved to the C-domain. Following Sigurðsson (2011), I assume that there is a *C/edge* linking feature {CLn} in C, which licenses the null topic. I will not develop an analysis of M-FNS in Russian here, as this is not the purpose of this paper. The structure in (24) is just an approximation of a possible account, but nothing crucial hinges on it.



The main point here is that E-FNSs are not linked to C. They are part of a nominative chain connecting both clauses across the complementizer *čto*:

- (25) [TP DP-NOM<sub>i</sub> ... [CP *čto*... [TP Ø-NOM<sub>i</sub> ...]]]

In the next section, I suggest that *čto* does not have a D-feature, which—I assume—is a necessary condition for a strong CP phase.

### 3. Embedded *čto*-clauses, Case and Activity Condition

This section focuses on properties of Russian *čto*, on the surface, do not seem to have a direct relation to E-FNSs. Section 3.1 outlines the edge properties of *čto*-clauses. Section 3.2 discusses the Activity Condition and links the richness of Case morphology to late Case deletion.

#### 3.1. *Čto*-clauses and relativized PIC

There are two relevant observations regarding *čto*-clauses in Russian: first, these clauses cannot be subjects unless there is a D-category in front (i.e., the demonstrative *to* ‘that’), as shown below (compare with the English translation featuring a *that*-clause).

- (26) \*(To) *čto* Lena prišla odna udivilo vsex.  
 that.N C Lena.NOM came.F alone.F surprised.N all.ACC  
 ‘That Lena came alone surprised really everybody.’

Second, *čto*-clauses do not allow *wh*-extraction, as we can see in (27). Note that (27a) cannot be attributed to *that*-trace effect since the object extraction in (27b) is equally problematic.

- (27) a. \*Kto<sub>i</sub> Lena skazala čto \_\_\_\_\_<sub>i</sub> pridět  
 who.NOM Lena.NOM said.F that \_\_\_\_\_ will.come.3SG  
 k nam v gosti?  
 to us in guests  
 ‘\*Who did Lena say that will come to our place?’
- b. \*Kogo<sub>i</sub> Lena skazala čto vy priglasili \_\_\_\_\_<sub>i</sub>  
 who.ACC Lena.NOM said that you invited.PL  
 k nam v gosti?  
 to us in guests  
 ‘Who did Lena say that you invited to our place?’

These pieces of data show that (i) *čto* is not inherently specified for a D-feature, and (ii) *čto* does not have an edge feature (EF), and therefore, it cannot provide an edge position for the moving *wh*-phrase. When an EF of the matrix little *v* probes downward, it cannot see any further than the C-edge (due to PIC), and the *wh*-phrase, which remains inside the C-domain is invisible for EF. This situation is illustrated in (28), which corresponds to the sentence in (27a) (relevant items are in bold). For the long distance *wh*-movement to be possible, *kto* has to be attracted by EF and to be displaced to the outer Spec,vP, but *kto* is not in an A-bar position that would be accessible to EF.

- (28) \* $[_{VP} \mathbf{kto} [_{VP} \text{Lena} [_{V'} \text{V} [_{CP} \mathbf{čto} [_{TP} \langle \mathbf{kto} \rangle \dots ]]]]]$   
 [EF]  $\left[ \begin{array}{l} \text{Domain inaccessible to EF} \\ \text{C-edge accessible to EF} \end{array} \right.$

To generalize, *čto*-clauses are weak phases that do not have a D/edge feature. Note that the weak phasehood of *čto*-clauses is independent from  $\phi$ -

feature defectiveness (*čto* does select a finite TP with a nominative subject). ‘Weak’ means D-feature defective. In anticipation of section 4, where E-FNSs are analyzed as internally merged arguments, I would like to point out at this point that the lack of a D-feature in C makes CP transparent for the little *v*’s selectional feature (SF) in the matrix clause. Consider (29a) and its supposed structure in (29b).

- (29) a. Kto<sub>i</sub> skazal čto \_\_\_\_\_<sub>i</sub> pridët k nam v gosti?  
 who.NOM said.M that will.come.3SG to us in guests  
 ‘Who said that (he/she) will come to our place?’
- b. [<sub>VP</sub> *kto* [<sub>v</sub> v [<sub>VP</sub> V [<sub>CP</sub> *čto*] [<sub>TP</sub> <*kto*> ...]]]]  
 [SF] structural layer irrelevant for SF

SF targets the first available argument (in Spec,TP) overlooking the C-edge. Crucially, the latter is irrelevant for SF as long as C lacks a D-feature. I assume that if it were present, this feature would block any SF-probing beyond C, and we would have a PIC effect, as we do in (28). In other words, we have a relativized PIC, whose application depends on the probing feature in the matrix *v* (EF or SF), and the feature specification in C. EF targets the C-edge and creates an outer Spec,vP; it has nothing to probe if C does not have any specifier (due to the absence of a D/edge feature). SF (responsible for the inner Spec,vP) would target Spec,TP only if C is devoid of a D-feature.

In sum, the lack of a D/edge feature in C has a twofold effect on movement across CP. On one hand, it makes the long distance A’-movement unavailable, as in (27). On the other hand, it “opens the door” to A-movement of the nominative subject from Spec,TP to the inner Spec,vP, as tentatively presented in (29b). Nevertheless, such a movement is expected to be blocked by the Activity Condition, which brings us to the next section.

### 3.2. Activity Condition and Case deletion

For the sake of concreteness, let us refer to the following formulation of the Activity Condition (from Gallego 2010:257, following Chomsky 2000:123, 2001:6). (Syntactic objects are ‘active’ if they are available for Agree/Merge, and they are ‘frozen’ if they cannot be moved/remerged into an A-position.)

- (30) *Activity Condition*  
 a. Syntactic objects with unvalued (structural) Case are ‘active’.  
 b. Syntactic objects with valued Case are ‘frozen’.

Interestingly, this condition does not hold in Russian (see Nevins 2005:290). For example, in (31) the accusative DP fronting, driven by EPP, targets Spec,TP after the structural Case is valued in a vP internal position.<sup>6</sup>

- (31) Lenu vyneslo volnoj na bereg.  
 Lena.ACC carried.out.N wave.INSTR on shore  
 ‘The wave caused Lena to wash ashore.’

<sup>6</sup> Lavine and Freidin (2002) argue extensively that accusative DPs in constructions like (31) are in Spec,TP and not in an A’-position.



According to (30), the accusative DP should be frozen inside vP, but contrary to the fact we do not have a verb-initial word order in (31). It would be surprising if (31) presented an isolated case, which does not follow from some general property of Russian. There is no particular reason to assume that syntactic objects with a valued structural Case become inactive or frozen in place if it is not independently required by the sensori-motor system.

In English, for example, the sensori-motor system needs to have a continuous access to syntactic derivation to be able to read structural Case values. Thus, a noun (e.g., *Lena*) can be nominative as well as accusative, depending on its syntactic position, and Case deletion (i.e., Case transfer to phonetic form) has to apply early. That is, if X is a Case assigning head and ARG is an argument targeted by X, Case should be deleted within the maximal projection of X: it may happen right after Agree takes place, and ARG does not move towards X, as in (32a), or Case is deleted after ARG raises to Spec,XP, as in (32b).

(32) *Early Case deletion*

- a.  $[_{XP} ZP [_{X'} X \dots [_{YP} ARG \dots ]]$   
       [NOM/ACC]  
       → Deletion
- b.  $[_{XP} ARG [_{X'} X \dots [_{YP} <ARG> \dots ]]$   
       [NOM/ACC]  
       → Deletion

If ARG moves outside XP, and its Case is not deleted on time, it would be illegible at the sensori-motor interface.

Russian, on the other hand, is a morphological Case language, in which each Case value is assigned a marker in morphology (e.g., *Lena* = NOM, *Lenu* = ACC), and the sensori-motor system is able to read structural Case values post-syntactically without early Case deletion. In fact, Case deletion could be part of a general Spell-Out occurring at the end of a strong phase. It means that valued Case features remain in the structure and there is no reason to believe that (30) should hold independently from considerations pertaining to legibility of Case at the sensori-motor interface. That is, syntactic objects with a valued Case should remain active until the very end of a strong phase.

In (31), vP is weak phase in the sense that the little *v* does not have a specifier (i.e., it does not select a thematic external argument even though it assigns accusative Case to the object; see Lavine 2010 for further discussion). Thus, the accusative DP remains active and moves outside vP without early Case deletion, as shown in (33a) (accusative Case feature is not deleted within the maximal vP projection, and yet it can be legible at the sensori-motor interface). At this point, we can plausibly hypothesize that a similar situation may also exist if a nominative DP had to cross a weak CP phase, as in (33b).

- (33) a.  $[DP-ACC \dots \boxed{[_{vP} v]} [_{vP} V <DP-ACC> \dots ]]$   
           *weak phase*
- b.  $[DP-NOM \dots \boxed{[_{CP} C]} [_{TP} <DP-NOM> \dots ]]$   
           *weak phase*

#### 4. E-FNSs as internally merged arguments

What we should retain from section 3 is the following: (i) *čto*-clauses are weak phases that do not have a D/edge feature, and (ii) DPs with a valued (structural) Case remain active until the end of a strong phase.

In addition to these two assumptions pertaining specifically to Russian, I also assume that:

- (34) a. The Theta-Criterion applies at each vP-phase.  
 b. DPs with valued Case cannot be merged into a Case position.  
 c. Structural Case is an interpretable feature in v/T.  
 d. Feature matching is required for Agree.

With (34a), I intend to implement the Theta-Criterion within a phase-theoretic approach. I assume that thematic information from previous phases is not backtracked: a  $\theta$ -role assigned at phase  $\alpha$  is irrelevant at phase  $\beta$ . (34b) follows from Last Resort: assuming that DPs must have their Case feature valued (Case Filter), I maintain that DPs can be merged into a Case position only if they need a Case value. If a DP with a valued Case is merged into a Case position, it is a Last Resort violation. (34c) (partly based on Pesetsky and Torrego 2001, 2004) implies that v and T do not have to check or assign their Case features. (34d) is quite straightforward: if Case or  $\phi$ -features do not match, there is no agreement.

Finally, from a broader minimalist perspective, I assume that Merge is the basic syntactic operation that applies freely and comes in two flavors: external Merge (EM), which takes new items from a numeration and adds them to the structure, and internal Merge (IM), which uses syntactic objects already present in the structure. Note that “IM (= Move, with the “copy theory”) is as free as EM; it can only be blocked by stipulation” (Chomsky 2008:140-141).

Now I will show how the above assumptions work together in a unified analysis of E-FNSs in Russian. Let us start with the example in (5), repeated in (35), and the derivational steps in (35a-c) (relevant fragments of the structure are in bold).

- (35) Lena<sub>i</sub> skazala čto \_\_\_\_\_<sub>i</sub> delaet uroki.  
 Lena.NOM said.F that \_\_\_\_\_ does.3SG homework.ACC  
 ‘Lena said that she is doing her homework.’

- a. [<sub>v'</sub> v [<sub>VP</sub> V [<sub>CP</sub> *čto* [<sub>TP</sub> DP-NOM ...]]]]  
 b. [<sub>VP</sub> **DP-NOM** [<sub>v'</sub> v [<sub>VP</sub> V [<sub>CP</sub> *čto* [<sub>TP</sub> <**DP-NOM**> ...]]]]]  
 c. [<sub>T'</sub> **T-NOM** [<sub>VP</sub> **DP-NOM** ...]]

In (35a), we have a point in the derivation when the little v has been merged and its selectional features require an external argument in Spec,vP. Suppose that there are no more arguments in the numeration, and EM is not an option. Thus, IM applies as shown in (35b): DP-NOM (which is syntactically active because the strong phase has not been reached yet) is remerged as external argument of the matrix clause. Then the matrix T-NOM is merged, and its unvalued  $\phi$ -features probe the corresponding  $\phi$ -features of DP-NOM. In (35c), Agree applies under feature matching; we do not have to stipulate that unvalued Case is a

requirement for Agree. Note that nominative Case is an interpretable feature in T, which does not have to be assigned to DP-NOM.

As we have seen in section 2.1, E-FNSs in Russian have to be linked by a nominative chain. Thus, E-FNSs cannot be controlled by a dative subject, as in (36). This type of control would require a derivational step where DP-NOM is merged into an inherent Case position (specifier of V-DAT). This is a Last Resort violation, which is why this option is ruled out:<sup>7</sup>

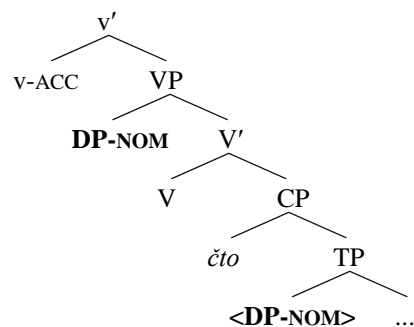
- (36) \*Lene<sub>i</sub> kažetsja čto \_\_\_\_\_<sub>i</sub> ošiblas’.  
 Lena.DAT it.seems that \_\_\_\_\_ made.mistake.F  
 [Lit.: ‘To Lena, it seems that she<sub>i</sub> made a mistake.’]
- a. [<sub>V</sub> V-DAT [<sub>CP</sub> čto [<sub>TP</sub> DP-NOM ...]]]  
 b. \*[[<sub>VP</sub> DP-NOM [<sub>V</sub> V-DAT [<sub>CP</sub> čto [<sub>TP</sub> <DP-NOM> ...]]]]]

The accusative object cannot control E-FNSs either, but for reasons other than Last Resort. Consider (37) (slightly modified version of (7)).

- (37) On<sub>i</sub> predupredil Lenu<sub>j</sub> čto \_\_\_\_\_<sub>i/\*j</sub> budet rabotat’  
 he warned.M Lena.ACC that \_\_\_\_\_ will.be.3SG to.work  
 vsju noč’.  
 all night  
 ‘He<sub>i</sub> warned Lena<sub>j</sub> that he<sub>i</sub>/\*she<sub>j</sub> will work all night.’

Object control by *Lenu* ‘Lena.ACC’ would be possible if DP-NOM were remerged in the specifier of the lexical verb, as in (38).

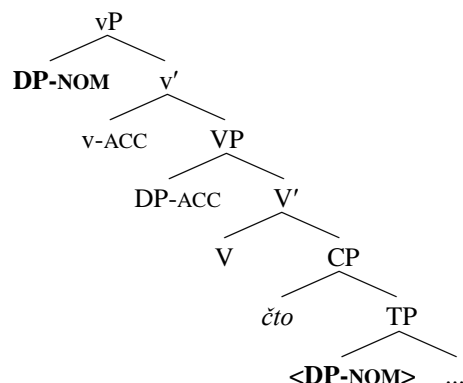
- (38) *Option 1: the embedded subject is remerged as the matrix object (object control)*



The problem with this derivation is that v-ACC cannot target DP-NOM because of the Case mismatch, and v-ACC's  $\phi$ -features cannot be valued by Agree (the derivation crashes). Another option is to have an externally merged object, which will agree with v-ACC, and DP-NOM is remerged in Spec,vP, as in (39).

<sup>7</sup> Note that E-FNSs of Russian type are not expected in languages where Spec,vP is an inherent Case position (e.g., ergative languages). Last Resort would rule out this possibility.

- (39) *Option 2: the embedded subject is remerged as the matrix subject (subject control)*



This derivation has a potential problem with locality: DP-ACC intervenes between v-ACC and DP-NOM. Why can DP-ACC not be remerged in Spec,vP instead of DP-NOM? Nevertheless, IM of DP-ACC is excluded by the Theta-Criterion, which is assumed to apply at each vP-phase: DP-ACC has already a  $\theta$ -role in the matrix vP-phase. In fact, when v-ACC's selectional features (responsible for the external argument) probe downward, they ignore any DP from the same phase. Moreover, the lack of D-feature in *čto* makes DP-NOM visible for v-ACC's selectional features.

To wrap up, E-FNSs in Russian are derived by IM when EM is not an option—that is, when the numeration does not have any available arguments to fill in Spec,vP. Being a narrow-syntactic property, IM is constrained by the output conditions, such as Last Resort, PIC, and Activity Condition. If, for some language-internal reasons, some of these conditions are not applicable (e.g., Activity Condition in Russian), IM may surface in situations when least expected (i.e., IM of nominative subjects). Under the current analysis, E-FNSs in Russian just illustrate the derivational nature of the narrow-syntactic engine—there are no backtracking or look-ahead operations. Moreover, according to my analysis of E-FNSs in Russian, the arguments we see in phonetic form (PF) are the arguments we have in the numeration (what you see is what you get). With a non-IM (or EM-only) alternative, we would have to assume that there are more items in the numeration than we actually see in PF. We would need to postulate a very specific PF-deletion rule (e.g., nominative subjects in *čto*-clauses can be PF-deleted if they are bound by the matrix nominative subject), but such a rule would basically restate the facts. Finally, the IM-analysis of E-FNSs in Russian essentially conspires with the movement analysis of control (see Boeckx, Hornstein and Nunes 2010 for a recent update). It does not mean, however, that all instances of obligatory control have to be derived by IM/movement. At the same time, if this analysis is on the right track, it also points out that not all instances of obligatory control involve PRO and compound Agree relationships mediated by C (Landau 2004). There should be instances of obligatory control that are derived by IM.

## 5. Conclusion

This paper showed that null subjects of finite clauses in Russian do not form a natural class. According to my proposal, matrix null subjects are licensed by an edge feature in C, while embedded null subjects are members of a nominative chain created by IM, or movement. This proposal implies that there is no universal principle of grammar precluding IM of nominative subjects. There are interface conditions that can block it: (a) early Case deletion (required by the sensori-motor system), (b) CP impenetrability (due to a D/edge feature in C), and (c) Last Resort condition ruling out IM into inherent Case positions. (a) and (b) do not apply to Russian, which is a morphological Case language and which does not have a D/edge feature in C (in *čto*-clauses). As for (c), it rules out finite control by dative DPs. If the proposed analysis is on the right track, we have an instance of control derived by IM. Nevertheless, my proposal does not imply that all instances of obligatory control should be derived by IM.

## References

- Avrutin, Sergej, and Bernhard Rohrbacher. 1997. Null subjects in Russian inverted constructions. In *Proceedings of the 4th meeting of Formal Approaches to Slavic Linguistics: the Cornell meeting*, eds. Wayles Browne, Ewa Dornisch, Natalia Kondrashova, and Draga Zec, 32-53. Ann Arbor: Michigan Slavic Publications.
- Chomsky, Noam. 2000. Minimalist inquiries: the framework. In *Step by step: essays on minimalist syntax in honor of Howard Lasnik*, ed. by Roger Martin, David Michaels, and Juan Uriagereka, 89-155. Cambridge, MA: MIT Press.
- Chomsky, Noam. 2001. Derivation by phase. In *Ken Hale: a life in language*, ed. by Michael Kenstowicz, 1-52. Cambridge, MA: MIT Press.
- Chomsky, Noam. 2008. On phases. In *Foundational issues in linguistic theory*, eds. Robert Freidin, Carlos Otero, and Maria Luisa Zubizarreta, 133-166. Cambridge: MIT Press.
- Chomsky, Noam, and Howard Lasnik. 1993. The Theory of Principles and Parameters. In *Syntax: an international handbook of contemporary research*, ed. by Joachim Jacobs, Arnim von Stechow, Wolfgang Stemefeld, and Theo Vennemann, 506-569. Berlin: Mouton de Gruyter.
- Boeckx, Cedric, Norbert Hornstein, and Jairo Nunes. 2010. *Control as movement*. Cambridge: Cambridge University Press.
- Fehrmann, Dorothee, and Uwe Junghanns. 2008. Subjects and scales. In *Scales*, eds. Marc Richards and Andrej Malchukov, 189-220. Linguistische Arbeitsberichte 86. Leipzig: Universität Leipzig.
- Franks, Steven. 1995. *Parameters of Slavic morphosyntax*. New York: Oxford University Press.
- Gallego, Ángel. 2010. *Phase theory*. Amsterdam: John Benjamins.
- Landau, Idan. 2004. The scale of finiteness and the calculus of control. *Natural Language and Linguistic Theory* 22:811-877.
- Lavine, James. 2010. Case and events in transitive impersonals. *Journal of Slavic Linguistics* 18:101-130.
- Lavine, James, and Robert Freidin. 2002. The subject of defective T(ense) in Slavic. *Journal of Slavic Linguistics* 10:251-287.
- Moore, John, and David M. Perlmutter. 2000. What Does It Take to be a Dative Subject? *Natural Language and Linguistic Theory* 18: 373-416.
- Müller, Gereon. 2006. Pro-drop and impoverishment. In *Form, structure, and grammar. A festschrift presented to Günther Grewendorf on occasion of his 60th birthday*, eds. Patrick Brandt and Eric Fuß, 93-115. Berlin: Akademie Verlag.

- Müller, Gereon. 2008. Some consequences of an impoverishment-based approach to morphological richness and pro-drop. In *Elements of Slavic and Germanic grammars: a comparative view*, eds. Jacek Witkoś and Gisbert Fanselow, 125-145. Polish Studies in English Language and Linguistics 23. Frankfurt am Main: Peter Lang.
- Nevins, Andrew. 2005. Derivations without the activity condition. In *Perspective on phases*, ed. by Martha McGinnis, and Norvin Richards, 287-310. MIT Working Papers in Linguistics 49. Cambridge: MIT Working Papers in Linguistics.
- Perlmutter, David, and John Moore. 2002. Language-internal explanation: the distribution of Russian impersonals. *Language* 78: 619-650.
- Pesetsky, David, and Esther Torrego. 2001. T-to-C movement: causes and consequences. In *Ken Hale: a life in language*, ed. Michael Kenstowicz, 355-426. Cambridge, MA: MIT Press.
- Pesetsky, David et Esther Torrego. 2004. Tense, Case, and the nature of syntactic categories. In *The syntax of time*, ed. by Jacqueline Guéron and Jacqueline Lecarme. Cambridge, MA: MIT Press, 495-538.
- Rizzi, Luigi. 2006. On the form of chains: criterial positions and ECP effects. In *Wh-Movement: moving on*, ed. by Lisa Lai-Shen Cheng and Norbert Corver, 97-133. Cambridge, MA: MIT Press.
- Sigurðsson, Ármann Halldór. 2011. Condition on argument drop. *Linguistic Inquiry* 42:267-304.
- Tsedryk, Egor. 2012. Finite control in Russian as movement: subject extraction, feature deficiency and parametric variation. Ms., Saint Mary's University.