Biaspectual Verbs: A Marginal Category?

Yulia Zinova and Hana Filip[(✉)]

Heinrich-Heine Universität Düsseldorf, Düsseldorf, Germany
`hana.filip@gmail.com`

Abstract. The hallmark property of the Russian verbal system is taken to be the bipartite perfective/imperfective distinction in the domain of grammatical aspect. In this paper we show that there is a substantial and productive class of morphologically complex verbs that do not clearly pattern as either perfective or imperfective on standard formal (distributional) tests for perfectivity versus imperfectivity. Such verbs also pose problems for contemporary syntactic approaches to Russian complex verbs. The main innovation we propose is a new positive test for perfectivity which, along with the standard formal (distributional) tests, allows us to provide empirical evidence for the existence of a class of verbs that exhibit a variable grammatical aspect behavior, i.e., behave like perfective or imperfective verbs in dependence on context. Apart from shedding a new light on the standard tests for the aspectual membership of Russian verbs, the main empirical outcome seems to suggest that a third–biaspectual–class of verbs which cannot be neatly aligned with either the perfective or imperfective class must be recognized. This immediately raises the question about its status with respect to the traditional bipartite perfective/imperfective distinction.

1 Introduction

The main goal of this paper is to provide evidence for the existence of a productive class of verbs in Russian that are morphologically complex and behave in the same way as those verbs that are traditionally considered biaspectual. This class of verbs poses challenges to both traditional and contemporary syntactic accounts of Russian verbal aspect. First, they cannot be identified by means of the standard formal (distributional) tests for determining whether a given verb form is imperfective or perfective, because such tests are formulated as negative diagnostics for perfectivity, i.e., the possibility they exclude is that a given verb form is perfective. Consequently, such tests fail to distinguish biaspectual verbs from imperfective ones. Second, current syntactic approaches that make the most explicit claims about the formal properties of Russian complex verbs make wrong or inconsistent predictions about the aspectual membership of such verbs.

We suggest a new positive test for perfectivity that allows us to provide evidence for a class of biaspectual verbs: namely, this class satisfies our new positive test for perfectivity, which true imperfectives fail, while at the same time, it fails to be aligned with true perfectives, according to the traditional negative tests for perfectivity. If it is correct that there is a productive class of biaspectual verbs with formal (distributional) and semantic properties that clearly set it apart from true perfectives and true imperfectives, then this would raise the question about its status with respect to the traditional binary aspectual opposition between perfectivity and imperfectivity, and whether the possibility of a tripartite division should be considered.

The paper is structured as follows. Section 2 provides the main data. Section 3 focuses on prefixed biaspectual verbs. We first provide a survey of the approaches to Russian prefixation and then show that none of the existing accounts is able to capture the existence of prefixed biaspectual verbs. In Sect. 4.1 we discuss the existing tests for verbal aspect and show that none of them is suitable for distinguishing between biaspectual and imperfective verbs. Section 4.2 is dedicated to the new test that is positive for perfectivity. Section 5 is a discussion of the consequences of the integration of the productive group of biaspectual verbs into the theory of Russian aspect and prefixation.

2   Main Data: Biaspectual Verbs

Biaspectual verbs have received constant attention in the studies of Russian verbal and aspectual systems (see, e.g., Isačenko 1960; Avilova 1968; Skott 1979; Gladney 1982; Čertkova 1998; Jászay 1999; Anderson 2002; Timberlake 2004; Janda 2007). Two classes are commonly distinguished: a relatively small group of verbs with historically Slavic roots, such as *kaznit'*$^{PF/IPF}$ 'to execute' and foreign borrowings ending in *ovat'*, such as *reformirovat'*$^{PF/IPF}$ 'to reform'. According to Čertkova and Čang 1998, the second group constitutes more than 90 % of the biaspectual verbs (their statistical study uses the data from the Ožegov 1990, dictionary) and according to Anderson 2002, – about 95 % (data taken from Zaliznjak 1977). All of the studies listed above are concerned exclusively with nonprefixed biaspectual verbs listed in the dictionaries.

However, there are also prefixed (and suffixed) biaspectual verbs, as is clearly evident from corpus-based studies (see e.g., Borik and Janssen 2012). Such verbs constitute an open class of lexical items with subgroups that follow productive patterns. Let us examine one such group: namely, the biaspectual verbs that are formed with the formant *-iva-/-yva-* and two or more prefixes, where the outermost is the completive *do-*[1]:

---

[1] In this scheme all the components are crucial: those verbs that contain *do-* as the outermost prefix, but do not contain the imperfective suffix, are clearly perfective and those verbs where the only prefix is *do-* and the imperfective suffix is present are imperfective.

(1)   do$_{COMP}$-PREF$^+$-ROOT-yva-t'[2]

Some illustrative examples (among many others) are:

(2)   a.   *do-pere-za-pis-yva-t'* 'to finish writing down again',
    b.   *do-pere-stra-iva-t'* 'to finish rebuilding',
    c.   *do-vy-š-iva-t'* 'to finish embroidering',
    d.   *do-za-pis-yva-t'* 'to finish writing down',
    e.   *do-pere-pis-yva-t'* 'to finish rewriting/copying',
    f.   *do-za-kaz-yva-t'* 'to finish ordering'.

Depending on the context, these verbs are assigned to either the imperfective aspect (examples (3-a) and (4-a)) or the perfective aspect (examples (3-b) and (4-b)).

(3)   a.   V dannyj moment doperezapisyvaju   ešče 2 pesni.
        in given   moment do.pere.za.write.imp.1sg also 2 songs
        'I'm currently finishing rerecording two more songs.'
    b.   Doperevela   "Talisman" Šandmaulej   i
        do.translate.pst.sg.f "Talisman" Šandmaul.gen and
        doperezapisyvala   sobstvennye pesni.
        do.pere.za.write.imp.pst.f.sg own   songs.
        'I finished translating "Talisman" by the group "Šandmaul" and finished rerecording my own songs.'[3]

(4)   a.   Ja skol'ko   ni   doperestraival,   ljudi   v itoge tratili
        I   how.much ever do.pere.build.pst.sg.m, people in total spent
        bol'še, čem na novuyu postrojku.
        more then on new bulding.
        'Every time I was rebuilding something, in the end the clients spent more than they would have paid for the new building.'
    b.   Vot tol'ko traktir doperestraivaju,   proekt
        here only   tavern do.pere.build.imp.pres.1sg, project
        sdam,   diplom poluču...
        hand.in.pres.1sg, diploma receive.pres.1sg
        'I will just first finish rebuilding the tavern, then hand in the project and receive the diploma...'

---

[2] The superscripts 'IPF' and 'PF' on a verb stand for the imperfective and perfective aspect. The following abbreviations are used in the glosses: NOM = nominative, GEN = genitive, DAT = dative, ACC = accusative, SG = singular, PL = plural, F = feminine, M = masculine, N = neuter, PRES = present tense, PAST = past tense, INCEP = inceptive, COMP = completive, IMP = imperfective suffix, PREF = lexical prefix.

[3] The past tense verbal form itself does not specify the person, only gender and number, so the information about the person comes from the context.

In (3-a) the verb *doperezapisyvaju* 'I am finishing rewriting' behaves like an imperfective verb, because it has a progressive interpretation triggered by the adverbial *v dannyj moment* 'currently' (see also below), while *doperezapisyvala* 'I finished rerecording' in (3-b) behaves like a perfective verb, because of the conjunction with the perfective verb *doperevela* 'finished translating' (see the more detailed explanation in Sect. 4.2).

In (4-a) the verb *doperestraival* 'was finishing rebuilding' is used as an imperfective verb with an iterative meaning and in (4-b) the same verb *doperestraivaju* 'I will finish rebuilding' can only be assigned the perfective aspect because it has future reference in the nonpast tense.

The variability of the perfective and imperfective uses of biaspectual verbs is a matter of some disagreement, not all the speakers can access both the perfective and imperfective variant. For instance, according to some speakers, *dozapisyvat'* 'to be finishing/finish writing down' cannot be used as a perfective verb, i.e., it is not biaspectual at all. However, such speakers would also agree that the structurally similar verb *dovyšivat'* 'to be finishing/finish embroidering' can, indeed, be used as a perfective verb, as in (5).

(5)   Planiruyu   pristupit' k rabote čerez dve nedeli, kak tol'ko
       Plan.pres.1sg start.inf   to work   over two weeks, as   only
       dovyšivayu   "Lesnuju zarju".
       do.vy.sew.imp.pres.1sg "Forest   dawn"
       'I plan to start the work in two weeks' time; as soon as I will have finished
       embroidering "Dawn in the forest".'

3   Russian Prefixation System

3.1   An Overview of the Existing Syntactic Approaches

As is well-known, the Russian grammatical aspect provides formidable challenges to any theory of aspect. One of the main reasons for this is the system of verbal prefixation, which is highly idiosyncratic. The difficulties start with the fact that even standard Russian grammars do not agree on the number of verbal prefixes and their meanings. Traditionally, the number of prefixes is claimed to be 18 (Isačenko 1960; 1968; Russian Grammar 1952), but Krongauz (1998, pp. 131–141) lists 19, proposing to split *o-/ob-* in two separate entries and Barykina et al. (1989) gives 21 prefixes. The largest number of prefixes is listed in Švedova (1982), who claims that the total number is 28. Her list includes 23 prefixes that she takes to be productive: *v-/vo-, vz-/vzo-, voz-/vozo-, vy-, dis-* (productive in scientific speech), *do-, za-, iz-/izo-, na-, nad-/nado-, nedo-, o-, ob-/obo-, ot-/oto-, pere-, po-, pod-/podo-, pred-/predo-, pri-, pro-, raz-/razo-, s-/so1-.* The other five are nonproductive (*niz-* and *pre-*) or loaned and productive only in literary language (*re-, de-* and *so2-*). In her list of the productive prefixes, the median number of their different uses/senses is 5.

Traditional, descriptive grammars (e.g., Russian Grammar 1952; Ušakov 1940; Švedova 1982) provide a number of valuable intuitive and descriptive observations, but they do not offer any systematic theory of prefixation. It is crucial

to note that they either do not mention the possibility of prefix stacking (as illustrated by examples in (2)) at all (see e.g., Švedova 1982) or if they do, they tend to list certain prefix combinations without motivating why exactly such combinations should occur[4].

One of the possible reasons for this omission is the widespread view that the main function of Russian (and, in general, Slavic) prefixes is to be added to imperfective simplex verbs and form perfective verbs. With certain restrictions, the imperfective suffix is added to prefixed perfective stems and derives secondary imperfective verbs. While this captures two of the most common formation processes of complex verbs, it must also be acknowledged that there are others that are traditionally barely mentioned. In particular, the stacking of prefixes has escaped any systematic treatment.

Filip (2000, 2003) attempts at providing systematic semantic motivation for at least some of the cases of stacked prefixes (based on Czech examples), and in this connection calls into question the common view of Slavic prefixes, according to which prefixes are only attached to imperfective verbs and form perfective verbs, showing that prefixes can also be attached directly to perfective verbs, both basic and prefixed.

Another important strand of research that addresses the phenomenon of Russian verbal prefixation, is syntactically based and has been developed in the past ten years or so. It has its origins in the long-standing tradition of distinguishing between two types of prefixes (Forsyth 1970; Isačenko 1960; Townsend 1975): lexical prefixes (also called internal prefixes) vs. those prefixes that derive Aktionsart verbs (later in the literature called superlexical or external).

The division of the prefixes into lexical/internal and superlexical/external is a key component in contemporary (mostly syntactically-based) approaches to Russian prefixation: Babko-Malaya (1999); Borik (2002); Gehrke (2004); Ramchand (2004); Schoorlemmer (1995); Romanova (2004, 2006); Svenonius (2004a, 2004b); Di Sciullo and Slabakova (2005). Following Svenonius (2004b, p. 229) who builds on the discussion of Russian in Schoorlemmer (1995), these two groups are distinguished according to the following diagnostics: superlexical prefixes (i) do not allow the formation of secondary imperfectives (invalid in Bulgarian), (ii) can occasionally stack outside lexical prefixes, never inside, (iii) select for imperfective stems, (iv) attach to the non-directed form of a motion verb, (v) have systematic, temporal or quantizing meanings, rather than spatial or resultative ones.

Babko-Malaya (1999) was the first to propose that the internal structure of complex verbs is represented by means of syntactic trees and lexical and superlexical prefixes occupy different syntactic positions in it. More precisely, lexical prefixes are adjoined to a lexical head, while superlexical prefixes are adjoined instead to a functional category. She predicts that "lexical prefixes modify the meaning of the verb, whereas superlexical prefixes are modifiers of verbal phrases

---

[4] For example, in Russian Grammar (1952) it is only stated that *na-, pere-, pod-, pri-* and *po-* are productive as second verbal prefixes and that *po-* can also be used as a third prefix.

or whole sentences" (Babko-Malaya 1999, p. 76). The (im)perfective aspect of a given complex verb is then determined by the properties of the highest affix in a structure. In what follows, let us have a look at a couple of proposals that follow this research program.

Romanova (2004) proposes the structure for Russian verbs that is represented in Fig. 1. Romanova (2004, p. 272) assumes "the presence of AspP in between VP and vP," that "is a possible place for merge of the secondary imperfective suffix or purely perfectivizing prefixes", and that lexical prefixes are located below AspP, while "superlexical prefixes originate – or at least end up – above the AspP domain" (p. 271). Throughout the paper, a lot of questions regarding the behavior of prefixes are posed and the author arrives at the conclusion that "there is no uniform distribution of all superlexicals".
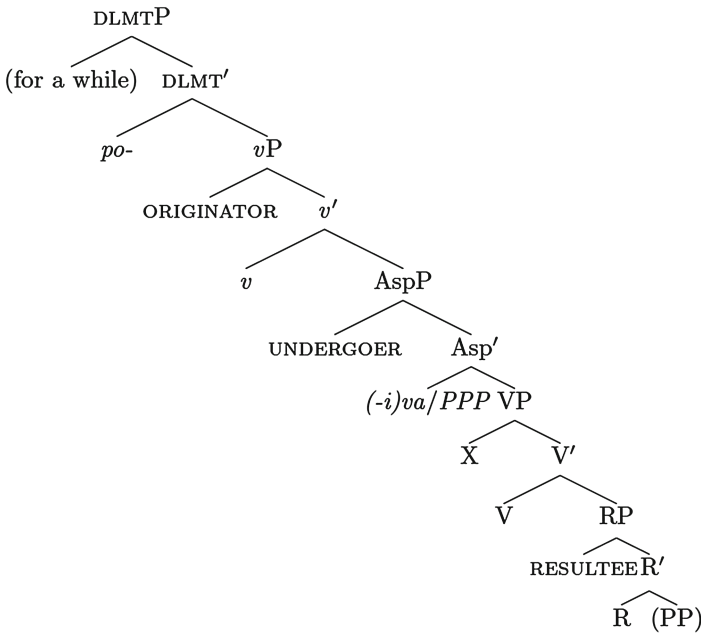

Fig. 1. Verbal structure according to Romanova (2004, p. 272)

While Babko-Malaya (1999) and Schoorlemmer (1995), among others, assume that superlexical prefixes form a homogeneous class, Svenonius (2004b) argues that there is a tripartite division among superlexical prefixes based on their ability to form secondary imperfectives.

According to Svenonius (2004b), certain superlexical prefixes (*za-* with inceptive meaning, *ot-* with terminative meaning and *pere-* with distributive meaning[5]) may be attached higher than the structural position of the imperfective

---

[5] *Pere-* has a variety of meanings (e.g. Švedova 1982 distinguishes between 10 different meanings) including spatial, temporal, comparative, iterative, crossing the boundary, distributive and *pere-* of excess.

suffix, which is *Asp*, the head of *AspP*. Such prefixes disallow the formation of secondary imperfectives, (e.g., *za-* in its inceptive use, as in Fig. 2). That is, the imperfective suffix cannot be directly attached to an imperfective stem and the result is an invalid structure (see Fig. 2).

There are also mixed cases like cumulative *na-*, excessive *pere-*, and attenuative *po-*. The normal point of attachment of such prefixes is outside the scope of the secondary imperfective, however under certain exceptional conditions they allow a lower point of attachment (p. 231).

Svenonius' main generalizations can be stated as follows (see also the summary in Svenonius 2012):

(i) lexical prefixes originate inside *v*P;
(ii) superlexical prefixes originate outside *v*P;
(iii) lexical and superlexical prefixes that (according to him) disallow secondary imperfectivization are separated by Asp in the syntactic structure;
(iv) exceptional superlexical prefixes are merged (sometimes) outside *v*P, but below the Asp.
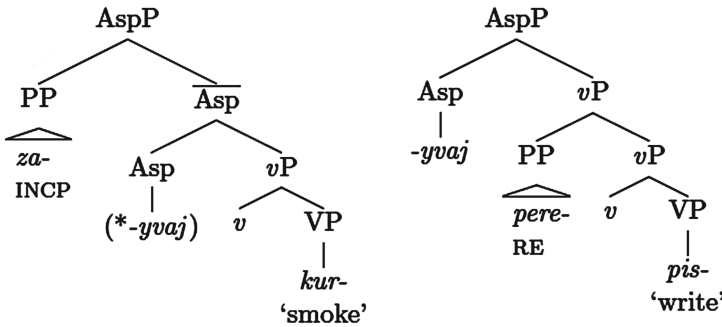

Fig. 2. Structural positions of different superlexical prefixes according to Svenonius (2004b, p. 231)

Ramchand (2004) proposes the following 'bottom-up' order:

(i) lexical prefixes;
(ii) aspectual head that may contain either the imperfective suffix or a superlexical prefix;
(iii) a DP projection for superlexical distributional prefixes (she cites *pere-* and *po-*).

While the motivation for this hierarchical order is not entirely clear, it would seem to derive from the following assumptions made by Ramchand (2004):

1. lexical prefixes appear low in the syntactic structure, due to which a "presuppositional structure to the aspectual head" is introduced "to the effect that it creates a definite rather than an indefinite time moment in Asp" (p. 349);

2. most superlexical prefixes are in Asp and "impose a specific reference time on the relation between event and temporal anchoring" (p. 351);
3. a position that superlexical prefixes that are distributional (*pere-* and distributive *po-*) occupy is higher in the hierarchy than the Asp head (p. 352); such prefixes can be attached directly to the root or to the secondary imperfective verb.

The fundamental two-way distinction is of key importance for Romanova (2004); Svenonius (2004b); Ramchand (2004) despite the fact that they split the class of superlexicals into subclasses and acknowledge that "there is no uniform distribution of all superlexicals" (Romanova 2004, p. 271).

In further developments we see a shift of focus from the bipartite distinction to the split of the whole class of prefixes into more than just two main classes. A good example is the work by Tatevosov (2007), who proposes a three-way classification of verbal prefixes, arguing for the existence of intermediate prefixes, in addition to lexical and superlexical ones. The group of the intermediate prefixes is constituted by completive *do-* and repetitive *pere-*.

This division is motivated by examples like (6-a) and (6-b). For the analysis that assumes the two-way distinctions, the verbs in (6-a) and (6-b) have identical internal structure: a superlexical prefix, a lexical prefix, a stem and the imperfective suffix. Nevertheless, these verbs are assigned to a different aspect: *nazapisyvat'* 'to write down a lot' is perfective while *perezapisyvat'* 'to be rewriting/to rewrite' is imperfective. For Tatevosov (2007), there is a structural difference between the two verbs, because *pere-* is classified as an intermediate prefix and is positioned between lexical prefixes and the imperfective suffix. As a result, the verb in (6-b) gets assigned the imperfective aspect. At the same time, *na-* remains a superlexical prefix and thus the verb *nazapisyvat'* 'to write down a lot' gets assigned the perfective aspect.

(6) a. nazapisyvat'^{PF}
         na.za.write.imp.inf
         'to write down a lot'
     b. perezapisyvat'^{IPF}
         pere.za.write.imp.inf
         'to be rewriting/to rewrite'

A more elaborate classification is proposed in Tatevosov (2009) that is mainly dedicated to the problem of prefix stacking. However, in order to account for the relevant stacking constraints, the proposal amounts to a list of postulations about the position of prefixes in the syntactic tree. Tatevosov (2009) abandons the previous tripartite distinction among all the prefixes proposed in Tatevosov (2007) and instead argues for a classical division of all the prefixes into lexical and superlexical ones, enriching it with a three-way classification of superlexical prefixes in order to account for the relevant facts: left periphery prefixes, selectionally limited prefixes and positionally limited prefixes.

The group of left periphery prefixes is constituted by only one prefix: distributional *po-* (*pobrosat'* 'to spend some time throwing'). It occupies the left

periphery of the verbal structure. Selectionally limited prefixes can be added only to a formally imperfective verb. The group includes delimitative *po-* (*posidet'* 'to sit for some time'), cumulative *na-* (*navarit'* 'to cook a considerable amount of something'), distributional *pere-* (*perelovit'* X 'to catch all of X') and inchoative *za-* (*zabegat'* 'to start running about').

The last group of positionally limited prefixes is constituted by the completive *do-* (*dodelat'* 'to finish doing'), repetitive *pere-* (*perepisat'* 'to rewrite') and attenuative *pod-* (*podustat'* 'to become a little bit tired'). These prefixes, according to Tatevosov (2009), can be added only before the secondary imperfective suffix *-yva-/-iva-* and end up in the same structural position as intermediate prefixes in Tatevosov (2007), the group being extended by one prefix.

The net advantage of Tatevosov (2009) over Tatevosov (2007) seems to be that only the former can motivate the difference between (7-a) and (7-b), but it also requires the stipulation that distributive *po-* forms a singleton group. On Tatevosov's (2009) account, distributive *po-* must be situated on the left periphery of the verb, thus there can be no derivation for (7-b).

(7)   a.   ponazapisyvat'
             distr.cum.za.write.imp.inf
             'to write down a lot one after another'
       b.   *napozapisyvat'
             cum.distr.za.write.imp.inf

3.2   Summary and Criticism of the Existing Syntactic Approaches: Predictions and Counterexamples

Although the approaches summarized above vary in many details, they all share the idea that prefixes fall into distinct groups characterized by different syntactic properties from which their semantic behavior is assumed to follow: superlexical prefixes have transparent meaning and behave compositionally, while the result of the combinations of verbal stems with lexical prefixes is lexicalized.

One problem is that the class of superlexical prefixes is not clearly delimited. There are substantial differences among the researchers on which prefixes belong to the superlexical class. The longest list can be found in Svenonius (2004a, p. 195, (28)): inceptive *za-*, terminative *ot-*, completive *do-* and *iz-*, perdurative *pro-*, delimitative, attenuative and distributive *po-*, repetitive, excessive and repetitive *pere-* and cumulative and saturative *na-*. While the list by Romanova (2004) is shorter, it also includes attenuative *pod-* and *pri-*.

As far as determining the aspect of a complex verb is concerned, what implicitly emerges from Ramchand (2004); Romanova (2004); Svenonius (2004b), can be summarized by the schema in (8), given in Borer (2013):

(8)   a.   V → *imperfective*[6]
       b.   Prefix + V → *perfective*
       c.   V + Semelfactive → *perfective*

---

[6] Plus a list of biaspectual and perfective underived verbs.

d.   Prefix + V + S-imperfective/Hab → *imperfective*

e.   Prefix + (Prefix + V + S-imperfective/Hab) → *perfective*

Taking into account also the proposals by Tatevosov (2007, 2009), the schema in (8) may be completed with the following rule (f), where (f) must be applied instead of (e) in case of intermediate/positionally limited prefixes (completive *do-*, repetitive *pere-*, attenuative *pod-*).

f.   (PosLim/ItmPrefix + Prefix* + V) + S-imperfective/Hab → *imperfective*

Examples (9-a)-(9-f) illustrate the application of the corresponding rules (8-a)-(8-f).

(9)   a.   pisat'^{IPF}
        write.inf
        'to write'

    b.   zapisat'^{PF}
        za.write.inf
        'to write down'

    c.   prygnut'^{PF}
        jump.semelf.inf
        'to jump once'

    d.   zapisyvat'^{IPF}
        za.write.imp.inf
        'to be writing down/to write down'

    e.   nazapisyvat'^{PF}
        cum.za.write.imp.inf
        'to write down a lot'

    f.   perezapisyvat'^{IPF}
        iter.za.write.imp.inf
        'to be rewriting/to rewrite'

From the schema in (8) it follows that all the existing syntactic approaches implicitly postulate that there is exactly one syntactic structure allowable for any given single verb token with a given interpretation. The structural position for each prefix use in the syntactic structure is fixed. To illustrate this point, which is key for our purposes, let us take as an example the biaspectual verb *dozapisyvat'* 'to finish writing/to be finishing writing' that follows the pattern in (1). Given the syntactic assumptions, summarized in the schema (8), it can be shown that the biaspectual nature of the verb cannot be predicted.

The verb in question contains the following derivational morphemes: the superlexical prefix *do-* with the completive meaning (see, e.g., Svenonius 2004a), the lexical prefix *za-* with non-compositional semantic contribution, the stem *-pis-* and the imperfective suffix *-yva-*.

Following Svenonius (2004b) and rule (e) in schema (8), we obtain the tree in Fig. 3 for the verb *dozapisyvat'*. The completive prefix *do-* scopes over the imperfective suffix, so the verb must be assigned the perfective aspect. Note that Svenonius (2004b) does not explicitly discuss the characteristics of the prefix *do-*. However, in Svenonius (2004a) this prefix is assigned to the superlexical class and in Svenonius (2004b) general statements about the properties of the superlexical prefixes are made. In sum, this allows us to conclude that the verb *dozapisyvat'* should be analyzed in the way illustrated in Fig. 3. Ramchand (2004, p. 357) makes the same predictions.
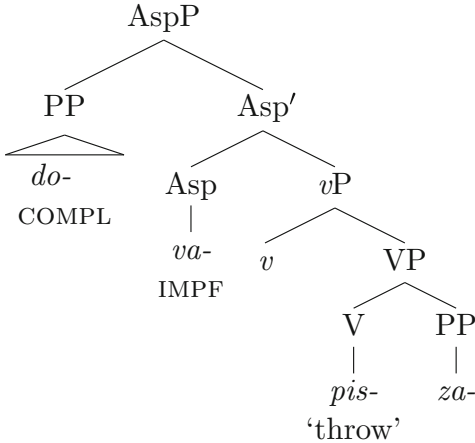
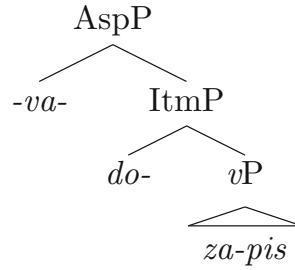**Fig. 3.** Tree for *dozapisyvat'* following Svenonius (2004b)

Fig. 4. Tree for *dozapisyvat'* following Tatevosov (2007)

Contrary to both Svenonius (2004b) and Ramchand (2004), Tatevosov (2007) arrives at a different aspectual classification of the same verb. This is because according to Tatevosov (2007), *do-* occupies a special projection for intermediate prefixes so that the resultant syntactic structure is as in Fig. 4. As we see, the imperfective suffix is in the highest position and the aspect of the whole verb must be imperfective. The analysis in Tatevosov (2009) amounts to the same prediction.

As is evident from the examples above, each theory predicts exactly one syntactic structure for the verb *dozapisyvat'*, as well as for any other verb. This holds true even for the most detailed account by Tatevosov (2009). Here the existence of an exceptional group of superlexical prefix uses is postulated. This group is the group of selectionally limited prefixes and includes delimitative *po-*, cumulative *na-*, distibutional *pere-* and inchoative *za-*. These prefixes, according to Tatevosov (2009), can assume a position "above" or "below" the imperfective suffix (which is not allowed in other approaches). However, this fact does not affect the overall prediction that there is a unique syntactic structure assigned to each given complex verb due to the selectional restriction.

The impossibility of having syntactic ambiguity for a given verb with a fixed interpretation should not be confused with the situation in which the verb has two meanings, i.e., the case of a genuine lexical ambiguity. In such case, all the approaches discussed predict for each meaning to be associated with a different syntactic tree.

In sum, the notion of a structural position is helpful in motivating at least certain facts about the formation of complex verbs (see example (9)). For this reason syntactic approaches were a necessary step in the process of understanding the system of Russian prefixation. However, the problematic part of these

approaches is that they, as we have shown, exclude the existence of biaspectual affixed verbs. The reason for this is that the structural assumptions that are postulated enforce a given complex verb to be unambiguously assigned to either the perfective or the imperfective aspect category independently of any other factors[7].

4   Identifying Biaspectual Verbs

4.1   Standard Diagnostics for Distinguishing Between Perfectives and Imperfectives

In Russian, the tests for determining the aspectual membership of a given verb form typically aim at excluding the possibility that a given verb form is perfective. Hence, they focus on the negative formal properties of perfective verbs. One good example of such a test set is given by Schoorlemmer (1995):

(10)   (i)   perfective verbs do not get an "ongoing" interpretation in nonpast tense;
        (ii) perfective verbs cannot be used as complements of phasal verbs (e.g., *načat'* 'to begin');
        (iii) perfective verbs cannot form present participles.

Notice that all of these tests are negative in so far as they specify the properties that perfectives fail to have. While these tests delimit perfective verbs, they cannot distinguish between imperfective and biaspectual verbs. Based on the previous aspect studies, there seem to be two possible candidate tests for perfectivity: one relies on past passive participle formation and the other makes use of the properties of the narrative sequence. We will ultimately show that neither of them works.

   According to the first test, past passive participles (PPPs) can only be formed from perfective verbs. For example, in the aspectual pair in (11) only the perfective member sanctions the derivation of a PPP (12-b), but not the imperfective one (12-a).

(11)   gruzit'^{IPF} → zagruzit'^{PF}

(12)   a.   gruzit'^{IPF} ↛ *gružennyj
         b.   zagruzit'^{PF} → zagružennyj

---

[7] One exception is a modification of Tatevosov (2009) proposed in Tatevosov (2013) that seems to implicitly react on problematic examples first mentioned in the work by Zinova (2012). Tatevosov (2013) proposes that the completive prefix *do-* (for a certain group of Russian speakers) does not have any restrictions on its attachment. If, however, such modification is adopted without further restrictions, the class of biaspectual verbs turns out to be too large. This problem seems to be solvable, although no solution is offered by the author. For a bit more details on this point and the data that remains problematic after such modification see Zinova and Filip (2014). Another conceptual problem is that the class of superlexical prefixes then contains 4 subclasses, two of which are inhabited by only one prefix.

However, matters are not as simple as that. As was pointed out by Schoorlemmer (1995), this test is applicable only to transitive and aspectually paired verbs. Specifically, according to Schoorlemmer, no perfective verbs with superlexical prefixes form aspectual pairs, which makes the test of little help for our purposes. Second, Romanova (2006) provides a number of counterexamples of past passive participles derived from imperfective verbs, among others (13).

(13)   ...kolonna   avtomašin, gružennyx   bumažnymi   paketami...
         column.nom cars.pl.nom loaded^{IPF}.pl.gen paper.pl.instr bags.instr
         '...a string of cars, loaded with paper bags...'

This suffices to show that the PPP formation test is neither reliable nor general enough.

The second possible positive test is connected to the phenomenon of aspectual pairs and to the contribution of the verbal aspect to the narrative sequence. Both are evoked in connection with what is referred to as the 'Maslov criterion' that first appears in the following formulation: "Pri perevode povestvovanija iz ploskosti prošedšego vremeni v ploskost' istoričeskogo nastojaščego vse glagoly kak SV, tak i NSV, okazyvajutsja uravnennymi v formax nastojaščego vremeni NSV" [When the narrative is transformed from the past into the historical present, all the verbs, both perfective and imperfective, result in forms of imperfective verbs in present tense] (Maslov 2004, pp. 76–77). However, the specific reference to Maslov's work is typically not given when the criterion is applied. We cite Mikaelian et al. (2007) as one of the clearest formulations found in the literature. The 'Maslov criterion' is formulated as follows in Mikaeljan et al. (Mikaelian et al. (2007), p. 1):

"A perfective and an imperfective verb can be considered an aspectual pair if and only if the imperfective verb can be substituted for the perfective verb in situations (such as descriptions of reiterated events or narration in historical present) where the latter is not allowed."

Mikaelian et al. (2007) illustrate the above with the following contrast:

(14)   a.   Prišel^{PF},   uvidel^{PF},   pobedil^{PF}
              Come.past.sg.m, see.pst.sg.m, conquer.pst.sg.m
              'I came, I saw, I conquered'
         b.   Prixožu^{IPF},   vižu^{IPF},   pobeždaju^{IPF}
              Come.pres.1sg, see.pres.1sg, conquer.pres.1sg
              'I come, I see, I conquer'

The sentence in (14-a) describes a sequence of events in the past, suggesting that each event was completed before the next started. Now, if the speaker wants to represent the same state of affairs in the historical present or as a habitual situation (their "reiterated event"), due to independently motivated constraints on the Russian aspectual system, only the corresponding[8] imperfective verbs can be used, as in (14-b).

---

[8] 'Corresponding' is understood as the imperfective verb that constitutes the aspectual pair with the original perfective verb.

It is plausible to approach biaspectual verbs by considering them as a kind of a covert aspectual pair and apply the 'Maslov criterion' in order to find them. One of the verbs that are often cited as paradigm examples of native biaspectual verbs is *kaznit'* 'to execute'. If the verbs in (15-a) and (15-b) can be thought of as constituting an aspectual pair, then the verb *kaznit'* in two different aspects in (15-c) might be thought of along the same lines, but of course in (15-c) the alleged members of the aspectual pair just happen to be not phonologically differentiated.

(15) a. pisat'^{IPF} – napisat'^{PF}
      b. zapisat'^{IPF} – zapisyvat'^{PF}
      c. kaznit'^{IPF} – kaznit'^{PF}

Applying the test to *kaznit'*, one can see that it can be used in the narrative sequence, which seems to suggest that it behaves like a perfective verb (16-a). The same verb can be used in the historical present or the habitual situation context, strongly suggesting that in (16-b) *kaznit'* behaves like an imperfective verb.

(16) a. Prišel^{PF},   uvidel^{PF},   pobedil^{PF},   kaznil^{PF}
          Come.pst.sg.m, see.pst.sg.m, conquer.pst.sg.m, execute.pst.sg.m
          vragov.
          enemies
          'I came, I saw, I conquered, I executed the enemies.'
      b. Prixožu^{IPF},   vižu^{IPF},   pobeždaju^{IPF},   kaznju^{IPF}
          Come.pres.1sg, see.pres.1sg, conquer.pres.1sg, execute.pres.1sg
          vragov.
          enemies
          'I come, I see, I conquer, I execute the enemies.'

This would seem to be in compliance with the 'Maslov criterion', as formulated by Mikaelian et al. (2007). Therefore, (16) seems to indicate that biaspectual verbs like *kaznit'* could be treated as covert aspectual pairs: in (16-a) the verb is perfective, while in (16-b) it is imperfective.

However, in the same contexts (narrative sequence and historical present/ habitual situation) it is also possible to use imperfective verbs like *dumat'* 'to think', as we see in (17).

(17) a. Prišel^{PF},   uvidel^{PF},   pobedil^{PF},   dumal^{IPF} o
          come.pst.sg.m, see.pst.sg.m, conquer.pst.sg.m, think.pst.sg.m about
          buduščem.
          future
          'I came, I saw, I conquered, I thought about the future.'
      b. Prixožu^{IPF},   vižu^{IPF},   pobeždaju^{IPF},   dumaju^{IPF} o
          come.pres.1sg, see.pres.1sg, conquer.pres.1sg, execute.pres.1sg about
          buduščem.
          future
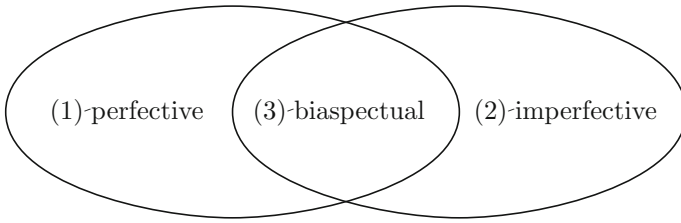   'I come, I see, I conquer, I think about the future.'

Fig. 5. Aspectual classes

This shows that such contexts cannot be used as diagnostics for perfectivity and imperfectivity. The 'Maslov criterion' requires a perfective verb as an input condition, so it is also negative for perfectivity and does not allow to distinguish between biaspectual and imperfective verbs. In (16) the same verb is used in both sentences due to its biaspectual nature. At the same time the possibility to use the same verb in both sentences in (17) is explained by the imperfective aspect of *dumal* 'thought' in the first sentence. Moreover, there are other problems related to the application of the 'Maslov criterion', which we cannot address given space limitations[9].

The key point to be made here and one that has not yet been emphasized enough in the research on Russian aspect, is that there is no positive test for perfectivity. Figure 5 schematically represents the aspectual classes of Russian verbs. The standard tests are negative for perfectivity, as illustrated by (10). They merely exclude the possibility that a given verb form is a member of Set 1. To separate the subset of biaspectual verbs (Set 3) from true imperfective verbs (Set 2), we need a positive test for perfectivity (Set 1). In the next section we will do just that and propose a new positive method of testing if a given verb is perfective. In combination with the standard tests we can then identify the class of the biaspectual verbs.

4.2   New Positive Test for Perfectivity: Narration Relation

The new positive test for perfectivity capitalizes on the notion of the *Narration relation*, defined as follows by Lascarides and Asher (1993):

Narration(α, β): The event described in β is a consequence of (but not strictly speaking caused by) the event described in α. If *Narration* (α, β) holds, and α and β describe eventualities e_1 and e_2 respectively, then e_1 occurs before e_2.

The *Narration* relation can be illustrated by (18):

(18)   Max woke up. He opened the window.

In English, it is natural to use telic verb phrases in non-progressive tense in the *Narration* relation. A parallel Russian example (19) contains two perfective

---

[9] Mikaeljan et al. (2007, p. 2) write that "rather than a tool for establishing aspectual pairs, the Maslov criterion should be taken as a definition and raison d'être of the aspectual correlation."

verbs. In observing that the main line of a narrative is constituted by sequences of perfective verb forms, which move narrative time forward, we draw on well-known insights in the vast literature on aspect and discourse structure (for Russian, see in particular Padučeva 1996; Padučeva 2004 and elsewhere).

(19)   Maksim prosnulsja^{PF}.   On otkryl^{PF} okno.
         Maksim woke.up.pst.m.refl he open.pst.m window.acc
         Maksim woke up. He opened the window.

The property that is crucial for us is that if the *Narration* relation holds and the second verb is perfective, the aspect of the first verb must be perfective as well. (20) demonstrates that the combination of an imperfective and a perfective verb is uninterpretable. Under the most normal assumptions about how situations in the world take place, people do not open the windows while sleeping nor is the event of opening a window normally interpreted as result or a continuation of the waking up event. Given that, the only possible relation between the two events is *Narration*.

(20) $^{??}$Maksim prosypalsja^{IPF}.   On otkryl^{PF} okno.
          Maksim woke.up.imp.pst.m.refl he open.pst.m window.acc
         $^{??}$Maksim was waking up. He opened the window.

Table 1. Verbal aspect and the *Narration* relation

Verbal combination		Acceptance judgment
Perfective verb	*i* 'and' perfective verb	Ok
Imperfective verb	*i* 'and' perfective verb	??
Biaspectual verb	*i* 'and' perfective verb	Ok

The idea of the test is summarized in Table 1. We propose to use sentences like (21) and (22), where the second verb is perfective such that the *Narration* relation is the only possible discourse relation between the events, described by the two clauses (see more details below). In such cases, the aspect of the first verb must be perfective, as well. Example (21) is in the non-past, whereas (22) – in the past tense. This shows that tense is not relevant for our purposes. Note that this is not to deny that the Narration Relation may also hold in sequences with imperfective verbs only, as in (23).

(21)   a.   Ja s"em^{PF} zavtrak i   pojdu^{PF} na rabotu.
              I   s.eat.pres.1sg breakfast and pref.go.pres.1sg on work
              'I will finish my breakfast and go to work.'
         b. $^{??}$Ja em^{IPF} zavtrak i   pojdu^{PF} na rabotu.
               I   eat.pres.1sg breakfast and pref.go.pres.1sg to work

(22)   a.   Ja s"el^{PF} zavtrak i   pošel^{PF} na rabotu.
              I   pref.eat.pst.sg.m breakfast and pref.go.pres.sg.m on work

'I finished my breakfast and went to work.'

    b.   ??Ja el^{IPF} zavtrak i   pošel^{PF} na rabotu.
         I   eat.pst.sg.m breakfast and pref.go.pst.sg.m to work

(23)   Uže   8:00. Ja em^{IPF} zavtrak i   idu^{IPF} na rabotu.
       Already 8:00. I   eat.pres.1sg breakfast and go.pres.1sg to work
       It is already 8:00. I eat the breakfast and go to work.

Examples (21-a) and (22-a) illustrate the first line of the table, (21-b) and (22-b) – the second line of the table. (21-b) and (22-b) are not interpretable, because neither the *Narration* nor any other coordinating relation, e.g., a *Background* relation, can be construed.

     The examples in (24) illustrate the third line of the table above which is the key to the case of biaspectual verbs. In a given context, *kaznit'* 'to execute' can behave either as a perfective or an imperfective verb. Given that in the test context imperfective verbs are odd, biaspectual verbs pattern together with perfective verbs. Thus, the proposed test context allows to distinguish between biaspectual and imperfective verbs.

(24)   a.   Palač   kaznit   prestupnika i   pojdët^{PF} domoj.
               Hangman execute.pres.3sg criminal   and po.go.pres.3sg home
               'The hangman will execute the criminal and will go home.'
     b.   Palač   kaznil   prestupnika i   pošel^{PF} domoj.
               Hangman execute.pst.m criminal   and po.go.pst.m home
               'The hangman executed the criminal and went home.'

Now that we have explained the basic workings of the test, let us address the precise conditions under which it works as a positive test for perfectivity. To enforce the *Narration* relation, the crucial conditions are required to be met.

1. The main lexical verb in the second clause must have a temporal extent.
2. The event denoted by the main lexical verb in the second clause must not be caused or considered a continuation of the event denoted by the main lexical verb in the first clause.
3. The clauses must be conjoined using plain conjunction *i* 'and' without any temporal or modal (epistemic) adverbial.

The conditions above reveal the workings of the test: when the two verbs denote such events that all the other coordinating relations such as *Background* or *Cause* are excluded (conditions 1 and 2), *i* 'and' (condition 3) can only indicate a *Narration* relation between the two clauses (as it is a marker of a coordinating relation and other coordinating relations are excluded), if it is acceptable; however, if a *Narration* relation between the two clauses cannot be established, the discourse is infelicitous, as in (21-b) and (22-b)).

     The reason for the first condition is that verbs denoting punctual events could be construed as describing events that are temporally located within the time span of the first event. In such case, it is not the *Narration* (but the *Background*) relation that holds between the two clauses and thus the rule expressed in the

last line of the table above (Table 1) is not applicable, as illustrated by (25). This condition is relevant if the test is applied in the past tense.

(25)   Ona igrala^{IPF} v futbol i   slomala^{PF} nogu.
        She play.pst.sg.f in football and break.pst.sg.f leg
        'While she was paying football, she broke her leg.'

Examples like (26) reveal the importance of the second condition: if the events denoted by the two main verbs are connected, the discourse relation is not one of Narration. As, according to Txurruka (2003), the natural language conjunction 'and' marks a coordinating relation, which means one of Narration, Background, Result, Continuation, Parallel or Contrast (Asher and Vieu 2005), one has to ensure that the Narration relation is the only possible one between the two events.

(26)   Ona xorošo igrala^{IPF} i   zarabotala^{PF} nagradu.
        She well   play.pst.sg.f and pref.work.pst.sg.f reward
        'She was playing good and earned a reward.'

On the basis of the observation by Txurruka (2003) that Narration is marked by *then*, we propose to use the substitution of *potom* 'then' instead of *i* 'and' to check whether it is in fact Narration that connects the two coordinated clauses. If it is, then the meaning of the two sentences is (nearly) identical (compare (21) with (27-a)). If it is not, the meaning changes significantly after such substitution (compare (25) with (27-b) and (26) with (27-c): the sentences in (27-b) and (27-c) suggest that the second event is not caused or explained by the first one).

(27)   a.   Ja s"em^{PF} zavtrak,   potom pojdu^{PF} na rabotu.
              I   s.eat.pres.1sg breakfast, then   po.go.pres.1sg on work
              'I will finish my breakfast, then I will go to work.'
        b.   Ona igrala^{IPF} v futbol,   potom slomala^{PF} nogu.
              She play.pst.sg.f in football, then   break.pst.sg.f leg
              'She was paying football, then she broke her leg.'
        c.   Ona xorošo igrala^{IPF},   potom zarabotala^{PF} nagradu.
              She well   play.pst.sg.f, then   pref.work.pst.sg.f reward
              'She was playing good, then she earned a reward.'

Examples in (28) and (29) demonstrate why the second condition is important: a sequence of two sentences without a conjunction or any explicit adverbial indicating their connection, as (28-a), is a bit strange (also a pause will be present between the two sentences in such case), but acceptable in an appropriate context (for example if someone is asked about his plans). (28-b), (28-c) are at least much better than (21-b) and (22-b) and (28-d) is completely natural. In those cases the Narration relation between the two clauses holds. In (28-b) and (28-d) it is explicit due to the presence of *potom* 'then' that, as was mentioned above, is a marker of the Narration. As the idea of the test is to exclude all the coordinating relations (the coordinating requirement is imposed by *i* 'and', so it must be present) except for Narration and see whether it can be established

given that the verb in the second clause is perfective, it is important to not include an explicit marker of this relation in the test context and thereby force its application.

(28) a. Ja jem^{IPF} zavtrak. Pojdu^{PF} na rabotu.
          I   eat.pres.1sg breakfast. pref.go.pres.1sg to work
          'I'm eating breakfast. Will go to work.'
      b. $^{?}$Ja jem^{IPF} zavtrak i   potom pojdu^{PF} na rabotu.
          I   eat.pres.1sg   breakfast and   afterwards pres.go.pres.1sg to work
          'I'm eating breakfast and will go to work afterwards.'
      c. $^{?}$Ja jem^{IPF} zavtrak i   obyazatel'no pojdu^{PF} na.
          I   eat.pres.1sg breakfast and necessarily   pres.go.pres.1sg to
          'I'm eating breakfast and I of course will go to work.'
      d. Ja jem^{IPF} zavtrak. Potom   pojdu^{PF} na rabotu.
          I   eat.pres.1sg breakfast. Afterwards pres.go.pres.1sg to work
          'I'm eating breakfast. Will go to work afterwards.'

Similarly in the past tense, (29-a) is perfectly fine in a context in which the speaker remembers what s/he did on a given occasion, and just in case there is a distinct pause between the two sentences. For (29-b), there do not seem to be any clear judgments and (29-c) is also fine.

(29) a. Ja el^{IPF} zavtrak. Pošel^{PF} na rabotu.
          I   eat.pst.sg.m breakfast. pres.go.pst.sg.m to work
          'I was eating breakfast. Went to work.'
      b. $^{?}$Ja el^{IPF} zavtrak i   potom   pošel^{PF} na rabotu.
          I   eat.pst.sg.m breakfast and afterwards pres.go.pst.sg.m to work
          'I was eating breakfast and went to work afterwards.'
      c. Ja el^{IPF} zavtrak. Potom   pošel^{PF} na   rabotu.
          I   eat.pst.sg.m breakfast. Afterwards pres.go.pst.sg.m to work
          'I was eating breakfast. I went to work afterwards.'

Such examples should suffice to illustrate the basic intuition behind the test. The main idea of the test is the well-known generalization given by Jespersen (1924) that if the verb is imperfective, it does not trigger narrative progression (in our case it is the verb in the first clause). Theoretically speaking, the relevant background for the workings of the test is best outlined in Altshuler (2012). His account of the discourse properties of the Russian imperfective relies on a multi-coordinate approach to aspect. He proposes interpretations for the NARR operator and for the aspectual operators and explains why only perfective verb is fine in (30-a) (ex. (73-a) in Altshuler 2012), which is an example similar to our test context.

(30) a. Lev ko mne $\{^{OK}$priexal^{PF} / $^{\#}$priezžal$^{IPF}\}$
          Lev to me   pref.arrive.pst.3sg /   pref.arrive.imp.pst.3sg
      b. i   srazu   pošel^{PF} kušat'.
          and right.away pref.go.pst.3sg eat
          'Lev arrived at my place and went to go eat right away.'

Now let us apply the test to the verbs *dopisyvat'* 'to finish/be finishing writing' and *dozapisyvat'* 'to finish/be finishing recording'. According to the syntactic theories, summarized in Sect. 3, these verbs are always assigned to one aspect: either perfective (Ramchand 2004; Romanova 2004; Svenonius 2004b) or imperfective (Tatevosov 2009). However, as examples (31) and (32) show, these two verbs pattern differently with respect to the narration relation test.

(31) a. $^{??}$Ja dopisyvaju   tekst i   pojdu^{PF} domoj.
          I   do.write.imp.pres.1sg text and go.pres.1sg home
      b. Ja dozapisyvaju   disk i   pojdu^{PF} domoj.
          I   do.za.write.imp.pres.1sg CD and go.pres.1sg home
          I will finish recording the CD and go home.

(32) a. $^{??}$Ja dopisyval   text i   pošel^{PF} domoj.
          I   do.write.imp.pst.sg.m tekst and go.pst.sg.m home
      b. Ja dozapisyval   disk i   pošel^{PF} domoj.
          I   do.za.write.imp.pst.sg.m CD and go.pst.sg.m home
          I will finish recording the CD and go home.

Examples (33-b) and (34-b) show that the same results as for *dozapisyvat'* are obtained for other verbs formed following the same pattern for biaspectual verbs (1). A good example is *dovyšivat'* 'to finish embroidering'. Notice that a derivationally related verb with the same root, namely, *došivat'*, to finish/be finishing sewing) is not acceptable in the test context, as shown by the examples (33-a) and (34-a).

(33) a. $^{??}$Ja došivala   platje i   podarila^{PF} ego sestre.
          I   do.sew.imp.pst.sg.f dress and pref.present.pst.sg.f he   sister
      b. Ja dovyšivala   kartinu i   povesila^{PF} eё.
          I   do.embroid.imp.pst.sg.f picture and pref.hang.pst.sg.f she
          'I finished embroidering the picture and hang it (on the wall).'

(34) a. $^{??}$Ja došivaju   platje i   podarju^{PF} ego sestre.
          I   do.sew.imp.pres.1sg dress and pref.present.pres.1sg he sister
      b. Ja dovyšivala   kartinu i   povesila^{PF} eё.
          I   do.embroid.imp.pst.sg.f picture and pref.hang.pst.sg.f she
          'I finished embroidering the picture and hang it (on the wall).'

To summarize, we have shown that the verbs formed according to the pattern in (1), e.g. *dozapisyvat'*, behave like those verbs that are traditionally considered biaspectual (e.g., *kaznit'*) and are intractable in the syntactic theories.

5   Discussion

As we have seen there is no test that allows to positively identify perfective verbs. This problem together with the widespread assumption that Russian verbal aspect is a binary category seems to be the reason why complex biaspectual verbs have remained largely unexplored and tend to be lumped together with

imperfective verbs. Traditional descriptive studies tend to mention only simplex biaspectual verbs, rather than complex ones, which are the focus of this paper. As for the recent syntactic theories of Russian prefixation, we aimed to provide evidence that they cannot account for the existence of complex biaspectual verbs without further modifications.

The existence of a non-neglectable class of complex verbs that can behave either as perfective or imperfective verbs, in dependence on context, raises important questions about their status with respect to the bipartite perfective vs. imperfective distinction. In what follows, let us briefly mention the following three. First, are such verbs ambiguous between the perfective and imperfective aspect or are they underspecified for grammatical aspect? The claim that they are ambiguous would imply that there are two different verbs (each with a different internal structure) that just happen to have the same phonological realization.

Second, it is not entirely clear whether there is just one class of complex verbs with variable grammatical aspect behavior or whether its domain needs to be split into subclasses. Third, what also needs to be clarified is the relation of complex verbs with variable grammatical aspect behavior to native simple biaspectual verbs like *kaznit'*, and to borrowed biaspectual verbs, both simple and complex, like *(pod-)amortizirovat'* 'to cushion (slightly).' The latter are claimed to lose their biaspectuality over time (see, e.g., Janda 2007; Korba 2007), in contrast to native biaspectual verbs like *kaznit'*. The answer to such questions must be left for future research.

A large part of the paper is devoted to providing a new positive test for perfectivity. This test relies on discourse structure, and its application requires several conditions to be observed. So far, no other suitable general positive test for perfectivity has been put forth. The fact that syntactic and morphological properties are used for a positive identification of imperfectivity, but the discourse level is needed in order to positively establish perfectivity of a given verb, is in itself an intriguing indication about another difference between imperfective and perfective aspect, which has not yet been noticed.

This paper is a part of a larger research program. In a related paper by (Zinova and Filip 2014) it is shown that there are other prefixed biaspectual verbs (not only prefixed with the completive *do-*, but also with the iterative *pere-* and the attenuative *pri-*). Some motivation why exactly those complex verb forms (with such prefixes) exhibit properties of biaspectuality is also provided. Significantly, the distinction between lexical and superlexical prefixes, and other finer distinctions among prefixes based on syntactic criteria, proves to be irrelevant in motivating their biaspectual behavior.

References

Altshuler, D.: Aspectual meaning meets discourse coherence: a look at the Russian imperfective. J. Semant. **29**(1), 39–108 (2012)

Anderson, C.: Biaspectual verbs in Russian and their implications on the category of aspect. Senior honor dissertation, The University of North Carolina (2002)

Asher, N., Vieu, L.: Subordinating and coordinating discourse relations. Lingua **115**(4), 591–610 (2005)

Avilova, N.S.: Dvuvidovye glagoly s zaimstvovannoj osnovoj v russkom literaturnom jazyke novogo vremeni [Biaspectual verbs with loaned stem in contemporary Russian literary language]. Voprosy jazykoznanija, pp. 66–78 (1968)

Babko-Malaya, O.: Zero morphology: A study of aspect, argument structure, and case. Dissertation, Rutgers University (1999)

Barykina, A.N., Dobrovol'skaya, V.V., Merzon, S.N.: Izučenie glagol'nyx pristavok [Study of verbal prefixes]. Russkij yazyk (1989)

Borer, H.: Between function and content - the case of Slavic perfective prefixes [Plenary talk handout, FDSL 2010]. Leipzig, Germany (2013)

Borik, O.: Aspect and reference time. Ph.D. thesis, Universiteit Utrecht (2002)

Borik, O., Janssen, M.: A database of Russian verbal aspect. In: Proceedings of the Conference Russian Verb, St. Petersburg, Russia (2012)

Čertkova, M.J., Čang, P.Č.: Evoljucija dvuvidovyx glagolov v sovremennom russkom jazyke. [Evolution of the biaspectual verbs in contemporary Russian.]. Russian Linguistics **22**, 13–34 (1998)

Di Sciullo, A.M., Slabakova, R.: Quantification and aspect. In: Verkeyl, H.J., de Swart, H., van Hout, A. (eds.) Perspectives on Aspect, pp. 61–80. Springer, The Netherlands (2005)

Filip, H.: The Quantization Puzzle. In: Events as Grammatical Objects, pp. 3–60. CSLI Press, Stanford (2000)

Filip, H.: Prefixes and the delimitation of events. J. Slavic Linguist. **1**(11), 55–101 (2003)

Forsyth, J.: A Grammar of Aspect: Usage and Meaning in the Russian Verb. Cambridge University Press, Cambridge (1970)

Gehrke, B.: How temporal is telicity? In: Paper presented at the workshop "Argument realization-Conceptual and grammatical factors", Leipzig (2004)

Gladney, F.Y.: Biaspectual verbs and the syntax of aspect in Russian. Slavic East Eur. J. **26**, 202–215 (1982)

Isačenko, A.: Grammatičeskij stroj russkogo jazyka v sopostavlenii s slovackim [Grammatical structure of Russian in comparison to Slovak]. Jazyki slavjanskoj kultury (1960)

Isačenko, A.V.: Die Russische Sprache der Gegenwart. M. Hueber, München (1968)

Janda, L.A.: What makes Russian bi-aspectual verbs special. In: Cognitive Paths into the Slavic Domain. Cognitive Linguistics Research, pp. 83–109 (2007)

Jászay, L.: Vidovye korreljaty pri dvuvidovyx glagolax [Aspectual correlates of biaspectual verbs]. Studia Russica **17**, 169–177 (1999)

Jespersen, O.: Philosophy of grammar. George Allen and Unwin Ltd, London (1924)

Korba, J.J.: The development of overt aspectual marking among Russian biaspectual verbs. ProQuest (2007)

Krongauz, M.: Pristavki i glagoly v russkom yazyke: Semanticheskaya grammatika [Prefixes and Verbs in Russian Language: A Semantics Grammar], Moscow (1998)

Lascarides, A., Asher, N.: Temporal interpretation, discourse relations and commonsense entailment. Linguist. Philos. **16**(5), 437–493 (1993)

Maslov, J.S.: Izbrannye trudy: Aspektologija. Obščee jazykoznanie [Selected Writings: Aspectology. General Linguistics]. Jazyki slavjanskoj kultury. Moscow (2004)

Mikaeljan, I., Šmelev, A., Zaliznjak, A.: Imperfectivization in Russian. In: Proceedings of the 3rd International Conference on Meaning-Text Theory, pp. 20–24 (2007)

Ožegov, S.I.: Slovar' russkogo jazyka [Dictionary of Russian] (1990)

Padučeva, E.V.: Semantičeskie issledovanija: Semantika vremeni i vida v russkom jazyke; Semantika narrativa [Semantic Studies: The Semantics of Tense and Aspect in Russian; The Semantics of Narrative]. Škola "Jazyki Russkoj Kultury". Moscow (1996)

Padučeva, E.V.: O semantičeskom invariante vidovogo značenija glagola v russkom jazyke [About the semantic invariant of the verbal aspect meaning in Russian]. Russkij jazyk v naučnom osveščenii **2**(8), 5–16 (2004)

Ramchand, G.: Time and the event: the semantics of Russian prefixes. Nordlyd **32**(2), 323–361 (2004)

Romanova, E.: Superlexical versus lexical prefixes. Nordlyd **32**(2), 255–278 (2004)

Romanova, E.: Constructing Perfectivity in Russian. Ph.D. thesis, University of Tromsø (2006)

Grammar, R.: Grammatika russkogo jazyka [Grammar of Russian]. Izdatelstvo AN SSSR, Moscow (1952)

Schoorlemmer, M.: Participial passive and aspect in Russian. LEd, Utrecht (1995)

Skott, S.: On biaspectual verbs in Russian. In: Pettersson, T. (ed.) Aspectology, pp. 17–33. Almqvist and Wiksell, Stockholm (1979)

Svenonius, P.: Slavic prefixes and morphology. an introduction to the Nordlyd volume. Nordlyd **32**(2), 177–204 (2004a)

Svenonius, P.: Slavic prefixes inside and outside VP. Nordlyd **32**(2), 205–253 (2004b)

Svenonius, P. : Structural and featural distinctions between germanic and slavic prefixes (2012)

Tatevosov, S.: Intermediate prefixes in Russian. In: Proceedings of the Annual Workshop on Formal Approaches to Slavic linguistics, vol. 16 (2007)

Tatevosov, S.: Množestvennaja prefiksacija i anatomija russkogo glagola [Multiple prefixation and the anatomy of Russian verb]. In: Korpusnye issledovanija po russkoj grammatike, pp. 92–157 (2009)

Tatevosov, S.: Množestvennaja prefiksacija i eë sledstvija (Zametki o fiziologii russkogo glagola) [Multiple prefixation and its consequences (Notes on the physiology of Russian verb)]. Voprosy jazykoznanija **3**, 42–89 (2013)

Timberlake, A.: A Reference Grammar of Russian. Cambridge University Press, Cambridge (2004)

Townsend, C.E.: Russian Word-Formation. Slavica Publishers, Bloomington (1975)

Txurruka, I.G.: The natural language conjunction and. Linguist. Philos. **26**(3), 255–285 (2003)

Ušakov, D., (ed.): Tolkovyj slovar' russkogo jazyka [Explanatory Dictionary of the Russian Language]. State Publishing House of Foreign and National Dictionaries, Moscow (1934–1940)

Švedova, N.J.: Russkaja grammatika [Russian Grammar], vol. 1. Nauka, Moscow (1982)

Zaliznjak, A.A.: Grammatičeskij slovar' russkogo jazyka [Grammatical Dictionary of Russian]. Russkij jazyk, Moscow (1977)

Zinova, Y.: Russian verbal prefixation puzzles. Handout of the talk given at the Graduate Research Seminar at Heinrich-Heine University (2012). https://www.academia.edu/8359697

Zinova, Y., Filip, H.: The role of derivational history in aspect determination. In: Proceedings of 24 FDSL Conference, Leipzig, Germany (2014, to appear)