# Russian verbs of order and permission: between obligatory control and ECM Abstract

The paper considers the problem of sub-categorizing predicates that embed a non-finite clause into raising vs. control groups and demonstrates that, in Russian, mandative verbs (*velet'* order', *razrešit'* 'permit', etc.) present a puzzle as they support both obligatory control and ECM. This ambiguity holds for the same native speakers, and no detectable difference in terms of agreement, TAM or structure can be found between non-finite embedded clauses with PRO or an overt DP subject. I further show that mandatives are not unique with this respect, as, in Russian, they pattern with the class of deontic modal predicatives (*nado* 'necessary', *možno* 'allowed'). To account for this phenomenon, I propose that mandative verbs are, essentially, verbs of communication that embed a silent deontic modal head that, in turn, takes a clausal proposition as its complement.

#### 1. Introduction

Many of the works that advocate existence of PRO and draw distinction between control and raising aim to determine the contexts where these phenomena are available, often arguing for their complementary distribution. Multiple classifications for predicates that can embed a non-finite clause have been proposed (see, for example, Davies and Dubinsky (2004) for a classification of English verbs, Wurmbrand's (2001, 2004) theory of restructuring configurations, Jackendoff and Culicover (2003, 2006) for a semantic categorization, to name a few), and rare exceptions – such as English aspectual predicates like *begin* (Perlmutter 1970) – that support both control and raising are often analyzed in terms of lexical ambiguity.

The present paper examines Russian mandative verbs<sup>1</sup> (*velet*' 'order', *prikazat*' 'order', *razrešit*' 'permit', etc.) that normally embed a dative DP interpreted as an obligation holder and a clause. Traditionally, these verbs, similarly to their English translation equivalents, are listed among object control predicates<sup>2</sup>, however, the more recent works by Barrie and Pittman (2010) and Minor (2013) propose that mandatives should be re-analyzed

Wurmbrand (2001), Landau (2013), a.o., use the term *desiderative* to refer to the predicates that express commands and orders, while Barrie and Pittman (2010) prefer the term *mandative*, following Quirk and Greenbaum (1973), a.o. Other common terms to refer to this group of predicates include *speech-act predicates* (Minor 2013) and *directive* verbs (see, for example, Comrie (1984)). Throughout this paper, I use the term *mandative*, following the discussion began by Barrie and Pittman (2010), to refer to verbs of order or prohibition as well as verbs equivalent the English predicates *permit* and *charge*.

The relevant works that discuss non-finite complementation in Russian include but are not limited to Schein (1982), Greenberg (1987), Franks and Hornstein (1992), Babby (1998), Landau (2008), Bailyn (2012).

as subject-to-object raising verbs. In this paper I will demonstrate that Russian mandatives support both obligatory object control and ECM, embedding non-finite clauses with covert (controlled) or overt (referential) subjects. This often gives rise to interpretational ambiguity and sentences similar to (1a) can get multiple readings, depending on whether the dative DP is structurally the matrix controller or the embedded subject itself. The ambiguity, however, can be resolved in cases of, for example, an inanimate embedded subject (1b) or partial coreference between the matrix obligation holder and PRO (1c).

- (1) a. Maša velela mal'čikam ostat'sja.

  Mary.NOM ordered boys.DAT stay.INF
  - (i) 'Mary ordered the boys to stay.' ← 'the boys' = a matrix constituent
  - (ii) 'Mary ordered someone for the boys to stay.' ← 'the boys' = the embedded subject
  - b. Maša velela stroitel'stvu zakončit'sja k srede.

Mary.NOM ordered construction.DAT complete.INF by Wednesday

'Mary ordered for the construction to be completed by Wednesday.'

- ← 'construction' = the embedded subject
- c. Maša velela Ivanu<sub>i</sub> PRO<sub>i+</sub> razojtis' ne pozže šesti.

  Mary.NOM ordered John.DAT disperse.INF neg later six

'Mary ordered John to disperse by six.' ← 'John' = a matrix constituent

I argue that there is no difference in terms of agreement, TAM or structural size between non-finite embedded clauses with PRO and those with an overt DP subject that could justify postulating lexical ambiguity of mandative predicates and predict their distribution. The alternation is not entirely 'free', unlike, for example, the one claimed by Sundaresan and McFadden (2010) for some clausal complements in Tamil, as a matrix obligation holder and an overt embedded subject of a non-finite clause cannot co-occur, and I argue that it should be accounted for in terms of ECM independent from lexical properties of the matrix predicate.

The paper further shows that mandative verbs, at least in Russian, are not unique in their ambiguous behavior and that they pattern with deontic modal predicatives (*nado* 'necessary', *možno* 'allowed'). I propose that this similarity stems from the fact that mandative verbs are, essentially, verbs of communication that embed a silent deontic modal; the latter, in turn, selects a propositional clause as its argument. Unlike those approaches that place a modal component within an infinitival clause itself (Bhatt 1999; Pesetsky and Torrego 2001; Wurmbrand 2014), in this case, the modal is a separate lexical head, although it remains covert. The ultimate structure is given in (2), where the embedded subject position can be occupied either by PRO or by an overt referential DP.

(2) [vP Subject [v v0 [vP V0 [AppP [DP obligation holder][Appl Appl [ModP modal [CP ...]]]]]]]
Before I proceed, a few words should be said about the data presented in this paper. I elicited grammaticality judgments from 20 monolingual native speakers of Russian, 20 – 35 y.o.; for several examples precise information about speakers' evaluations is given in the main text or in footnotes. Although my own speaker's intuition does not always agree with that of the others, a certain degree of variation is expected and the data should not be ignored. The variation itself deserves further consideration, however, its thorough examination lies beyond the scope of this paper. For the present discussion it suffices to say that, although there are less permissive and more permissive speakers, the ambiguity under consideration holds for the same group of consultants. That is, the same speakers accept, for example, sentences with a matrix mandative verb and an inanimate dative DP (ECM cases) and sentences with partial coreference between the matrix obligation holder and the understood embedded subject (obligatory control cases).

The rest of the paper is structured as follows. Section 2 describes general properties of sentences with a matrix mandative verb and a non-finite clause in Russian and demonstrates that the dative DP can be analyzed as the embedded subject. Section 3 focuses on control diagnostics and shows that mandatives are truly ambiguous between obligatory control and ECM. Section 4 and Section 5 present the analysis, highlighting similar behavior of mandative verbs and deontic modal predicatives and providing additional support for the structural presence of a silent deontic modal head in constructions with a matrix mandative verb.

# 2. Mandative verbs and overt embedded subjects

# 2.1. General properties

Let us start by describing syntactic behavior of Russian mandative verbs: *razrešit*' 'allow', *pozvolit*' 'allow', *zapretit*' 'prohibit', *prikazat*' 'order', *velet*' 'order', *predpisat*' 'obligate', *poručit*' 'charge', *skazat*' 'tell' and their derived forms.

Mandative verbs usually co-occur with a dative DP that often refers to the obligation / permission holder ('obligation holder', henceforth) and an embedded constituent (often a clause) denoting an event that should or should not happen (3). The dative DP does not alternate with a prepositional phrase; as illustrated in (3b), it can be implicit.<sup>3</sup>

In this paper I will focus primarily on constructions with overt dative DPs and I will leave those with implicit participants aside for future research; for discussions of the problem see Bouchard (1982), Huang

- (3) a. Vrač velel Maše jest' ovošči.

  doctor.NOM ordered Mary.DAT eat.INF vegetables

  'The doctor ordered Mary to eat vegetables.'
  - b. Vrač velel jest' ovošči. doctor.NOM ordered eat.INF vegetables

'The doctor ordered (someone) to eat vegetables.'

When a mandative predicate is used together with an overt dative DP and a non-finite clause, the former must be coreferent with the understood subject of the embedded clause. As demonstrated in (4), the relation between the two complies with structural requirements and cannot be established solely from a pragmatic perspective.

(4) a. Ivan<sub>k</sub> znal' čto Pet'a velel Maše<sub>i</sub> sdelat' zadanije samoj<sub>i</sub>/ \*samomu<sub>k</sub>.

John.NOM knew that Peter.NOM ordered Mary.DAT do.INF task.ACC herself himself

'John knew that Peter had ordered Mary to do the task herself.'

Not available: 'John knew that Peter had ordered Marina for him (John) to do the task himself.'

- b. Pet'a velel [druzjam  $Ma\check{s}i_k$ ], sdelat' zadanije samim, \*samojk. Peter.NOM ordered friends.DAT Mary.GEN do.INF task.ACC themselves herself 'Peter ordered Mary's friends to do the task themselves.'
  - Not available: 'Peter ordered Mary's friends for Mary to do the task herself.'
- c. Učitel' velel Maše sdelat' zadanije, i direktor Ivanu tože. teacher.NOM ordered Mary.DAT do.INF task.ACC and director.NOM John.DAT too 'The teacher ordered Mary to do the task and the director ordered John to do the task.' Not available: '... the director ordered John for Mary to do the task.'

Two options are potentially available to describe the relation between the overt dative DP and the understood embedded subject in sentences with a matrix mandative predicate. The first option is to treat the two as syntactically distinct items, with the matrix dative DP controlling the embedded silent subject. The second option is to analyze the dative DP as the subject of the non-finite clause itself, either moved into a matrix position or staying within the embedded constituent. Traditionally, mandatives are considered ordinary object control predicates (Franks and Hornstein 1992; Babby 1998; Landau 2013, a.o.); however, recent works by Barrie and Pittman (2010) (for English) and Minor (2013) (for Russian) argue that these verbs should be analyzed as raising predicates with an overt embedded subject. In the

<sup>(1989),</sup> Sag and Pollard (1991), Wyngaerd (1994), Jackendoff and Culicover (2003), Landau (2013), a.o.

next section I will demonstrate that both approaches are correct to a certain degree and that the dative DP corresponds to either a matrix participant ('controller') or the embedded subject.

# 2.2. The dative DP is an embedded argument

In this sub-section, I will show that in a sentence with a matrix mandative verb, a dative DP and an embedded non-finite clause, the DP can be base-generated within the lower clause receiving its thematic role from the embedded predicate; thus, it can be completely independent from the matrix verb. Evidence for this is found in the results for idiom chunk, embedded passivization and inanimateness tests.<sup>4</sup>

First, embedded under a mandative predicate, the idiom *čërnaja koška probežala meždu nimi*, literally translated as 'a black cat run between them', can still retain its idiomatic interpretation (5), which is possible if 'the black cat' DP is base-generated as a part of the embedded collocation.<sup>5</sup>

- (5) a. Ja ne velel čërnoj koške probegat' mezdu nimi.
  - I NEG ordered black cat.DAT run.INF between them

Lit. available: 'I did not order the black cat to run between them.'

Idiom. available: 'I did not order / force them to quarrel.'

b. Ja vynudil čërnuju košku probežat' meždu nimi.

- (i) Ja razrešil čërnoj koške probežat' meždu nimi.
  - I allowed black cat.DAT run.INF between them

Lit. 'I allowed a black cat to run between them.'

Idiom. not available 'I allowed them to quarrel.'

This can be explained, however, from a pragmatic point of view; it is generally difficult to combine an idiom and a corresponding non-idiomatic expression that describes a (usually) non-volitional act with a desiderative predicate (ii).

(ii) a. Ja razrešil, čtoby čërnaja koška probežala meždu nimi.

I allowed so that black cat.NOM run.SUBJ between them

Lit. 'I allowed a black cat to run between them.'

Idiom. questionable: 'I allowed them to quarrel.'

b. #Ja razrešil im possorit'sja.

I allowed them.DAT quarrel.INF

'I allowed them to quarrel.'

Another commonly used diagnostic – insertion of an expletive pronoun – cannot be applied, since, in Russian, there are no overt expletive pronouns. See Franks (1990), Perlmutter and Moore (2002), a.o., for a discussion of null expletives in Slavic languages.

Notice that this does not work for all idioms in all contexts. The same phrase *čërnaja koška probežala meždu nimi* 'a black cat run between them' apparently does not retain its idiomatic interpretation in (i).

I forced black cat.ACC run.INF between them Only lit. 'I forced a black cat to run between them.'

Intended idiomatic 'I forced them to quarrel.'

Second, sentences with a matrix mandative verb and an embedded passive construction can get the same interpretation as parallel sentences with an embedded active construction. Compare (6a) and (6b): if the dative DPs in these examples – 'the boy' and 'Voldemort' – are interpreted as volitional obligation holders addressed directly by 'the director', the two sentences receive distinct readings. However, it is also possible to interpret these DPs as embedded participants, while the true obligation holders remain implicit (for example, it could have been the director's associates) and, in this cases, the sentences are equivalent. The ambiguity itself, of course, should be accounted for and I will address it later in this paper; for now, it is important to focus on possible equivalency of (6a) and (6b). As further illustrated in (6c) and (6d), semantic equivalency under voice transformations is not allowed in case of ordinary object control verbs.

- (6) a. Direktor prikazal mal'čiku byt' ubitym Voldemortom. director.NOM ordered boy.DAT be.INF kill.PTCP Voldemort.INS
  - (i) 'The director ordered the boy that he should be killed by Voldemort.'  $(\neq b)$
  - (ii) 'The director ordered that the boy should be killed by Voldemort.' (= b)
  - b. Direktor prikazal Voldemortu ubit' mal'čika. director.NOM ordered Voldemort.DAT kill.INF boy.ACC
    - (i) 'The director ordered Voldemort that he should kill the boy.' ( $\neq$  a)
    - (ii) 'The director ordered that Voldemort should kill the boy.' (= a)
  - c. Direktor zastavil mal'čika byt' ubitym Voldemortom. director.NOM forced boy.ACC be.INF kill.PTCP Voldemort.INS 'The director forced the boy to be killed by Voldemort.' ( $\neq$  d)
  - d. Direktor zastavil Voldemorta ubit' mal'čika. director.NOM forced Voldemort.ACC kill.INF boy.ACC

'The director forced Voldemort to kill the boy.'  $(\neq c)$ 

Furthermore, desiderative predicates can co-occur with an inanimate dative DP denoting a non-sentient non-volitional object, which cannot be interpreted as a matrix obligation holder and is unambiguously thematically related to the embedded predicate (7).<sup>6</sup> Again, as shown in (7c), this property distinguishes mandatives from ordinary object control verbs.

(7) a. %Direktor razrešil večerinke prodolžať sja do polunoči.

<sup>6 55%</sup> of the 20 monolingual native speakers marked the examples in (7a) and (7b) as acceptable.

- director.NOM permitted party.DAT continue.INF until midnight 'The director permitted that the party continue until midnight.'
- b. %Direktor prikazal xorkruksam byt' uničtožennymi kak možno skoreje. director.NOM ordered horcruxes.DAT be.INF destroyed.PTCP as soon as possible 'The director ordered that the horcruxes be destroyed as soon as possible.'
  - = 'The director order to destroy the horcruxes as soon as possible.'
- c. \*Direktor zastavil večerinku prodolžat'sja do polunoči. director.NOM forced party.ACC continue.INF until midnight Intended: '\*The director forced the party to continue until midnight.'

The three properties of sentences with mandative predicates, a dative DP and an embedded non-finite clause, described above, stem from the single fact that the DP is base generated as an argument of the embedded predicate. The question remains whether this DP can stay within its initial clause or if it obligatorily moves into a matrix position. I will turn to this issue in the next sub-section.

#### 2.3. The dative DP is located within the embedded clause

I argue that a dative DP interpreted as an argument of the embedded clause can stay within this clause and does not have to move. Support for this claim comes from distribution of indefinite non-specific *-nibud'* pronouns, licensing of negative polarity items (NPIs), and positioning of adjuncts. In what follows I will consider these phenomena one by one, extending the discussion started by Minor (2013). Minor's arguments for the dative DP staying within its clause are persuasive, even though his final claim that, in case of a matrix mandative verb, the dative DP is always thematically related to the main predicate is undermined by the data presented in the previous sub-section of this paper.

A first piece of support for the 'embedded subject' analysis comes from the behavior of Russian indefinite non-specific pronouns derived with the *-nibud*' suffix. In sentences with a matrix mandative verb *-nibud*' pronouns are allowed within an embedded clause where they scope narrowly, however, they cannot be used in the matrix clause (8a and 8b). Crucially for the present discussion, a *-nibud*' pronoun is grammatical as a dative DP (8c), which implies

This does not imply that the embedded subject cannot raise at all; for example, it can undergo A-bar movement under topicalization, etc. What I argue for throughout this paper is that, for Russian, there is no evidence for obligatory subject-to-object raising and that the embedded subject does not have to end up in a matrix position.

<sup>8</sup> Minor (2013) follows Haspelmath (1997) and Yanovich (2005) and assumes that indefinite non-specific pronouns must be licensed by a c-commanding intentional operator that scopes right above the embedded clause.

that it belongs to the embedded clause; in (8d) I also provide an example with an implicative object control verb for comparison.

- (8) a. Koroleva velela Ivanu pozvat' kogo-nibud'. queen.NOM ordered John.DAT call.INF someone.ACC 'The queen ordered John to call someone.'
  - b. \*Kto-nibud' velel Ivanu pozvat' korolevu.
    someone.NOM ordered John.DAT call.INF queen.ACC
    Intended: 'Someone ordered John to call the queen.'
  - c. Koroleva velela komu-nibud' pozvat' Ivana.

    queen.NOM ordered someone.DAT call.INF John.ACC

    'The queen ordered that there be someone who would call John.'
  - d. \* Koroleva vynudila kogo-nibud' pozvat' Ivana.

    queen.NOM forced someone.ACC call.INF John.ACC

    Intended: 'The queen forced someone (non-specific) to call John.'

Second, licensing of negative polarity items should be considered. In general, an embedded negation cannot license a negative pronoun (derived with the *ni*- prefix) located within the matrix clause (9a). However, a *ni*- pronoun can appear as a dative DP in a sentence with a mandative predicate and an embedded non-finite clause (9b), in contrast with, for example, constructions with an implicative predicate (9c). Therefore, we can conclude that, unlike accusative objects used together with implicative verbs, the dative DP under consideration is base-generated and licensed within the embedded constituent.

- (9) a. \*Nikto velel Ivanu ne prixodit'. nobody.NOM ordered John.DAT NEG come.INF Intended: '\*Nobody ordered John not to come.'
  - b. Ivan velel nikomu ne prixodit'.John.NOM ordered nobody.DAT NEG come.INF'John ordered that nobody would come.'
  - c. \*Ivan vynudil nikogo ne prixodit'.

    John.NOM forced nobody.ACC NEG come.INF

    Intended: 'John forced everybody not to come.'

Finally, let us consider the positioning of various adjuncts characterizing matrix and embedded events. Due to the relatively free word order in Russian, a matrix adverb is expected to be able to separate a dative DP located within the matrix clause from the embedded clause. To test this, I use examples with an indefinite non-specific *kto-nibud*'

pronoun, an inanimate DP, and an NPI licensed by the embedded negation, which, as was mentioned above, can only be interpreted as parts of the embedded clause, thus preventing potential ambiguity. As shown in (10), the manner adverbs *tixon'ko* 'quietly' and *nepremenno* 'certainly, necessarily' and the temporal adjunct *v ponedel'nik* 'on Monday' intervening between the dative pronoun and the rest of the embedded clause cannot modify the matrix predicate but only the embedded one.

(10) a. Maša velela komu-nibud' tixon'ko pomyt' posudu.

Mary.NOM ordered someone.DAT quietly wash.INF dishes

'Mary ordered for someone to wash the dishes quietly.'

Not available: 'Mary quietly ordered for someone to wash the dishes.'

b. Maša velit projektu nepremenno byť zakončennym k ponedel'niku.

Mary.NOM order.FUT project.DAT certainly be.INF finish.PTCP by Monday

'Mary will order that the project be necessarily finished by Monday.'

Not available: 'Mary will certainly order that the project be finished by Monday.'

c. Maša velela nikomu v ponedel'nik ne prixodit'.

Mary.NOM ordered nobody.DAT in Monday NEG come.INF

'Mary ordered that nobody would come on Monday.'

Not available: 'Mary ordered on Monday that nobody would come.'

Taking all these data into account, we can infer that the dative DP under consideration can be base-generated within the embedded non-finite clause and, importantly, can stay within its clause.

# 2.4. Are mandatives raising predicates?

The data presented in the previous sub-sections posit a problem for existing classifications of clause-embedding predicates that label mandatives as object control verbs and also challenge a potential analysis in terms of obligatory subject raising; so far, all of the discussed properties of mandative verbs rather point towards an ECM-style approach. The most straightforward possible representation for the structure of sentences similar to those presented in (10) is given in (11).

(11) [vP Subject [v' v<sup>0</sup> [vP desiderative [CP [DP Dative Subject] infinitive]]]

The structure presented in (11) resembles the ones proposed for English mandatives by Barrie and Pittman (2010) and for Russian 'speech act verbs' by Minor (2013). Since, to the best of my knowledge, these are the two recent works touching upon the problem of mandative predicates passing at least some raising diagnostics, I will briefly describe them in more

detail, before I proceed by examining raising vs. control ambiguity and developing a novel analysis that will fully account for it.

The first work that overlaps with the present discussion is Barrie and Pittman's (2010) paper. In short, they demonstrate that English mandative verbs like *order* and *permit* can pass raising tests (see their examples for expletives in (12a), idiom chunk in (12b) and embedded passivization in (12c)) and argue that sentences with these predicates always involve raising.

- (12) a. John ordered/commanded/permitted there to be fruit available at the reception.
  - b. John ordered/permitted/commanded tabs to be kept on Kenji.
  - c. The chief medical officer ordered an ophthalmologist to examine the patient.
  - = The chief medical officer ordered the patient to be examined by an ophthalmologist.

Barrie and Pittman (B&P) assume the obligatory presence of an overt or implicit *mandee* – a goal of mandation that is usually co-referent with the embedded subject. The authors do not further elaborate on syntactic properties of desiderative predicates and provide only a preliminary structural representation (13). Importantly, B&P argue that the embedded subject **always** raises into the matrix clause over the *mandee* (presumably, to be assigned case), although they do not support this claim with results for movement diagnostics. This subject-to-object raising violates the Minimal Link Condition; to deal with this, B&P tentatively suggest that a *mandee* can be a part of a PP with a silent P head, however, they leave this hypothesis to be further investigated (see Boeckx and Hornstein (2003) for a similar proposal for *promise*).

- (13) a. John [ $_{VP}$  ordered [ $_{XP}$  mandee $_{i}$ ] [ $_{IP}$  Bill $_{i}$  to sweep the floor]]
- b. John [FP] ordered [VP] [DP] the floor] ordered [XP] mandee] [IP] the floor to be swept]]] However, as demonstrated in the previous sub-section, there is a reason not to stipulate obligatory subject-to-object raising for Russian. This problem was addressed by Minor (2013), who came up with the following structural representation for sentences with a matrix mandative verb (14), which looks very similar to the one presented in (11).
- (14) [vP] the doctor v[vP] advised  $\{u\theta\}$  [TP] someone  $\{iD\}$  to get medicine [IP]

Recall, however, that Minor (2013) claims that the dative DP, even though generated within the embedded clause, still must comply with the selectional restriction of a matrix mandative predicate and be potentially suitable as the matrix obligation holder (normally animate and volitional); hence, he denotes a matrix predicate as carrying an unvalued theta-feature to be checked by a lower suitable DP (marked with iD). He further argues that only overt DPs with a hidden restrictor bound by the matrix 'controller' can occupy the embedded subject positions (i.e. indefinite pronouns, quantified expressions but not, for example, referential non-

quantified DPs), and proceeds to develop a complex analysis within the Movement Theory of Control framework allowing a DP to check multiple theta roles via Agree. However, in Section 2.2, we have already seen that the dative DP can belong exclusively to the embedded clause, contrary to Minor's assumptions.

Furthermore, both approaches under discussion face the following, more serious, problem: as I will show in the next section, sentences with mandatives can still pass control diagnostics and the subject position of an embedded non-finite clause can be occupied either by a referential DP or PRO; thus, under control configuration, the dative DP should be analyzed as an obligation holder located within the matrix clause and controlling the silent embedded subject. I will further support the idea that a dative DP and an embedded subject can be distinct items by drawing attention to the often ignored and under-described constructions with a matrix mandative verb and other types of complements – finite clauses and nominal phrases.

# 3. Mandative verbs as control predicates

# 3.1. Ambiguous dative DPs

However tempting it might be to simply re-label mandatives as raising or ECM predicates, always treating the dative DP as the embedded subject itself, it turns out that these verbs can support obligatory control as well.

We have already seen that, at least in some cases, the dative DP seems to be ambiguous between being a 'proper' embedded argument and denoting an obligation holder related rather to the matrix mandative verb; remember the examples with embedded voice transformations in (7). This ambiguity further manifests itself in sentences with quantified DPs, which can have wide scope and narrow scope interpretations. For example, consider (15), for which two readings are available: the dative DP 'two boys' can scope either above the matrix predicate (wide scope) or within the embedded clause (narrow scope).

- (15) Pet'a razrešil p'ati malčikam ostat'sja.
  - Peter.NOM permitted five.DAT boys.DAT stay.INF
  - (i) 'There are five boys such that Peter permitted them to stay.' (wide scope)

This ambiguity has also been reported by Minor (2013); however, he focuses primarily on availability of a narrow-scope reading and does not mention the fact that narrow-scope and wide-scope interpretations, as described in the present paper, are normally mutually exclusive.

(ii) 'Peter permitted (someone) that there be five (random) boys who would stay.' (narrow scope)

Availability of a narrow scope reading signals that the quantified DP is base-generated within the lower clause; compare, for example, (15) and a parallel construction with an implicative object control predicate and a matrix direct object (16a). A wide scope reading, however, is usually unavailable for embedded items (16b), which implies that in (15) the quantified DP must be within the higher clause.

(16) a. Pet'a zastavil p'at' malčikov ostat'sja.

Peter.NOM forced five.ACC boys.ACC stay.INF

'There are five boys such that Peter forced them to stay.' (wide scope)

Not available: 'Peter forced someone that there be two boys who stay.' (narrow scope)

b. Kak minimum odin učitel' velel Maše pročitat' každuju knigu.

at least one teacher.NOM ordered Mary.DAT read.INF every book.ACC

'There is at least one teacher that ordered Mary to read every book.' (narrow scope for 'every book')

Not available: 'For every book there is at least one teacher that ordered Mary to read it.' (wide scope for 'every book')

Additionally, the adjunct placement diagnostic (10) yields different results depending on the type of dative DP. If the latter is an indefinite *-nibud* pronoun or an inanimate DP denoting a non-volitional object that cannot be interpreted as an obligation holder, an adverb placed to the right of this DP can only modify the embedded predicate. However, if the dative DP refers to a sentient being or a group of beings, the sentence is ambiguous and the adjunct can be related either to the embedded or to the matrix predicate (17).

- (17) a. Maša velela Pete tihon'ko pomyt' posudu.
  - Mary.NOM ordered Peter.DAT quietly wash.INF dishes
  - (i) 'Mary ordered Peter to wash the dishes quietly.'
  - (ii) 'Mary quietly ordered Peter to wash the dishes.'
  - b. Maša velit Pete nepremenno zakončiť projekt k ponedeľniku.

    Mary.NOM order.FUT Peter.DAT certainly finish.INF project.ACCby Monday
    - (i) 'Mary will order Peter to necessarily finish the project by Monday.'
    - (ii) 'Mary will certainly order Peter to finish the project by Monday.'

#### 3.2. The dative DP is unambiguously a matrix obligation holder

Furthermore, there are contexts in which the dative DP is unambiguously interpreted as an obligation holder distinct from the embedded subject. First, there are many native speakers who allow partial coreference between the dative DP and the embedded subject in sentences with an embedded non-finite clause. For example, out of 20 monolingual native speakers of Russian who I have consulted, 11 judge (18a) as grammatical or acceptable even though the embedded predicate requires a semantically plural subject while the dative DP is semantically singular. Similarly, 14 out of 20 speakers accept (18b), where the modifier *vmeste* 'together' also requires a plural antecedent.<sup>10</sup>

- (18) a. %Ivan velel Petru razojtis' ne pozže šesti.

  John.NOM ordered Peter.DAT disperse.INF NEG later six

  'John ordered Peter to disperse by six.'
  - b. %Marina razrešila Anečke pojti v kino vmeste.

    Marina.NOM permitted Ann.DAT go.INF into cinema together

    'Marina permitted Ann to go to the cinema together.'

Even though my own native speaker's intuition suggests that the examples in (18) are rather ungrammatical, they are accepted by many speakers of Russian and should be taken into account. As has been extensively argued by Wurmbrand (2002), Landau (2007), a.o., availability of partial control implies presence of an independent PRO subject and posits a serious problem for an analysis in terms of movement.

Second, Russian mandative verbs can embed not only a non-finite clause but also a finite subjunctive clause or a DP referring to the situation that should or should not happen (19).<sup>11</sup> Importantly, in these cases, the embedded subject and the dative DP do not have to be coreferent at all (19b).

For the 20 speakers, I found no correlation between allowing partial coreference (i.e. control configuration) and (not) accepting sentences with inanimate /indefinite dative DPs (i.e. dative DPs basegenerated as embedded subjects). Rather, as was noted in Section 1, a distinction can be made between more permissive and less permissive speakers, the former evaluating both sentences with an inanimate dative DP and those with partial control as grammatical.

Although a couple of examples with an embedded eventive DP can be found for most of the mandative verbs, it should be noted that not all mandative predicates allow these nominal dependent constituents to the same extent: while *razresit'* 'permit', *porucit* 'charge with', and *predpisat'* 'order' embed an eventive DP quite frequently, *prikazat'* 'order' only rarely does so and sentences with the matrix *velet'* 'order' and an accusative eventive DP cannot be found in the largest national corpora. I leave this puzzling distribution to be accounted for by future research.

- (19) a. Vrač velel / razrešil Maše<sub>i</sub>, čtoby ona<sub>i/j</sub> jela ovošči.

  doctor.NOM ordered permitted Mary.DAT so that she.NOM eat.SUBJ vegetables

  'The doctor ordered / permitted Mary to eat vegetables.'
  - b. Vrač velel / razrešil medsestre, čtoby Maša jela ovošči. doctor.NOM ordered permitted nurse.DAT so that Mary.NOM eat.subj vegetables 'The doctor told the nurse that Mary should / could eat vegetables.'
  - c. Prezident razrešil / zapretil kompanijam pokupku akcij.

    president.NOM permitted prohibited companies.DAT buying.ACC shares.GEN

    'The president permitted / prohibited the companies to buy shares.'

Note that, in sentences similar to (19), a matrix dative DP is interpreted as an obligation holder and not merely as a goal of communication. For example, in (19b), 'the nurse' is held at least partially responsible for Mary's behavior; if we try to substitute this DP with another one referring to a person unrelated to Mary the sentence will make no sense.

# 3.3. Embedded clauses with overt vs. implicit subject

It might be suggested that all mandative predicates are, in fact, represented by homonymous pairs – an ECM verb vs. a control verb that embedded either a non-finite clause with a PRO or a finite subjunctive clause / an eventive DP; this would concur with many existing analyses for raising vs. control ambiguity featured, for example, by the verbs *want* or *begin* in English. However, in sentences with a matrix mandative verb in Russian, no detectable difference can be found between non-finite embedded clauses with overt referential vs. silent PRO subjects that would justify positing such homonymy.

For example, Landau (2004) distinguishes between obligatory control and no-control environments based on agreement and tense features of the embedded clause. No infinitive in Russian can be overtly marked for agreement, and, as demonstrated in (20), time reference of all constituents embedded under a mandative verb is determined relatively to the time reference of the matrix event, although the two do not have to coincide.

- (20) a. Včera Marina razrešila Anne pojti v kino vmeste v ponedel'nik. yesterday Marina.NOM permitted Ann.DAT go.INF into cinema together in Monday 'Yesterday Marina permitted Ann to go to the cinema together on Monday.'
  - b. Včera prezident velel stroitel'stvu zakončit'sja k martu.

    yesterday president.NOM ordered building.DAT complete.INF by March

    'Yesterday the president ordered to complete building by March.'

Williams (1987), Lasnik (1998), Chomsky (1999), a.o., propose that clausal complements of raising predicates are IPs, while non-finite clauses with a controlled subject are CPs. Again, this distinction does not seem to hold in Russian. While it is hard to prove whether non-finite clauses in Russian contain a CP projection, since argumental infinitival constituents, in general, cannot be accompanied by an overt complementizer, they appear to have at least some left periphery above an IP 'layer', which can host a focus or a topic. As illustrated in (21), an embedded constituent can be moved to the embedded left focus position both in sentences with a dative obligation holder (21a) and in those where the dative DP should be analyzed as the embedded subject (21b).

(21) a. Marina razrešila Anne TOL'KO SEGODN'A pojti v kino vmeste.

Marina.NOM permitted Ann.DAT only today go.INFinto cinema together.

'Marina permitted Ann to go to the cinema together TODAY.' (... and tomorrow it is prohibited)

b. Prezident velel K MARTU sroitel'stvu zakončit'sja.

president.NOM ordered by March construction complete.INF

The president ordered for the construction to complete BY MARCH.' (... not by June) I assume that the constructions with embedded non-finite clauses under consideration exhibit DP / PRO alternation in the same syntactic environment. This observation contributes to the ongoing discussion of DP / PRO alternation in non-finite clauses<sup>12</sup>; the Russian data contradict the assumption that referential expressions cannot stay within infinitival clauses (Landau 2015, a.o.) and support McFadden (2004) and Sundaresan and McFadden's (2010) claim that referential DPs can, in principle, appear in any environment as long as independently motivated requirements of grammar are not violated. Although the discussion of these 'independently motivated principles' and DP licensing in general lies beyond the limits of this paper, I will briefly return to the topic in the following section.

See Pires (2007) for a discussion of English gerunds, Chung and McCloskey (1987) and Bondaruk (2006) (on Irish), Mohanan (1982) and Sundaresan and McFadden (2010) (on Dravidian languages) and Mensching (2000), a.o. (on Romance languages).

#### 4. The proposed analysis: verbs of communication embedding modals

# 4.1. Outline of the analysis

I consider mandative verbs a sub-class of ditransitive communication verbs (verbs of information transfer): an order or a permission, denoted by an embedded proposition, is transmitted to an obligation holder / addressee, similar to factual information (22).

- (22) a. Maša velela Anne, čtoby ona pomyla posudu.

  Mary.NOM ordered Ann.DAT so that she.NOM wash.SUBJ dishes

  'Mary ordered Ann to wash the dishes.'
  - b. Maša skazala Anne, čto Vanja pomyl posudu.

    Mary.NOM told Ann.DAT that John.NOM washed dishes

    'Mary told Ann, that John had washed the dishes.'

Verbs of communication are, by their nature, ditransitive predicates, for which I adopt a structural representation in line with Pylkkänen's (2008) low applicative approach (see also Dyakonova (2005), Boneh and Nash (2017) for applicative analyses).<sup>13</sup>

The structure is schematized in (23), where the matrix verb of communication (denoted here as SAY) takes as its complement an applicative phrase with an Addressee as an applied object.

With the assumption that mandative verbs belong to the class of communication verbs, the structure in (23) directly accounts (i) for cases of an embedded finite subjunctive clause together with an overt obligation holder (24a), and (ii) for those sentences with an embedded non-finite clause that exhibit obligatory control properties (24b).

(24) a.  $[_{vP}$  Maša  $[_{v'}$   $v^0$   $[_{vP}$  velela  $[_{ApplP}$   $[_{DP}$  Anne $_i$ ] $[_{Appl'}$  Appl $^0$   $[_{CP}$  čtoby ona $_i$  pomyla posudu]]]]]] 'Mary ordered Ann to wash the dishes.'

Lit: 'Mary ordered Ann so that she would wash the dishes.'

As for now, I refrain from entering into a detailed discussion of verbs of communication in Russian in general, and I consider both analyses viable. For the sake of simplicity, in this paper I adopt an applicative analysis and Pylkkänen's basic semantics and denote the functional head that relates an Addressee / Obligation holder and an embedded clause as Appl.

An alternative approach to ditransitive predicates is the Small Clause analysis (Hale and Keyser 2002; Harley 2003; Den Dikken 2006, a.o.). The dative Addressee is considered a PP predicate with a silent P head, while the transferred proposition is generated as the small clause subject; in case of verbs that embed a non-finite clause, the predication is reverse so that a dative Addressee could control an embedded subject (i).

 $<sup>(</sup>i) \qquad \quad \left[ {_{\text{VP}}} \; Subject \left[ {_{\text{V}}} \; v^0 \left[ {_{\text{VP}}} \; SAY \left[ {_{\text{SC}}} \left[ {_{\text{PP}}} \; P^0 \left[ {_{\text{DP}}} \; Dat \; Addressee \right] \right] \right]_{R^*} \; R^0 \left[ {_{\text{CP/IP}}} \; \dots \; \right] \right] \right] \right]]$ 

b.  $[_{vP}$  Maša  $[_{v'}$   $v^0$   $[_{VP}$  velela  $[_{ApplP}$   $[_{DP}$  Anne $_i][_{Appl'}$  Appl $^0$   $[_{CP}$  PRO $_i$  pomyt' posudu]]]]]] 'Mary ordered Ann to wash the dishes.'

However, this analysis seemingly leaves aside examples with an overt referential embedded subject, discussed in detail in Section 2.1. The solution is straightforward: to combine the discussed control and overt embedded subject analyses into one structure (25).

(25) [VP V<sup>0</sup> [ApplP [DP obligation holder][Appl Appl<sup>0</sup> [CP subject + infinitive]]]]]

The core idea is that two dative DPs are potentially available (a matrix obligation holder (addressee) and an overt subject of an embedded clause). In case of verbs of communication in Russian (including mandatives) a dative obligation holder can be implicit and does not alternate with an overt prepositional phrase (26).

- (26) a. Maša skazala (Anne / \*dl'a Anny), čto Pet'a pomyl posudu.

  Mary.NOM said Ann.DAT to Ann that Peter.NOM washed dishes

  'Mary said (to Ann) that Peter had washed the dishes.'
  - b. Maša velela (Anne / \*dl'a Anny), čtoby Pet'a pomyl posudu.

    Mary.NOM ordered Ann.DAT to Ann so that Peter.NOM wash.SUBJ dishes

    'Mary ordered (to Ann) Peter to wash the dishes.'

I argue that the combinations of an optionally overt dative obligation holder and an overt embedded subject yield structural representations for all constructions with desiderative predicates that can be found in Russian. In the next sub-section I will consider the possible combinations one by one.

After that, I will address two remaining important questions: (i) What could explain the difference between ordinary verbs of communication and mandative predicates? In other words, what makes us interpret addressees as obligation holders? and (ii) Is this 'overt embedded subject' vs. 'controlled embedded subjects' ambiguity a unique property of mandatives (at least in Russian)? I will provide the single answer to both questions: mandative verbs are verb of communications that embed a proposition 'enclosed' into a larger constituent headed by a structurally present although silent deontic modal head. This modal, in Russian, belongs to the existing class of the so called modal predicatives (invariable predicates), which pattern with mandatives in their syntactic behavior.

# 4.2. Accounting for possible dependent constituents

#### 4.2.1. Embedded finite clauses and eventive DPs

Taking into account the optionality of an overt dative obligation holder and the fact that desiderative predicates allow non-finite and finite subjunctive embedded clauses as well as, occasionally, eventive DPs, we get several possible types of constructions with mandatives, all of which are attested in Russian.

The structures for sentences with a finite embedded clause or an eventive DP are drafted below in (27).

(27) a.  $[_{vP}$  Maša  $[_{v'}$   $v^0$   $[_{VP}$  velela  $[_{ApplP}$   $[_{DP}$  Anne $_i$ ] $[_{Appl'}$  Appl $^0$   $[_{CP}$  čtoby ona $_i$  pomyla posudu]]]]]] 'Mary ordered Ann to wash the dishes.'

Lit: 'Mary ordered Ann so that she washed the dishes.'

 $b. \ [_{vP} \ Ma\~sa \ [_{v}' \ v^0 \ [_{VP} \ poru\~cila \ [_{ApplP} \ [_{DP} \ Anne_i][_{Appl'} \ Appl^0 \ [_{DP} \ myt' \ posudy]]]]]]$ 

'Mary charged Ann with washing the dishes.'

The structures presented in this sub-section will be eventually revised in Section 4 to add one more component – a silent modal head that takes an embedded proposition as the complement. However, at this point, they correctly represent the idea about mandatives being a sub-class of verbs of communication.

#### 4.2.2. Embedded non-finite clauses

The structure in (27) is also applicable to sentences with a mandative predicate embedding a non-finite clause with a controlled PRO subject (28).

(28)  $[_{vP} \text{ Maša } [_{v'} \text{ } v^0 \text{ } [_{VP} \text{ } \text{velela } [_{ApplP} \text{ } [_{DP} \text{ } \text{Anne}_i] [_{Appl}^{} \text{ } \text{ } \text{Appl}^0 \text{ } [_{CP} \text{ } \text{PRO}_i \text{ } \text{pomyt' } \text{ } \text{posudu}]]]]]]$ 'Mary ordered Ann to wash the dishes.'

An obligation holder can be implicit, still controlling PRO within a lower non-finite clause (29a).<sup>14</sup> Alternatively, a non-finite clause with an overt referential subject can be embedded (29b).

In this paper, I tentatively represent an implicit obligation holder as ec, and leave the question about its precise nature for future investigation. For an implicit obligation holder to establish control relations with an embedded PRO the former must be syntactically present (Landau 2010), and, drawing parallel between dative obligation holders and other dative applied arguments (Addressees, Attitude Holders, Beneficiaries), I assume that it is a weak implicit argument, i.e. a  $\varphi$ -P (following Landau's (2010) distinction between weak and strong implicit arguments). However, as indirect objects in Russian in general do not bind reflexives (which are subject-oriented) or control secondary predicates, it appears to be hard to prove or disprove that implicit versions are indeed structurally deficient.

- (29) a.  $[_{vP}$  Maša  $[_{v'}$   $v^0$   $[_{VP}$  velela  $[_{ApplP}$   $ec_i$   $[_{Appl'}$  Appl $^0$   $[_{CP}$  PRO $_i$  pomyt' posudu]]]]]] 'Mary ordered (someone) to wash the dishes.'
  - b.  $[v_P]$  Maša  $[v_P]$  velela  $[Appl_P]$  ec  $[Appl_P]$  [CP] Anne pomyt' posudu]]]]]] 'Marv ordered for Ann to wash the dishes.'

Based on the structure in (29b) we could expect sentences with both an overt obligation holder and an overt embedded subject to be grammatical. However, it turns out that overt realization of these two dative DPs together is prohibited (30a), even though there is no general restriction ruling out co-occurrence of two dative DPs next to each other within one sentence in Russian (30b).

- (30) a. \*Maša velela Anne [Pete prin'at' lekarstvo].

  Mary.NOM ordered Ann.DAT Peter.DAT take.INF medicine

  Intended: 'Mary ordered Ann for Peter to take the medicine.'
  - b. Maša velela Anne [Pete kupit' podarki]. Mary.NOM ordered Ann.DAT Peter.DAT buy.INF presents

'Mary ordered Ann to buy presents for Peter.' ('Peter' = an embedded beneficiary)

I follow Burukina (2019) and propose to account for this adopting an ECM analysis for constructions with an overt embedded subject: in (30a), etc. there is one source for dative case available (Appl<sup>0</sup>) and the two overt DPs compete for it. When an obligation holder is implicit, the higher Appl<sup>0</sup> can exceptionally license the referential embedded subject. If the obligation holder is an overt DP itself, a derivation with a non-PRO embedded subject will crash.

This analysis accounts for the overt embedded subject vs. control ambiguity, including diverging interpretations of examples with an embedded passive construction (6) and quantified expressions (15). In principle, most of sentences with a mandative verb and an embedded non-finite clause can receive multiple readings depending on the interpretation of the dative DP. Thus, in (31) the (a) interpretation is possible if *Anne* 'to Ann' is analyzed as an obligation holder controlling the embedded PRO subject. The second interpretation is entailed if *Anne* is the overt embedded subject itself, while the recipient of the message 'Ann should come at 8' remains unspecified.

- (31) Maša velela Anne prijti v 8. Mary.NOM ordered Ann.DAT come.INF at 8
  - a. 'Mary was talking to Ann and she ordered her to come at 8.'
  - ← underlying control structure
  - b. 'Mary talked to someone and ordered that Ann should come at 8.'
  - ← underlying structure with the overt embedded subject

The proposed structural representation fully describes the Russian data, relying on similarities between mandative predicates and verbs of communication. However, there are also obvious differences between the two groups. After all, in ordinary sentences with a verb of communication the dative DP is normally interpreted as merely an Addressee, not as an obligation holder responsible for doing something. In the remaining part of this paper I will argue that desiderativity is derived as sentences with mandative verbs contain a structurally present although silent deontic modal that heads an embedded clause or an eventive DP. This accounts not only for the difference between mandatives and ordinary verbs of communication but also for identical properties of mandative predicates and the so called deontic modal predicatives.

# 5. Mandatives and deontic modal predicatives

# 5.1. General properties of deontic modal predicatives

I propose to add one more component to the presented structure to account for several additional properties of constructions with mandative verbs and to develop the ultimate representation – a silent deontic modal that takes an embedded clause / an eventive DP as a complement (32).

(32)  $[_{VP} \text{ Subject } [_{V'} \text{ V}^0 [_{VP} \text{ V}^0 [_{ApplP} [_{DP} \text{ obligation holder}] [_{Appl'} \text{ Appl}^0 [_{ModP} \text{ modal } [_{CP} \dots]]]]]]]$  This silent modal head is not an 'invented' item; in Russian, it belongs to the well established class of the so called modal *predicatives* (*možno* 'allowed', *nado* 'necessary, required', etc.). This corresponds to the general semantic intuition that desiderativity involves deontic modality and helps to draw a parallel between almost identical distributions of modal predicatives and desiderative verbs.

Russian deontic modal predicatives are often described as being phi-invariant. Indeed, they normally prohibit nominative DP subjects<sup>15</sup> and embed a non-finite or a finite subjunctive

The fact that modals of necessity behave differently from other modal items has been reported for many languages, starting with English *need* (Duffley 1994; Harves and Kayne 2012); however, this behavior does not interfere with the proposed analysis.

The predicatives *nužno* and *neobxodimo*, both translated to English as 'necessary', are apparent exceptions as they can be analyzed as short forms of adjectives (*nužn-yj* and *neobxodim-yj*, respectively) and allow nominative nominal subjects (i).

 <sup>(</sup>i) Maše nužna / neobxodima eta kniga.
 Mary.DAT necessary.FEM.SG necessary.FEM.SG this book.FEM.SG.NOM
 'This book is necessary to Mary.' = 'Mary needs this book.'

clause, appearing in the default neuter singular form (visible in past and future tense when an agreeing copula is required (33)). Similarly to mandative verbs, deontic modal predicatives usually occur together with a dative DP.

- (33) a. Maše bylo možno pojest' moroženoe.

  Mary.DAT was.N.SG allowed.N.SG eat.INF ice-cream

  'Mary is allowed to eat ice-cream.'
  - b. Maše bylo nel'zja, čtoby Marina ostavalas'.Mary.NOM was.N.SG prohibited.N.SG so that Marina.NOM stay.SUBJ'For Mary it was prohibited for Marina to stay.'

Sentences with a deontic modal predicative and an embedded non-finite clause pass the familiar diagnostics for having an overt embedded subject: the idiom chunk (34), embedded passivization (35) and inanimateness tests (36).

- (34) Čërnoj koške nel'zja probegat' meždu nimi. black cat.DAT prohibited.N.SG run.INF between them Lit. available: 'The black cat mustn't run between them.' Idiom. available: 'They are not allowed to quarrel.'
- (35) a. Mal'čiku nado byt' ubitym Voldemortom.

  boy.DAT necessary.N.SG be.INF killed Voldemort.INST
  - (i) 'It is necessary that the boy be killed by Voldemort.' (= b)
  - (ii) 'For the boy it is necessary to be killed by Voldemort.'  $(\neq b)$
  - b. Voldemortu nado ubit' mal'čika. Voldemort.DAT necessary.N.SG kill.INF boy.ACC
    - (i) 'It is necessary that Voldemort kill the boy.' (= a)
    - (ii) 'For Voldemort it is necessary to kill the boy.'  $(\neq a)$
- (36) Stroitel'stvu nado zakončit'sja k martu.

  construction.DAT necessary.N.SG complete.INF by March

  'The construction must be completed by March.'

The examples above demonstrate that dative DPs that we see on the surface are often thematically related to the embedded predicate and a deontic modal itself appears to be rather a functional element (see Wurmbrand's (1999, 2001) claim that modal verbs participate in functional restructuring deriving monoclausal constructions). However, at least three factors suggest that Russian deontic modal predicatives do not belong to the same class of functional heads, as, for example, modal verbs in many Germanic languages. The first factor is an already familiar kind of ambiguity, attested for (35). Second, partial coreference between the

matrix obligation holder and the silent subject of an embedded non-finite clause is allowed, as reported by many native speakers (37). Third, deontic modal predicatives allow a broad range of possible dependents (both non-finite and finite clauses). Based on these properties, I argue that deontic modal predicatives are lexical heads that normally require a single argument – a non-finite or a finite subjunctive clause – and allow an additional obligation holder, which (in case of an embedded non-finite clause) controls the embedded subject.<sup>16</sup>

(37) % Marine nel'zja bylo idti v kino vmeste.

Marine.DAT prohibited.N.SG was.N.SG go.INF into cinema together

'For Marina it was prohibited to go to the cinema together.'

Similarly to sentences with a matrix mandative verb, when the dative DP is the embedded subject itself, no evidence confirms that it must move into a matrix position; in (38), for example, I provide results for the NPI licensing diagnostic.

(38) Segodn'a možno nikomu ne myt' posudu. today allowed.N.SG nobody NEG wash.INF dishes 'Today it is allowed for everybody not to wash the dishes.'

I propose the following structural representation for constructions with Russian deontic modal predicatives (39): a deontic modal predicative is, inherently, a monadic predicate selecting a single complement, and an obligation holder is introduced above the ModP.

(39)  $[ApplP [DP obligation holder] [ApplP Appl^0 [ModP deontic modal [CP ...]]]]$ 

Again, I adopt the basic applicative syntax and semantics proposed by Pylkkänen (2008) and assume that an applied object related to a saturated modal constituent (which, in turn, embeds a proposition) by the applicative head always gets interpreted as an obligation holder, both in root and embedded contexts, including those case when a deontic modal phrase is embedded

The reported capability of deontic modals to either select a proposition with an overt referential subject or support control relation between an obligation holder and an embedded PRO fits in with the general discussion of deontic modality by Brennan (1993) and 'ought-to-be' vs. 'ought-to-do' distinction proposed by Feldman (1986).

under a verb of communication.<sup>17</sup> In the next sub-section I will provide two additional arguments in favor of the decompositional analysis for mandative verbs.

# 5.2. Deriving desiderativity: mandatives embed a silent modal

Support for decomposing constructions with mandative verbs comes from two properties of such sentences. First is the possibility of ambiguous interpretation of examples with sentential negation. Let us first take a look at desiderative predicates in general. The fact that desiderative deontic universal 'must'-type predicates can be Neg-raisers has been widely discussed in the literature, including von Fintel and Iatridou (2007), Iatridou and Zeijlstra

(i) \*Vrač skazal komu-to medsestre; PRO; dat' Maše lekarstvo.

doctor.NOM told someone.DAT nurse.DAT give.INF Mary.DAT medicine.ACC

Intended: 'The doctor told someone that for the nurse it is necessary to give Mary the medicine.'

[VP SAY [ApplP [Addressee] [ApplP Appl0 [ApplP [Obligation holder] [ApplP Appl0 [ModP modal [CP ... ]]]]]]]

I assume that (i) is ruled out because of an independent general restriction on recursion: an applicative phrase cannot be selected as the complement of another applicative head. The precise nature of this restriction remains to be further investigated (see, for example, analyses developed by Koopman (2014) and Den Dikken and Dékány (2018)), however, its presence is further supported by ungrammaticality of examples with multiple Beneficiaries, External Possessors and dative Goals (ii).

- (ii) a. \*Ivan Maše Petru razbil vazu.

  John.NOM Mary.DAT Peter.DAT broke vase.ACC
  Intended: 'John broke Peter's vase for Mary.'
  - b. Ivan Maše razbil vazu.

    John.NOM Mary.DAT broke vase.ACC
  - (i) 'John broke Mary's vase.' ('Mary' = external possessor)
  - (ii) 'John broke a vase for Mary.' ('Mary' = beneficiary)

To introduce both an Addressee and an obligation holder additional 'layers' should be inserted between the two applicative phrases: for example, a modal part can be embedded within a finite clause (iiia) or introduced in form of direct speech (iiib).

(iii) a. Vrač medsestre nužno dat' Maše lekarstvo. skazal komu-to, doctor.NOM told someone.DAT that nurse.DAT necessary.N.SG give.INF Mary.DAT medicine 'The doctor told someone that for the nurse it is necessary to give Mary the medicine.' b. Vrač "Medsestre nužno lekarstvo." skazal komu-to: dat' Maše doctor.NOM told necessary.N.SG give.INF Mary.DAT medicine someone.DAT nurse.DAT 'The doctor told someone: "For the nurse it is necessary to give Mary the medicine."

Given the structures for verbs of communication (23) and deontic modals (39), one might expect that the combination of the two would result in a construction with simultaneously present referentially different Addressee and obligation holder; however, sentences similar to (i) are ungrammatical for all native speakers of Russian.

- (2013), a.o. In contrast, existential predicates denoting permission typically do not support Neg-raising and do not allow ambiguous interpretations (Iatridou and Zeijlstra 2013) (40).
- (40) a. John cannot stay.
  - = John must leave. ≠ John may leave.
  - b. Maše nel'zja ostavat'sja.

Mary.DAT prohibited.N.SG stay.INF

- 'Mary is not allowed to stay.'
- = Mary must leave.  $\neq$  Mary may leave.

Consider now the example in (41) in its ECM configuration, which involves the mandative verb of permission *razrešit'* 'permit', and its possible interpretations. If *razrešit'* itself belongs to the class of deontic modal predicates, we would expect (a) to be interpreted only as (b). The fact that both (b) and (c) readings are available is easy to explain if the 'communication' and the modal components are separated and there is an intermediate position available between the two. Furthermore, the interpretation in (d) is blocked compatibly with the idea that the lower modal is indeed permissive and Neg-raising is not allowed.

(41) a. Anna ne razrešala Maše ostat'sja.

Ann.NOM NEG permitted Mary.DAT stay.INF

- 'Ann didn't allow Mary to stay.'
- b. 'Ann said that it is not possible for Mary to stay.'
- c. 'Ann didn't say that it is possible for Mary to stay.'
- d. Not available: 'Ann said that it is possible for Mary not to stay.'
- (41') NEG(c) [VP razrešala [ApplP ec [ApplP ApplO NEG(b) [ModP modal [ NEG(d) Maše ostat'sja]]]]. Second, almost all predicates denoting information transfer can be 'transformed' into mandative verbs, at least in colloquial Russian. Consider verbs in (42a): they are interpreted as ordinary verbs of communication, require an embedded finite indicative clause and can optionally have an overt dative Addressee. However, as illustrated in (42b) and (42c), they can also appear with a non-finite or a finite subjunctive embedded clause. In this case they get mandative (modal) interpretation, and a dative DP can be interpreted as an obligation holder.
- (42) a. Pet'a skazal / napisal / šepnul Maše, čto Vanja ujdet.

  Peter.NOM said wrote whispered Mary.DAT that Vanja.NOM leave.FUT

  'Peter said / wrote / whispered to Mary that John would leave.'
  - b. Pet'a skazal / napisal / šepnul Maše ujti.Peter.NOM said wrote whispered Mary.DAT leave.INF

'Peter said / wrote / whispered that Mary should leave.'

c. Pet'a skazal / napisal / šepnul Maše, čtoby ona ušla.

Peter.NOM said wrote whispered Mary.DAT so that she.NOM leave.SUBJ

'Peter said / wrote / whispered that Mary should leave.'

The contrast between (42a) and (42b, 42c) might be explained by postulating two morphologically identical lexical entries for each of the verbs of information transfer. However, encoding modality in a structurally independent modal head eradicates the rather speculative lexical duplication and, at the same time, helps to explain the distribution of indicative and subjunctive mood in the embedded clause. This does not prove that the modal head is present. However, the analysis proposed in this paper provides a simple explanation for the similarity between various sub-classes of predicates which otherwise might be harder to achieve.<sup>18</sup>

```
(i) a. Maše
                Ø
                                              vstavat'.
                            zavtra
                                      rano
   Mary.DAT
                necessary
                            tomorrowearly
                                              wake up.INF
    'Mary should wake up early tomorrow.'
   b. Mašine
                            zdes'
                                      ne
                                              projexat.
   car.DAT
                possible
                            here
                                      NEG
                                              pass.INF
```

Considering examples similar to those in (i), one might ask if sentences with a matrix mandative predicate embed a 'root infitive type' direct speech. In other words, could (iia) be parallel to (iib)?

```
(ii) a. Pet'a
                skazal
                           Maše
                                       (*budet) rano
                                                           vstavat'.
                told
    Peter.NOM
                           Mary.DAT
                                       be.FUT
                                                  early
                                                           wake up.INF
    'Peter told Mary to wake up early.'
                skazal:
    b. Pet'a
                           "Maše
                                       (budet)
                                                           vstavat'.'
                                                  rano
    Peter.NOM told
                                                           wake up.INF
                           Mary.DAT
                                       be.FUT
                                                  early
    'Peter told: "Mary should wake up early"'.
```

At least three facts speak against analyzing (iia) as an equivalent to (iib). First, the prosody is different; in particular, direct speech is normally separated from the matrix part with a long pause. Second, as shown in (ii), in case of direct speech, a finite clause is embedded, which is visible in past / future tense when an overt copula is present. Third, direct speech requires indexical shift; thus, an embedded first person pronoun will be interpreted as referring to the logophoric center not the actual AUTHOR. Again, this is impossible in sentences similar to (iia).

The proposed approach differs from analyses that place a functional modal component within an infinitival clause itself (Bhatt 1999; Pesetsky and Torrego 2001; Wurmbrand 2014). However, the claim that silent lexical modals are attested in Russian has been independently made to account for the behavior of the so called root infinitives (Moore and Perlmutter 2000; Fleisher 2006). Although on the surface root infinitives look like non-finite clauses with a dative DP 'subject' (i), as was persuasively demonstrated by Fleisher (2006), they are, in fact, biclausal constructions with a silent matrix modal element.

<sup>&#</sup>x27;The car cannot pass here.'

#### 6. Concluding remarks

In this paper, I have focused on mandative verbs in Russian and demonstrated that they support both control and ECM, and that this ambiguity cannot be reduced to postulating lexical homonymy and / or assuming that the embedded non-finite clauses differ in size or have different TAM characteristics.

The reported control / ECM alternation (matching DP / PRO alternation within the embedded clause) posits a challenge to the existing categorizations of clause-embedding predicates that attempt to place each verb either into the 'raising' group or the 'control' group. The data further support the Sundaresan and McFadden's (2010) idea that DP subjects are, essentially, available in the same syntactic environments as PRO.

I have further demonstrated that, in Russian, another group of clause-embedding predicates behave in a similar way, namely, deontic modal predicatives. To account for this, I have developed a single analysis arguing that constructions with a matrix mandative verb should be decomposed: mandative verbs belong to the class of verbs of communication that embed a silent deontic modal head, selecting a proposition as its complement. Although the proposed analysis is initially data-driven, I believe that its central idea of decomposition can be successfully applied to other languages. Furthermore, the data under consideration open the door to further investigation of functional vs. lexical and overt vs. covert modal items.

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