# Russian verbs *pomoč*' 'help' and *pomešat*' 'prevent': complex predicate formation vs. embedding a proposition

**Abstract.** This paper examines constructions with the verbs *pomoč* 'help' and *pomešat'* 'prevent' in Russian and demonstrates that, although these verbs are usually listed among object control predicates, they appear in a whole range of constructions that cannot be accounted for by a straightforward control analysis and are hard to describe in terms of a fixed set of selectional specifications. The paper proposes that *pomoč* and *pomešat'* always allow for only one internal argument – an Event. However, instead of a propositional Event, an unsaturated property can be merged in the complement position of these predicates. The property and the matrix lexical verb can form a single complex predicate and, in this case, a dative Beneficiary is introduced to saturate it. If the proposed analysis is on the right track it supports Hale and Keyser's (1993, 2002) claim that, while lexicon imposes some selectional restrictions, a certain degree of freedom is allowed when mapping lexical items to syntactic structure, which can give rise to various syntactic configurations.

#### 1. Introduction

Most of the recent works on non-finite subordination that draw a line between control and raising phenomena attempt to place predicates that can embed a non-finite clause into one of the two groups: those that select a clause with the controlled subject and those that support embedded subject raising (Wurmbrand 2003; Davies and Dubinsky 2004; Landau 2013, a.o.). Several problematic ambiguous cases are already well known: aspectual verbs (Perlmutter 1970), propositional predicates equivalent to believe (Landau 2013), etc. They are usually accounted for by assuming completely distinct structures corresponding to sentences that pass control vs. raising tests and often by postulating lexical ambiguity for the predicates themselves. This relates this issue to another common idea about lexical predicates imposing precise selectional restrictions on the type of a complement they can combine with, which can be traced back to Chomsky (1957, 1965) and Grimshaw (1979), a.o. This assumption has been (partially) questioned by Hale and Keyser (1993, 2002), Hoekstra (2004), Levin and Hovav (2005), a.o., who suggest that a verb can have a complement of different kinds, and the discussion continues.

In this paper I examine Russian predicates *pomoč* 'help' and *pomešat*' 'prevent' and I demonstrate that, despite the fact that these verbs are usually listed among ordinary object control predicates, they appear in a whole range of constructions that cannot be accounted for by a straightforward control analysis and are hard to describe in terms of a fixed set of selectional specifications.

First, *pomoč* 'help' and *pomešat*' 'prevent' allow a dative DP and an embedded non-finite clause. I will show that the former can be base generated as either a matrix

constituent (Beneficiary) or the embedded subject (1). Furthermore, a Beneficiary can appear without an embedded clause (1b).

**(1)** a. Vrač pomog / pomešal Pete vyzdorovet' / rane zažiť. doctor.NOM helped prevented Peter.DAT recover.INF wound.DAT heal.INF 'The doctor helped Peter to recover / prevented Peter from recovering.' / 'The doctor helped the wound to heal / prevented the wound from healing.' b. Vrač pomog / pomešal Pete / \*rane. stopped doctor.NOM helped Peter.DAT wound.DAT 'The doctor helped / stopped Peter.' / Intended: '\*The doctor helped / stopped the wound.'

Second, I will demonstrate that *pomoč* and *pomešat*' can also embed a finite clause as a complement (2), however, in this case, a finite clause and a Beneficiary appear to be in complementary distribution.

(2) Vrač pomog, čtoby Pet'a vyzdorovel. doctor.NOM helped so that Peter.NOM recover.SUBJ 'The doctor helped Peter to recover.'

I argue that the complex distribution of the predicates *pomoč* and *pomešat*', specifically the properties described above, can be fully accounted for if we adopt Hale and Keyser's (1993, 2002) approach to argument structure and allow *pomoč* and *pomešat*' to combine either with a propositional complement or with a property.

I propose that these Russian verbs always allow for only one internal argument – a (usually clausal) Event. However, instead of a propositional Event, an unsaturated property can be merged in the complement position; in this case, the derivation does not necessarily crash. I argue that the property and the matrix lexical verb (*pomoč* or *pomešat*') can form a single complex predicate and a dative Beneficiary is introduced to saturate it. If the proposed analysis is on the right track it supports the idea that, while lexicon imposes some selectional restrictions, a certain degree of freedom is allowed when mapping lexical items to syntactic structure, which can give rise to various syntactic configurations.

The paper continues as follows. Section 2 describes properties of a dative DP and an embedded clause appearing together with *pomoč* or *pomešat'* and demonstrates, first, complementary distribution of a dative DP and a finite subjunctive clause and, second, ambiguity of sentences with a dative DP and a non-finite clause. Section 3 proposes an analysis for the presented data. Section 4 concludes the paper.

#### 2. Mutual distribution of a dative DP and an embedded clause

Similar positive results for some raising diagnostics have been reported for the English verb *prevent* by Aarts (1997), however, his analysis in terms of subject raising cannot account for the Russian data. As will be demonstrated in this paper, in Russian sentences with *pomoč* and *pomešat*' the embedded subject can stay within its clause. Furthermore, such sentences are ambiguous between control and 'overt embedded subject' interpretations.

# 2.1. Overview of the distribution of pomoč and pomešat'

Pomoč and pomešať used as a matrix predicate often appear in constructions with a nominative subject,² a dative DP and an embedded non-finite clause, similarly to, for example, English help.³ However, this is not the only possible context in which these Russian verbs can be used. The predicates also allow an embedded finite subjunctive clause and, furthermore, an embedded clause can be absent (in this case, a single dative DP is present). Below I list possible combinations of various dependent constituents occurring with pomoč or pomešať as a matrix predicate, together with examples (3). In this section I will discuss these options one by one presenting novel data; among other things, I will demonstrate that, as stated in (3c), a dative DP and an argumental finite subjunctive clause are in complementary distribution, and that a sequence of dative DP and an embedded non-finite clause (3d) can be structurally ambiguous with a dative DP base-generated either within or higher than the infinitival clause.

a. *Pomoč* or *pomešat'* + a Beneficiary dative DP + an optional v 'in' PP (3) pomogla / pomešala Anne  $\mathbf{V}$ poiske podarka. Marv.NOM helped prevented search present.GEN Ann.DAT in 'Mary helped / prevented Ann to search for a present.' b. *Pomoč* or *pomešat*' + an Event dative (eventive) DP Maša pomogla / pomešala Aninomu postupleniju v universitet. prevented Ann.ADJ entering.DAT into university 'Mary helped / prevented Ann to enter the university.' c. *Pomoč* or *pomešat*' + a finite subjunctive clause pomogla / pomešala, čtoby Anna sdala ekzamen. Marv.NOM helped prevented so that Ann.NOM pass.SUBJ exam.ACC 'Mary helped / prevented Ann to pass the exam.' d. *Pomoč* or *pomešat*' + a dative DP + a non-finite clause Maša pomogla / pomešala Anne sdat' ekzamen. prevented Ann.DAT pass.INF exam.ACC Marv.NOM helped 'Mary helped / prevented Ann to pass the exam.'

As illustrated in (4), both *pomoč* and *pomešať* prohibit accusative direct objects and can occur only together with a dative DP. Furthermore, *pomoč* and *pomešať* cannot be passivized (see ungrammatical passive participle, personal -*sja* passive and impersonal -*sja* passive forms in (5)).

Thematically, the subject of *pomoč* or *pomešat* is an Agent or a Cause (i).

<sup>(</sup>i) Ploxaja pogoda pomogla kapitanu izbežat' ataki piratov. bad weather.NOM helped captain.DATavoid.INF attack.GEN pirates.GEN 'The bad weather helped the captain to avoid pirate's attack.'

It should be noticed that, although the distribution of *pomoč* and *pomešat'* in Russian resembles that of English verbs *help* and *prevent*, which I primarily use throughout this paper to translate the examples, they are not identical. For example, Russian *pomešat'* is distributionally similar to both *prevent* and *stop*, however, it differs from both of these verbs in prohibiting an accusative direct object.

- **(4)** a. \*Ploxaia pogoda/ rusalka pomogla / pomešala kapitana. weather.NOM mermaid.NOM helped stopped captain.ACC Intended: 'The bad weather / a mermaid helped / stopped the captain.' b. \*Ploxaja pogoda/ rusalka pomogla / pomešala poezdku. weather.NOM mermaid.NOM helped prevented journey.ACC Intended: 'The bad weather / a mermaid helped / prevented the journey.'
- (5) pomogla / pomešala Maše. a. Anna Ann.NOM helped stopped Marv.DAT 'Ann helped Mary / prevented Mary from doing something.' b. \*Maša pomoglas' / pomešalas'. Mary.F.NOM helped.F.PASS stopped.F.PASS. Intended: 'Mary was helped / was stopped.' c. \*Maša byla pomožena / pomešana. help.F.PTCP Mary.F.NOM was stop.F.PTCP Intended: 'Mary was helped / was stopped.' d. \*Maše pomoglos' / pomešalos'. helped.N.PASS stopped.N.PASS Mary.DAT Intended: '\*It was helped / stopped to Mary.' e. \*Maše bylo pomoženo pomešano. Marv.DAT was help.N.PTCP stop.N.PTCP Intended: '\*It was helped / stopped to Mary.'

## 2.2. Introducing a dative Beneficiary

A dative DP appearing without an embedded clause is often interpreted as a Beneficiary (see the examples in the previous subsection); it is optional (6) and does not alternate with a prepositional phrase. Notice that, although there is no grammatical restriction on a Beneficiary DP (for example, it is not necessarily [+animate]), there is a semantic restriction: a Beneficiary normally refers to a sentient being or a group of beings (7).

- (6) Otkuda u teb'a den'gi? Bog pomog! where at you.GEN money God.NOM helped 'Where did you get the money? God helped (me)!'
- (7) a. Maša pomogla kompanii / strane. Mary.NOM helped company.DAT country.DAT 'Mary helped the company / the country.' b. \*Maša zdaniju / pomogla rane. Mary.NOM helped building.DAT wound.DAT Intended: '\*Mary helped the building / the wound.'

Syntactically, a dative Beneficiary cannot control into secondary predicates or purpose clauses (similarly to other non-subject dative DPs in Russian). It also cannot bind a reflexive pronoun, as all reflexive pronouns in Russian (seb'a, svoj) are subject-oriented. However, a Beneficiary can be optionally accompanied by a v'in' PP

that refers to the *Event* with respect to which either help is provided or interference appears (8) – in this case, a Beneficiary DP can bind a reciprocal pronoun embedded within the PP (8b).

(8) a. Maša devočkam v pomogla poiske knig. Mary.NOM helped girls.DAT search books.GEN in 'Mary helped the girls in searching for the books.' b. Maša pomogla devočkam; v poiske drug druga<sub>i</sub>. girls.DAT Mary.NOM helped in search each other.GEN 'Mary helped the girls in searching for each other.'

## 2.3. Introducing a non-clausal Event

As demonstrated in (3b) and (9), *pomoč* and *pomešat*' allow a dative DP that refers to an Event that is happening (in case of *pomoč* 'help') or not happening (in case of *pomešat* 'prevent') because of the Agent's behavior or the Cause.<sup>4</sup> The two dative DPs – a Beneficiary and an Event – cannot co-occur (10), even though this combination is logically possible, and a Beneficiary and an Event can be introduced simultaneously if the latter is either a clause or a  $\nu$  'in' PP (see, for example, (10a) in contrast with (10b) and (10c)).

- (9) Rosturizm pomog prodaže turov v Egipet. Russiatourism.NOM helped sale.DAT tours.GEN into Egypt 'Russiatourism helped to sell tours to Egypt.'
- (10)a. \*Rosturizm pomog agentstvam prodaže turov v Egipet. Russiatourism.NOM helped agencies.DAT sale.DAT tours.GEN into Egypt Intended: 'Russiatourism helped the agencies to sell tours to Egypt.' b. Rosturizm pomog agentstvam v prodaže turov v Egipet. Russiatourism.NOM helped agencies.DAT in sale tours.GEN into Egypt Intended: 'Russiatourism helped the agencies to sell tours to Egypt.' c. Rosturizm pomog agentstvam prodavat' tury Russiatourism.NOM helped agencies.DAT sell.INF tours.ACC into Egypt Intended: 'Russiatourism helped the agencies to sell tours to Egypt.'

When the Event is introduced by a v 'in' PP, the question arises whether this PP is an adjunct or occupies an argumental position. An Event PP does not pattern with adjunct PPs in at least two aspects. First, as shown in (11), only an Event PP but not an adjunct PP can contain a reciprocal pronoun bound by the Beneficiary.

(11) a. Marina pomogla / pomešala mal'čikam, v poiske drug druga,

Notice that the data from the National Corpus of Russian demonstrate that nominal Events are much less frequent than nominal Beneficiaries: for example, searching for a sequence of pomoč or pomešat' and (within a 1-2 interval) an inanimate dative DP preceding a dot returns only 12 Event and around 75 inanimate Beneficiary (nouns equivalent to English company, country, project, etc.) entrances among the first 100 results.

Marina.NOM helped stopped boys.DAT in search each\_other.GEN 'Marina helped / prevented the boys to search for each other.'
b. \*Marina pomogla / pomešala mal'čikam; radi drug druga;.
Marina.NOM helped stopped boys.DAT for each\_other
Intended: '\*Marina helped / stopped the boys for the sake of each other.'

Second, as illustrated in (12), ordinary adjuncts but not an Event v 'in' PP can be stranded if a VP is topicalized.<sup>5</sup>

(12)a. Pomogat' Pete Marina budet [na ekzamene] SAMA. help.INF Peter.DAT Marina.NOM will herself at exam 'Marina will HERSELF help Peter at the exam.' b. \*Pomogat' Pete Marina budet [v poiske podarka] SAMA. Peter.DAT Marina.NOM will in search present.GEN herself help.INF 'Marina will HERSELF help Peter to search for a present.'

Based on these properties of an Event PP, I argue that it is not an adjunct but a complement within VP. I will further discuss PP Events in section 3. Most frequently, however, an Event is expressed as a clause; as was mentioned earlier, *pomoč* and *pomešat*' can embed a finite subjunctive or a non-finite clause. I will turn to these cases in the next subsections where I will examine mutual distribution of a Beneficiary and a clausal Event.

#### 2.4. A dative DP and an embedded finite clause

## 2.4.1. A single subjunctive clause – a complement or an adjunct?

First, I will focus on constructions with *pomoč* or *pomešat*' as the matrix predicate and an embedded finite subjunctive clause; an example is given in (13a), reproduced from (3c). Although intuitively (13a) is equivalent to (13b) and it seems plausible to analyze it as involving an Event, additional diagnostics should be applied to demonstrate that the subjunctive clause in this example is indeed an argument (a complement) and not an adjunct.

(13)a. Maša pomogla, čtoby Anna sdala ekzamen. helped so that Ann.NOM Mary.NOM pass.SUBJ exam.ACC 'Mary helped Ann to pass the exam.' b. Maša pomogla sdat' Anne ekzamen. Mary.NOM helped Ann.DAT pass.INF exam.ACC 'Mary helped Ann to pass the exam.'

As illustrated in (14a), subjunctive *čtoby* clauses in Russian are often used as purpose / goal adjuncts, and sometimes a sentence receives two different interpretations that are hard to distinguish without a proper context (14b).

In Russian a constituent at the right edge of a clause can often be interpreted as a focus which could make the comparison more difficult. Because of this, in the examples in (12), independent right edge focus is also present.

(14) a. Maša pomogla Anne<sub>i</sub> podgotovit'sja, čtoby ona<sub>i</sub> sdala ekzamen.

Mary.NOM helped Ann.DAT prepare.INF so that she pass.SUBJ exam.ACC

'Mary helped Ann prepare so that she could pass the exam.'

- b. Maša pomogla, čtoby Anna sdala ekzamen.
- Mary.NOM helped so that Ann.NOM pass.SUBJ exam.ACC
- (i) 'Mary helped Ann to pass the exam.' argument clause
- (ii) 'Mary helped (to do something), so that Ann would pass the exam.' adjunct clause

A clearer interpretational distinction between an argument subjunctive clause and a purpose clause can be made when the matrix predicate is negated. Thus, the sentence in (15) yields two distinct implications depending on the reading of the *čtoby* clause: if the clause is interpreted as a complement, we can confer that Marina didn't help Ann to pass the exam because she wasn't interested in Ann's success. If the subjunctive clause is interpreted as a purpose adjunct, a possible implication is that Marina actually wanted Ann to succeed at the exam and that's why she didn't do something unmentioned.

- (15) Marina ne pomogla, čtoby Anna sdala examen.

  Marina.NOM not helped so that Ann.NOM pass.SUBJ exam.ACC
- (i) 'Marina didn't help Ann to pass the exam.' Marina wasn't interested in Ann passing the exam.
- (ii) 'Marina didn't help (to do something), so that Ann would pass the exam.' *Marina was interested in Ann passing the exam*.

There are at least two syntactic tests that can help to determine whether an embedded subjunctive clause can be analyzed as a complement. First, adjunct clauses are typically syntactic islands (as per Huang's (1982) Condition on Extracting Domain), that is, they are opaque for sub-extraction, while it is often possible to move a constituent out of an embedded complement clause. In (16) I compare a subjunctive clause embedded under *pomoč* 'help' with an adjunct subjunctive clause and a complement subjunctive clause of a desiderative predicate (*hotet*' 'want'); it turns out that the former patterns with complement clauses in that a constituent can be extracted out of it.

(16)a. Kuda<sub>i</sub> Maša pomogla, čtoby Pet'a postupil  $t_i$ ? so that Peter.NOM enter.SUBJ Mary.NOM helped where 'Where did Mary help Peter to get accepted?' b. \*Kuda<sub>i</sub> Maša zaplatila, čtoby Pet'a postupil t<sub>i</sub>? so that Peter.NOM enter.SUBJ where Mary.NOM paid '\*Where did Mary pay so that Peter would get accepted?' c. Kuda<sub>i</sub> Maša xotela, čtoby Pet'a postupil t<sub>i</sub>? Mary.NOM wanted so that Peter.NOM enter.SUBJ where 'Where did Mary want for Peter to get accepted?'

Second, a complement subjunctive clause is hard to dislocate to the left (17b). A purpose clause is merged structurally higher than a complement clause; as an adjunct, it is usually linearized either at the right or at the left edge of the clause (17c). In contrast, an embedded complement clause normally linearly follows the predicate; for example, it is hard to focus it, and even in this case right edge focus is preferable. As illustrated in (17a), if a subjunctive clause embedded in a sentence with the *pomoč* or *pomešat*' appears at the left edge, it can only be interpreted as a Purpose adjunct, not as an Event complement.

(17) a. Čtoby Pet'a postupil v vuz, Maša pomogla. so that Peter.NOM enter.SUBJ into university Mary.NOM helped Intended, not available: 'Mary helped Peter to get accepted into a university.' Available: 'Mary helped (to do something), so that Peter would get accepted into a university.'

b. ?\*Čtoby Pet'a postupil v vuz, Maša xotela.
so that Peter.NOM enter.SUBJ into university Mary.NOM wanted
Intended: 'Mary wanted for Peter to get accepted into a university.'
c. Čtoby Pet'a postupil v vuz, Maša zaplatila.
so that Peter.NOM enter.SUBJ into university Mary.NOM paid
'Mary paid so that Peter would get accepted into a university.'

To summarize, the results for the diagnostics presented above suggest that a single subjunctive clause embedded under *pomoč* or *pomešat'* should be analyzed as a complement.

## 2.4.2. Complementarity of an Event subjunctive clause and a Beneficiary

So far, I have provided examples with a single subjunctive clause. The question arises whether, in the case of *pomoč* or *pomešat*', an Event finite clause can co-occur with a Beneficiary dative DP. The answer is not easy to give, as, for example, in sentences similar to that in (18a), an embedded clause is most naturally analyzed as a purpose adjunct (as in (18b)).

(18) a. Maša pomogla Pete, čtoby on postupil v vuz.

Mary.NOM helped Peter.DAT so that he enter.SUBJ into university
'Mary helped Peter, so that he would get accepted into a university.'

Questionable: 'Mary helped Peter to get accepted into a university.'

b. Maša pomogla Svete den'gami, čtoby Pet'a postupil

v vuz.

Mary.NOM helped Sveta.DAT money.INS so that Peter.NOM enter.SUBJ into university

'Mary helped Sveta by giving her money, so that Peter would get accepted into a university.'

First, we can check if sentences with a negated matrix predicate can yield two distinct interpretations. Speakers' judgments suggest that in (19) only one reading is available.

Furthermore, similar examples with an Event reading for a subjunctive clause cannot be found in corpora (including the National Corpus of Russian) or by Google.

(19) ?Marina ne pomogla Anne<sub>i</sub>, čtoby ona<sub>i</sub> sdala examen.

Marina.NOM not helped Ann.DATso that she pass.SUBJ exam.ACC

'Marina didn't help Ann, so that she would pass the exam.' – Marina was interested in Ann's success.

Not available: 'Marina didn't help Ann to pass the exam.'

Second, the familiar set of syntactic diagnostics can be applied to check whether an embedded clause in, for example, (18a) is an adjunct or an argument: the sub-extraction test and the dislocation test. The results, illustrated in (20) and (21), suggest that when a dative DP is present an embedded subjunctive clause should be analyzed as an adjunct. Thus, it turns out that with the verbs *pomoč* and *pomešat*' it is impossible for a dative DP and a subjunctive complement clause to combine.

(20)a. ?\*Kuda<sub>i</sub> Maša pomogla Pete, čtoby on postupil  $t_i$ ? Mary.NOM helped Peter.DAT so that he where enter.SUBJ '\*Where did Mary help Peter so that he would get accepted?' Questionable: 'Where did Mary helped Peter to get accepted to?' b. \* Kuda<sub>i</sub> Maša pomogla Svete den'gami, čtoby Pet'a postupil t<sub>i</sub>. where Mary.NOM helped Sveta.DAT money.INS so that Peter.NOM enter.SUBJ

Intended: '\*Where did Mary help Sveta by giving her money so that Peter would get accepted?'

a. Čtoby on<sub>i</sub> postupil (21)v vuz, Maša pomogla Pete<sub>i</sub>. he enter.SUBJ into university Mary.NOM helped Peter.DAT 'Mary help Peter so that he would get accepted into a university' Questionable: Mary helped Peter to get accepted into a university.' b. Čtoby Pet'a<sub>i</sub> postupil v vuz, Maša pomogla emu<sub>i</sub>. so that Peter.NOM enter.SUBJ into university Mary.NOM helped he.DAT 'Mary help Peter so that he would get accepted into a university.' c. Čtoby Pet'a postupil v universitet, Maša pomogla Svete den'gami. so that Sveta.DAT Peter.NOM enter.SUBJ into university Mary.NOM helped

'Mary helped Sveta giving her money so that Peter would get accepted into a university.'

money.INS

I argue that there is no evidence for co-occurrence of a dative DP and a finite subjunctive clause in a sentence with a matrix *pomoč* or *pomešat'* predicate, and that the two constituents are in complementary distribution. Such complementarity is unusual among Russian verbs that can embed a DP and a clausal complement (22). However, it matches another property of *pomoč* and *pomešat'* – complementarity of nominal Beneficiaries and Events discussed in subsection 2.1 (10).

zastavl'ala Marinu<sub>i</sub>, (22)a. Maša ne čtoby onai ušla. Mary.NOM not forced Marina.ACC so that she leave.SUBJ 'Mary didn't force Marina to leave.' b. Maša ne velela uhodila. Marine<sub>i</sub>, čtoby onai Mary.NOM not ordered Marina.DAT so that she leave.SUBJ 'Mary didn't order Marina to leave.'

In the next subsection I will proceed by focusing on sentences with a dative DP and an embedded non-finite clause. I will demonstrate that they correspond to one of two underlying structures: (i) embedding a single clause with an overt dative subject or (ii) containing a matrix dative DP and a separate non-finite constituent.

#### 2.5. A dative DP and an embedded non-finite clause

## 2.5.1. Obligatory coreference

In this subsection I will consider constructions with pomoč or pomešať as a matrix predicate, a dative DP and an embedded non-finite clause. As was mentioned in the first section, pomoč and pomešať are usually listed among object control verbs (Arylova 2006; Bailyn 2012); however, I will demonstrate, first, that there is no evidence for the presence of PRO within a non-finite clause embedded under pomoč or pomešat', and second, that sentences with these predicates can pass diagnostics for a dative DP being base-generated within an infinitival constituent.

In sentences with pomoč and pomešat' the understood subject of an embedded non-finite clause must co-refer with a dative DP (23). In the examples below I tentatively denote an embedded subject as ec, to avoid calling it PRO, trace or variable.

(23)skazala, čto Svetai pomogla Pete; a. Marina<sub>k</sub>  $ec_{i/*i/*k}$  sdat' ekzamen. Marina.NOM said that Sveta.NOM helped Peter.DAT pass.INF exam.ACC 'Marina said that Sveta had helped Peter to pass the exam.' pomogla [druzjam b. Marina<sub>k</sub> Peti<sub>i</sub>]<sub>i</sub> sdat' ekzamen.  $ec_{i/i/*k}$ friends.DAT Peter.GEN Marina.NOM helped pass.INF exam.ACC 'Marina helped Peter's friends to pass the exam.'

As proposed by Wurmbrand (2002), a.o., structural presence of PRO is usually justified by availability of partial control (and / or split control), that is, partial although obligatory coreference between PRO and its controller; see, for example, constructions with partial and split control in English in (24), where the embedded predicate – gather – requires a plural Agent, while the controller – the director – is syntactically and semantically singular.

- (24) a. The director<sub>i</sub> promised [PRO<sub>i+</sub> to gather at six].
  - b. The director<sub>i</sub> promised John<sub>i</sub> [PRO<sub>i+j</sub> to gather at six].

In Russian, some of the control predicates support split and / or partial control. This can be tested using an embedded item that would require a plural subject: raz - sja verbs (rashodit'sja 'disperse', razrugat'sja 'quarrel'), which require a semantically plural Agent, and together-type modifiers, which must be related to a plural DP. In (25) I illustrate partial control in sentences with the verb ubedit' 'persuade' and the evaluative adjectival predicate važno 'important'.

(25)a. Ivank ubedil direktora:  $PRO_{i+k}$ razojtis' v sem'. Ivan.NOM persuaded director.ACC disperse.INF in seven 'Ivan persuaded the director to disperse at seven.' b. Direktork ubedil Ivana<sub>i</sub> PRO<sub>i+k</sub> podgotoviť otčet vmeste. director.NOM persuaded Ivan.ACC prepare.INF report.ACC together 'The director persuaded Ivan to prepare a report together.' PRO<sub>i+</sub> razoitis' c. Ivanu važno v sem'. disperse.INF in seven Ivan.DAT important.N.SG 'To Ivan, it is important to disperse at seven.' d. Direktoru, važno PRO<sub>i+</sub> podgotovit' otčet vmeste. prepare.INF report.ACC together director.DAT important.N.SG 'To the director, it is important to prepare a report together.'

In sentences with  $pomo\check{c}$  or  $pome\check{s}at'$ , however, coreference between the dative DP and the embedded subject must be strict and cannot be partial. As illustrated in (26), examples with a raz - sja verb or a together-type modifier in the embedded clause and a semantically / syntactically singular controller within the matrix clause are considered ungrammatical by native speakers.

a. \*Ivan<sub>k</sub> (25)pomešal direktoru<sub>i</sub> razojtis' v sem'.  $ec_{i+k}$ prevented director.DAT disperse.INF Ivan.NOM in seven Intended: 'Ivan did not let the director disperse at seven.' b. \*Direktor<sub>k</sub> pomog Ivanu<sub>i</sub>  $ec_{i+k}$  podgotovit' otčet vmeste. director.NOM helped prepare.INF report.ACC together Ivan.DAT Intended: 'The director helped Ivan to prepare a report together.'

Therefore, there is no clear evidence that a dative DP and an embedded subject are related via control; they can be connected via predication or the dative DP might be the embedded subject itself. I will come back to this question in the next subsections.

## 2.5.2. The dative DP as the embedded subject

In order to determine whether the dative DP belongs to the embedded clause the standard set of diagnostics should be applied: the idiom chunk test and the embedded passivization test. First, it is assumed that an expression retains its idiomatic reading only if all the components are base-generated together within one clause; for example, in English *Tina believed the cat to be out of the bag by now* retains the idiomatic interpretation 'Tina believed that by now the secret had been revealed', which suggests that *the cat* is merged together with the embedded predicate and other parts of the

idiom. In contrast, *Tina persuaded the cat to be out of the bag* has only the literal interpretation, which entails that *the cat* in this case is a matrix argument (the English examples are taken from Davies and Dubinsky 2004). For Russian, the idiom *černaja koška probežala meždu nimi* 'the black cat run between them' (idiomatic reading: 'they quarreled') is helpful. Unlike, for example, implicative object control verbs or proper subject control verbs, sentences with *pomoč* or *pomešat*' support the idiomatic interpretation of the embedded idiom (27); this implies that, in case of *pomoč* or *pomešat*', the dative DP ' the black cat' is initially related to the embedded predicate and can be interpreted as a part of the idiom.

koške probežať (27)a. Ja pomešal černoi meždu nimi. prevented black cat.DAT run.INF between them Lit. 'I prevented the black cat from running between them.' Idiomatic, available: 'I prevented them from quarreling.' b. Černaja koška ne xotela probežat' meždu nimi. black cat.NOM not wanted run.INF between them Lit. 'The black cat didn't want to run between them.' Idiomatic, not available: 'They didn't want to quarrel.' c. Ja vvnudil černuju košku probežat' meždu nimi. forced black cat.ACC run.INF between them Lit. 'I forced the black cat from running between them.' Idiomatic, not available: 'I forced them to quarrel.'

*Pomoč* and *pomešat* also pass the embedded passivization test: sentences with embedded passives (28a and 28c) can receive the same interpretations as parallel sentences with embedded active constructions (28b and 28d), in contrast with sentences with ordinary object control verbs (see distinct interpretations for (28e) and (28f)). This behavior further suggests that the dative DP receives a thematic role from the embedded predicate and not from the matrix one.

(28)pomešaem mal'čiku bvt' ubitvm Voldemortom. a. My prevent.FUT boy.DAT be.INF killed.PTCP Voldemort.INST 'We will prevent the boy from being killed by Voldemort.' ≠ b. My pomešaem Voldemortu ubit' prevent.FUT Voldemort.DAT kill.INF boy.ACC we 'We will prevent Voldemort from killing the boy.' zalečiťsja pomožet rane kak možno bystree. ointment.NOM help.FUT wound.DAT heal.PASS.INF as soon as possible 'The ointment will heal the wound as soon as possible.' = d. Maz'pomožet zalečiť ranu kak možno bystree. as soon as possible ointment.NOM help.FUT heal.INF wound.ACC 'The ointment will heal the wound as soon as possible.' e. My vynudim mal'čika Voldemortom. byt' ubitym force.FUT boy.ACC killed.PTCP Voldemort.INST be.INF 'We will force the boy to be killed by Voldemort.' ≠ f. Myvynudim Voldemorta ubit' mal'čika. force.FUT Voldemort.ACCkill.INF boy.ACC

'We will force Voldemort to kill the boy.'

These results for the embedded subject diagnostics suggest that in sentences with *pomoč* or *pomešat*' a dative DP can be base-generated within an embedded clause. This is additionally supported by the fact that a dative DP used together with an embedded clause does not have to comply with the requirements imposed on a sole matrix Beneficiary, that is, it can refer to a non-sentient object; compare, for example, (29a) and (29b).

a. Vaša politika pomešaet zdaniju byt' dostroennym. your policy.NOM prevent.FUT building.DAT be.INF complete.PTCP 'Your policy will prevent the building from being completed.'
 b. \*Vaša politika pomešaet zdaniju. your policy.NOM prevent.FUT building.DAT Intended: '\*Your policy will prevent the building.'

The next step is to test whether the overt dative embedded subject stays within its clause or moves to a matrix position (Raising-to-Object or Subject-to-Object raising). I will discuss this issue in the next subsections.

#### 2.5.3. The dative DP as a surface constituent of the embedded clause

There are several phenomena that are clause-bound, especially when occuring within an embedded context: licensing of Negative Polarity Items (NPIs) and merge of adverbial adjuncts.

First, NPIs in Russian (negative *ni*- pronouns: *nikto* 'nobody', *nigde* 'nowhere', etc.) must be bound by a sentential negation; as illustrated in (30a), licensing is local, that is, a sentential negation in an embedded clause cannot license NPIs in a matrix clause. In contrast with sentences with an implicative verb and a matrix object controller, constructions with *pomoč* and *pomešat*' allow a dative DP to be an NPI when a sentential negation is present not in the matrix clause but in the embedded clause (30b, 30c).

(30)a. Direktor ugovoril vsex<sub>i</sub>/ \*nikogo<sub>i</sub> [PRO<sub>i</sub> ne brat' iz korobki]. den'gi director.NOM persuaded everybody.ACCnobody.ACC not take.INF money from box 'The director persuaded everybody not to take money from the box.' pomogli nikomu b. Vrači ne zabolet'. doctors.NOM helped nobody.DAT not get ill.INF 'The doctors helped everybody not to get ill.' c. Xranitel'nica pomogla ničemu propast'. helped nothing.DAT not curator.NOM disappear.INF 'The curator helped to keep everything.' Lit.: '\*The curator helped everything not to get lost.'

Second, an adjunct that modifies an embedded predicate must be merged within the embedded clause; therefore, its surface position can be used to indicate the edges of an embedded clause.<sup>6</sup> As demonstrated in (31a), in sentences with *pomoč* and *pomešat*' an adjunct that linearly precedes a dative DP can be interpreted as related either to the matrix predicate or to the embedded one; the ambiguity can be resolved if an additional semantically 'conflicting' adjunct is introduced (31b).

(31) a. Volšebnik pomog nemedlenno rane zažit'.
wizard.NOM helped immediately wound.DAT heal.INF
(i) 'The wizard helped the wound to heal immediately.',
(ii) 'The wizard immediately helped the wound to heal.'
b. ?Volšebnik pomog nemedlenno rane zažit' do zakata.
wizard.NOM helped immediately wound.DAT heal.INF by sunset
'\*The wizard immediately helped the wound to heal by sunset.'

It turns out that the dative DP can stay within its embedded clause and does not have to move into a matrix position. However, as will be demonstrated in the next subsection, the data are more complex and, at least in some cases, a dative DP appearing together with an embedded non-finite clause exhibits properties of a matrix constituent.

#### 2.5.4. The dative DP as a matrix constituent

First, a dative DP co-occurring with a non-finite clause obeys binding conditions A and B within the local domain that includes the matrix verbs. (32a) demonstrates that a pronominal embedded in the infinitival clause can be coreferent with the matrix subject, because the latter is not within the local domain of the former. However, the dative pronominal in a sentence with *pomoč'* and *pomešat'* cannot be coreferent with the subject (32b).

(32) a. Mašai pomogla Pete poexat' s neji v gorod.

Mary.NOM persuaded Peter.DAT go.INF with her into city
'Mary helped Peter to go with her to the city.'

b. Mašai sama pomešala sebei / ej\*i/k poexat' s Petej v gorod.

Mary.NOM herself prevented herself.DAT her.DATgo.INF with Peter into city
'Mary herself prevented herself to go to the city with Peter.'

Similarly, the reciprocal pronoun *drug druga* 'each other', which must be locally bound withing a minimal clause with a (silent) subject (33a), appears in dative case in sentences with *pomoč* and *pomešat*' and is interpreted as coreferent with the matrix subject (33b).

It might be suggested that the example in (31a) with the adjunct interpreted as an embedded one is a result of the long-distant scrambling. However, as has been demonstrated by Bailyn (2003) and others, the long-distance scrambling in Russian is normally limited to a movement of a constituent from the embedded clause into the right focus position of the matrix clause.

(33)a. Mal'čiki<sub>k</sub> ugovorili Marinu<sub>i</sub> [PRO<sub>i</sub> obn'at' drug druga\*1. persuaded each other.ACC boys.NOM Marina.ACC hug.INF 'The boys persuaded Marina to hug each other.' b. Deti pomogli drug drugui sdelat' domašnee zadanie. children.NOM helped each other.DAT do.INF homework 'The children helped each other to do the homework.'

Second, and most importantly, the dative DP can be separated from the embedded non-finite clause by a matrix adjunct (34).

(34) Želaju, čtoby vy pomogli reb'onku vse vmeste adaptirovat'sja. wish.1SG so that you.PL.NOM help.SUBJ child.DAT all together adapt.INF Lit.: 'I wish that you would altogether help the child adapt.'

In the next subsection I will address the question of how to interpret the results for these diagnostics. I will argue that no real subject raising takes place and that the dative DP under consideration is base generated either within the embedded clause (= the embedded subject) or the matrix clause (= a Beneficiary).

## 2.5.5. Against a subject raising analysis

At first glance, the results for movement diagnostics demonstrated in the previous subsection seem to suggest that the embedded dative subject optionally moves to an (A) position within a matrix clause. However, it appears that sentences with those DPs that are most straightforwardly interpreted as embedded subjects (inanimate nouns and parts of idioms) show negative results for movement tests, for example, the inserted adjunct diagnostic (compare (34) and (35)).

- (35) a. \*Eta maz' pomožet rane nemedlenno zažit' do zakata. this ointment.NOM help.FUT wound.DAT immediately heal.INF by sunset Intended: '\*This ointment will immediately help the wound to heal by the sunset.'
  - b. \*Ministry pomogli stroitel'stvu vse vmeste zakončit'sja vovrem'a. ministers.NOM helped building.DATall together finish.INF in time Intended: 'The ministers altogether helped to finish construction in time.' c. Želaju, čtoby vy pomogli čërnoj koške vse vmeste probežat' meždu nimi.

wish.1SG so that you.PL.NOM help.SUBJ black cat.DAT all together run.INF between them

Lit.: 'I wish that you would altogether help the black cat to run between them.' Idiomatic, not available: 'I wish that you would altogether help them to quarrel.'

Another piece of support for the idea that in sentences with a dative DP and an embedded non-finite clause the former can correspond either to the embedded subject or to a matrix constituent comes from the results for constituency tests. A dative DP that can only be interpreted as the embedded subject cannot stay behind when the rest

of the non-finite clause is moved, for example, in pseudo cleft constructions. In (36) I provide several examples to highlight the contrast between the behavior of overt embedded subjects and matrix constituents.

(36)a. \*V čom pomogla rane, maz' tak eto zažiť. ointment.NOM helped in what wound.DAT so that heal.INF Intended: 'What the ointment helped to do was to heal the wound.' b. %V čom maz' pomogla, tak eto ointment.NOM helped in what so that wound.DAT heal.INF 'What the ointment helped to do was to heal the wound.' pomogla mne. tak eto zalečiť ranu. c. V čom ointment.NOM helped me.DATso that heal.INF wound.ACC in what 'What the ointment helped me to do was to heal the wound.'

I argue that in sentences with *pomoč* or *pomešat'* as the matrix predicate a dative DP and an embedded non-finite clause structurally correspond either to a single clause with an overt embedded subject or to a complex constituent with the dative DP base-generated outside the infinitival construction. This seems, at first sight, to contradict the previously discussed idea about complementary distribution of Beneficiaries and clausal Events under *pomoč* and *pomešat'*; it turns out that embedded non-finite clauses pattern either with Event v 'in' PPs, co-occuring with a Beneficiary, or with finite subjunctive clauses. In the next section I will propose an analysis that resolves the conflict and accounts for all the data considered in this paper.

## 3. The proposed analysis

## 3.1. Pomoč and pomešať as predicates with a single internal argument

In (37, 38) I list all possible combinations of dependent constituents that are allowed by matrix *pomoč* and *pomešat*'. As can be seen in (37) and (38), the contexts can be grouped together: those where only an Event is present and those that allow a Beneficiary and an Event to co-occur.

#### (37) an Event only

- a. Pomoč or pomešat' + an Event dative DP
- b. *Pomoč* or *pomešat*' + a finite subjunctive clause
- c. *Pomoč* or *pomešat'* + a non-finite clause with an overt subject

#### (38) a Beneficirary and an Event

- a. *Pomoč* or *pomešat*' + a Beneficiary dative DP + an optional Event v 'in' PP
- b. *Pomoč* or *pomešat'* +a Beneficiary dative DP + a non-finite clausal predicate

As was demonstrated in the previous section, although *pomoč* and *pomešat*' in Russian are usually listed among control predicates, they exhibit three interesting properties that distinguish them from garden-variety object control verbs:

• despite the fact that, in principle, they allow both a sentient Beneficiary and an Event, the two dependent constituents are often prohibited to co-occur;

- a non-finite clause and a co-occurring dative DP can be analyzed as a single constituent;
- a combination of a non-finite embedded clause and a dative DP is structurally ambiguous between a single clause with an overt embedded subject and a predication-like structure.<sup>7</sup>

To account for these properties I propose a two-fold analysis that is essentially based on the idea that *pomoč* and *pomešat*' can take either a proposition or a property as a complement. In what follows I will present the analysis in detail.

First, I argue that *pomoč* and *pomešat*' initially select only one internal argument that denotes an Event – a CP or an eventive DP occupying the complement position; the structure is schematized in (39).

```
(39) a. [VP V<sup>0</sup> pomoč or pomešat' [CP [DP Dative Subject] infinitive]] b. [VP V<sup>0</sup> pomoč or pomešat' [CP čtoby ...]] c. [VP V<sup>0</sup> pomoč or pomešat' [DP Event]]
```

The idea behind this proposal is straightforward: if a Beneficiary and an Event were two arguments licensed independently by verbs *pomoč* and *pomešat*', we would expect them not to be in complementary distribution. In other words, if a predicate licenses two independent arguments, they are normally obligatory and expected to cooccur; this principle is illustrated with an implicative predicate in (40).

(40) Maša zastavila \*(Pet'u) pomyt' posudu.

Mary.NOM forced Peter.ACC wash.INF dishes
'Mary forced Peter to wash the dishes.'

However, as we have seen, in some cases, a Beneficiary and an Event are allowed to appear together. I will refer to such constructions in the next subsection and I will approach them in terms of complex predicate formation.

## 3.2. Complex predicate formation

Three kinds of sentences with *pomoč* and *pomešat'* apparently do not fit in with the structure proposed in (39): (i) constructions with a dative Beneficiary and a separate embedded non-finite clause (41a), (ii) those with a Beneficiary and a PP Event (41b), and (iii) constructions with a single dative Beneficiary (41c).

(41) a. Devočki, pomogli / pomešali drug drugui [sdat' ekzamen]. prevented each other.DAT pass.INF exam.ACC girls.NOM helped 'The girls helped / prevented each other to pass the exam.' b. Devočki, pomogli / pomešali drug drugui [v sdače ekzamena]. prevented each other.DAT in passing exam.GEN girls.NOM helped 'The girls helped / prevented each other to pass the exam.' c. Devočki pomogli / pomešali Marine. girls.NOM helped stopped Marina.DAT

For extensive discussions of predication see Williams 1980, Rothstein 1983, Bowers 1993, Hoekstra 2004, den Dikken 2006, and references therein.

# 'The girls helped / stopped Marina.'

To account for all of these cases I have developed the second part of my analysis in terms of complex predicate formation. Following Hale and Keyser's (1993, 2002) approach to argument structures, I propose that, in case of the matrix *pomoč* or *pomešat'* predicate, the complement position can be occupied either by a saturated Event argument (see the previous subsection) or by an unsaturated property: usually, a non-finite clause with a silent variable subject or a prepositional phrase. The property and the matrix lexical verb form a single complex predicate that becomes predicated of a Beneficiary DP. I will now proceed by considering all kinds of sentences that fall under this structural description one by one.

For the first case (a matrix dative DP and an embedded non-finite clause, see (41a)), I adopt the so called *predicative control* analysis proposed by Landau (2015) and I argue that the dative DP is merged as the subject of a complex predicate formed by *pomoč* or *pomešat*' and the embedded clause. It becomes possible to establish relation between the two, since the non-finite clause with a PRO subject remains an unsaturated property with an available 'slot'. The predicative control analysis straightforwardly accounts for obligatory coreference of the Beneficiary and the embedded subject, on the one hand, and unavailability of partial or split control reported in section 2.5.1. The structure is schematized in (42), where I highlight a complex predicate. Following Hale and Keyser's (1993, 2002) exploitation of the Spec,VP position for the subject of secondary predication, I tentatively place the Beneficiary in Spec,VP, and I leave the question about its precise merge position for future investigation.

# (42) [ $_{\text{VP}}$ [ $_{\text{DP}}$ Dative Beneficiary] $_{\text{i}}$ [ $_{\text{V}}$ $\mathbf{V^0}$ pomoč or pomešat' [ $_{\text{FinP}}$ PRO $_{\text{i}}$ infinitive]]]

Not only unsaturated non-finite clauses can form a complex predicate together with a matrix verb. Prepositional phrases are also suitable as predicates; embedded under *pomoč* or *pomešat* an Event v PP requires a higher Beneficiary to become fully saturated (see the structure in (43)).

# (43) $[VP [DP Dative Beneficiary] [V' V^0 pomoč or pomešat' [PP v 'in' Event]]]$

To account for sentences with *pomoč* or *pomešat'* as the matrix predicate and a single Beneficiary, I propose that such constructions contain a silent Event; thus, a complex unsaturated predicate can still be formed to license a Beneficiary. Here, I follow Hoekstra (2004), who has demonstrated that silent predicates are, in principle, available in the world's languages, based on data from Dutch. The proposed

<sup>8</sup> Here, I use PRO to denote a variable, an 'empty slot' that should further be saturated, following Williams 1980 and, among recent works, Sigurðsson 2008 and Landau 2015. As was mentioned in section 2, there is evidence against presence of an 'independent' silent subject in such sentences, including unavailability of partial or split control.

<sup>9</sup> Examining Dutch sentences equivalent to *John hit the ball* and comparing them to those equivalent to *John hit Jack* and *John hit the ball away*, Hoekstra (2004) argues that 'John hit the ball' contains a silent secondary predicate similar to *away* that

assumption accounts for the complex data and is compatible with the general intuition that acts of helping or preventing are always directed towards some event. I schematize the underlying structure of such sentences in (44) and I leave this issue for further investigation in line with the discussion begun by Hoekstra, a.o.

## (44) [VP] Dative Beneficiary [VV] pomoč or pomešať [silent Event]

The proposed analysis straightforwardly accounts for the complementary distribution of a Beneficiary and an embedded finite clause or a non-finite clause with a referential DP subject – the latter are saturated propositions and cannot form a complex predicate together with the matrix verb.

The same logic can be applied to account for complementarity of a Beneficiary and an Event DP. As proposed by Sichel (2010), silent participants within eventive DPs should be analyzed as *pro* (rather than *PRO*), which saturates the argument position and doesn't transform a nominal phrase into a predicate. Therefore, similarly to finite clauses, eventive DPs can only be merged as arguments and not as predicates.

#### 4. Conclusion

In this paper I have investigated syntactic behavior of the Russian verbs *pomoč* 'help' and *pomešat*' 'prevent'. I have presented the novel data demonstrating that, although these predicates are usually listed among object control verbs embedding a non-finite clause, they actually appear in various syntactic contexts and also allow finite subjunctive clauses, prepositional phrases and eventive DPs as a complement.

I have further shown that a dative DP that is often used in sentences with pomoč or pomešat' as the matrix predicate and that is traditionally analyzed as the matrix controller for an embedded PRO subject, is, in fact, base generated either as a matrix Beneficiary or as the embedded subject itself. In addition to this, I have argued that, although based on some examples the Beneficiary might be considered an argument of pomoč and pomešat', its complementary distribution with an Event denoted by a finite subjunctive clause, a saturated non-finite clause or a DP would be hard to account for under the assumption that pomoč and pomešat' are ditransitive. Furthermore, an analysis in terms of subject raising would also fail to describe the data.

I have developed a novel analysis for *pomoč* and *pomešat*' that accounts for their peculiar properties without stipulating lexical ambiguity. First, I propose that these verbs allow only one internal argument – an Event, normally base generated in the complement position. Second, I assume that, instead of a propositional argument, an unsaturated property can also be merged as a complement. Together with the matrix lexical verb it forms a complex predicate that gets predicated of the Beneficiary DP. This analysis falls in line with Hale and Keyser's (1993, 2002) approach to argument structure, according to which a lexical verbal head must have a syntactic complement, however, the nature of this complement can be different and is not necessarily regulated by inherent selectional specifications of the verb itself.

is responsible for its original syntactic and semantic properties.

One of remaining issues that I have not discussed in this paper is the source of dative case assigned to the DP. In this respect, Russian *pomoč* and *pomešat'* pattern with equivalent verbs in many other languages: Beneficiaries are marked dative in German, Icelandic, Spanish, to name a few; analyses for this phenomenon range from those suggesting that dative is an inherent case to those that assume presence of a special functional head responsible for case assignment (usually, a relator or an Appl<sup>0</sup>). Another direction for future research is to check whether the proposed analysis in terms of (optional) complex predicate formation can be applied to constructions with verbs equivalent to *pomoč* and *pomešat'* in other languages. I leave these questions open for further investigation.

#### References

- Aarts, Bas. (1997) English Syntax and Argumentation. London: Macmillan.
- Arylova, Aysa. (2006) *Infinitival Complementation in Russian*. MA Thesis, University of Tromsø.
- Bailyn, John F. (2003) "A (Purely) Derivational Account of Russian Scrambling". Barbara H. Partee, ed. *Formal Approaches to Slavic Linguistics* 11. Ann Arbor, MI: Michigan Slavic Publications, 41–62.
- ——. (2012) *The Syntax of Russian*. Cambridge; New York: Cambridge University Press. [Cambridge Syntax Guides]
- Bowers, John. (1993) "The Syntax of Predication". Linguistic Inquiry 24: 591-656.
- Chomsky, Noam. (1957) Syntactic Structures. The Hague: Mouton.
- Davies, William D., and Stanley Dubinsky. (2004) *The Grammar of Raising and Control: A Course in Syntactic Argumentation*. Malden, MA: Blackwell Pub.
- Dikken, Marcel den. (2006) Relators and Linkers: The Syntax of Predication, Predicate Inversion, and Copulas. Cambridge, MA: MIT Press.
- Grimshaw, Jane. (1979) "Complement Selection and the Lexicon". *Linguistic Inquiry* 10 (2): 279–326.
- Hale, Ken, and Samuel Jay Keyser. (1993) "On Argument Structure and the Lexical Expression of Syntactic Relations". Ken Hale and Samuel Jay Keyser, eds. *The View from Building 20: Essays in Linguistics in Honor of Sylvain Bromberger*. Cambridge, MA: MIT Press, 53–109.
- ——. (2002) Prolegomenon to a Theory of Argument Structure. Cambridge, MA: MIT Press.
- Hoekstra, Teun. (2004) Arguments and Structure: Studies on the Architecture of the Sentence. Berlin; New York: Mouton de Gruyter.
- Huang, C.-T. James. (1982) *Logical relations in Chinese and the theory of grammar*. Ph.D. dissertation, Massachusetts Institute of Technology.
- Landau, Idan. (2013) Control in Generative Grammar: A Research Companion. New York: Cambridge University Press.
- Levin, Beth, and Malka Rappaport Hovav. (2005) *Argument Realization*. Cambridge: Cambridge University Press.

- Perlmutter, David M. (1970) "The Two Verbs Begin". Peter Rosenbaum and Roderick Jacobs, eds. *Readings in English Transformational Grammar*: Waltham, MA: Ginn-Blaisdell, 107–119.
- Rothstein, Susan. (1983) *The Syntactic Forms of Predication*. Ph.D. dissertation, Massachusetts Institute of Technology.
- Sichel, Ivy. (2010) "Towards a Typology of Control in DP". Norbert Hornstein and Maria Polinsky, eds. *Movement Theory of Control*. Amsterdam: John Benjamins, 245–266.
- Sigurðsson, Halldór Ármann. (2008) "The Case of PRO". *Natural Language & Linguistic Theory* 26 (2): 403–50.
- Williams, Edwin. (1980) "Predication". Linguistic Inquiry 11 (1): 203-38.
- Wurmbrand, Susi. (2001) *Infinitives: Restructuring and Clause Structure*. New York, NY: Mouton de Gruyter.
- ——. (2002) "Syntactic versus Semantic Control". C. Jan-Wouter Zwart and Werner Abraham, eds. *Linguistik Aktuell/Linguistics Today* 53. Amsterdam: John Benjamins Publishing Company, 93–127.