

## Licensing of DP/PRO embedded subjects in Russian\*

**Abstract.** The paper contributes to the ongoing discussion of DP / PRO alternation, examining properties of Russian evaluative adjectival predicatives that embed a non-finite clause (i.e. *važno* ‘important’) and arguing that (i) sentences with these predicates and an embedded non-finite clause are ambiguous between obligatory control / overt embedded subject analyses, (ii) the DP/PRO alternation does not correlate with the feature specification or the structural size of an embedded clause, (iii) the alternation is not free and can be formally accounted for by an analysis in terms of cross-clausal Case licensing of embedded overt DP subjects. The novel data from Russian challenge existing approaches to DP / PRO distribution and non-finite subordination in Slavic languages and provide further support for (a version of) Case filter.

**Keywords:** control, DP distribution, PRO, Case, DP/PRO alternation, dative, Russian

### 1 Introduction

The paper presents and examines a previously undescribed case of DP / PRO alternation in non-finite clauses in Russian. I focus on sentences with a matrix evaluative adjectival predicate (such as *važno* ‘important’) and an infinitival complement clause (1) and demonstrate that they can both support obligatory control and have overt an embedded subject.<sup>1</sup>

- (1) a. Maše<sub>i</sub> bylo važno [PRO<sub>i+</sub> pojt<sub>i</sub> vmeste v kino].  
Maša.DAT was important.PR go.INF together to cinema  
‘For Maša it was important to go to the cinema together.’  
b. Bylo važno [stroitel’stvu zanjat’ dva mesjaca].  
was important.PR construction.DAT take.INF two months  
‘It was important for the construction to take two months.’

Providing the results for various diagnostics, I show that the subject position of an embedded non-finite clause in (1) can be occupied either by an obligatorily controlled PRO or by a referentially independent overt DP. The DP/PRO alternation does not correlate with the Tense / agreement characteristics of an embedded clause or its structural size, implying that covert and overt subjects can be found in the same syntactic environments. This challenges existing approaches to DP / PRO distribution that postulate that it is strictly complementary and depends on the finiteness and/or feature specification of a clause (Landau 2000, 2004; Bondaruk 2006; Pires 2007; Sitaridou 2007, a.o.).

Furthermore, the DP / PRO alternation in Russian is not completely free either, in contrast with, for instance, DP / PRO alternation in Tamil and other Dravidian languages, as described by Sundaresan and McFadden (2009). In Russian, an overt

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1 Glossing abbreviations: ACC = accusative, DAT = dative, F = feminine, FUT = future, GEN = genitive, INF = infinitive, INS = instrumental, N = neuter, NEG = negation, NOM = nominative, PR = predicative, PTCP = passive participle, SG = singular, SUBJ = subjunctive.

embedded (dative) subject is allowed only when there is no potential overt (dative) controller available within a higher clause.

To formally account for the so-called Two-Dative Generalization formulated above I develop an analysis in terms of cross-clausal Case licensing of embedded overt DP subjects. First, I follow Chomsky (1981) and Chomsky and Lasnik (1993) in that PRO and overt DPs differ in that only the latter need Case to be licensed; at the same time, I assume that, in principle, DPs and PRO can be merged in the same position. Second, I argue that, since non-finite clauses are inherently deficient and has no subject Case available, overt DP subjects can only be licensed from the outside; in the case of Russian sentences with a matrix evaluative adjective, this can be done by a matrix applicative head, which normally introduces and licenses a (dative) Attitude holder merged in Spec,AppIP. Thus, the two DPs – the embedded subject and the matrix Holder end up competing for one feature. Third, I demonstrate that an overt embedded subject does not have to undergo A movement to a matrix position in order to be licensed and can stay relatively low within its clause being assigned Case long-distance, over a clausal boundary. Thus, the novel data from Russian provide support for Case-licensing accounts and for availability of long-distance A dependencies (see Wurmbrand 2018 for an overview of literature on long-distance raising and agreement).

The paper is structured as follows. Section 2 presents the data, focusing on the constructions with a matrix evaluative predicate and an embedded non-finite clause and providing the results for various control and raising diagnostics. Section 3 discusses the DP / PRO alternation in more detail, showing that it neither can be connected to the feature specification of an embedded clause nor is entirely free. Section 4 proposes the analysis. Section 5 concludes the paper outlining some potential directions for future research.

## 2 The data: DP/PRO alternation under evaluative adjectival predicates

### 2.1 General syntactic properties

Evaluative adjectival predicates in Russian, such as *važno* ‘important’ and *interesno* ‘interesting’, known in traditional literature as *predicatives*, select a non-finite or a finite (indicative or subjunctive) clausal argument, exhibiting default Neut.Sg agreement; they usually co-occur with an optional dative DP (DP<sub>DAT</sub>), which is often interpreted as an Attitude Holder (2).

- (2) a. (Maše) bylo važno ujtí.  
 Maša.DAT was important.PR leave.INF  
 ‘For Maša it was important to leave.’
- b. (Maše) bylo važno čtoby Anna ušla.  
 Maša.DAT was important.PR so that Anna.NOM leave.SUBJ  
 ‘For Maša it was important for Anna to leave.’
- c. (Maše) bylo važno čto Anna ujdut.  
 Maša.DAT was important.PR that Anna.NOM leave.FUT  
 ‘For Maša it was important that Anna will leave.’

Morphologically, these predicatives are similar to the agreeing short neuter.sg forms of the equivalent adjectives; see an example in (3), where an adjective is used with a nominal subject and bears the same number and gender.

- (3) a. Maše byla važna ego ljubov’.

Maša.DAT was important.F.SG his love.F.SG.NOM  
 ‘His love was important to Maša.’

- b. Maše bylo važno ego povenije.  
 Maša.DAT was important.N.SG his behavior.N.SG.NOM  
 ‘His behavior was important to Maša.’

For an ongoing discussion of whether adjectival predicatives should be considered short adjectives or a separate category I refer the reader to Bonch-Osmolovskaja (2003) and Say (2013). For the present research it suffices to list the general distributional properties of predicatives, and I leave the question about the category open for future investigation.

## 2.2 Control vs. overt embedded subject diagnostics

### 2.2.1 Obligatory coreference

The first step of analyzing sentences like (2a) is to determine whether coreference between the DP<sub>DAT</sub> and the understood subject of the embedded clause is obligatory and structurally conditioned and not established pragmatically. To do this, I test the common cases of non-obligatory control: long-distance control, non-c-commanding control, and arbitrary reference (Landau 2013). As demonstrated in (4), all attempts to construct sentences like this with a matrix evaluative predicative result in ungrammaticality.<sup>2</sup>

- (4) a. Maša<sub>i</sub> skazala, što Anne<sub>k</sub> važno *ec<sub>i\*/j/\*ARB/k</sub>* ujt<sub>i</sub>.  
 Maša.NOM said that Anna.DAT important.PR leave.INF  
 Only: ‘Maša said that for Anna it was important to leave.’  
 ← attempted long-distance control / arbitrary interpretation
- b. [Kollegam Maši<sub>k</sub>]<sub>i</sub> važno *ec<sub>i\*/j/\*k</sub>* ujt<sub>i</sub>.  
 colleagues.DAT Maša.GEN important.PR leave.INF  
 Only: ‘For Maša’s colleagues it is important to leave.’  
 ← attempted non-c-commanding control

It should further be noted that a silent embedded subject cannot be a *pro*, since it must always be interpreted as a bound variable and, unlike pronominal items, cannot get strict coreference reading, for instance, under ellipsis (5).

- (5) Maše<sub>i</sub> važno *ec<sub>i</sub>* ujt<sub>i</sub> i Anne tože.  
 Maša.DAT important.PR leave.INF and Anna.DAT too  
 Sloppy reading: ‘For Maša it was important to leave and for Anna it was important to leave too.’

Strict reading, not available: ‘... and for Anna it was important for Maša to leave too.’

There are two ways to approach the relation between the DP<sub>DAT</sub> and the embedded subject and to account for their obligatory coreference: (1) to assume that the DP<sub>DAT</sub> is the embedded subject itself (raising / ECM analyses), or (2) to consider the DP<sub>DAT</sub> a controller of a separate entity, namely PRO, in the embedded subject position.

### 2.2.2 The dative DP as the embedded subjects

<sup>2</sup> In these examples I tentatively denote covert embedded subjects as *ec*, so that it remains possible to analyze them either as PRO or (A/A’) traces.

At least in some cases, the dative DP should be unambiguously analyzed as the embedded subject itself, thematically related only to the embedded predicate. First, as demonstrated in (6), the DP<sub>DAT</sub> sometimes refers to a non-sentient object that cannot be an Attitude Holder of the matrix evaluative predicate.

- (6) a. *Važno stroitel'stvu zakončit'sa k koncu goda.*  
 important.PR construction.DAT complete.INF by end year  
 'It is important that the construction be complete by the end of the year.'
- b. *Važno ruke byt' zalečennoj kak možno ran'se.*  
 important.PR arm.DAT be.INF heal.PTCP as soon as possible  
 'It is important that the arm heal as soon as possible.'

Second, the DP<sub>DAT</sub> can be interpreted as a part of an embedded idiomatic expression (7). Assuming that this is only possible when an idiom chunk is thematically related to the idiomatic predicate, we can infer that 'the cat' in (7) is base-generated in a non-finite clause as an argument of 'run'.

- (7) *Očen' važno černoj koške ne probegat' meždu nami*  
 very important.PR black cat.DAT NEG run.INF between us  
 Literally: 'It is very important for a black cat not to run between us.'  
 Idiomatic available: 'It is very important for us not to quarrel.'

Finally, the results for the voice transparency diagnostic, which relies on the fact that passivization of a predicate does not result in a truth-conditional difference between the active and the passive constructions, match the results for the idiom chunks test presented above. As illustrated in (8), a sentence with a passivized embedded predicate can receive the same interpretation as its 'active' counterpart, which implies that, in both cases, the DP<sub>DAT</sub> is a part of the (non-changing) embedded argument structure.

- (8) a. *Malč'iku važno byt' ubitym Voldemortom.*  
 boy.DAT important.PR be.INF kill.PTCP Voldemort.INS  
 (i) 'To the boy it is important to be killed by Voldemort.' (≠ b)  
 (ii) 'It is important that the boy be killed by Voldemort.' (= b)
- b. *Voldemortu važno ubit' malč'ika.*  
 Voldemort.DAT important.PR kill.INF boy.ACC  
 (i) 'To Voldemort it is important to kill the boy.' (≠ a)  
 (ii) 'It is important that Voldemort kill the boy.' (= a)

Importantly, I argue that the DP<sub>DAT</sub> does not have to undergo A movement from the embedded subject position to a matrix position; in other words, the examples above should not be considered instances of true subject-raising.<sup>3</sup> This is supported by adjunct placement: as exemplified in (9), an adjunct that immediately precedes the embedded DP subject can be interpreted as modifying either the matrix predicate or the embedded one; at the same time, an adjunct placed after the dative subject can only be interpreted as embedded.

- (9) a. *Važno bylo ešče včera rane zažit'.*  
 important.PR was just yesterday wound.DAT heal.INF  
 (i) 'Yesterday it was important that the wound would heal.'  
 (ii) 'It was important that the wound would have healed yesterday.'
- b. *Važno bylo rane ešče včera zažit'.*  
 important.PR was wound.DAT just yesterday heal.INF

<sup>3</sup> Although further subject movement into the matrix clause is possible (for instance, A-bar movement under focalization or topicalization), it is not obligatory and does not affect subject licensing.

Only: ‘It was important that the wound would have healed yesterday.’

Note that, even though, in Russian, adjunct movement across a clausal boundary is normally allowed only into a focus / topic position at the very left periphery (Bailyn 2003), within a single clause relatively unrestricted adjunct scrambling is attested; thus, if ‘wound.DAT’ in (b) were located within the matrix clause it would be possible to put the adjunct to the right of it.

### 2.2.3 The dative DP as a matrix Attitude Holder

As demonstrated in Section 2.2.1, in sentences under consideration coreference must be established between the dative DP and the understood embedded subject; however, the two elements can be partially identical. This is demonstrated in (10), where the embedded predicate and the *together*-type modifier in embedded clauses require a semantically plural subject, while the DP<sub>DAT</sub> refers to a singular person.

- (10) a. Maše<sub>i</sub>      važno      PRO<sub>i+</sub> pojti      v kino      vmeste.  
           Maša.DAT important.PR      go.INF      to cinema      together  
           ‘For Maša it is important to go to the cinema together.’  
       b. Maše<sub>i</sub>      važno      PRO<sub>i+</sub> razojtis’      v      sem’.  
           Maša.DAT important.PR      disperse.INF at      seven  
           ‘For Maša it was important to disperse at seven.’

Availability of partial control is one of the strongest arguments for structural presence of PRO and against the DP<sub>DAT</sub> being the embedded subject itself and (see Wurmbrand 2002, Landau 2013, a.o.). Furthermore, as has been noted in Section 2.1, Russian evaluative predicatives allow finite clausal subjects; in this case, a dative Attitude Holder can still be present as an unambiguously non-coreferent item ((2b) repeated in (11)).

- (11) Maše      bylo      važno,      čtoby      Anna      ušla.  
       Maša.DAT was      important.PR so that      Anna.NOM leave.SUBJ  
       ‘To Maša it was important that Anna would leave.’

To summarize, the data presented in this section show that evaluative predicatives support both an analysis in terms of an overt referential embedded subject and obligatory control. The next section will consider the DP/PRO alternation in more detail.

## 3 The DP/PRO alternation

### 3.1 Comparing embedded clauses with covert/overt subjects

It might be suggested that all evaluative predicatives are represented by homonymous pairs – a predicate selecting a clause with an overt subject and an obligatory control predicate that embeds a clause with a PRO subject. In recent literature on non-finite complementation, availability of overt referential subjects is often related to presence of agreement and (semantic or syntactic) tense (see Landau (2004, 2013) and references therein). Adopting such an approach, we would expect embedded clauses with DP<sub>DAT</sub> subjects to differ significantly from embedded constructions with PROs. However, in sentences with a matrix predicative in Russian, no detectable difference can be found between non-finite complements of these two kinds.

First, no infinitive in Russian can be overtly marked for agreement. Thus, unless we want to stipulate covert agreement morphology in some non-finite clauses, clauses with DP and PRO subjects are identical in this respect.

Second, as demonstrated in (12), there is no overt tense morphology present and time reference of all non-finite constituents embedded under a predicative verb is determined in the same way relatively to the time reference of the matrix event.

- (12) a. Včera Marine<sub>i</sub> bylo važno [PRO<sub>i+</sub> pojt<sub>i</sub> v kino vmeste v ponedel'nik].  
 yesterday Marina.DAT was important.PR go.INF to cinema together on Monday  
 'Yesterday it was important for Marina to go to the cinema together on Monday.'
- b. Včera bylo važno [stroitel'stvu zakončit'sja k martu].  
 yesterday was important.PR construction.DAT complete.INF by March  
 'Yesterday it was important that the construction be complete by March.'

In addition to this, in Russian, all embedded non-finite clauses with overt / covert subjects appear to be structurally larger than TP, thus dismissing the idea that availability of subject-raising / ECM correlates with the structural size of a clause (Williams 1987; Lasnik 1998; Chomsky 1999). As illustrated in (13), an embedded constituent can be moved to the embedded left focus position both in sentences with a dative Attitude Holder and in those where the DP<sub>DAT</sub> can only be analyzed as the embedded subject.

- (13) a. Anne<sub>i</sub> bylo važno [TOL'KO SEGODNJA PRO<sub>i+</sub> pojt<sub>i</sub> v kino vmeste].  
 Anna.DAT was important.PR only today go.INF to cinema together.  
 'To Anna it was important that ONLY TODAY they would go to the cinema together.'
- b. Bylo važno [IMENNO K MARTU stroitel'stvu zakončit'sja].  
 was important.PR exactly by March construction.DAT complete.INF  
 'It was important for the construction to be complete exactly BY MARCH.'

Thus, the constructions with embedded non-finite clauses under consideration appear to allow DP / PRO alternation in the same syntactic environment.

### 3.2 The Two-Dative Generalization

The data presented in the previous sections contradict the assumption that referential expressions cannot stay within infinitival clauses (Landau 2004, 2015; Sigurðsson 2008, a.o.) and support Sundaesan and McFadden's (2009) claim that referential DPs can, in principle, appear in any environment as long as independently motivated requirements of grammar are not violated.

I propose the following structural representation for sentences with a matrix predicative and an embedded non-finite clause (14).<sup>4</sup>

- (14) [<sub>AppP</sub> [ Attitude holder ] [<sub>AppI</sub> AppI<sup>0</sup> [<sub>AdjP</sub> Adj<sup>0</sup> [<sub>FinP</sub> DP/PRO Subject ... ]]]]

4 See Grashchenkov & Grashchenkova (2007), Geist (2010), Borik (2014), a.o., for discussions of evaluative adjectives being unaccusative.

As schematized in (14), the embedded subject position is occupied either by an overt DP or PRO; however, the alternation is not entirely free. If it was unrestricted, we would expect sentences with two overt dative DPs – a Holder and the embedded subject – to be grammatical. This prediction is not borne out as examples like (15a) are judged as strictly unacceptable by all native speakers of Russian, even though, in general, two dative DPs can co-occur in a sentence (15b).

(15) a. \*Maše važno [stroitel'stvu zakončit'sja k martu].  
 Maša.DAT important.PR construction.DAT complete.INF by March  
 Intended: 'For Maša it is important for the construction to be complete by March.'

b. Maše<sub>k</sub> važno [Anne<sub>i</sub> PRO<sub>k</sub> pomoč' t<sub>i</sub>].  
 Maša.DAT important.PR Anna.DAT help.INF  
 'For Maša it is important to help Anna.'

To capture the restriction on DP/PRO alternation, I propose the following **Two-Dative Generalization**: the embedded overt referential subject is allowed only when there is no overt (dative) DP controller available within a higher clause.

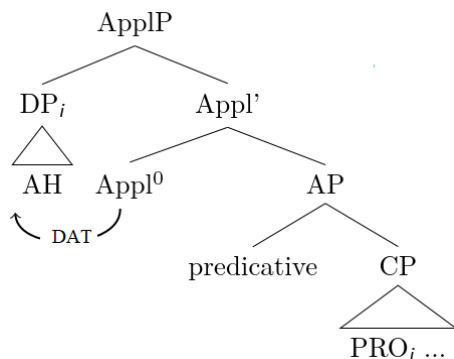
In the next section I further argue that the generalization is best formally accounted for by a cross-clausal Case assignment analysis.

### 3.3 The cross-clausal Case assignment analysis

In essence, I propose that a matrix Appl licenses either an overt Attitude Holder in Spec,ApplP or the embedded DP subject, located at the left edge of its clause; thus, the two end up in complementary distribution competing for the same Case feature.

The structure for sentences with an overt Attitude Holder is given in (16); here, I follow Pylkkänen (2008), Boneh and Nash (2017), a.o., and assume that a holder is introduced in Spec,ApplP and gets structural dative Case from the functional head Appl.

(16)



I further follow Chomsky (1981) and Chomsky and Lasnik (1993) in that overt DPs differ from PRO in requiring Case to be licensed. Since the embedded clause is Case-deficient and there is no other source for 'free' Case available, only PRO merged in the embedded subject position survives derivation.<sup>5</sup>

<sup>5</sup> In Russian, a structural subject case is arguably available within non-finite clauses and manifests itself on embedded subject-oriented semi-predicatives (Comrie 1974; Greenberg 1989; Franks 1990; Franks and Hornstein 1992; Babby 1998; Moore and Perlmutter 2000; Fleisher 2006; Landau 2008, a.o.). However, I argue that the data are more complex than predicted by the existing accounts and require further examination before they could be used as support for clause-internal Case assignment. Consider, for instance, examples in (I) where there are clearly other factors yet to be discovered at play.

(i) a. Petja<sub>i</sub> rešil [PRO<sub>i</sub> sdelat' ??odnomu / samomu zadanije].  
 Petja.NOM decided do.INF alone.DAT himself.DAT task.ACC

As mentioned previously, an Attitude Holder can also be covert; I argue that, in this case, it is still syntactically present as a  $\phi$ P (a weak implicit argument, see Landau's (2010) discussion of silent nominal phrases). On the one hand, a silent Attitude Holder obligatorily controls the embedded PRO subject (17).

- (17) a. Načal'nikam važno, čtoby sotrudniki rabotali bol'she.  
 bosses.DAT important.PR so that employees.NOM work.SUBJ more  
 'For the bosses it is important that the employees work more.'
- b. Sotrudniki govornjat / uznali, čto važno rabotat' bol'she.  
 employees.NOM say learned that important.PR work.INF more  
 (i) 'The employees say / learned that for them it is important to work more.'  
 (ii) '... that for the bosses it is important to work more.'  
 Not available: '... that for the bosses it is important for the employees to work more.'
- c. Sotrudniki uslyšali ot načal'stva, čto važno rabotat' bol'she.  
 employees.NOM heard from bosses that important.PR work.INF more  
 (i) 'The employees heard from the bosses that for them (employees) it is important to work more.'  
 (ii) '... that for the bosses it is important to work more.'  
 Not available: '... that for the bosses it is important for the employees to work more.'

On the other hand, as a DP-less phrase, a covert Attitude Holder does not need Case to be licensed, allowing for the applicative head to assign Case to another DP; thus, an overt embedded subject becomes licit since it receives the required Case. Adhering to the Agree framework (Chomsky 2000, 2001), I treat Case as one of many features that must be valued when a nominal enters into a dependency with a functional head, thus, the proposed downward Case assignment complies with the Agree locality restriction. The structure of such sentences is provided in (18).

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'Petja decided to do the task alone / himself.'

- b. Maša zastavila Petju<sub>i</sub> [PRO<sub>i</sub> sdelat' samomu / samogo zadanije].  
 Maša.NOM forced Petja.ACC do.INF himself.DAT himself.ACC task.ACC  
 'Maša forced Petja to do the task himself.'

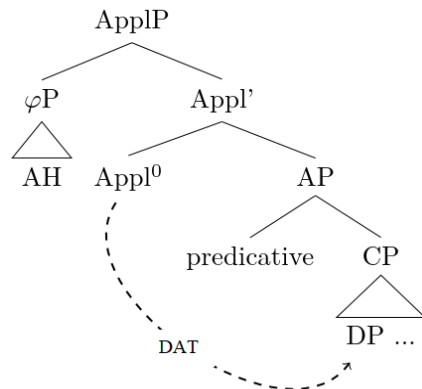
Furthermore, the 'structural' dative case never appears on embedded secondary predicates (Grebenyova 2005; Franks 2014), even though case-concord with the controller is allowed in cases of subject control.

- (ii) a. Petja rešil ne prixodit' bol'she pjanyj / \*pjanomu domoj.  
 Petja.NOM decided NEG come.INF anymore drunk.INS drunk.NOM drunk.DAT home  
 'Petja decided not to come home drunk anymore.'
- b. Maša zastavila Petju pojti pjanyj / \*pjanogo / \*pjanomu domoj.  
 Maša.NOM forced Petja.ACC go.INF drunk.INS drunk.ACC drunk.DAT home.  
 'Maša forced Petja to go home drunk.'

Until we fully account for case concord of semi-predicatives and predicates, the data cannot be considered reliable evidence of the availability of a structural subject case in non-finite clauses.



(18)



A piece of additional support for the proposed analysis comes from sentences with a matrix epistemic modal, such as *vozmožno* ‘possible’, *verojatno* ‘probable’. As demonstrated in (19a, b), these predicates are incompatible with Attitude Holders, i.e. there is no ApplP in the matrix clause. At the same time, overt embedded subjects are prohibited (19c), which suggests that the two phenomena – matrix applied objects and DP subjects in non-finite clausal complements – not only appear but also disappear together.

- (19) a. (\*Maše) vozmožno vstretit’ znakomyx  
Maša.DAT possible.PR meet friends.ACC  
‘It is possible to meet friends.’  
b. (\*Maše) vozmožno čto Anna vstretit znakomyx.  
Maša.DAT possible.PR that Anna.NOM meet.FUT friends.ACC  
‘It is possible that Anna will meet her friends.’  
c. \*Vozmožno stroitel’stvu zakončit’sja k martu.  
possible.PR construction.DAT complete.INF by March  
Intended: ‘It is possible that the construction will be complete by March.’

To summarize, I have demonstrated that Russian evaluative predicatives can embed non-finite clauses with either a covert (PRO) or an overt subject (DP). I argue that, in the first case, obligatory control is established between PRO and a matrix Attitude Holder, while in the second case, the embedded DP subject must be licensed and the only way to do that is via cross-clausal Case assignment by a matrix Appl, which otherwise licenses an overt Attitude Holder. The data under discussion challenge the generally accepted assumption that Russian prohibits long-distance subject raising and ECM-like phenomena (Lasnik 1998) and contribute to the discussion of DP distribution and long-distance A dependencies (Wurmbrand 2018).

#### 4 Expanding the data set

As the second piece of support for the proposal, I would like to present several other constructions that fall under the Two-Dative Generalization and can be accounted for by the proposed analysis in term of cross-clausal Case licensing: modal existential constructions, and the so-called main clause infinitives. An in-depth discussion of all these constructions lies beyond the limits of the paper and I can only refer the reader to Burukina (2019) for more detail; in this section I would like to demonstrate that the DP/PRO alternation is attested in the cases listed above and that it is restricted in the same way as in sentences with matrix evaluative predicatives.

Modal existential constructions (MECs) in Russian consist of a dative DP, a finite existential BE verb that exhibits default third person / neuter singular agreement, an interrogative pronoun and a non-finite clause; semantically, their interpretations involve root existential modality ('can', 'may'). The so-called main clause infinitives are also well-known in the literature on Russian syntax (see Moore and Perlmutter (2000), Fleisher (2006), and references therein). In this case, a non-finite clause combines with a dative DP with the help of the BE copula (covert in present tense);<sup>6</sup> in contrast with MECs, main clause infinitives imply universal modality. In both constructions coreference between the dative DP and the understood subject of the embedded clause is obligatory.

There are ongoing debates on whether, in these constructions, a control relation is established between the dative DP and the embedded PRO subject or the overt embedded subject itself raises to a matrix position. I argue that, just as in the case of evaluative predicatives, the two lines of argumentation should be reconciled to reveal the truth.

On the one hand, both MECs and main clause infinitives exhibit a crucial control property: partial coreference between the dative DP and the covert embedded subject is allowed (20).

- (20) a. Maše<sub>i</sub> jest' kogda PRO<sub>i+</sub> vstretit'sja.  
 Maša.DAT exists when meet.INF  
 'Maša has time to meet.'
- b. Maše<sub>i</sub> jest' čto PRO<sub>i+</sub> vmeste delat'.  
 Maša.DAT exists what together do.INF  
 'Maša has something to do together.'
- c. Petja sčitaet, čto Maše<sub>i</sub> PRO<sub>i+</sub> ne pojti vmeste v kino.  
 Petja.NOM believes that Maše.DAT NEG go.INF together to cinema  
 'Petja believes that Maša cannot go to the cinema together.'

On the other hand, both constructions show positive results for the diagnostics for an overt embedded subject, such as the idiom chunk and non-sentence tests (21).

- (21) a. Černoj koške<sub>i</sub> jest' iz-za čego t<sub>i</sub> probežat' meždu nimi.  
 black cat.DAT exists because of what run.INF between them  
 Idiomatic available: 'They had a reason to quarrel.'  
 Literally: 'The black cat had a reason to run between them.'
- b. Gruzovikam zdes' ne projexat'.  
 trucks.DAT here neg pass.INF  
 'The trucks cannot pass here.'

Furthermore, both MECs and main clause infinitives fall under the proposed Two-Dative Generalization: the matrix dative DP cannot co-occur with an overt embedded subject (22).

- (22) a. \*Nam jest' čto tebe pojest'.  
 we.DAT exists what you.DAT eat.INF  
 Intended: 'We have something for you to eat.'
- b. U nas jest' čto tebe pojest'.  
 at us exists what you.DAT eat.INF

<sup>6</sup> Bi-clausality of main clause infinitives has been demonstrated by Fleisher (2006) (see Moore and Perlmutter (2000) suggesting a monoclausal analysis). Fleisher's arguments include the following: (i) presence of the finite matrix *byt'* 'be', (ii) positioning of (embedded) negation after *byt'*, (iii) co-occurrence of *byt'* with perfective infinitives, normally prohibited in monoclausal constructions. A bi-clausal approach is also implied in Veyrenc (1979), Schein (1982), and Sigurðsson (2002).

- ‘We have something for you to eat.’
- c. \*Pete gruzovikam zdes’ ne projexat’.  
 Petja.DAT trucks.DAT here NEG pass.INF  
 ‘For Peter, the trucks cannot pass here.’

Building upon Simík (2011) and den Dikken (2006), I suggest the following (simplified) structural representations for modal existential constructions (23a) and main clause infinitives (23b).

- (23) a.  $[_{RP} DP_{DAT} [_R R^0 [_{CP} wh [_C C^0 [PRO \text{ infinitive}]]]]]$   
 b.  $[_{RP} DP_{DAT} [_R R^0 [_{CP} PRO \text{ infinitive}]]]$

I argue that the traditional descriptions should be further revised to account for the possibility of an overt embedded subject, licensed by the higher functional head (here, R(elator)) when the matrix participant is an implicit  $\varphi P$ , in the way presented in (24).

- (24) a.  $[_{RP} \varphi P [_R R^0 [_{CP} wh [_C C^0 [DP \text{ infinitive}]]]]]$   
 b.  $[_{RP} \varphi P [_R R^0 [_{CP} DP \text{ infinitive}]]]$

As in the case of sentences with a matrix evaluative predicative and an embedded non-finite clause, the cross-clausal Case assignment analysis might be not the only way to account for the control vs. no control ambiguity of MECs and main clause infinitives. However, the proposed approach can straightforwardly capture the relevant properties noted by the two competitive lines of research.

## 5 Concluding remarks

I have demonstrated that, in Russian, the DP / PRO alternation is attested in non-finite clauses of the same structural size and Tense – Agreement characteristics, embedded under an evaluative predicative. The alternation is restricted by the presence of a potential matrix  $DP_{DAT}$  controller, as lexical embedded subjects are available only when the closest matrix argument (an Attitude Holder) is covert. Thus, it turns out that it is not a lexical subject and PRO that are in complementary distribution, but rather overt embedded subjects and overt potential DP controllers.

We have also seen that the correlation between the presence of a matrix  $DP_{DAT}$  argument and the availability of an embedded  $DP_{DAT}$  subject holds for other kinds of constructions, including epistemic modals, modal existential constructions, and main clause infinitives. The matrix DP and the embedded DP appear to be closely connected, and I propose that this connection and the complementarity follow from the simple fact that the two are licensed by the same functional head – the matrix Appl in the case of evaluative predicatives.

This explanation sides with other approaches to DP / PRO alternation in terms of Case licensing. Adopting the common idea that Case is a feature valued under Agree and the modern version of Case filter (Chomsky 2000, 2001), I argue that a lexical embedded subject can check [uCase] with a matrix applicative head over a clausal boundary, if the Case is not checked by a DP in the Spec,ApplP; in sentences with a matrix evaluative predicative this could happen if the matrix Holder is an implicit  $\varphi P$  that does not have a Case layer (DP / KP).

I further assume that PRO does not need Case to be licensed. Crucially, although I advocate the Case licensing approach, the proposed analysis falls in line (to a certain extent) with approaches that postulate a relatively free distribution of DPs and PRO. This highlights the issue that, in its core, the Case licensing framework does not prohibit overt DPs to be merged as subjects of non-finite clauses, as it merely states that they

will not ‘survive’ in that position without some help from the outside. This contrasts with many ‘non-Case licensing’ approaches, such as Landau’s (2015) Two-Tiered theory of control and Sigurðsson (2008). Although at first glance these analyses agree with, for instance, Sundaresan and McFadden’s (2009) approach in rejecting relevance of Case, they introduce various mechanisms to prevent lexical and PRO subjects from ever appearing in the same embedded environments.

If the proposed analysis is on the right track, the case of cross-clausal Case assignment under consideration falls under the general discussion of various cross-clausal A-dependencies: subject raising and agreement across clause boundaries; see Wurmbrand (2018) for an overview. The Russian constructions complement the already known data and add Appl to the general picture, suggesting that all functional heads on the clausal spine that have Case features are capable of establishing inter-clausal relations with a DP (see Nunes 2009, Şener 2011, and Deal 2017, a.o., for discussions of long-distance feature-sharing with T and Voice/v). This opens many directions for future research. One of them would be examination of languages where applicative heads overtly agree with an applied object; if a similar kind of DP / PRO alternation is attested there, we would expect to find correlation with the agreement pattern. Another would be to find a language with subject raising to Spec,AppIP across a clause boundary.

## References

- Babby, Leonard H. 1998. “Subject control as direct predication: evidence from Russian”. *Formal Approaches to Slavic Linguistics*, edited by Ž. Bošković, S. Franks, and W. Snyder. Ann Arbor, Michigan: Michigan Slavic Publications.
- Bailyn, John F. 2003. “A (purely) derivational account of Russian scrambling”. *Formal Approaches to Slavic Linguistics*, edited by B. Partee, 11:41–62. Michigan Slavic Publications.
- Bonch-Osmolovskaja, Anastasija. 2003. *Konstrukcii s dativnym subjektom v russkom jazyke: opyt korpusnogo issledovanija*. PhD diss., Moscow State University.
- Bondaruk, Anna. 2006. “The licensing of subjects and objects in Irish non-finite clauses”. *Lingua* 116:874–894.
- Boneh, Nora, and Léa Nash. 2017. “The syntax and semantics of dative DPs in Russian ditransitives”. *Natural Language & Linguistic Theory* 35, no. 4: 899–953.
- Borik, Olga. 2014. “The argument structure of long and short form adjectives and participles in Russian”. *Lingua* 149:139–165.
- Burukina, Irina. 2019. *Raising and control in non-finite clausal complementation*. PhD diss. Eötvös Loránd University, Budapest.
- Chomsky, Noam. 1981. *Lectures on government and binding*. Dordrecht. Holland ; Cinnaminson, [N.J.]: Foris Publications.
2000. “Minimalist inquiries: the framework”. *Step by step: essays on minimalist syntax in honor of Howard Lasnik*, edited by R. Martin, D. Michels, and J. Uriagereka, 89–155. Cambridge, MA: MIT Press.
2001. “Derivation by phase”. *Ken Hale: a life in language*, edited by M. Kenstowicz, 1–52. Cambridge, MA: MIT Press.
- Chomsky, Noam, and Howard Lasnik. 1993. “The theory of principles and parameters”. *Syntax: an international handbook of contemporary research*, edited by J. Jacobs, A. von Stechow, W. Sternefeld, and T. Vennemann, 506–569. Berlin: Mouton de Gruyter.
- Comrie, Bernard. 1974. “The second dative: a transformational approach”. *Slavic transformational syntax*, Michigan University Press., edited by R. Brecht and C. Chvany, 123–150. Michigan Slavic materials 10. Ann Arbor.
- Deal, Amy Rose. 2017. “Covert hyperraising to object”. *Proceedings of NELS 47*, edited by A. Lamont and K. Tetzloff.

- Dikken, Marcel den. 2006. *Relators and linkers: the syntax of predication, predicate inversion, and copulas*. Cambridge, Mass: MIT Press.
- Fleisher, Nicholas. 2006. "Russian dative subjects, case, and control". Ms. University of California, Berkeley.
- Franks, Steven. 1990. "Case, configuration and argumenthood: reflections on the second dative". *Russian Linguistics* 14 (3): 231–254.
2014. "The overgeneration problem and the case of semipredicatives in Russian". *Advances in the syntax of DPs. structure, agreement, and case*, edited by A. Bondaruk, G. Dalmi, and A. Grosu, 13–59. Amsterdam: John Benjamins.
- Franks, Steven, and Norbert Hornstein. 1992. "Secondary predication in Russian and proper government of PRO". *Control and grammar*, 1–50. Studies in Linguistics and Philosophy. Springer, Dordrecht.
- Geist, Ljudmila. 2010. "The argument structure of predicate adjectives in Russian". *Russian Linguistics* 34:239–260.
- Grashchenkov, Pavel, and Anna Grashchenkova. 2007. "Argument structure of Russian adjectives". Talk given at the Workshop on argument structure and syntactic relations, Vitoria-Gasteiz.
- Grebenyova, Lydia. 2005. "Agreement in Russian secondary predicates". *Proceedings of the 40th meeting of the Chicago Linguistic Society*, 69–81. Chicago: University of Chicago.
- Greenberg, Gerald R. 1989. "Dative subjects and the second dative within Slavic". *Digest for Philology and Linguistics* 32:45–57.
- Landau, Idan. 2000. *Elements of control: structure and meaning in infinitival constructions*. Dordrecht: Kluwer.
2004. "The scale of finiteness and the calculus of control". *Natural Language & Linguistic Theory* 22 (4): 811–877.
2008. "Two routes of control: evidence from case transmission in Russian". *Natural Language & Linguistic Theory* 26 (4): 877–924.
2010. "The explicit syntax of implicit arguments". *Linguistic Inquiry* 41 (3): 357–388.
2013. *Control in generative grammar: a research companion*. New York: Cambridge University Press.
2015. *A two-tiered theory of control*. Cambridge, Massachusetts: MIT Press.
- Lasnik, Howard. 1998. "Exceptional case marking: perspectives old and new". *Formal Approaches to Slavic Linguistics: the connecticut meeting 1997*, edited by Ž. Bošković, S. Franks, and W. Snyder, 187–211. Michigan Slavic Publications.
- Moore, John, and David M. Perlmutter. 2000. "What does it take to be a dative subject?" *Natural Language & Linguistic Theory* 18 (2): 373–416.
- Nunes, Jairo. 2009. "Brazilian portuguese under minimalist lenses". *Minimalist essays on Brazilian Portuguese syntax*, edited by J. Nunes, 142:3–14. Linguistik Aktuell/Linguistics Today. Amsterdam: John Benjamins.
- Pires, Acrisio. 2007. "The derivation of clausal gerunds". *Syntax* 10 (2): 165–203.
- Pylkkänen, Liina. 2008. *Introducing arguments*. MIT Press
- Say, Sergey. 2013. "On the nature of dative arguments in Russian constructions with "predicatives". *Current studies in Slavic linguistics*, edited by I. Kor Chanine, 225–245. Studies in Language Companion Series 146. Amsterdam: John Benjamins.
- Schein, Barry. 1982. "Non-finite complements in Russian". *Papers in syntax*, edited by A. Marantz and T. Stowell, 217–244. MIT Working Papers in Linguistics 4.
- Şener, Serkan. 2011. "Cross clausal licensing of accusative case on subjects of CPs in Turkish". *Proceedings of NELS 39*, edited by B. Smith, K. Mullin, and S. Lima, 679–690. Amherst, MA: GLSA.
- Sigurðsson, Halldór Á. 2002. "To be an oblique subject: Russian versus Icelandic". *Natural Language & Linguistic Theory* 20:691–724.
2008. "The case of PRO". *Natural Language & Linguistic Theory* 26 (2): 403–450.
- Simík, Radek. 2011. *Modal existential wh-constructions*. PhD diss., University of Groningen.

- Sitaridou, Ioanna. 2007. "Romance infinitives with subjects, subjunctive obviation and control theory". *Coreference, modality, and focus*, edited by L. Eguren and O. Fernández Soriano, 191–219. Amsterdam: John Benjamins.
- Sundaresan, Sandhya, and Thomas McFadden. 2009. "Subject distribution and finiteness in tamil and other languages: selection vs. case". *Journal of South Asian Linguistics* 2 (1).
- Veyrenc, Jacques. 1979. *Les propositions infinitives en russe*. Paris: Institut d'études slaves.
- Williams, Edwin. 1987. "Implicit arguments, the binding theory, and control". *Natural Language & Linguistic Theory* 5 (2): 151–180.
- Wurmbrand, Susi. 2002. "Syntactic versus semantic control". *Linguistik aktuell/linguistics today*, edited by C. J.-W. Zwart and W. Abraham, 53:93–127. Amsterdam: John Benjamins Publishing Company.
2018. "Cross-clausal A-dependencies". *Papers from the 54th regional meeting of the Chicago Linguistic Society*. Chicago Linguistic Society, Chicago, Ill.