

Russian Dative Subjects, Case, and Control*

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Abstract

It is generally agreed that subjects of infinitival clauses in Russian are marked with dative case, based on evidence from two areas of Russian grammar: (i) apparent dative subjects of main-clause infinitivals and (ii) the case marking phenomenon known as the “second dative.” Here I argue that the first type of evidence has been misanalyzed in much of the syntactic literature, and that only the second type of evidence supports the existence of dative subjects of infinitives. The correct generalization is that subjects of Russian infinitival clauses are marked with dative case, but that PRO is the only element that may occupy this position. This result is consonant with recent developments in the theories of case and DP licensing and the distribution of PRO, which readily countenance morphological case marking of PRO and tie PRO’s occurrence to the presence of $[-T]$ and/or $[-Agr]$ features on I^0 . This paper provides both a needed update to the syntactic description of Russian and a contribution to the theories of DP licensing and control.

1 Introduction

Most contemporary syntactic analyses of Russian state that subjects of Russian infinitival clauses are marked with dative case (see, for example, Wierzbicka 1966; Comrie 1974b; Greenberg 1985; Neidle 1988; Greenberg and Franks 1991; Schoorlemmer 1993;

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Kondrashova 1994; Babby 1998; Moore and Perlmutter 2000; Perlmutter and Moore 2002). Here I wish to offer a modified version of this view. I propose that subjects of Russian infinitival clauses are indeed marked with dative case, but that they may never be lexical DPs or *pro*; only PRO may occur in the subject position of a Russian infinitival clause. This is a novel proposal with important consequences for our understanding of the distinction between morphological case and syntactic Case¹ and for the theory of control. In particular, it supports the view that morphological case is unrelated to DP licensing (and thus unrelated to classical GB Case; McFadden 2004) and that the distribution of PRO is regulated by [T] and [Agr] features, and not by syntactic Case (Landau 2004, to appear). The Russian data are thus consistent with the view that syntactic Case is an extraneous analytical tool not needed for these purposes, and that it may be possible to eliminate it from syntactic theory entirely.

Two types of evidence have been used to argue that Russian infinitival clauses have dative subjects: (i) apparent dative subjects of main-clause infinitivals and (ii) the case marking pattern known as the “second dative.” These are shown in (1a) and (1b), respectively.²

- (1) a. **Nam** ne minovat' gibli.
us.DAT NEG avoid.INF disaster.GEN
'It is not for us to avoid disaster.' (Timberlake 2004:8)
- b. Maša ugovorila Vanju [PRO prigotovit' obed
Maša.F.NOM persuaded.F Vanja.M.ACC prepare.INF lunch
odnomu].
alone.M.DAT
'Maša persuaded Vanja to cook lunch by himself.' (Franks 1995:235)

I argue below in section 2 that dative DPs like *nam* in (1a) are not subjects, but are instead experiencer arguments of a higher modal predicate. This is not a novel proposal: it is implicit or explicit in the analyses of at least Veyrenc (1979), Schein (1982), and Sigurðsson (2002). In section 2 I offer an analysis of the syntax of this construction that is more fully worked out than those offered previously, and show that apparent main-clause infinitivals like the one in (1a) are in fact biclausal structures. The ungrammaticality of impersonal predicates in this construction (as discussed by Perlmutter and Moore 2002) confirms that there is a control relationship between the dative experiencer of the modal predicate and the subject position of the embedded infinitival clause.

¹Throughout the paper, I follow the convention of writing lower-case *case* for morphological case marking and capitalized *Case* for the theoretical device licensing the occurrence of DPs.

²The following abbreviations are used in examples throughout the paper: ACC, accusative; COND, conditional particle; DAT, dative; EXIST, existential; F, feminine; FUT, future; GEN, genitive; IMPF, imperfective; INF, infinitive; INST, instrumental; LOC, locative; M, masculine; N, neuter; NEG, negation; NOM, nominative; PAST, past; PF, perfective; PL, plural; POSS, possessive; PRES, present; PRT, particle; Q, question particle; REFL, reflexive; SG, singular.

In section 3 I discuss the second dative, exemplified in (1b), and its implications for the morphological case marking of PRO. Following Babby (1998), Moore and Perlmutter (1999), and Franks (2005), I take the existence of the second dative pattern to indicate that PRO is marked with dative case in infinitival clauses. The dative secondary predicate *odnomu* in (1b) receives its dative case via agreement with PRO, which it modifies. As discussed in section 4, this possibility is readily accommodated by an approach to case like that of McFadden (2004), who proposes a wholesale split between morphological case marking (i.e., nominal inflection) and syntactic Case (the syntactic device licensing the occurrence of DPs). These data likewise support, and extend to Russian, Landau’s (2004; to appear) approach to the distribution of PRO, as the $[-Agr]$ specification of Russian infinitives ensures that only PRO may occupy the subject position of an infinitival clause and receive structurally assigned dative case there. Evidence from second dative agreement also suggests that the distribution of impersonal clauses in Russian is better explained by an analysis based on control than by the case-based proposal of Perlmutter and Moore (2002), as impersonals may be ungrammatical no matter whether the syntactic environment calls for a dative or a nominative subject.

Section 5 contains more detailed discussion of the modal predicate found with main-clause infinitivals, focusing on a puzzle concerning the position and scope of negation. This modal is also shown to be of a crosslinguistically common type. A few lingering questions are addressed in section 6. Section 7 concludes the paper.

2 Main-Clause Infinitivals

We begin with a discussion of main-clause infinitivals (hereafter, MCIs),³ exemplified above in (1a). Contrary to the standard view, I suggest that the dative DP in an MCI is not the subject of the infinitival clause, and that MCIs therefore do not constitute evidence for infinitival clauses’ having dative subjects in Russian. Instead, the dative DP is the experiencer argument of a higher modal predicate, and is related to the subject position of the infinitival clause via a control relation. The details of the syntactic analysis are presented in sections 2.1 and 2.2, along with discussion of its various descriptive advantages. Putative counter-evidence is addressed in section 2.3. The result is that only the second dative provides evidence that Russian infinitival clauses have dative subjects; this is discussed later, in section 3.

2.1 A Biclausal Structure

The claim that MCIs have dative subjects rests in large part on the superficial similarity of such clauses to finite main clauses with nominative subjects. Perlmutter and

³I introduce this abbreviation both in the interest of saving space and in order to induce the reader to abandon, via acronymic obfuscation, the idea that this construction consists of a single clause or that the infinitival clause is unembedded.

Moore (2002:620) offer the pair of sentences shown in (2).

- (2) a. **Mne** ne sdat' èkzamen.
 me.DAT NEG pass.INF exam.ACC
 'It is not (in the cards) for me to pass the exam.'
- b. **Ja** ne sdam èkzamen.
 I.NOM NEG pass.1SG exam.ACC
 'I will not pass the exam.'

The two sentences in (2) are claimed to be structurally parallel, with the sole difference that the MCI in (2a) contains a dative subject and an infinitival main verb while the finite clause in (2b) contains a nominative subject and a finite main verb (for explicit formulations of this claim and/or analyses that depend crucially on it, see, e.g., Wierzbicka 1966; Comrie 1974b; Greenberg and Franks 1991; Babby 1998; Moore and Perlmutter 1999, 2000; Perlmutter and Moore 2002). This dative case is assumed to be purely structural—i.e., assigned by default under the relevant syntactic configuration—and not tied to semantics.⁴

The difficulty of maintaining this view becomes immediately apparent, however, when we consider data from other tenses, as in (3).

- (3) a. Mne ne sdat' èkzamen. (= 2a)
 me.DAT NEG pass.INF exam.ACC
 'It is not (in the cards) for me to pass the exam.'
- b. Mne **bylo** ne sdat' èkzamen.
 me.DAT be.PAST.N NEG pass.INF exam.ACC
 'It was not (in the cards) for me to pass the exam.'

⁴Note that the claim holds only for clauses that, like (1a) and (2a), lack the type of overt finite predicate that takes a dative DP as an experiencer argument. Such clauses are abundant in Russian; an example is shown in (i).

- i. **Nam** nraivitsja katat'sja na lyžax.
 us.DAT like.3SG slide.INF on skis
 'We like to ski.' (Moore and Perlmutter 2000:390)

In (i), the dative DP *nam* is an experiencer argument of the finite predicate *nraivitsja*, and not the subject of the infinitive. A great deal of recent work has been devoted to showing that sentences like (i) are different from MCIs: the former have dative experiencer arguments (i.e., semantically based case assignment) while the latter have dative subjects whose case is purely structural (though see Schoorlemmer 1993 for a different view). For reasons of space, I will not review the arguments here; I refer the reader to Greenberg and Franks (1991), Komar (1999), and especially Moore and Perlmutter (2000) for details. Of course, we will soon see that MCIs are structurally quite similar to sentences like (i). I simply wish to make it clear that those authors who take MCIs to have dative subjects generally do not consider sentences like (i) to have dative subjects.

- c. Mne **budet** ne sdat' èkzamen.
me.DAT be.FUT.3SG NEG pass.INF exam.ACC

'It will not be (in the cards) for me to pass the exam.'

The tense paradigm in (3) suggests that there should be a present-tense form of the verb *byt'* 'be' in the present-tense example in (3a), corresponding to past-tense *bylo* in (3b) and future-tense *budet* in (3c); all other material in these sentences is the same. And, in fact, it is well known that the Russian verb *byt'* is null in its present-tense form. The structure of (3a) is thus as shown in (4) (following Veyrenc 1979:20).

- (4) Mne \emptyset ne sdat' èkzamen.
me.DAT be.PRES NEG pass.INF exam.ACC

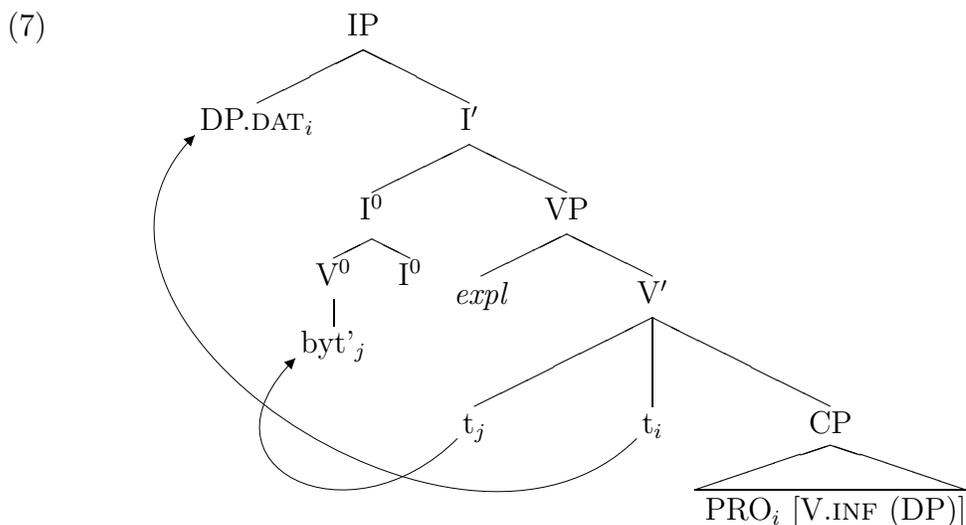
'It is not (in the cards) for me to pass the exam.'

The very existence of the tense paradigm in (3) indicates that there is more structure in MCIs than the simple comparison in (2) would suggest. In this connection, Franks (1995:252) observes that "in infinitival constructions where no finite copula is possible, neither is a dative subject." How can we best account for these facts?

I propose that MCIs are biclausal structures whose matrix verb is finite *byt'* (following the suggestions of Schein 1982 and Sigurðsson 2002). I begin by presenting the proposed structure in full, and discuss the evidence in favor of its various properties throughout the remainder of the paper. The crucial points of the analysis are the following: (i) the matrix verb is finite *byt'*, which takes the dative DP and the infinitival clause as its arguments; (ii) *byt'* has a modal interpretation in this construction, the details of which are discussed below in section 5; (iii) modal *byt'* is an impersonal verb with a null expletive subject; (iv) the dative DP is not the subject of modal *byt'*, but is an internal argument; and (v) the dative DP controls the PRO subject of the embedded infinitival clause. The structure of (4) is thus as shown in (5). A more schematic labeled bracketing and corresponding tree are provided in (6) and (7).

- (5) [IP Mne_i [_{I'} \emptyset .BYT'_j [_{VP} *expl* [_{V'} t_j t_i [_{CP} PRO_i ne sdat' èkzamen]]]]]]

- (6) [IP DP.DAT_i [_{I'} *byt'*_j-I⁰ [_{VP} *expl* [_{V'} t_j t_i [_{CP} PRO_i V⁰.INF (DP)]]]]]]



The dative DP (DP.DAT) is an internal argument of *byt'*, as indicated by the position of its trace in (7). It moves to SpecIP (or SpecTP, on some formulations; I will assume rough interchangeability of these categories here) to satisfy the EPP (Lavine and Freidin 2002; Bailyn 2004). Importantly, this movement does not make the dative DP a subject. While binding and reconstruction tests suggest that SpecIP is an A-position in Russian, any XP may move there to satisfy the EPP, including DPs that are clearly objects, as evidenced, e.g., by their accusative case, cooccurrence with nominative agentive clause mates, failure to trigger verb agreement, and inability to be controlled (for details, see Bailyn 2004). Subjects in Russian are generated *v*/VP-internally and get their nominative case *in situ*, though they may also move to SpecIP to satisfy the EPP (King 1995; Bailyn 2004). The term “subject” will henceforth be used to refer to arguments of this latter type. The dative DP in an MCI, then, is simply an internal argument that raises to SpecIP to satisfy the EPP, and not a subject.

Modal *byt'*, meanwhile, is a V⁰ that undergoes obligatory head movement to I⁰ (or T⁰, as *byt'* inflects only for tense, and not for agreement, in MCIs) (King 1995; Bailyn 2004).⁵ The impersonal character of modal *byt'* is reflected by the null expletive, *expl*, in SpecVP (see King 1995 for arguments that subjects in Russian are merged in SpecVP; for Bailyn 2004, it is Spec*v*P). I include the null expletive here for expository purposes, though the analysis does not depend crucially on it and there are conceptual problems with positing an expletive in the lexical layer of the clause (for discussion, see McCloskey 1996, 2001). As can be inferred from the structure in (7), modal *byt'* is a double-object verb without a thematic subject. For simplicity's sake, I have chosen to represent this with a ternary branching structure, but this can easily be translated into a binary branching *v*P-shell structure in which the

⁵Bailyn (2004) argues that this head movement is overt only when SpecIP is filled by a non-nominative XP. Though Bailyn does not discuss MCIs (his argument is based on evidence from a multitude of other constructions), they nonetheless meet this condition for overt head movement.

dative DP is structurally superior to the CP complement (cf. Larson 1988). Finally, evidence that the embedded infinitival clause is a CP comes from the possibility of *wh*-movement within this clause (discussed below in section 5.2; Babby 2000) and from the ungrammaticality of ECM configurations with verbal complement clauses in Russian (see Chvany 1975:52, among many others).⁶

The structure in (7) readily accounts for a number of phrase-structural peculiarities of MCIs that are difficult to explain on a monoclausal analysis. Here I focus on three issues: (i) the position of negation, (ii) the cooccurrence of *byt'* with perfective infinitives, and (iii) the inability of the dative DP to be controlled from a higher clause.

The position of the sentential negation marker *ne* in MCIs provides strong evidence that modal *byt'* and the infinitive do not occupy the same minimal clause. In Russian, *ne* always immediately precedes the finite verb, as shown in (8).⁷ It is a proclitic that must move together with the finite verb under I⁰-to-C⁰ movement, as shown in (9) (King 1995:chap. 6). Furthermore, *ne* always precedes *byt'* when *byt'* occurs as an auxiliary, as it does in passives (10) and future imperfectives (11).

- (8) a. Mal'čik **ne** vidit knigi.
 boy.NOM NEG see.3SG book.GEN
 'The boy does not see a book.' (King 1995:184)
- b. *Mal'čik vidit **ne** knigi. (*on intended reading*)

⁶ECM configurations are possible in Russian with nominal and adjectival complements, but not with verbal complements, as the following sentences show.

- i. Ja sčitaju lingvistiku naukoj.
 I.NOM consider.1SG linguistics.ACC science.INST
 'I consider linguistics a science.' (Chvany 1975:52)
- ii. Ja sčitaju Mašu p'janoj.
 I.NOM consider.1SG Maša.F.SG.ACC drunk.F.SG.INST
 'I consider Maša drunk.' (Pesetsky 1982:158)
- iii. *My sčitajem ego brata naxodit'sja v Kieve.
 we.NOM consider.1PL his brother.ACC be located.INF in Kiev.LOC
 intended: 'We consider his brother to be in Kiev.' (Chvany 1975:52)

Verbal complements like the one in (iii) are systematically ungrammatical in ECM configurations, regardless of the verbal semantics; activity verbs are just as bad as stative verbs like *naxodit'sja*. This fact has been taken to indicate that infinitival complement clauses contain a CP layer that blocks Case assignment to the embedded subject position. (In a Caseless theory, the CP layer could likewise be involved in blocking DP licensing in verbal complements, though I have no specific implementation to propose.)

⁷Note that *ne* may express constituent negation when it immediately precedes something other than the finite verb; such readings are possible in (8b), (10b), and (11b), though in (8b) the case of the object must be changed to accusative. (9b) is ungrammatical under any reading.

- (9) a. Oni sprosili, **ne** videli li my Ivana včera.
 they.NOM asked.PL NEG saw.PL Q we.NOM Ivan.ACC yesterday
 ‘They asked if we hadn’t seen Ivan yesterday.’ (King 1995:144)
 b. *Oni sprosili, videli li my **ne** Ivana včera.
- (10) a. Gorod **ne** byl okružen vragom.
 city.M.NOM NEG be.PAST.M surrounded.M enemy.INST
 ‘The city was not surrounded by the enemy.’ (Moore and Perlmutter 1999:229)
 b. *Gorod byl **ne** okružen vragom. (*on intended reading*)
- (11) a. Gruzoviki **ne** budut proezžat’.
 trucks.NOM NEG be.FUT.3PL go through.IMPF.INF
 ‘The trucks will not get through.’ (based on Moore and Perlmutter 1999)
 b. *Gruzoviki budut **ne** proezžat’. (*on intended reading*)

The position of negation in MCIs, however, violates the generalization seen in (8) through (11). As we saw above in (3), *ne* comes not before modal *byt’* but after it in this construction. Placing *ne* before *byt’* results in strong ungrammaticality, as shown in (12).

- (12) a. Gruzovikam bylo **ne** proexat’.
 trucks.DAT be.PAST.N NEG go through.PF.INF
 ‘It was not (in the cards) for the trucks to get through.’ (Moore and Perlmutter 1999:226)
 b. *Gruzovikam **ne** bylo proexat’.

The biclausal structure sketched in (7) offers a straightforward explanation for the position of negation in MCIs. Negation fails to precede finite *byt’* in (12) because it is not in the matrix clause, but rather embedded in the infinitival clause. If finite *byt’* and the infinitive were in the same minimal clause, we would have no explanation for why *ne* occurs after *byt’*. The position of negation facts thus provide strong evidence for the biclausal analysis proposed here. (Note that the ungrammaticality of examples like (12b) is still unexplained. I postpone discussion of why *ne* is unable to occur in the matrix clause of this construction until section 5.)

The second major piece of evidence in favor of the biclausal analysis is the grammatical cooccurrence of *byt’* with perfective infinitives. All Russian verb forms, including infinitives, have an aspectual specification: they are either perfective or imperfective. As shown above in (11), *byt’* may serve as an auxiliary for the imperfective infinitive. A finite future form of *byt’* followed by an imperfective infinitive yields the future imperfective construction. Note, however, that future *byt’* may not be followed by a perfective infinitive; the contrast is shown in (13).

- (13) a. Gruzoviki budut proezzhat'.
trucks.NOM be.FUT.3PL go through.IMPF.INF
'The trucks will get through.'
- b. *Gruzoviki budut proexat'.
trucks.NOM be.FUT.3PL go through.PF.INF

MCI's, however, readily admit perfective infinitives. In fact, perfective infinitives are often preferred over imperfective infinitives in this construction. Consider (14), the future-tense counterpart of (12a).

- (14) Gruzovikam budet ne proexat'.
trucks.DAT be.FUT.3SG NEG go through.PF.INF
'It will not be (in the cards) for the trucks to get through.' (Moore and Perlmutter 1999:226)

The licit cooccurrence of future-tense *byt'* and the perfective infinitive is explained by the biclausal structure proposed above. In this structure, *byt'* is the matrix verb and the infinitive is embedded in a CP complement. Therefore, *byt'* and the infinitive are not clause mates. Whereas the infinitive in the future imperfective construction in (13) occupies the same minimal clause as the future auxiliary *budut* and can only be imperfective, the infinitive in the MCI in (14) occupies a clausal complement of which *budet* is not a constituent. Thus, the local configuration which allows only imperfective infinitives to occur alongside future-tense forms of *byt'* simply does not exist in MCIs. As a result, it is no surprise to find that perfective infinitives are permitted. The syntactic analysis proposed here makes the correct prediction about the (lack of a) selectional relationship between *byt'* and infinitival aspect in MCIs.

Moore and Perlmutter (1999) use the position-of-negation and infinitival-aspect-selection facts discussed here to argue that the past-tense *bylo* and future-tense *budet* forms found in MCIs are not verbs but "temporal particles." They note in particular that these forms are morphologically invariant in this construction: *byt'* does not inflect for person, number, or gender here. The morphological fixity of these forms is just as readily explained, however, by analyzing them as different tense forms of an impersonal predicate. Russian has many other impersonal predicates (some of which are discussed below in section 2.2), and as a class they show default 3SG or neuter inflection.⁸ The biclausal analysis proposed here, in which *byt'* is a matrix impersonal predicate, accounts not only for the morphological invariance of the forms in question, but also for the particular forms seen. On the temporal particle analysis, by contrast, the fact that the temporal particles have the same shape as default 3SG and neuter forms, and not some other *a priori* conceivable forms like 3PL or feminine, is simply fortuitous.

⁸Past-tense verb forms in Russian are historically derived from participles, and show gender and number agreement instead of person and number agreement.

Finally, I turn to one additional argument in favor of the biclausal structure proposed in (7): the inability of the dative DPs in MCIs to be controlled. Just as in English, the subject position of an infinitival clause in Russian may be controlled by an argument in a higher clause. In MCIs, however, control is impossible, as shown in (15) and (16).

- (15) a. Ja_i ne xoču [PRO_i rabotat' segodnja].
 I.NOM NEG want.1SG work.IMPF.INF today
 'I don't want to work today.'
- b. *Ja_i ne xoču [PRO_i **byt'** rabotat' segodnja].
 I.NOM NEG want.1SG be.INF work.IMPF.INF today
 intended: 'I don't want to have to work today.'
- (16) a. Mne_i grustno [PRO_i rabotat' segodnja].
 me.DAT sad.N work.IMPF.INF today
 'I am sad to work today.'
- b. *Mne_i grustno [PRO_i **byt'** rabotat' segodnja].
 me.DAT sad.N be.INF work.IMPF.INF today
 intended: 'I am sad to have to work today.'

We have seen above that the modal verb *byt'* is an integral part of the syntax of MCIs; (15b) and (16b) show that ungrammaticality results when this construction is placed in a control configuration. This is surprising on an analysis in which the dative DP in an MCI is the structural subject.⁹ Moreover, the ungrammaticality of control in (15b) cannot be attributed to case clash between the nominative subject of the matrix verb *xoču* and the putative dative subject of the infinitival complement, as (16b) is just as ungrammatical despite the fact that the would-be controller, *mne*, is itself dative. Note further that the ungrammaticality of (15b) and (16b) argues not only against the idea that MCIs have dative subjects, but also against the idea that the dative DP is the subject of the matrix verb *byt'* in the biclausal structure proposed in (7). If it were the subject, we would expect it to be able to be controlled.¹⁰

The evidence from the position of negation, infinitival aspect, and control thus suggests that MCIs are biclausal structures like the one sketched in (7). Moreover, we now have an explanation for Franks's (1995:252) observation, cited above, that dative subjects are dependent on the presence of finite *byt'*: these dative DPs are

⁹Recall that by this we mean not merely the XP occupying SpecIP, but a DP base-generated in SpecVP (or SpecvP).

¹⁰Jóhanna Barðdal (p.c.) suggests, based on data from Icelandic and German, that the ability to be controlled may be a gradient property of structural subjects; see Eythórsson and Barðdal (2005) and Barðdal (to appear) for details. If true, then the inability of dative DPs in MCIs to be controlled would no longer bear on their status with respect to subjecthood. In the absence of similar data for Russian, I will assume, with Sigurðsson (2002:716), that structural subjects may be controlled regardless of their case or that of their controller.

arguments of modal *byt'*. Such dependence is quite unexpected on an analysis in which the dative DP is the structural subject of the infinitival clause. What we have not yet seen is compelling evidence that the dative DP in this construction controls a PRO subject in the embedded infinitival clause, as the structure in (7) suggests. In the next section we examine the evidence in favor of such an analysis.

2.2 Control: Evidence from Impersonals

The main source of evidence for the control analysis proposed here is the ungrammaticality of impersonal predicates in MCIs. The behavior of impersonals in MCIs is discussed in detail by Perlmutter and Moore (2002); I will review the relevant facts here. The behavior of impersonals helps us distinguish between two possible analyses of the relationship between the dative DP and the subject position of the embedded infinitival clause: control and raising.¹¹ The embedded subject position is occupied by a null expletive in impersonal clauses. Null expletives may undergo raising but may not enter into control relationships, as they are thematically deficient. The ungrammaticality of impersonals in MCIs thus supports the view that there is a control relationship in this construction.

Russian contains a wide variety of impersonal predicates. Some are verbal, while others are adverbial and depend on an auxiliary to express tense. All show 3SG or neuter inflection and lack an overt nominative subject. The question of how best to analyze this situation—whether as agreement with a null expletive subject that is morphologically singular and neuter, or instead as default inflection in the absence of a structural subject, null or otherwise—is an interesting and important one, but one that is peripheral to our main concern here (for discussion, see Lavine 2000; Harves 2002; Lavine and Freidin 2002; Perlmutter and Moore 2002). I will assume the former analysis, with a null expletive subject, but I emphasize that this choice is made primarily for ease of exposition; the thematic facts discussed here could be successfully implemented under a subjectless analysis, as well. The important points for us are that impersonal predicates assign no subject θ -role and that their null expletive subjects are unable to bear a θ -role.

Three major types of Russian impersonal predicate discussed by Perlmutter and Moore (2002) are (i) impersonal verbs, (ii) dative experiencer predicates, and (iii) genitive of negation structures. Examples of these are shown in (17a), (17b), and (17c), respectively.

¹¹Note that, though the proper syntactic treatment of the raising/control contrast has been a topic of lively debate in recent years (see, e.g., Hornstein 1999; Culicover and Jackendoff 2001; Landau 2003), here I am concerned principally with the thematic contrast between the two configurations, a basic fact whose validity is acknowledged by all parties. Though my own syntactic analysis of control is closest to that of Landau, the thematic arguments made here are independent of the implementation.

- (17) a. Menja tošnit.
me.ACC nauseate.3SG
'I feel nauseous.' (Perlmutter and Moore 2002:628)
- b. Borisu bylo veselo.
Boris.DAT be.PAST.N happy.N
'Boris was having fun.' (Moore and Perlmutter 2000:374)
- c. Za granicej ne bylo opublikovano takix statej.
abroad NEG be.PAST.N published.N such articles.GEN
'There weren't any such articles published abroad.' (Perlmutter and Moore 2002:623)

None of the overt arguments in the examples in (17) is a subject. All fail to trigger verb agreement, and none of these argument positions may be controlled from a higher clause. Accusative *menja* in (17a) and dative *Borisu* in (17b) occur clause-initially in order to satisfy the EPP; in (17c) this function is performed by the adverbial *za granicej*, and so the genitive argument remains in its base position. For more detailed discussion of the impersonal nature of these predicate types, see Comrie (1974a), Schoorlemmer (1995), Komar (1999), Moore and Perlmutter (2000), and Perlmutter and Moore (2002).

As Perlmutter and Moore (2002) note, all of the impersonal predicate types in (17) are ungrammatical in MCIs. This is shown in (18).¹²

- (18) a. *Menja tošnit'.
me.ACC nauseate.INF
intended: 'It is (in the cards) for me to feel nauseous.'
- b. *Borisu byt' veselo.
Boris.DAT be.INF happy.N
intended: 'It is (in the cards) for Boris to have fun.'
- c. *Za granicej ne byt' opublikovannym takix statej.
abroad NEG be.INF published.N.INST such articles.GEN
intended: 'It is not (in the cards) for there to be any such articles published abroad.' (Perlmutter and Moore 2002:627)

I propose that the ungrammaticality of impersonal predicates in MCIs is due to a failure of control. Impersonal predicates differ from other predicates in their lack of a thematic subject; instead, they have a null expletive subject that cannot bear a θ -role. When an impersonal predicate is placed in an MCI configuration, this null expletive is forced into the position occupied by the dative DP in an ordinary MCI. The comparison is sketched in (19): (19a) repeats the structure of the grammatical (5) above, while (19b) shows the structure of the ungrammatical (18a).

¹²Note that the instrumental case on the participle *opublikovannym* 'published' in (18c) is due to an unrelated grammatical rule of Russian.

- (19) a. [IP **Mne**_i [_{I'} \emptyset .BYT'_j [VP *expl* [_{V'} t_j t_i [CP PRO_i ne sdat' èkzamen]]]]]
 b. * [IP Menja_k [_{I'} \emptyset .BYT'_j [VP *expl* [_{V'} t_j **expl**_i [CP PRO_i tošnit' t_k]]]]]

The crucial difference between the two cases is the identity of the DP argument of modal *byt'*, shown in boldface. When this is a lexical DP like *mne* in (19a), it can bear the internal θ -role assigned by modal *byt'* and can likewise control PRO in the embedded clause.¹³ When it is a null expletive, as in (19b), it can do neither. In addition, there is a problem with PRO in (19b): since it is in the subject position of an impersonal clause, it receives no θ -role. This sets it apart from all known grammatical instances of PRO. The analysis offered here thus provides a natural explanation for the ungrammaticality of impersonals in MCIs, based on independent properties of the control relation and of PRO.

A raising analysis of the relationship between the dative DP and the embedded subject position, by contrast, would fail to predict the ungrammaticality of impersonal predicates in MCIs. Russian impersonal predicates are perfectly grammatical in raising structures with verbs like *načat'* 'begin' and *prodolžat'* 'continue', as shown in (20). The structure of (20b) is sketched in (21).

- (20) a. Menja načalo tošnit'.
 me.ACC begin.PAST.N nauseate.INF
 'I began to feel nauseous.' (Comrie 1974a:108)
 b. Borisu prodolžalo byt' stydno.
 Boris.DAT continue.PAST.N be.INF shameful.N
 'Boris continued to feel ashamed.' (Perlmutter and Moore 2002:637)
- (21) [IP Borisu_k [_{I'} prodolžalo_j [VP *expl*_i [_{V'} t_j [IP t_i byt' stydno t_k]]]]]

As (21) shows, the null expletive subject of the impersonal predicate *byt' stydno* 'be shameful' raises to the subject position of the raising verb *prodolžat'* 'begin' (which itself has undergone overt V⁰-to-I⁰ raising due to the non-nominative DP in SpecIP; Bailyn 2004). Since nothing prevents raising of null expletives, a raising analysis of MCIs would be unable to explain the ungrammaticality of impersonal predicates in this construction without adding some stipulation to allow for the grammaticality of non-impersonals like (19a). A further difficulty for a raising analysis is the fact that Russian lacks raising-to-object (or ECM, depending on one's inclination) with verbal complements, as mentioned above.¹⁴ Raising a DP from the embedded subject posi-

¹³Note that object control is independently attested in Russian, as shown for example in sentence (1b) above.

¹⁴This fact, together with the behavior of impersonals, rules out a third option for the structural analysis of MCIs: one in which the matrix modal *byt'* takes the infinitival CP as its sole complement, and the dative DP occupies the subject position of the infinitival clause. Since ECM is unavailable, the dative case marking of the subject would have to be assigned structurally from within the infinitival clause. But in that case, there would be no principled way to account simultaneously for the ungrammaticality of impersonal clauses, with null expletive subjects, and the grammaticality of other clauses, with non-expletive subjects (*pace* Perlmutter and Moore 2002; see section 3.2).

tion to the internal argument position of modal *byt'* would thus be a type of movement that is unattested elsewhere in the language. The control analysis encounters none of these problems.

The behavior of impersonals therefore supports the conclusion that the dative DP in an MCI is related to the embedded subject position of the infinitival clause via control, and not via raising. Perlmutter and Moore (2002) offer a different explanation for the ungrammaticality of impersonals in this environment, based on the morphological inventory of Russian. In section 3.2, I discuss the full range of advantages of the control analysis over Perlmutter and Moore's proposal; that discussion will depend in part on data from second dative agreement, to be discussed in section 3.1.

2.3 Putative Counter-Evidence

In this section I examine grammatical phenomena that are commonly taken as evidence that the dative DPs in MCIs are subjects, and show that all of the phenomena in question are readily explained by the biclausal structure proposed here. I focus on four issues: (i) the thematic properties of the dative DP, (ii) the ability of the dative DP to serve as a reflexive antecedent, (iii) gender and number agreement with the dative DP, and (iv) dative DPs in clausal subjects.

2.3.1 Thematic Properties of the Dative DP

One of the most basic arguments in favor of the structural subjecthood of dative DPs in MCIs holds that these dative DPs must be subjects because they can instantiate the same range of thematic roles as nominative subjects of finite clauses (Kondrashova 1994:258). In this, they differ from typical dative DPs, which tend to be only recipients or experiencers. The mismatch between the rather narrow semantics of dative case and the rather broad thematic range of structural subject position has led many to posit a difference between “inherent” and “structural” dative case, with the dative DPs in MCIs falling under the latter heading (Greenberg and Franks 1991; Schoorlemmer 1995). On the other hand, Fortuin (2000:250) suggests that these dative DPs are understood as recipients, albeit of an abstract “situation type.”

The biclausal structure sketched above in (7) accounts naturally for both observations. In this structure, the subject of the infinitival clause is not the dative DP but PRO. It is well known that PRO can instantiate all of the thematic roles associated with structural subject position, as shown in the English examples in (22).

- | | | |
|------|---|---------------------------|
| (22) | a. I want [PRO to hit the ball]. | <i>Transitive agent</i> |
| | b. I want [PRO to run]. | <i>Unergative agent</i> |
| | c. I want [PRO to arrive on time]. | <i>Unaccusative theme</i> |
| | d. I want [PRO to be examined by the doctor]. | <i>Passivized theme</i> |
| | e. I want [PRO to be happy]. | <i>Experiencer</i> |

The observation that the dative DPs in MCIs are thematically less restricted than ordinary dative DPs is therefore unproblematic for the biclausal analysis proposed here, as the dative DP is not itself the subject of the infinitival clause. Instead, the dative DP controls the reference of PRO, which occupies the embedded subject position and bears its full range of thematic roles. Moreover, we also have an account of why the dative DP seems at the same time to be a semantic experiencer with respect to the modality expressed by *byt'*: it is the internal argument of *byt'* (more on this in section 5). The apparent thematic promiscuity of dative DPs in MCIs therefore need not be taken as evidence that these DPs are subjects.

2.3.2 Reflexivization

A dative DP in an MCI can serve as the antecedent of a reflexive pronoun, a property which tends to be associated crosslinguistically with structural subjects. In Russian, however, reflexives may be anteceded by a morphosyntactically disparate class of discourse-prominent DPs, as discussed by Timberlake (1980), Greenberg and Franks (1991), and Moore and Perlmutter (2000). In impersonal clauses, oblique possessors and experiencers may antecede reflexives, as shown in (23).

- (23) a. **U nego** ne ostavalos' vremeni na **sebja**.
 at him.GEN NEG remain.PAST.N time.GEN on REFL.ACC
 'He didn't have any time left for himself.' (Timberlake 1980:248)
- b. **Emu** ne ostavalos' vremeni na **sebja**.
 him.DAT NEG remain.PAST.N time.GEN on REFL.ACC
 'No time for himself remained for him.' (Timberlake 1980:248)

For arguments that oblique possessors and experiencers are not subjects, see Greenberg and Franks (1991), Komar (1999), and Moore and Perlmutter (2000). The fact that dative DPs in MCIs may also antecede reflexives, as shown in (24), is therefore not compelling evidence of their structural subjecthood.

- (24) a. **Borisu** ne istratit' tak mnogo deneg na **sebja**.
 Boris.DAT NEG spend.PF.INF so much money on REFL.ACC
 'It's not (in the cards) for Boris to spend so much money on himself.'
 (Moore and Perlmutter 2000:377)
- b. $[_{IP} \text{Borisu}_i [_{I'} \emptyset.BYT'_j [_{VP} \text{expl} [_{V'} t_j t_i [_{CP} \text{PRO}_i \dots \text{na sebja}_i]]]]]$

Timberlake's (1980) notion of competing "axes of prominence" captures the distribution of reflexive antecedents in Russian better than a simple restriction to structural subject position. In impersonal clauses with null expletive subjects like those in (23) and (24), oblique possessors and experiencers may serve as reflexive antecedents, as they are highly prominent on the axis of information or topic. For Bailyn (2004), these properties inhere in the SpecIP position, which may be occupied by all manner

of subject and non-subject reflexive antecedents (though judgments of acceptability vary considerably for different non-nominative antecedents in SpecIP). In addition, the structure in (24b) suggests that PRO may play a role in reflexive antecedence, as it occupies the structural subject position of the minimal clause containing the reflexive. In this connection, Avrutin (1994) shows that object-controlled PRO can antecede a reflexive even when there is a non-expletive matrix subject, as in (25).

- (25) [Každyj student]_i poprosil Ivana_j [PRO_{*i,j} pročitat' ego_{i,?*j} /
 every student.NOM asked Ivan.ACC read.PF.INF his /
 svoju_{i,j} stat'ju].
 REFL.POSS article
 'Every student asked Ivan to read his article.' (Avrutin 1994:720)

The interpretive possibilities for sentences like (25) are clearly complex. It is reasonable to conclude, however, that PRO plays an important role in allowing the reading on which *Ivan* serves as the antecedent of the reflexive *svoju*, as only PRO can match the matrix subject in terms of structural prominence. Given the nature of reflexive antecedence in Russian, the ability of the dative DP in an MCI to antecede a reflexive does not pose a problem for the biclausal structure proposed here.

2.3.3 Agreement

A third piece of evidence that has been used to argue for the subjecthood of dative DPs in MCIs is the fact that such dative DPs can control person and number agreement on predicate adjectives and participles. Moore and Perlmutter (2000) point out that this differentiates putative dative subjects from dative experiencers like the one shown above in (17b), and places them in a natural class with nominative subjects.

I follow Sigurðsson (2002), however, in objecting that the agreement triggered by these dative DPs is of a non-clause-bounded type, and as such does not constitute evidence that these dative DPs are subjects. The agreement is only in gender and number, and not in case, as shown in (26).¹⁵

- (26) **Fil'mam** Kislovskogo ne byt' **dostupnymi** / *dostupnym.
 films.DAT.PL K.GEN NEG be.INF accessible.INST.PL / *DAT.PL
 'It is not (in the cards) for Kieslowski's films to be accessible.' (cf. Moore and Perlmutter 2000:393)

Sigurðsson (2002) likens the gender and number agreement seen in Russian examples like (26) to what he calls "secondary agreement" in Icelandic, which is not clause-bounded and typically does not involve agreement in case. He suggests a biclausal structure for MCIs very similar to the one proposed here, and observes that

¹⁵Note that (26) shows only number agreement, as the gender agreement distinctions of Russian adjectives and participles are neutralized in plurals. Gender agreement can be seen in singular examples of this type.

the same type of agreement—gender and number, but not case—is seen in uncontroversially biclausal Russian examples like those in (27).

- (27) a. **Ivan** ne xočet [prijiti domoj **p'janym**].
 Ivan.M.NOM.SG NEG want.3SG come.PF.INF home drunk.M.INST.SG
 ‘Ivan does not want to come home drunk.’ (Sigurðsson 2002:714)
- b. Ja poprosil **Ivana** [ne proxodit' **p'janym**].
 I.NOM asked Ivan.M.ACC.SG NEG come.IMP.F.INF drunk.M.INST.SG
 ‘I asked Ivan not to come drunk.’ (Sigurðsson 2002:714)

Cross-clausal gender and number agreement is triggered by a subject in (27a) and by an object in (27b). Moreover, this agreement may be understood as mediated by PRO. As Sigurðsson (2002:712) writes, “PRO obligatorily copies both the number and gender of its controller (and passes these features on to its predicate).” I take these facts to indicate that the gender and number agreement triggered by dative DPs in MCIs is not compelling evidence that they are subjects. The biclausal control structure proposed above in (7), by contrast, accounts quite naturally for these agreement data.

2.3.4 Clausal Subjects

Finally, let us consider the claim that Russian infinitival-clause subjects—that is, whole infinitival clauses that occupy subject position within a larger clause—may contain overt dative subjects within them. These seem at first to pose a problem for the generalization that only PRO may occupy subject position in an infinitival clause. Greenberg (1985:274) offers the following examples.¹⁶

- (28) a. **Emu** sobrat'sja — tol'ko podpojasat'sja.
 him.DAT get ready.PF.INF be.PRES just put on belt.PF.INF
 ‘For him to get ready is just putting his belt on.’
- b. **Takomu** ženit'sja na Milovanovoj značilo by
 such.DAT marry.PF.INF on Milovanova mean.PAST.N COND
 vosstanovit' utračennoe k samomu-sebe uvaženie.
 restore.PF.INF lost to self respect.ACC
 ‘For such a man to marry Milovanova could only mean restoring lost self-respect.’

The highlighted dative DPs in (28) are taken by Greenberg to be dative subjects of their subject infinitival clauses. It is clear, however, that these datives are understood not just as the subject of the first infinitive in each example, but also as the subject

¹⁶I follow Greenberg in using an em-dash to represent the null present-tense copula in (28a), as is sometimes done in Russian orthography.

of the second one. In (28a), *emu* is both the one getting ready and the one putting on his belt; likewise, in (28b) *takomu* is both the one getting married and the one restoring his lost self-respect. If these datives were fully contained within the first infinitival clause as subjects in each case, it would be unclear how the relationship between that dative DP and the subject position of the second infinitival clause could be established.¹⁷ We may compare the behavior of the dative DP to that of the internal argument *Milovanovoj* in (28b), which is uncontroversially contained within (a PP in) the first infinitival clause, yet clearly bears no relationship to any understood argument position in the second infinitival clause.

It is therefore plausible that the dative DPs in (28) are not contained within the first infinitival clause, but instead are oblique arguments of the matrix verb, which is always an equative verb like *byt'* 'be' or *značit'* 'mean'. I do not offer a detailed analysis of such structures, except insofar as to say that they clearly do not involve the modal *byt'* seen in MCIs. The facts outlined above suggest that the dative DPs in this construction are not overt dative subjects of an infinitival clause, but instead are related to both infinitival clauses via control from outside,¹⁸ and thus do not constitute counter-evidence to the claim that only PRO may occupy the subject position of an infinitival clause in Russian.¹⁹

¹⁷For example, if one proposed a modification of the c-command relation such that the dative subject in the subject infinitival clause could control the lower clause's subject position, it would then be mysterious why such subjects-of-subject-infinitivals fail to trigger Condition B violations:

- i. [For John_i to receive a gift] would thrill him_i / *himself_i.

In (i), *John* must not be able to c-command out of the subject infinitival clause.

¹⁸The unmarked intonation of the English translation of (28a) is also highly suggestive in this regard. In order to convey the proper meaning, a pause must be inserted after the initial PP *for him*: *For him, to get ready is just putting his belt on*. Such a pause is possible in cases where the *for NP* string is an oblique PP argument of the matrix verb, distinct from the infinitival clause, but not in cases where *for* is a complementizer introducing a full CP of which the infinitive is also a part. Expletive and idiom-chunk subjects are possible in the latter case but not the former, while ordinary DP subjects are possible in both, with different meanings in each case:

- | | | | |
|------|----|--|---|
| i. | a. | For it to rain would be wonderful. | [_{CP} for it to rain] |
| | b. | * For it, to rain would be wonderful. | [_{PP} for it] [_{VP} to rain] |
| ii. | a. | For the shit to hit the fan would be awful. | [_{CP} for the shit to hit the fan] |
| | b. | * For the shit, to hit the fan would be awful. | [_{PP} for the shit] [_{VP} to hit the fan] |
| iii. | a. | For John to sneeze would be embarrassing. | [_{CP} for John to sneeze] |
| | b. | For John, to sneeze would be embarrassing. | [_{PP} for John] [_{VP} to sneeze] |

The requirement that examples like those in (28) be pronounced with a pause in English lends at least some plausibility to the idea that the dative DP is not structurally part of the infinitival clause.

¹⁹Greenberg (1985) also describes sentences in which each infinitival clause has its own dative DP associated with it. I do not have an analysis of such sentences; they seem to be structurally different from the more common type described above, with a single dative DP.

2.4 Summary

In this section we have seen that MCIs are best analyzed as biclausal structures like the one shown in (7), and that they therefore cannot be used as evidence that Russian infinitival clauses have dative subjects. The phenomena typically invoked in favor of overt dative subjects are readily accounted for by the alternative proposal sketched here. In the next section we turn to evidence that Russian infinitival clauses do indeed have dative subjects, but that PRO is the only possible occupant of this position.

3 The Second Dative

Here I argue that the Russian case marking phenomenon known as the second dative provides evidence that Russian infinitival clauses mark their subjects with structural dative case, but that PRO is the only element that may occupy this position. After presenting the basic second dative data, I discuss evidence that the second dative is an agreement phenomenon, and not a default case marking pattern, following Babby (1998). Together with the analysis of MCIs presented in section 2, the second dative data show that PRO is the only possible dative subject in Russian, a fact that fits nicely into recent theoretical proposals about case/Case (McFadden 2004) and the distribution of PRO (Landau 2004, to appear). In addition, comparison of second dative vs. nominative agreement in MCIs and gerundial clauses suggests that the distribution of impersonals, which are ungrammatical in both environments, is best explained in terms of control, and not in terms of morphological case, contra Perlmutter and Moore (2002).

3.1 The Second Dative: Basic Data

The term “second dative” refers to a pattern of dative case marking seen on the secondary predicates *sam* ‘(by) X’s self’ and *odin* ‘alone’ in infinitival clauses. To begin, it should be noted that *sam* and *odin* are exceptional: all other secondary predicates in Russian appear in the instrumental case (for details, see Franks 1995:chap. 6). I therefore follow Greenberg and Franks (1991) in referring to *sam* and *odin* as “semi-predicatives.”

The distribution of second dative *sam* and *odin* is roughly as follows: *sam* and *odin* are nominative in subject-controlled infinitival clauses, and are dative in all other infinitival clauses. In infinitival clauses introduced by an overt complementizer, *sam* and *odin* are always dative. Examples are shown in (29) through (32) (based on Franks 1995:235–236).

- (29) a. Ivan xočet [PRO pojti na večerinku **odin**].
 Ivan.M.NOM wants go.INF to party alone.M.NOM
 ‘Ivan wants to go to the party alone.’

- b. Ljuba priexala [PRO pokupat' maslo **sama**].
Ljuba.F.NOM came buy.INF butter self.F.NOM
'Ljuba came to buy the butter herself.'
- (30) a. Maša poprosila Vanju [PRO prijti **odnomu**].
Maša.F.NOM asked Vanja.M.ACC come.INF alone.M.DAT
'Maša asked Vanja to come alone.'
- b. Maša poprosila Ljubu [PRO kupit' maslo **samoj**].
Maša.F.NOM asked Ljuba.F.ACC buy.INF butter self.F.DAT
'Maša asked Ljuba to buy the butter herself.'
- (31) a. Ivan pošel domoj [čtoby [PRO ne obedat' **odnomu**]].
Ivan.M.NOM went home in order NEG dine.INF alone.M.DAT
'Ivan went home in order not to eat dinner alone.'
- b. Ljuba priexala [čtoby [PRO pokupat' maslo **samoj**]].
Ljuba.F.NOM came in order buy.INF butter self.F.DAT
'Ljuba came in order to buy the butter herself.'
- (32) a. [PRO prijti **odnomu**] očen' trudno.
 come.INF alone.M/N.DAT very difficult
'To arrive alone is very difficult.'
- b. Dlja nas utomitel'no [PRO delat' èto **samim**].
for us.GEN exhausting do.INF this self.DAT.PL
'It is exhausting for us to do this on our own.'

Example (29) shows nominative *sam* and *odin* in subject-controlled infinitivals; (30) shows dative *sam* and *odin* in object-controlled infinitivals; (31) shows dative *sam* and *odin* in subject-controlled infinitivals introduced by the overt complementizer *čtoby*; finally, (32) shows dative *sam* and *odin* in other types of infinitivals. Note that *sam* and *odin* always agree in gender and number with the DPs they modify, but agree in case only in subject-controlled infinitivals without an overt complementizer.

3.2 The Second Dative as Agreement

I argue that the second dative is best understood as an agreement phenomenon. In this, I follow Comrie (1974b), Neidle (1988), Babby (1998), Franks (2005), and many others, and go against Greenberg and Franks (1991) and Franks (1995), who argue that the second dative is a default structural case marking pattern. The element that *sam* and *odin* agree with—i.e., the source of their dative case—is PRO.

The first piece of evidence in favor of an agreement analysis is the fact that, unlike ordinary secondary predicates in Russian, the semipredicatives *sam* and *odin* always agree in case with the DPs they modify. Examples of semipredicative case marking are given in (33), while ordinary secondary predicate case marking is shown in (34) (examples from Greenberg and Franks 1991:80–81).

- (33) a. Ja xoču prijti odin / *odnim.
I.NOM want come.INF alone.M.NOM / *M.INST
'I want to come alone.'
- b. Ja našel ego odnogo / *odnim.
I.NOM found him.ACC alone.M.ACC / *M.INST
'I found him alone.'
- (34) a. Ivan xočet prijti p'janyj / p'janym.
Ivan.M.NOM wants come.INF drunk.M.NOM / M.INST
'Ivan wants to come drunk.'
- b. Lora našla Ivana *p'janogo / p'janym.
Lora.F.NOM found Ivan.M.ACC drunk.*M.ACC / M.INST
'Lora found Ivan drunk.'

Secondary predicates are normally restricted to instrumental case, as shown in (34), though they may agree in case with a nominative DP. The semipredicatives *sam* and *odin*, by contrast, always take the case of the DP they modify. The existence of the second dative pattern therefore suggests that there is some dative DP in infinitival clauses for *sam* and *odin* to agree with.

The obvious candidate is PRO. Recall from section 2.3.3 Sigurdsson's (2002:712) claim that "PRO obligatorily copies both the number and gender of its controller." If *sam* and *odin* agree with PRO, we then have a straightforward explanation for the fact, mentioned immediately above, that the semipredicatives always agree in gender and number with the overt DP they are understood to modify: this DP is the controller of PRO. PRO serves as intermediary in the gender and number agreement relation between the semipredicatives and the overt DPs they modify.

More importantly, however, if dative *sam* and *odin* agree with PRO, this means that PRO must be dative in the infinitival clauses in question. Babby (1998:32–33) provides the clinching argument, based on evidence from gerundial clauses. He shows that in gerundial clauses, *sam* and *odin* have the same case as the subject of the immediately dominating clause, as in (35).

- (35) a. Ja vse videl, **sam** ostavajas' nezamečennym.
I.NOM all saw self.M.NOM remaining unnoticed.M.INST
'I saw everything, (while) remaining unnoticed myself.'
- b. Ščel' v doskax dala mne vozmožnost' [PRO vse videt', **samomu**
crack in boards gave me.DAT opportunity all see.INF self.M.DAT
ostavajas' nezamečennym].
remaining unnoticed.M.INST
'The crack in the boards let me see everything without being noticed myself.'

In (35), the case of the semipredicative inside the gerundial clause co-varies with the case of the subject in the immediately dominating clause: nominative *sam* with *ja* in (35a), dative *samomu* with PRO in (35b).²⁰

The semipredicative case paradigm in (35) leaves us no choice but to conclude that the PRO subject of the infinitival clause in (35b) is dative. Since gerundial clauses are completely transparent for case assignment to semipredicatives contained within them, the dative *samomu* in (35b) must result from agreement with infinitival PRO.²¹ An analysis of the second dative as structurally determined default case marking, as proposed by Greenberg and Franks (1991) and Franks (1995), cannot account for the difference between (35a) and (35b): the semipredicative is in the same structural position within the gerundial clause in both examples, yet its case varies.

We may therefore conclude that the PRO subject of an infinitival clause is dative in Russian. Note that this is a structurally determined property, and not an inherent property of PRO. The PRO subjects of gerundial clauses, for example, are only contingently dative, as (35) suggests. Moreover, there are situations in which PRO appears to be nominative even in infinitival clauses. These are the subject-controlled infinitivals without overt complementizers discussed above and shown in (29). In such situations, there is clearly some mechanism for overriding the structural dative case marking of infinitival PRO. I remain agnostic as to what this mechanism is; for Franks (1995:240ff.) it is proper government, while for Babby (1998) it is vertical binding. This mechanism is also at work in certain infinitival complements of nouns, as discussed by Franks (1995:248) and Fortuin (2003:77ff.). Here I agree with Franks that such examples involve “restructuring” of the verb-noun sequence into a complex verb, which renders them identical to ordinary subject-controlled infinitivals.

Finally, the behavior of *sam* and *odin* in gerundial clauses allows us to refute Perlmutter and Moore’s (2002) case-based explanation for the ungrammaticality of impersonal predicates in MCIs, discussed above in section 2.2. Perlmutter and Moore make the following background assumptions: (i) infinitival clauses may have overt dative subjects (precisely what I have argued against in section 2) and (ii) impersonal predicates select null expletive subjects (as also assumed here). They take the ungrammaticality of impersonals in MCIs to imply that Russian must lack *dative* null expletives; i.e., the twin requirements of null expletive-hood (due to the impersonal

²⁰It is immaterial that the controller of PRO in (35b), *mne*, is itself dative. As discussed by Franks (1995) and Babby (1998), infinitival complements of nouns show second dative *sam* and *odin* no matter what the case of the controller of PRO, with one minor exception discussed below.

²¹I assume that this agreement is mediated by a PRO subject of the gerundial clause. On this view, the gerundial PRO subject must inherit its case directly from its controller, the subject of the immediately dominating clause. Babby (1998) proposes that gerundial clauses and subject-controlled infinitival clauses lack PRO altogether, and instead are bare VPs whose subjects are determined via “vertical binding” (Williams 1994); the case of any embedded semipredicatives is then similarly determined. Importantly, both analyses reach the conclusion that gerundial clauses do not assign case to subjects, in contrast to infinitival clauses, which assign structural dative case to their subjects.

predicate) and dative case (due to the infinitival context) converge on an element that simply does not exist in the language. The explanation is morphological and language-internal. (See also Koenig and Davis (2004), who propose slight modifications to Perlmutter and Moore’s proposal but preserve their basic assumptions about the existence of overt dative subjects of infinitivals and the impossibility of dative expletives.)

Gerundial clauses provide a telling counterpoint to MCIs. As Babby (1975) shows, impersonal predicates are systematically ungrammatical in gerundial clauses in Russian. We have seen in this section, however, that gerundial clauses do not assign dative case to their subjects; instead, their subjects inherit the case of the subject of the immediately dominating clause (see footnote 21). Russian’s supposed lack of a dative null expletive therefore cannot explain the ungrammaticality of impersonals in gerundial clauses.

This ungrammaticality is straightforwardly explained as a failure of control. Gerundial clauses never have overt subjects; rather, their PRO subjects must be controlled from without. As argued above in section 2.2, impersonal predicates are ungrammatical in control structures due to the thematic deficiency of their null expletive subjects. By appealing to control, we can offer a unified explanation for the ungrammaticality of impersonals in both MCIs and gerundial clauses.²² The gerundial facts thus support the control analysis of MCIs presented above in section 2.2. Moreover, the control analysis allows us to achieve an explanation in universal syntactic terms, without forcing us to posit a morphological deficiency in the null pronominal paradigm of a particular language. For these reasons, I conclude that the control analysis is superior to the analysis of Perlmutter and Moore (2002).

4 Case and the Distribution of PRO

The evidence in sections 2 and 3 has shown that Russian infinitival clauses have dative subjects, but that PRO appears to be the only attested subject of this type. In this section I discuss the implications of this situation for the theories of case and control, focusing in particular on recent work by McFadden (2004) and Landau (2004, to appear). I suggest that the Russian facts support the view that morphological case is completely distinct from syntactic Case (i.e., DP licensing), and that the distribution of PRO is regulated by [T] and [Agr] features, and not by Case.

To begin, let us recall that the evidence in favor of dative PRO subjects of infinitival clauses in Russian comes from an extremely limited domain: the agreement behavior of two adjectives, *sam* and *odin*. If the second dative pattern could be explained as something other than agreement, our evidence for dative subjects of

²²Note as well that the unified analysis works even if one assumes, with Babby (1998), that gerundial clauses lack PRO altogether. In both MCIs and gerundial clauses, impersonal predicates are ungrammatical due to the failure of an interclausal thematic dependency (control of PRO, or vertical binding), and not due to an arbitrary morphological gap.

infinitival clauses would vanish. As argued in section 3.2, however, an alternative explanation does not appear to be forthcoming, and Sigurðsson (2002:717) notes that “[d]isproving that [Russian PRO] is dative is probably even harder than proving that it is.” Thus, I take second dative agreement at face value, i.e., as an indication that infinitival PRO is dative in Russian.

It is by no means novel or radical to propose that PRO may be case marked. Here it will be helpful to distinguish proposals about the abstract syntactic Case marking of PRO from those about the morphological case marking of PRO. On the side of syntactic Case, the classical GB conception of PRO prohibited it from appearing in Case-marked positions (or any governed position), but it has since been proposed that PRO is licensed by a special null Case (Chomsky and Lasnik 1993).²³ On the side of morphological case, evidence from agreement with Icelandic quirky subjects has long been taken to indicate that PRO may bear case; Hungarian and Russian, as also discussed here, have similar phenomena (for discussion and references, see Landau 2004:864). What, then, is the status of the dative case borne by infinitival PRO in Russian?

I propose that this dative case is best understood as a purely morphological phenomenon (i.e., case), and not as the morphological reflex of a syntactic licensing mechanism (Case). The reasons for this choice are both conceptual and empirical. To begin, if syntactic Case were involved, it would have to be null Case, as it would license PRO. We would then be forced to assume, with Franks (2005:379), that Russian has a special dative null Case that licenses the occurrence of PRO in infinitival clauses. The conceptual problems with null Case are well documented, as discussed by McFadden (2004:§8.8) and by Hornstein (1999:71), who writes, “It is fair to say that null Case accounts for the distribution of PRO largely by stipulation.” Moreover, this dative null Case would trigger morphological agreement (i.e., the second dative agreement on *sam* and *odin*) indistinguishable from that triggered by ordinary dative case, meaning that there would be no language-internal criterion for telling one from the other. Thus, all else being equal, an analysis without null Case is to be preferred.

I follow McFadden (2004) in proposing that the morphological case marking of PRO is independent of the syntactic mechanism licensing its occurrence. For McFadden, this is part of a larger claim that morphological case and syntactic Case are entirely distinct, and that it may be possible to eliminate the latter from syntactic theory.²⁴ The Russian data provide empirical support for this conceptual split. In particular, the inability of lexical DPs and *pro* to occur as subjects of infinitival clauses in Russian is puzzling for traditional GB and Minimalist views of case, according to which morphological case is simply an overt reflex of syntactic Case (DP licensing). In such a system, we would expect lexical DPs and *pro* to be able to occur in the

²³Note that null Case licenses only PRO, and not phonologically null items generally.

²⁴McFadden implements his proposal in the framework of Distributed Morphology. Other implementations of the case/Case split are possible, however, as seen immediately below in the discussion of Landau (2004, to appear).

subject position of an infinitival clause, as structural dative case is assigned to this position; however, as shown here in detail, this is not so. This dative case clearly cannot be connected to DP licensing, as no lexical DPs are licensed in this position. We are thus led to the following conclusion about PRO: the fact that Russian infinitival PRO is dative is unrelated to the statement of PRO's distribution.

What regulates the distribution of PRO in a theory without syntactic Case, null or otherwise? Landau (2004, to appear) proposes that it is the combination of [T] and [Agr] features located on I^0 and C^0 .²⁵ The Russian facts presented here conform precisely to the system he describes; the present proposal thus extends Landau's system to Russian.²⁶ Landau (2004:842) argues that PRO is licensed whenever I^0 is specified as [-T] or [-Agr]; only positive specifications of both values license the occurrence of a lexical DP or *pro*. Russian infinitives, like those in most languages, do not show agreement, and as such are specified as [-Agr] (Landau 2004:839).²⁷ According to Landau's "control calculus," then, PRO should be the only possible subject of an infinitival clause in Russian, and hence the only possible dative subject (since only infinitival clauses assign dative case to their subjects). This is precisely what the data in sections 2 and 3 suggest. The descriptive generalization that emerges from a close examination of MCIs and the second dative matches the prediction made by Landau's theoretical proposal. The conclusion that PRO is the only possible dative subject in Russian now has both descriptive and theoretical force.

In sum, the Russian facts support McFadden's (2004) proposed split between case and Case, and conform to Landau's (2004; to appear) prediction about the distribution of PRO. They thus support the broader conclusion, reached by both authors, that syntactic Case is unnecessary for these purposes and may be entirely eliminable.

²⁵McFadden (2004:§8.8.2) has an alternative proposal, based on lexical semantics and the interpretation of PRO. His argument, however, hinges on a non-standard analysis of the English complementizer *for*.

²⁶Landau (2004) introduces the system with evidence from Hebrew and the Balkan languages, while Landau (to appear) extends it to Basque and Welsh. While Landau notes that Russian infinitival PRO is dative, he does not discuss the distribution of PRO in Russian. The present study may thus be seen as a contribution to this line of research on the distribution of PRO.

²⁷Note that gender and number agreement on passive participles is not counter-evidence against this claim. Consider the passive MCI in (i):

- i. Toj rukopisi [PRO ne byt' opublikovannoj].
 that manuscript.F.DAT NEG be.INF published.F.DAT

'It is not (in the cards) for that manuscript to be published.' (Moore and Perlmutter 2000:389)

In (i), the passive participle *opublikovannoj* agrees with PRO, which inherits the gender and number of *toj rukopisi* (as described above in section 2.3.3) and gets its own dative case from the infinitival clause. This agreement does not contradict the claim that Russian infinitivals are [-Agr], however, because the claim applies only to I^0 , and not to V^0 or any other lower heads. I^0 in (i) is occupied by the infinitive *byt'*, which shows no agreement. We may conclude that I^0 is [-Agr] in passive infinitives in Russian, just as in active infinitives.

5 The Identity of Modal *byt'*

In this section I return to an unanswered question from section 2 regarding the verb *byt'* in MCIs: why is it impossible to negate this verb? As we saw above in (12), the negation marker *ne* always occurs in the embedded infinitival clause in MCIs, and never in the matrix clause. I suggest that this is because the matrix modal *byt'* in MCIs is existential *byt'*, and not copular *byt'* (a distinction due to Chvany 1975). Existential *byt'* is not negated with *ne*—instead, there is a suppletive negative existential verb, *net*—and existential negation is semantically incompatible with the proposition expressed by the infinitival clause. There are thus both morphological and semantic reasons for the ungrammaticality of sentences like (12b). The analysis proposed here allows us to account for the syntactic position of *ne*, its semantic scope, and the modal interpretation of *byt'*, a combination of facts that lends further support to the biclausal analysis developed in section 2. In addition, it helps us account for the structural similarity between MCIs and infinitival existential sentences in Russian (Babby 2000), a welcome result.

5.1 Modal *byt'* as Existential *byt'*

Evidence for the *byt'* in MCIs' being existential *byt'* comes from the particular modal interpretation associated with it, the relationship of that modal interpretation to the expression of possession crosslinguistically, and the way in which possession is expressed in Russian. The result is that it is not only plausible that modal *byt'* is existential *byt'*, but it is semantically quite natural, as well.

Modal *byt'* in MCIs expresses obligation. Consider (1a) above, repeated here with some additional structural detail as (36).

- (36) Nam_i ∅.BYT' [PRO_i ne minovat' gibeli].
 us.DAT be.PRES NEG avoid.INF disaster
 'It is not for us to avoid disaster.' (Timberlake 2004:8)

This sentence makes a statement about the way the world must be. Specifically, it says that the world must be such that 'not avoiding disaster' is something that applies to 'us'. It therefore expresses obligation. All MCIs have this deontic modal reading; the sense of inevitability associated with the obligation is conveyed by the 'in the cards' translation introduced by Moore and Perlmutter (1999).²⁸ Moreover, as suggested by the interpretation discussed here, the translation in (36) can be rendered semantically more transparent (though less idiomatic in English) by undoing the effect

²⁸Note that the anchor of the modal in MCIs, i.e., the person whose evaluation is the source of the modality, is not the dative DP but the speaker (though these overlap in (36)). Importantly, this does not imply that the dative DP must be a subject contained within the infinitival clause, as Moore and Perlmutter (1999) claim for predicate adverbials like *važno* 'important'. Consider (i) and (ii).

of neg-raising, yielding ‘it is for us not to avoid disaster’ (Horn 1989). As will be seen below, this is a truer rendering of the scopal relationship between negation and modal *byt’*.

It is crosslinguistically common for modal verbs that express obligation to be morphologically indistinguishable from verbs that express possession, as Bhatt (1997) shows in detail. Perhaps more appropriately, we may say that verbs whose basic meaning involves possession tend to have modal obligation readings associated with them, as well. English *have (to)* is an example; Bhatt (1997) gives many more. I will assume, contra Bhatt, that the crosslinguistic regularity of this pattern is due to a deep semantic affinity between these two domains of meaning, and not due to the presence of a null modal verb in those sentences where a verb of possession takes on a modal meaning.²⁹ That is, the verb of possession seen in sentences with a modal obligation reading is just that: the verb of possession.

The Russian verb of possession is *byt’* ‘be’. As Chvany (1975) shows, the *byt’* that expresses possession in Russian is not copular *byt’* but existential *byt’*. Among the properties that distinguish existential *byt’* from copular *byt’* are the following: (i) it is negated not with *ne* but with the suppletive negative existential verb *net*; (ii) under negation, the DP whose existence is being denied appears in the genitive case, not

-
- i. Borisu važno rabotat’, no on ne uvažayet rabotu.
 Boris.DAT important work.INF but he.NOM NEG respect.3SG work.ACC
 ‘It is important for Boris to work, but he doesn’t respect work.’
- ii. It is important [_{PP} for plants] [_{CP} for their owners to water them].

Moore and Perlmutter focus on sentences like (i), and propose that if the dative *Borisu* were an oblique argument of *važno*, separate from the infinitival clause, semantic contradiction would result; i.e., for them, the only way for *Borisu* not to be the evaluator with respect to whom *važno* is interpreted is for it to be part of the clausal complement of *važno* (its surface position is attributed to DP fronting). As (ii) clearly shows, however, it is possible for oblique arguments of a predicate like *important* to be syntactically outside of the clausal complement without being the evaluator. This seems to be a general property of the syntax-semantics interface; see Bhatt (1997) for similar discussion of the interpretation of raising vs. control structures. The syntactic structure proposed here for MCIs is therefore not in conflict with the modal interpretive facts discussed in this section.

²⁹In addition to the fact that this saves us from having to posit a syntactically undetectable null element, it may be noted that Bhatt (1997) is similarly glib in his dismissal of the possibility that the verb of possession might contribute the modal meaning itself. Here I entertain this possibility, and show that it goes a long way toward explaining the properties of *byt’* in MCIs. The “deep semantic affinity” proposed above may be the result of something like pragmatic strengthening in the domain of quantification. The Russian verb of possession (and perhaps such verbs generally) has existential force (as discussed immediately below), while deontic modals have universal force. The possession-obligation connection thus involves a semantic gap between existential and universal quantification, a gap that may be bridged diachronically by pragmatic strengthening (i.e., semantic change due to understatement). At present, this is only speculation; a full working out of this idea must await future work.

Note as well that Schoorlemmer (1993) and Kondrashova (1994) offer analyses of MCIs that involve a null modal; these analyses differ from my own not only in that respect, but also in that they analyze the dative DP as the structural subject.

the nominative; and (iii) the DP complement of existential *byt'* may not occur in an ECM configuration, unlike that of copular *byt'* (see footnote 6 above); for discussion, see Chvany (1975:chap. 2). These differences are shown in (37), with copular *byt'* in (37a) and existential *byt'* in (37b); case and verb forms other than those shown are ungrammatical. (38) shows a possessive use of existential *byt'*.

- (37) a. Lingvistika ne (est') nauka.
 linguistics.NOM NEG be.PRES science.NOM
 'Linguistics is not a science.' (Chvany 1975:46)
- b. Doktora **net** v gorode.
 doctor.GEN NEG.EXIST in city.LOC
 'The doctor is not in town.' (Chvany 1975:47)
- (38) a. Ivanu \emptyset / byl / budet 21 god.
 Ivan.DAT be.PRES / PAST / FUT 21 year
 'Ivan is 21 years old.' (lit. 'To Ivan are 21 years.')
- b. *Sud'ja sčitaet Ivanu 21 god.
 judge.NOM considers Ivan.DAT 21 year
 intended: 'The judge considers Ivan 21.' (Chvany 1975:107)

As (38) shows, possessors are expressed as oblique arguments of existential *byt'* (sometimes as dative DPs like *Ivanu*, more often as genitive objects of the preposition *u* 'at') and thus correspond to the locatum argument of the ordinary existential reading of this verb (cf. Freeze 1992).

I propose that the modal *byt'* that occurs in MCIs is precisely existential *byt'*, the Russian verb of possession. The dative DP in an MCI corresponds to the possessor in a possessive sentence (which in turn corresponds to the locatum in a plain existential sentence), and the infinitival CP corresponds to the possessum, or the entity whose existence is being asserted. The verb *byt'* states the relation between these two, with the meaning of possession replaced by a meaning of obligation (Bhatt 1997). An MCI states that the world must be such that the situation expressed by the infinitival CP will apply to the dative DP (as reflected syntactically by the obligatory control relation between the dative DP and the embedded PRO subject of the infinitival CP).

The existential *byt'* analysis of MCIs offers a solution to the negation problem mentioned earlier. On this analysis, sentences like (12b), **Gruzovikam ne bylo proexat'*, are ungrammatical because existential *byt'* cannot be negated by placing *ne* before it. This fact cannot be explained if we assume that the *byt'* in MCIs is copular *byt'*. Interestingly, the suppletive negative existential verb *net* cannot be used in MCIs, either. I take this to indicate that the denial of existence expressed by *net* is something that applies to entities, and not to propositions.³⁰ That is, while the

³⁰Though see section 5.2 for discussion of the existential negation of CPs in which *wh*-movement has taken place.

existence of a situation (i.e., of a proposition) may be positively asserted—this is precisely what happens in MCIs, I claim—the denial of its existence may not. I have no deep explanation to offer for this claim; I simply note the surface facts, and leave the investigation of the semantic underpinnings of these facts to future research.

On the analysis being developed here, negation is expressed in MCIs not by denying the existence of the proposition expressed by the infinitival CP, but by *positively asserting* the existence of the negation of that proposition. This semantic difference is directly reflected in the syntactic position of negation in MCIs, as noted in section 2.1, where it was shown that negation always resides inside the infinitival CP, and not in the matrix clause. Negative MCIs are thus syntactically and semantically parallel to positive MCIs, the sole difference being one of polarity within the proposition being asserted to exist. Moreover, this analysis correctly describes the scopal relationship between modal/existential *byt'* and the embedded *ne*. As can be inferred from the translations provided throughout and as discussed explicitly earlier in this section, negation always takes narrow scope in MCIs. An example like (36) means ‘it must be the case that it is for us not to avoid disaster’. It does *not* mean, ‘it is not the case that it must be the case that it is for us to avoid disaster’, or less opaquely, ‘it need not be the case that it is for us to avoid disaster’. This is schematized in (39).

- (39) a. OBLIGATION/EXISTENTIAL > NEG *Strong reading*
 b. *NEG > OBLIGATION/EXISTENTIAL *Weak reading*

Negative MCIs always have the reading in (39a). I call this the “strong reading,” because it rules out a greater number of possible ways the world could be than the more permissive “weak reading” in (39b), which has the opposite scopal relationship. Put differently, the strong reading asymmetrically entails the weak reading. On this analysis, syntactic and semantic scope are isomorphic in MCIs: negation is always syntactically subordinate to modal *byt'*, and it always has narrow scope.

The analysis of modal *byt'* as existential *byt'* developed here therefore has a number of advantages. First, it explains the deviance of examples like (12b) by assimilating it to the independently attested ungrammaticality of such *ne* usage in existentials and possessives; this is impossible in an analysis where *byt'* is the copula and/or an auxiliary (Schoorlemmer 1993; Kondrashova 1994).³¹ Second, it allows us to reconcile the syntactic position of *ne* with its semantic scope; this is impossible in an analysis where the modality in MCIs springs from the infinitive itself (or from “the construction itself”; Moore and Perlmutter 2000:386), as the infinitive is syntactically subordinate to negation, though negation must take narrow scope. Finally, the existential analysis is crosslinguistically well motivated: existential *byt'* is the Russian verb of possession, and it is crosslinguistically common for verbs of possession to take on modal obligation readings (Bhatt 1997). The semantic underpinnings of the ungrammaticality of negative existential *net* in MCIs remain obscure; nonetheless, the

³¹Note in this connection as well that Bhatt (1997:§6) uses evidence from *do*-support to show that the *have* in English *have (to)* is possessive *have*, and not auxiliary *have*.

existential analysis helps us explain many otherwise mysterious properties of negation in MCIs.

5.2 Infinitival Existential Sentences

An additional advantage of the existential analysis of modal *byt'* in MCIs is that it highlights the similarity between MCIs and another infinitival construction in Russian: infinitival existential sentences. These are exemplified in (40) (Babby 2000:1).

- (40) a. Nam est' gde spat'.
 us.DAT be.EXIST.PRES where sleep.INF
 'There is somewhere for us to sleep.'
- b. Nam negde spat'.
 us.DAT nowhere sleep.INF
 'There is nowhere for us to sleep.'

I propose that the structure of affirmative infinitival existentials like the one in (40a) is nearly identical to the structure of MCIs. The only differences are that existential *byt'* occurs in its emphatic overt form, *est'*, and that there has been *wh*-movement within the infinitival CP. The structure I propose is sketched in (41) (cf. (6) above and Babby 2000:3).

- (41) [IP Nam_i [_{I'} est'_j [_{VP} expl [_{V'} t_j t_i [_{CP} gde_k [IP PRO_i spat' t_k]]]]]]]

As the glosses in (40) suggest, the interpretation of existential *byt'* in infinitival existentials does not take on the modal obligation reading associated with MCIs; instead, it retains its more basic meaning. The possession-obligation connection described above in section 5.1 readily accounts for this semantic difference between the constructions.³² Babby (2000:3–4) argues against a control analysis of the dative DP in (40a). His argument, however, depends crucially on the idea that infinitival clauses can have overt, lexical-DP subjects,³³ an idea that has been extensively argued against in this paper. I therefore adopt the control analysis, just as I have for MCIs.

A comparison of MCIs with infinitival existential sentences reveals a correlation between the use of an emphatic form of existential *byt'*—overt *est'* in the present tense, stressed versions of *bylo* and *budet* in the past and future tenses, respectively (Babby 2000:4)—and the presence of a *wh*-phrase in one of its arguments. This correlation has a straightforward semantic explanation. Timberlake (2004:313) writes that

³²Included in this connection is the quantificational gap between the two: existential quantification in infinitival existential sentences, universal quantification in MCIs. See footnote 29 for discussion.

³³Specifically, Babby argues that if the dative DP is an argument of existential *byt'*, then there is no way to explain the absence of infinitival existential sentences with *two* dative DPs: one the argument of existential *byt'*, one the subject of the infinitival clause.

the emphatic existential is used “when the import of the utterance is whether or not any token of a type exists at all.” Complements containing *wh*-phrases like the ones shown in (40) occur in contexts where the existence of a token of some type is at issue, e.g., ‘a place to sleep’; the emphatic form of the existential is consequently used. With MCIs, by contrast, the existence of a situation (that is obligated to hold) is not previously at issue. The MCI simply states that the situation exists; it does not, however, assert that *some* situation exists, rather than none at all. The “import of the utterance,” therefore, is not to establish “whether or not any token of a type exists at all,” and so a non-emphatic form of existential *byt’* is used. The emphatic/non-emphatic split between infinitival existentials and MCIs is thus semantically and pragmatically based, and is consistent with their sharing a common underlying structure.

Negative infinitival existential sentences like the one in (40b) are somewhat different in their structure, though important points of contact remain. Babby (2000) argues that negative *wh*-words like *negde* ‘nowhere’ in (40b) are morphological fusions of what were once separate words: *ne + gde > negde*. Moreover, Babby shows that this older *ne* was not the *ne* of sentential negation, but rather the negative existential verb *ně* (the vowels *e* and *ě* have merged as *e* in present-day Russian). The structure of (40b) is thus exactly comparable to that of (40a) at the appropriate level of historical depth and/or morphosyntactic abstraction.³⁴ Compare (42) to (41) above (cf. Babby 2000:9).

(42) [IP Nam_i [_{I'} **ně**_j [_{VP} *expl* [_{V'} t_j t_i [_{CP} **gde**_k [IP PRO_i spat' t_k]]]]]]]

On this view, negative existential *ně* in (42) is in the structural position where we would expect to find negative existential *net* in MCIs. Why is *ně* permitted in infinitival existentials while *net* is barred from MCIs? First, it is part historical quirk. The synchronic distribution of *ně* is extremely limited, *ně* having been lost “in all positions except when followed by the [*wh*]-word of its CP infinitive complement” (Babby 2000:19). Second, as has been noted for English, clauses in which *wh*-movement has taken place more readily ape the distribution of DPs than do clauses without such movement; see, e.g., Levin and Rappaport Hovav (1995:chap. 6) for general discussion and Bhatt (1999:chap. 2) on infinitival questions. This is shown for finite CPs in (43a) and for infinitival clauses in (43b).

- (43) a. i. John thought [_{PP} about [whether [he should go]]].
 ii. * John counted [_{PP} on [that [he should go]]].
 b. i. John thought [_{PP} about [whether [PRO to go]]].
 ii. * John counted [_{PP} on [PRO to go]].

In (43), the [+*wh*] clauses are able to occur as the complement of a preposition—a canonical DP position—while the [−*wh*] clauses are not. Recall that in section 5.1 I

³⁴See Babby (2000) for discussion of the problems this construction raises for the syntax-morphology interface.

suggested that the denial of existence expressed by negative existential *net* is something that applies only to entities, i.e., to DPs. It is possible, then, that the negative existential verb *ně* is allowed to take a CP complement in examples like (40b) because the [+*wh*] specification of the CP in question allows it to behave like a DP, and to occupy a position that is otherwise reserved for DPs. This is only a tentative suggestion, but it may help us to explain why negative existential *ně* is permitted in these clauses, while negative existential *net* is barred from MCIs.

In sum, the analysis of modal *byt'* in MCIs as existential *byt'* helps account for the structural similarities between MCIs and infinitival existential sentences, and supports an analysis in which these two constructions share a common underlying structure. In addition, the proposed connection to MCIs may aid in future research by shedding new light on the properties of negative infinitival existentials, a notoriously thorny topic in Russian syntax.

6 Remaining Issues

6.1 Purpose Clauses

Perlmutter and Moore (2002) note that MCIs (for them, infinitival clauses with dative subjects) can occur not only as root clauses, but also embedded under the complementizer *čtoby* ‘(in order) that’, in a purpose clause. In general, embedded MCIs may simply be analyzed as finite clauses, as the complementizers under which they are embedded happily select finite complements. This is what I propose happens with the complementizer *pered tem kak* ‘before’, discussed by Comrie (1974b:133). Sigurdsson (2002:714) likewise suggests that MCIs embedded under *čtoby* are finite clauses. For *čtoby*, this is a possibility, but it requires some additional comment.

There is a small complication with the claim that an MCI embedded under *čtoby* is a finite clause: there is no overt form of *byt'* in the embedded MCI. In ordinary MCIs, this is easily explained as the expected null present-tense form of *byt'*. It is a morphological rule of Russian, however, that finite verbs embedded under *čtoby* must always occur in their past-tense form. For *byt'*, this is not a null form, but the overt form *bylo*. If MCIs embedded under *čtoby* are finite, then we must find some explanation for why *bylo* is absent.

I suggest that the absence of *bylo* is related to the presence of a fossilized form of *byt'* in the complementizer itself. This fossilized form is *by*, which occurs independently in subjunctive clauses in Russian. The remainder of the complementizer, *čto*, also occurs independently and is the Russian clausal subordinator *par excellence*. There are a number of possibilities for why *bylo* might be absent, given these facts. (i) Modal *byt'* might simply take the form *by* in these embedded environments, and incorporate via head movement into the complementizer *čto*. It must be noted, however, that *čtoby* can occur even in environments where no such head movement is plausible, e.g., with finite complements headed by verbs other than *byt'*. (ii) The

modal *byt'* of the MCI might simply delete when subordinate to *čtoby*; this might be understood as the synchronic residue of an older process like the one described under option (i).³⁵ (iii) The complementizer *čtoby* itself might license the occurrence of the dative DP in the MCI (this function could be associated with the fossilized form of *byt'* contained within it), imposing thematic restrictions similar to those discussed in section 2.2 and thereby ruling out impersonal predicates, which remain ungrammatical in this environment (Perlmutter and Moore 2002).

Full investigation of the syntax of MCIs in purpose clauses must await future research. For now, given the possibilities discussed in this section, I conclude that the absence of *bylo* in MCIs embedded under *čtoby* does not seriously undermine the biclausal analysis developed here.

6.2 Dative Subjects in Other Slavic Languages

Preliminary investigation of dative subjects in the Slavic family beyond Russian yields support for the biclausal analysis of MCIs proposed here. It seems that apparent dative subjects occur only in those Slavic languages that express possession with a verb meaning ‘be’, and not with a verb meaning ‘have’. On the analysis offered here, this is because those apparent dative subjects are oblique arguments of ‘be’, the verb of possession.

Greenberg and Franks (1991) survey five Slavic languages and find that while Russian and Polish contain dative subjects, Slovenian, Serbo-Croatian, and Slovak do not.³⁶ In addition, they note that Polish is “much more restrictive than Russian” in its use of dative subjects (Greenberg and Franks 1991:83).³⁷ Their results strongly

³⁵In this connection, note that the emphatic existential *byt'* used in infinitival existential sentences (see section 5.2) does occur as overt past-tense *bylo* when embedded under *čtoby*:

- i. Xočetsja že apartamenty pobol'se, razmerom, skažem, s GUM, **čtoby**
 want.3SG.REFL PRT apartments larger size.INST say.1PL with GUM in order
 detjam **bylo** gde razguljat'sja.
 children.DAT be.EXIST.PAST where run around.INF

‘[We] want bigger apartments, the size of, say, GUM, so that there would be someplace for the children to run around.’ (*Sem' dnej* [periodical], 20–26 Feb. 2006, p. 56)

The overt-null correlation between the emphatic *byt'* of infinitival existentials and the non-emphatic *byt'* of MCIs is thus maintained under *čtoby*.

³⁶They note in addition that all Slavic languages contain experiencer datives of the kind discussed above in footnote 4.

³⁷It should be noted here that MCIs with overt dative DPs, while robustly attested in Russian and subject to strong judgments of grammaticality, are not altogether common in ordinary spoken Russian. They are generally restricted to written registers and “have an epic ring to them” (Timberlake 2004:363). It is far more common for there to be no overt experiencer in an MCI, i.e., for arbitrary PRO to occur in place of the dative DP. In addition, MCIs are most common when questioned or negated. It is not clear to me that these last facts require (or are amenable to) a syntactic explanation.

parallel Isačenko's (1974) findings regarding the use of 'be' vs. 'have' to express possession in Indo-European and other languages. Within the Slavic family, Russian is a 'be' language, while Czech, Slovak, and Serbo-Croatian are 'have' languages. Polish, Ukrainian, and Belorussian are "in a state of transition from B(e)-languages to H(ave)-languages" (Isačenko 1974:44). For Polish, the restricted use of dative subjects noted by Greenberg and Franks goes hand in hand with the "state of transition" towards the use of 'have' noted by Isačenko.

The analysis proposed here, in which MCIs have a biclausal structure headed by existential *byt'*, receives typological support from these findings. Apparent dative subjects are correlated with possessive 'be' because this possessive 'be' takes the dative DP as its oblique argument. As documented in crosslinguistic detail by Freeze (1992), possessive 'be' always selects an oblique possessor. Possessive 'have', by contrast, selects a nominative possessor, and so those Slavic languages with possessive 'have' correspondingly lack apparent dative subjects. The preliminary cross-Slavic findings thus lend support to the analysis of MCIs offered here.

7 Conclusion

I have argued that Russian infinitival clauses contain dative subjects, but that only a subset of the examples traditionally used to demonstrate this phenomenon actually bear on the issue. So-called main-clause infinitivals are in fact biclausal structures headed by existential/modal *byt'*, which takes the dative DP and the infinitival CP as its arguments. The dative DP obligatorily controls the PRO subject of the embedded infinitival clause, a configuration that renders impersonal predicates ungrammatical in this construction. Evidence from second dative agreement of the semipredicatives *sam* and *odin* is our only evidence that infinitival clauses assign dative case to their subjects. Moreover, these facts force us to conclude that PRO is the only possible dative subject in Russian, a novel proposal in the study of Russian syntax.

The Russian facts have important consequences for the theories of case and control. The case marking of infinitival PRO, together with the inability of this case marking to license lexical DPs or *pro*, supports the view that morphological case is independent of syntactic Case (DP licensing; McFadden 2004). The exclusion of lexical DPs and *pro* from the subject position of infinitival clauses supports Landau's (2004; to appear) featurally based account of the distribution of PRO. The Russian data are therefore consistent with the view that syntactic Case is not needed for these purposes, that it in fact complicates the theoretical account of the interaction between PRO and morphological case, and that it may be possible to eliminate Case from syntactic theory entirely.

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