# DATIVE CASE WITH INFINITIVES IN RUSSIAN[*]

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## 1.    Introduction

This paper discusses the so-called Dative Infinitive Construction (DIC) in Russian (1). It involves a root clause headed by an infinitival verb, whose subject is dative (Kondrashova 1994; Moore and Perlmutter 1999, 2000; Sigurðsson 2002; Fleisher 2006; Jung 2009, Tsedryk 2017):

(1)    *Mne  ne     vstat'/vstavat'      zavtra      rano.*
      I.DAT NEG  get.up.PERF.INF     tomorrow   early
      Perfective: 'It will be impossible for me to get up early tomorrow'
      Imperfective: 'I (don't) need / have to get up early tomorrow'

    I argue that not all structures that surface with an infinitival verb in the matrix clause are true DICs, only those with a negated perfective verb. I also show that agreement-based approaches positing a functional head as a case assigner cannot account for the structure of DICs. I develop an analysis along the lines of dependent case family of approaches (Marantz 1991, McFadden 2004, Baker 2015). DICs are shown to pattern with finite clauses, and the dative argument is analysed as residing in [Spec, TP] paralleling the structure of finite clauses with a nominative subject. The infinitival dative case is assigned as an unmarked case via case assignment rules.

    In section 2, I discuss the properties of DICs and parallelism between nominative and infinitival dative. I also present arguments in favour of DICs' monoclausality and the structural nature of the infinitival dative. In section 3 I show that DICs are finite tensed clauses, which never involve PRO but rather *pro* when embedded. I then present my analysis of the construction based on the configurational model of case assignment. Section 4 concludes the discussion.

## 2.    Introducing the dative infinitive construction

### 2.1    What is and what is not a DIC

Traditionally, all those structures have been analyzed as DICs which surface as a combination of an infinitival verb and a "subject-like" dative argument. Different types are illustrated in (1) and (2): such infinitival dative clauses include both perfective and imperfective (1) clauses, yes/no- and wh-questions (2a, b) and adjunct clauses (2c).

(2) a. *Vstavat'/vstat'*      *li mne zavtra rano*?
Get.up.IMPERF/PERF.INF    Q I.DAT   tomorrow   early
Imperfective and perfective 1: 'Should I/Do I need/have to get up early tomorrow?'
Perfective 2: 'Will it be possible for me to get up early tomorrow?'

     b. *Kogda mne vstavat'/vstat'*      *zavtra*?
When   I.DAT   get.up.IMPERF/PERF.INF    tomorrow?
'What time should I/do I need to get up tomorrow?'

     c. *Ja zakončil vsë, čtoby mne (ne) vstavat'/vstat*      *rano.*
I.NOM finished all,   in.order I.DAT(NEG)    get.up.IMPERF/PERF.INF   early
'I finished everything, so that I don't have to get up tomorrow early'

However, one cannot unify all these constructions under one structural analysis. Imperfective sentences are different from their perfective counterparts. First, declarative perfective infinitival sentences are always in the negative form and are ungrammatical when affirmative:

(3) *\*Mne*    *vstat'*      *zavtra*    *rano*.
   I.DAT    get.up.PERF.INF    tomorrow   early
   Intended: 'It will be possible for me to get up tomorrow early'

Imperfective infinitival sentences are both possible as affirmative and negative. Besides, there is a clear difference in semantics: imperfective sentences involve modal necessity, while perfective ones have the flavour of negated possibility (Tsedryk 2017): something is not possible for the person denoted by the dative NP and it is not under their control. A second crucial difference is that declarative perfectives can be used in the past and the future with *bylo* 'was' and *budet* 'will be', respectively (4).[1] Declarative infinitival sentences with imperfective verbs are ungrammatical with these words alone (5): they are accompanied by *nado* 'need/have to' (or *nužno* with the same meaning):

(4) *Mne*    *bylo/budet*    *ne vstat'*      *rano.*
   I.DAT    was/will.be    NEG get.up.PERF.INF   early
   'It was/will be impossible for me to get up early'[2]

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[1] I avoid using any terms for these words such as auxiliary or particle. I postpone the discussion of the structural status of *bylo* and *budet* until section 3. What is worth noting here is that formally they are the past and the future forms, respectively, of the verb *byt'* 'be'.

[2] The meaning of the sentences with or without *budet* 'will be' is basically the same. Probably, this is due to the fact that infinitives are often "future-oriented". See Stowell (1982) for a relevant discussion.

(5)  *Mne  (ne)  \*(nado)  bylo/budet  vstavat'  rano.*
    I.DAT  (NEG)  need/have to  was/will.be  get.up.IMPERF.INF  early
    'I (didn't/don't) need / have to get up early'

I take this evidence as an indication of the biclausal status of declarative imperfective infinitival sentence. They involve a main clause formed by the predicate *nado* that can optionally be silent in the present and has to be overt in the past and future. The dative case on the "subject-like" argument comes from *nado*, which is the usual situation with this predicate as shown in (6). So, the infinitive is in fact in an embedded clause in (1) with an imperfective verb and (5), and the dative case on the "subject" is assigned within the main clause.

(6)  *\*Ja/Mne  nado  (bylo/budet)  vody.*
    \*I.NOM/I.DAT  need  (was/will.be)  water
    'I need/needed/will need some water'

Perfective sentences with the negated possibility semantics, on the other hand, do not involve any covert modal predicates and are only grammatical in negative sentences. I thus consider them to be true DICs in which an infinitival verb combines with a dative NP in the same clause.

As for adjunct infinitival clauses with a dative argument, they can be both affirmative and negative, with imperfective and perfective verbs and they involve a yet another kind of semantics, namely that of rationale (with the complementizer *čtoby* 'in order') and purpose clauses in sentences like (2c). They behave as true DICs because no modal predicate like *nado* can be inserted here and, moreover, they do not allow *bylo* or *budet*, so a biclausal analysis would be even less plausible for them than for the negated possibility perfectives. The special semantics can be attributed to presence of the complementizer (usually *čtoby* or *dlja togo čtoby* 'in order').[3]

Yes/no and wh-questions can be true DICs or biclausal structures with *nado*. They are possible with verbs of both aspects (2a, b). There is a reading (perfective 2) which is very close to negated possibility in (1), namely a question about such a possibility. I am not sure why these perfective questions are grammatical but affirmative sentences like (3) are not. Crosslinguistically, questions and negatives do pattern together (they are downward entailing contexts). In English, for instance, negative polarity items such as *any* and *yet* require either a negative or a question structure as opposed to their "positive" counterparts *some* and *already*. For the purposes of the present discussion, I set questions aside. It should be noted, though, that as long as at least some types of "infinitival questions" with a dative argument pattern together with true DICs (i.e. perfective dative infinitival clauses), they can be accounted for in the analysis proposed in section 3.

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[3] This kind of semantics is analyzed as subjunctive in Tsedryk (2017) which is reasonable because *čtoby* and *dlja togo čtoby* introduce subjunctive finite clauses as well and historically *čtoby* is a combination of *čto* 'what' and the Russian subjunctive particle *by*.

## 2.2 The clausal status of the DIC

Now I turn to the problem of clausality in DICs. I have shown that only sentences with a negated perfective verb (plus some questions with perfectives) seem to be truly monoclausal and fall in the class of true DICs. In this section I give additional evidence in favour of their monoclausality and refute the arguments proposed to support their biclausal status.

There exist two versions of the biclausal analysis: control and raising. In the former, the dative argument is generated in the matrix clause and gets its case there (Fleischer 2006), while in the latter it enters the derivation in the embedded clause and moves higher to get its case (Jung 2009). Let me start with the raising option. From the point of view of the Russian grammar, it does not look plausible: raising is only available out of small clauses and never infinitival ones (see Bailyn 2012:109-111 for discussion):

(7)  *Ja      sčitaju Sashu     umnym      /  *znat'     otvet.*
     I.NOM   believe Sasha.ACC smart.INSTR /  know.INF   answer.ACC
     'I believe Sasha (to be) smart/to know the answer'

Since there is no independent evidence to support the raising analysis of DICs, the latter becomes very stipulative. Moreover, if *bylo/budet* is analysed as the matrix verb, it would be the case assigner. However, the copular *byt'* never assigns DAT, it usually requires NOM on its subject and INSTR on its object:

(8)  *Sasha/*Sashe        byl      xorošym/* xorošemu    myzykantom/*muzykantu.*
     Sasha.NOM/*DAT       was      good.INSTR/*DAT       musician.INSTR/*DAT
     'Sasha was a good musician'

The control analysis looks more plausible, since control sentences are widely attested in Russian, but it heavily relies on DICs being biclausal. Thus, showing that DIs cannot be biclausal means that they do not involve control. The first piece of evidence comes from the position of negation: it has to come before the infinitive and after *bylo/budet*. Fleischer (2006) argues that it indicates the presence of a higher clause in the structure, headed by *Ø / bylo / budet*, above the infinitival one. That the negation always stays low is explained by its obligatory "strong" reading: 'it must be the case that it is for someone *not* to do something'. It is, however, not clear why negation should be banned from merging into the matrix clause with the reading like 'it must *not* be the case that it is for someone to do something'. Moreover, Fleischer's analysis rules out the possibility of negation taking scope over the dative argument, since the latter is generated in the matrix clause. This is not true in Russian: quantifiers show that negation can take scope over the DAT argument:

(9)  *Vsem         ne   postupit'   v  universitet.*
     Everyone.DAT   NEG  enter        in university
     'It is impossible for everyone to enter the university (but is possible for some)'

Another piece of evidence from Fleischer (2006) is the fact that, when *budet* is used to form the future tense and is in the same clause as the infinitival main verb (for the structure see Bailyn 2012), it never selects for perfective verbs, while in DICs the verb is always perfective. This is true but it would work as an argument against the monoclausal analysis only if one assumes that *budet* in the DIC is the same as the future tense *budet*. This is not the only possible option as is shown in Tsedryk (2017) and will be shown here in section 3.3.

Now some words on counterevidence to the biclausal analysis. Tsedryk (2017) discusses the pattern in (10):

(10) a.  *Ivanu        bylo    ne   postupit'       v      universitet.*
         Ivan.DAT      was     NEG  enter.PERF.INF  into   university
         'It was impossible for Ivan to enter the university.'

     b.  *\*Bylo   li Ivanu       ne    postupit'       v      universitet?*
         Was     Q  Ivan.DAT    NEG   enter.PERF.INF  into   university
         Intended: 'Was it impossible for Ivan to enter the university?'

*Bylo/budet* in the DIC is not able to undergo head-movement in yes/no-questions as shown in (10b). If it was a usual verb, it would be able to participate in question inversion just like any other verb, including the copular *byt'* 'be'. Since this is not the case, it is doubtful that *bylo/budet* is a verb in DIC sentences.

Another way to defend the biclausal approach to the DIC is to say that *bylo/budet* are the past and future forms of the copula *byt'* 'be'. There are some similarities, indeed. They have the same forms and distribution: just like *bylo/budet* in the DIC, the true copular verb *byt'* is used in the past and future forms but is always silent in the present (11a). The copula can also take infinitival complements (11b).

(11) a.  *Sasha        (ne)  byl / Ø / budet    xorošim        muzykantom.*
         Sasha.NOM    NEG   was / Ø / will.be  good.INSTR     musician.INSTR
         'Sasha was/is/will be a good musician'

     b.  *Ejo      rešenie       bylo (\*ej)       kupit'        kvartiru.*
         Her.NOM decision.NOM   was   (\*she.DAT)  buy.PERF.INF  apartment.ACC
         'Her decision was (not) to buy a new apartment'

This is where the similarities end, though. First, as can be seen in (11a), the position of negation is different: it precedes the copula but follows *bylo/budet* in DICs. Second, unlike the true copula, *bylo/budet* can never be inverted in yes/no-questions. Third, in infinitival complements a dative subject is banned (11b), while in DICs it is the default.

Finally, complement infinitival clauses can be perfective and imperfective, affirmative and negative but the DIC is restricted to negated perfectives.

Since *bylo/budet* is not really a verb, the position of negation that Fleisher (2006) presents as an argument in favor of the DIC's biclausality, in fact points in the opposite direction. Under the monoclausal analysis the position is straightforwardly accounted for if we assume that *bylo/budet* is not a verb but something else. The negation *ne* would then just precede a full verb (infinitive in this case) as it would do with any other verb. I discuss this issue in detail in section 3.3.

## 2.3   Some formal properties of DICs

DICs possess a number of interesting syntactic properties, one of them being the assignment of dative to the "subject-like" NP. It can never be nominative (or any other case, for that matter). DAT and NOM are in complementary distribution, as illustrated in (12). Moreover, since Russian verbs agree only with nominative NPs, there is no agreement.

(12) *Mne/*Ja      ne     vstat'           zavtra     rano.*
     I.DAT/*NOM    NEG  get.up.PERF.INF  tomorrow   early
     'It will be impossible for me to get up early tomorrow'

Another important property concerns the perfective "negated possibility" DICs like that in (1). In declarative DICs a perfective verb always goes with negation, affirmative sentences are impossible. In addition, the position of negation is fixed as it always has to directly precede the verb, even when *bylo* or *budet* show up in the structure:

(13) *Mne     (*ne)     bylo/budet     *(ne)     vstat'           rano.*
     I.DAT    (*NEG)   was/will.be    NEG       get.up.PERF.INF   early
     'It was/is/will.be impossible for me to get up early'

A third interesting characteristic is that "non-canonical"[4] case assignment applies only to the "subject-like" argument, and no other argument of the verb is affected. All other arguments receive the case they would get in a corresponding finite sentence. Thus it is, for example, possible to get two datives in one infinitival sentence. In (14) the leftmost argument is assigned infinitival dative while the postverbal one receives dative from the verb (*pomoč* 'help' always assigns DAT to its object):

(14) *Vasje     ne     pomoč       svoemu     drugu.*
     Vasja.DAT  NEG  help.PERF.INF self.DAT    friend.DAT
     'It will be impossible for Vasja to help his friend'

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[4] If by "canonical" we understand the assignment of NOM to the subject, ACC to the direct object and DAT to the indirect object.

There are also some important properties of adjunct DICs. First, they are headed by complementizers such as (*dlja togo) čtoby* 'in order to', *pered tem kak* 'before', *vmesto togo čtoby* 'instead of (doing smth)' which introduce sentential adjuncts. Second, the dative argument is optionally coreferent with an argument in the main clause. However, when there is coreference, the dative argument can be omitted, otherwise it has to be overt: a silent argument will be interpreted as coreferent with one of the matrix arguments (*ja* 'I' in (15)).

(15)  *Ja      zakončil vsë,     čtoby    *(jej)   ne    vstavat'          rano*.
      I.NOM    finished everything, in.order she.DAT NEG  get.up.IMPERF.INF  early
      Intended: 'I finished everything, so that *she* doesn't have to get up early'.

These are the syntactic properties of DICs that will become important in my discussion of the source of the infinitival dative and the mechanics of its assignment.

## 2.4   Infinitival datives are structural

The fact that infinitival datives are structural, not inherent or lexical has extensively been discussed in the literature (Greenberg and Franks 1991, Kondraschova 1994, Moore and Perlmutter 2000, Germain 2017), so I only briefly introduce some syntactic tests that support the structural nature of the infinitival dative.

First, the infinitival dative does not depend on specific predicates. DICs are possible with a wide range of predicates with only one restriction: if a predicate has no NOM arguments, a DIC is impossible. Consider the impersonal verb *xvatat'/xvatit'* 'be enough.IMPERF/PERF' in (16), which has two arguments: one dative, the other genitive. Consequently, neither of them can be assigned infinitival dative in a DIC (17).

(16)  *Mne     ne    xvataet                    deneg*.
      I.DAT    NEG   be.enough.IMPERF.PRES.3SG   money.GEN
      'I don't have enough money'

(17)  *Mne/Den'gam    ne    xvatit'              deneg/mne*.
      I/Money.DAT     NEG   be.enough.PERF.INF   money.GEN/I.DAT
      'It is impossible for me to have enough money/for the money to be enough for me'

Thus, having a NOM argument is a necessary condition for a predicate to be able to form a DIC. It implies a connection between nominative and infinitival dative: they should have a similar source. The second test is the ability of the infinitival dative to replace the accusative case of the direct object in infinitival passive constructions:

(18)  a.    *Drugu     ne    obmanut'    Vasju*
            Friend.DAT NEG   deceive.INF  Vasja.ACC
            'It's impossible for a friend to deceive Vasja.'

b.   *Vasje*   *ne*   *byt'*   *obmanutym*   *drugom*
   Vasja.DAT   NEG   be.INF   deceived.INST   friend.INST
   'It's impossible for Vasja to be deceived by a friend.'

  DIC passives manipulate a verb's core arguments in the same way as passivization in finite clauses does: the direct object *Vasja* of the verb *obmanut'* 'deceive' in (18a) is promoted to the leftmost position in (18b) and assigned DAT instead of ACC. The agentive subject *drug* 'friend' is demoted in (18b) to the adjunct status and receives instrumental case just like subjects do in passives. A related test involves the use of unaccusatives in DICs. Consider an unaccusative verb *upast'* 'fall.PERF' whose sole argument is always nominative in finite clauses (*Vasja* in (19a)). In a DIC it can be licensed by the infinitival dative:

(19) a.   *Vasja*   *upal*   *s*   *kryšy.*
    Vasja.NOM   fell   from   roof.
    'Vasja fell from the roof'

   b.   *Vasje*   *ne*   *upast'*   *s*   *kryšy.*
    Vasja.DAT   NEG   fall.PERF.INF   from   roof.
    'It is impossible for Vasja to fall from the roof'

  To briefly summarize, the infinitival dative behaves syntactically as a structural case. I have shown that it does not come from the predicate and is not directly tied to a specific theta-role assigned by the predicate. It also participates in case alternations that are associated with structural cases, such as passives and unaccusatives.

## 3.   Infinitival datives explained

### 3.1   The structural position of the infinitival dative

One of the main insights of section 2 is the connection between nominative and infinitival dative cases. There is evidence that further supports its existence in Russian: the ability of the latter to control into gerundial clauses, a property exhibited usually by nominative subjects only (Bailyn 2012: 114). Consider a finite sentence with a gerundial clause (from Bailyn 2012: 144, slightly modified):

(20) *Ivan$_i$*   *našel*   *Sashu$_j$,*   [*PRO$_{i/*j}$*   *čitaja*   *gazetu*].
   Ivan.NOM$_i$   found   Sasha.ACC$_j$   [PRO$_{i/*j}$   read.GER   newspaper]
   'Ivan found Sasha while reading a newspaper'

  Only the nominative subject can control PRO in a gerundial clause. The accusative direct object *Sashu* is not able to be the controller. As it turns out, the dative NP in the DIC can control into gerundial clauses just like the nominative subject:

(21) [PRO$_{i/*j}$    *Čitaja    gazetu*],    *Ivanu    ne    najti    Sashu.*
    [PRO$_{i/*j}$    Read.GER newspaper],    Ivan.DAT    NEG    find.PERF.INF Sasha.ACC
    'While/By reading a newspaper, Ivan won't be able to find Sasha'

Since infinitival dative-marked arguments exhibit various syntactic properties that are attributed in other contexts to nominative noun phrases, I conclude that the structural position where the infinitival dative is assigned is the same, [Spec, TP]. This is the null hypothesis given all the data presented above. For the purposes of this paper, I assume it to be true, and in what follows I will explore the consequences of this analysis.

## 3.2   PRO vs. *pro* in DICs

The problem with empty categories in DICs arises in contexts where the dative argument is silent, which can be found in adjunct clauses whose subject is coreferent with one of the arguments in the matrix clause (the subject in (22) but it can be an object, too):

(22) *Ja$_i$    vsë    zakončil, čtoby    e$_{i/*j}$    ne    vstavat'    rano*
    I.NOM    everything finish.PAST, in.order.to    NEG    get.up.INF    early
    'I finished everything, so that I don't have to get up tomorrow early'

This silent argument looks [+anaphoric] just like PRO in infinitival complements is. It cannot take an antecedent from elsewhere: the antecedent has to be one of the arguments in the main clause. Despite this, I argue that *e* in DICs like (22) is in fact *pro*. First, in complement infinitival clauses with a true PRO, an overt dative subject is always ungrammatical (23a). However, in DICs the dative argument can be either overt or silent (23b): this syntactic behaviour bears more resemblance to *pro* that PRO.

(23) a.    *Ja$_i$    xoču* [*(\*mne) / PRO$_i$    rabotat'    zdes'* ]
        I.NOM    want (\*I.DAT) / PRO    work.INF    here
        'I want to work here'

    b.    *Ja xotel    vzjat' vyxodnoj, čtoby    (mne)    pobyt'    odnomu.*
        I    wanted    take    day.off    in.order.to (I.DAT)    be    alone.DAT
        'I wanted to take a day off to spend some time alone'

Second, the syntactic distribution of DCIs is that of finite clauses and not PRO-infinitives. Certain complementizers such as *čto* 'that', select only finite clauses and never infinitival ones with PRO. Compare (24a) and (24b) below:

(24) a.    *Vasja    skazal,* [*čto    on    ne    vstanet    rano*].
        Vasja.NOM said,    that    he.NOM NEG    get.up.PERF.FUT.3SG    early
        'Vasja said that he won't get up tomorrow early'

b.     *Vasja        skazal   mne$_i$    [(\*čto)   PRO$_i$    vstat'         rano].*
      Vasja.NOM   said      I.DAT$_i$   [(\*that)   PRO$_i$     get.up.PERF.INF   early]
      Intended: 'Vasja told me to get up early tomorrow'

c.     *Vasja        skazal,   [čto     emu     ne    vstat'         rano].*
      Vasja.NOM   said,     [that     he.DAT   NEG   get.up.PERF.INF   early]
       'Vasja said that it's impossible for him to get up tomorrow early'

It turns out that DICs are perfectly grammatical with *čto*, as seen in (24c). DICs pattern with finite clauses and PRO is usually not found in finite sentences (see next section on finiteness).

Third, the fact that the empty element in (22) is [+anaphoric] does not necessarily entail that it is PRO. In some contexts uncontroversial instances of *pro* in Russian can also exhibit such behaviour. In (25) the embedded clause is finite (selected by *čto* 'that') but the subject is silent and has to be coreferent with the subject of the matrix clause *Vasja*: any other interpretation is ruled out (see Matushansky 1997, Tsedryk 2013, Bizzarri 2015 for more details on this issue; see also Sudharsan 2017 on anaphoric *pro* in Kannada).

(25)   *Vasja$_i$        skazal,   čto      pro$_{i/*j}$   xočet      spat'.*
      Vasja.NOM     said,     that             want.PRES   sleep.INF
      'Vasja said that he wanted to sleep'

Thus, I conclude that the empty element in (22) cannot be PRO. It has all the properties of *pro* instead. Since there is no conclusive data in favour of Russian PRO being able to bear case (dative, in particular), I assume that PRO is always caseless in Russian. Thus, in Russian infinitival clauses dative is assigned to the subject only if it is an overt NP or *pro*.

### 3.3   Finiteness and tense in DICs

I take the data showing that DICs never involve PRO, can be selected by complementizers which require only finite clauses and can be root clauses as indicating that DIC sentences are finite and not infinitival clauses. It further supports the idea that nominative and infinitival dative have much in common and are assigned under minimally different conditions. Moreover, that DICs are finite means that they should be treated as tensed clauses – the issue that I turn my attention to now.

The DIC is analyzed as a tensed construction in Greenberg and Franks (1991) and Tsedryk (2017) but Moore and Perlmutter (1999) reject this view and analyze *bylo/budet* as temporal particles instead. In their analysis DICs can refer to the past or future but they are not truly tensed. First, they note that the particle *bylo* is attested in Russian in finite clauses:

(26) *On      bylo / *byl        (ne)     skazal        nam      pravdu,*
He.NOM was.NEUT/*MASC   (NEG)   say.PAST.MASC   we.DAT truth.ACC,
*no    potom    peredumal.*
but    then     rethought.
'He was about to tell us the truth, but then he changed his mind.'

Here *bylo* conveys the 'be about to do something' meaning, and the main verb *skazal* 'said' is inflected for past tense. If *bylo* was a verb in the past, the sentence would be tensed twice, which is unattested in Russian. Moreover, *bylo* fails to agree with the subject. It is *skazal* that does so. This *bylo* looks like *bylo* in DICs not only morphologically but also syntactically: it has to precede the negation in (26). There is, however, a crucial difference. Unlike in DICs, *budet* is not available in finite clauses other than as a future tense auxiliary for imperfective verbs (which have to be infinitival):

(27) **On       budet       skažet       nam      pravdu,    no    peredumaet*
He.NOM    be.FUT.3SG say.FUT.3SG   we.DAT truth.ACC, but   rethink.FUT.3SG
Intended: 'He will almost tell us the truth, but then he will change his mind.'

Thus, following Greenberg and Franks (1991) and Tsedryk (2017), I stick to the hypothesis that DICs are tensed clauses. The function of *bylo/budet* is to realize the tense feature on the T head but because these are not verbs (see also 2.2), I assume that they are phonological realizations of the [+past]/[+future] features on T. Since the verb in DICs is infinitival, it is incompatible with a tense feature and cannot be adjoined to T and spelled out as a tensed verb. The derivation for a sentence like (28) will proceed as in (29):

(28) *Ivanu       bylo ne   postupit'   v     universitet.*
Ivan.DAT   was  NEG enter.INF   into   university
'It was impossible for Ivan to enter university.'

(29) i. Merge {v, VP}, where VP = *postupit' v universitet* ⟶ Spell out VP
ii. Merge {NP *Ivan*, v'}; Merge {Neg, vP}; Merge {T[+past], NegP}
iii. Copy NP *Ivan*; Merge {NP *Ivan*, T'}
iv. Merge {C, TP} ⟶ Spell out TP: assign DAT to NP *Ivan* – *Ivanu*;
                                           spell out T[+past] as *bylo*.

Spelling out the tense feature on T is a last resort operation which I assume to be available in Russian since the forms of *byt'* 'be' are multifunctional and used to spell out the future tense for imperfective verbs and aspectual meanings like that in (26). This is one of the points where my analysis departs from that of Tsedryk (2017), whose model also tries to account for the behaviour of *bylo/budet*. In his approach these words spell out a complex "Appl + T" head. However, positing an ApplP projection is not well motivated for two reasons: a position unusually high for applicatives and the meaning is different from both high and low Appl (Pylkkänen 2008). Moreover, spelling out Appl would be an unusual function for *bylo/budet* in Russian, since Appl heads are not spelled

out in Russian (see Soschen 2005, Grashchenkov and Markman 2008 on Russian applicatives).

The derivation in (29) is what I propose for generating DIC clauses in Russian. This analysis does not answer one important question, though: how exactly is dative assigned to the argument in [Spec, TP] in DICs? I have presented all necessary components for my analysis of the source of the infinitival dative and I now turn to presenting it in detail.

## 3.4  The infinitival dative as an unmarked case

A good model of DICs as well as a theory of case assignment in general should be able to account for all the facts about infinitival datives discussed so far. It should provide a mechanism of dative case assignment in DICs that keeps the differences between nominative and infinitival dative as minimal as possible. In other words, the conditions under which each of these two cases is assigned should be minimally different.

Greenberg and Franks (1991) develop a GB approach to DICs, where the differences between nominative and infinitival dative have to do with different flavours of T. Nominative is assigned by T (=I(nfl)) with [+tense; +agreement] features. This is based on the fact that the verb agrees with nominative in Russian in tensed clauses. Dative is assigned to the same structural position, [Spec, TP (=IP)], but by the [+tense; -agreement] T head. This mechanism correctly rules out PRO-infinitives, which are not compatible with [+tense; -agreement]: in Russian controlled clauses are [-tense; -agreement]. Although at first sight this approach seems to be able to capture the distribution of nominative and infinitival dative NPs, there are some conceptual and empirical problems it runs into, given evidence and theoretical developments brought about by research into case and agreement over the past three decades.

First, in Minimalism the phenomenon of agreement has been formalized as either a functional projection ArgP (Pollock 1989, Chomsky 1995 and much related work) or as a syntactic operation Agree, whose applications go far beyond subject-verb agreement. Greenberg and Franks' [agreement] feature is incompatible with these current assumptions in the field. This issue alone, however, does not undermine their analysis because this incompatibility is a matter of theory-internal assumptions.

A more serious problem is that agreement-based approaches to case contradict the crosslinguistic generalization that it is case that triggers agreement and not vice versa (Bobaljik 2008, Preminger 2014). Greenberg and Franks's model fails to account for the distribution of nominatives across languages. Nominative case is found in embedded infinitival (i.e. non-agreeing) clauses in a number of languages (see Ortega-Santos 2002, Szabolcsi 2009, Barbosa 2016, Corbalán 2018 for data and an extensive discussion of the issue). Thus, the lack of agreement does not block nominative case. For an analysis of DICs, it means that it is not the lack of agreement that triggers dative case assignment to the NP in [Spec, TP]. It is nominative that determines agreement in finite clauses and dative case simply does not. Both are assigned independently of agreement.

A third issue with Greenberg and Franks' approach is that it fails to account even for the distribution of nominative NPs in Russian. In (30) the nominative NP *on* 'he' is in an infinitival clause and is interpreted as its subject (Barbosa 2016). If this is the correct

analysis of the data, then Greenberg and Franks' (1991) approach does not work here, either.

(30) *Perestal* [*prixodit' domoj tol'ko on pjanim*].
    Stopped    come.INF  home   only   he.NOM drunk
    'It stopped being the case that only he comes home drunk'

So, the lack of agreement on the verb in DICs cannot be the source of the infinitival dative. The difference is not a specific type of T involved in the derivation of DICs but the way the tense feature on T functions: in DICs this feature is not passed on to the verb because the latter is infinitival. In ordinary finite clauses, the feature is spelled out together with the verb. This is a crucial observation for my analysis to which I now turn.

The alternative I propose is that the infinitival dative is assigned via Marantz' (1991) algorithm, being one of the unmarked cases in Russian, according to his typology of cases: a. lexically governed case; b. "dependent" case (accusative and ergative); c. unmarked case (environment-sensitive); d. default case. Like nominative, infinitival dative is assigned to the NP that has not received lexical or dependent case by the time of spell-out and in the environment minimally different from that for the nominative case.

There is one crucial difference between DICs and usual indicative finite clauses: the main verb does not get the tense feature from T. The tense feature is active on T but there is nothing in the derivation that has an uninterpretable/unvalued tense feature for T to check/value it. This feature is phonologically realized as *bylo/budet* (and silent in the present). It is not just the presence of an infinitive that triggers dative because it would then be possible to have a "subject-like" dative argument in control clauses, which is ungrammatical in Russian. This principle of case assignment to [Spec, TP] can be stated as a rule in (31), which is based on Baker (2015: 166), as it is usually done in dependent case approaches (McFadden 2004, Baker and Vinokurova 2010, Baker 2015):

(31) a. If NP is m-commanded by T[~~tense~~] and is not otherwise case-marked when TP is spelled out, assign it *nominative/absolutive*.

   b. If NP is m-commanded by T[tense] and is not otherwise case-marked when TP is spelled out, assign it *dative*.

Here [~~tense~~] means that the tense feature on T has checked/valued an uninterpretable/unvalued tense feature on the verb and thus has been "discharged" and spelled out along with the verb. Correspondingly, [tense] denotes a tense feature that has not been "discharged" and can be spelled out as *bylo/budet*. The rule does not make any reference to [Spec, TP] specifically. I evoke the notion of *m-command* here instead that dates back to Chomsky (1986) and is defined as follows (slightly modified):

(32) X m-commands Y iff X does not dominate Y, and Y does not dominate X, and the maximal projection of X dominates Y.

T m-commands everything it c-commands plus its specifier, which guarantees that not only [Spec, TP] but also any other NP that T c-commands is in the domain of

nominative/absolutive/dative case assignment. Using m-command accounts for such languages as Icelandic with structures like (33): the NOM NP is not in the canonical subject position linearly. The DAT NP is arguably in [Spec, TP], so the NOM NP is not even structurally in the usual subject position (Sigurðsson 1989, 2004, among others).

(33)  *Henni    leiðast    strákarnir.*
       She.DAT   bore.3PL   boy.the.PL.NOM
       'She finds the boys boring.'

The NP that gets nominative does not have to be in [Spec, TP]. What is important for case assignment is the presence of distinct NPs in the same domain, their relative positions and the presence of lexical case assigners (or the lack thereof). In (33) the leftmost NP is case-marked with a lexically-governed dative case. The second NP cannot get a dependent case (accusative), so according to (31), since it is m-commanded by T[~~tense~~] and not case-marked otherwise by the time TP is spelled-out, it gets nominative.

## 4.    Conclusion

To conclude, I have shown that DICs are similar to usual finite clauses and the infinitival dative should be assigned under conditions minimally different from those for nominative. I have argued that agreement-based approaches and those that rely on the T head as the case-assigner cannot adequately capture these differences, which rather have to do with how the tense feature on T functions in DICs and not with the presence or absence of agreement or different flavours of T. I have proposed the derivation in (29) for DICs and the rule in (31) for the assignment of infinitival datives based on Baker (2015).

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