- von Stechow, A. (2012) Syntax and semantics: An overwiew. In: C. Maienborn, K. von Heusinger & P. Portner (eds.), *Semantics: An International Handbook of Natural Language Meaning.* Volume 3 [HSK 33.3]. Berlin, New York: Mouton de Gruyter, 2173-2223.
- Sternefeld, W. (2006) Syntax. Eine morphologisch motivierte generative Beschreibung des Deutschen. 2 Bde. Tübingen: Stauffenburg.
- Tomaszewicz, B. (2012) The syntactic position of Polish by and main clause phenonomena. In: A. Lobke, L. Haegeman & R. Nye (eds.), Main clause phenomena. New horizons [Linguistik Aktuell 190]. Amsterdam, Philadelphia: Benjamins, 257-278.
- Truckenbrodt, H. (2006a) On the semantic motivation of syntactic verb movement to C in German. *Theoretical Linguistics* 32.3, 257-306.
- Truckenbrodt, H. (2006b) Replies to comments by Gärtner, Plunze and Zimmermann, Portner, Potts, Reis and Zaefferer. *Theoretical Linguistics* 32.3, 387-410.
- Wunderlich, D. (1997) A minimalist model of inflectional morphology. In: C. Wilder, H.-M. Gärtner & M. Bierwisch (eds.), *The role of economy principles in linguistic theory* [Studia grammatica 40]. Berlin: Akademie Verlag, 267-298.
- Zimmermann, I. (2009) Satzmodus. In: S. Kempgen, P. Kosta, T. Berger & K. Gutschmidt (eds.), Die slavischen Sprachen. Ein internationales Handbuch zu ihrer Struktur, ihrer Geschichte und ihrer Erforschung, Band 1 [HSK 32.1]. Berlin, New York: de Gruyter, 484-505.
- Zimmermann, I. (2010) Where are the worlds? Handout. Sentence Types, Sentence Moods, and Illocutionary Force: International Conference to Honor Manfred Bierwisch, November 4-6, 2010, ZAS Berlin.
- Zimmermann, I. (2013) Selektion und Interpretation morphosyntaktischer Merkmale. In: H. Härtl (ed.), *Interfaces of morphology. A Festschrift for Susan Olsen* [Studia grammatica 74]. Berlin: Akademie Verlag, 217-228.
- Zimmermann, I. (to appear a) Approaching the morphosyntax and semantics of mood. In: J. Błaszczak, D. Klimek-Jankowska, K. Migdalski & A. Giannakidou (eds.), *Tense, mood, and modality: New perspectives on old questions.* Chicago: Chicago University Press.
- Zimmermann, I. (to appear b) Imperativsätze. In: Nový encyklopedický slovník češtiny.

Yulia Zinova & Hana Filip Heinrich-Heine Universität Düsseldorf

The role of derivational history in aspect determination*

1. Introduction

The main goal of this paper is to explore the class of certain derivationally complex verbs in Russian that exhibit the same behavior as those verbs that are traditionally taken to be biaspectual. They are illustrated by the following examples:

(1)	a. dozapisyvať	'to (be) finish(ing) recording
	b. doperedelyvať	'to (be) finish(ing) redoing'
	c. doperezalivat'	'to (be) finish(ing) refilling'

Such verbs contain two or more prefixes and the imperfective suffix. In a given context they behave as either unambiguous perfective or unambiguous imperfective verbs, so their grammatical status is fully resolved. Now, this behavior fails to be revealed by the standard diagnostic tests used to determine the aspectual status of Russian verbs (see Section 3): under those tests, verbs in (1) are aligned with unambiguously imperfective verbs. Many studies also implicitly or explicitly deny the existence of affixed biaspectual verbs in Russian (e.g., recent theories by Ramchand 2004, Romanova 2004, Svenonius 2004b, Tatevosov 2008 and Tatevosov 2009; for more discussions about the size of the group of biaspectual verbs, see Gladney 1982, Čertkova and Čang 1998, Jászay 1999, Anderson 2002). However, as is evident from a recent corpus-based study by Borik and Janssen (2012), such verbs exist. They constitute an open class of lexical items with subgroups that follow productive patterns. The main focus of this paper is on the properties of verbs such as those in (1), which have so far remained largely unexplored, and pose challenges to traditional and also recent syntactic analyses of derivationally complex Russian verbs.

The hypothesis defended in this paper is that a certain class of biaspectual verbs¹ sui generis must be acknowledged: namely, a class of verbs that cannot be neatly aligned with either imperfective or perfective verbs. A case in point is the

Ilse Zimmermann

^{*} We would like to thank the organizers, audiences and anonymous reviewers of the10th European Conference on Formal Description of Slavic Languages. Separate

class of derivationally complex verbs, as exemplified in (1). It will be argued that the biaspectual status of a given verb of this type is a consequence of the multiple derivational histories associated with it. The histories are constructed on the basis of the knowledge about the verbs that are attested in the language.

Our approach not only provides a basis for predicting the grammatical aspect of a given verb (perfective, imperfective or biaspectual), but it also leads to an empirically and theoretically more comprehensive account of Russian verbal formation and grammatical aspect. As a consequence, while it is true that the majority of Russian prefixed verbs are unambiguously either perfective or imperfective, the existence of a third class of verbs, namely, biaspectual verbs, must also be taken into account.

The outline of the paper is as follows: In Section 2, we provide a short overview of recent syntactic approaches to Russian complex verb formation. Section 3 is devoted to the discussion of a class of biaspectual verbs and the test that helps distinguish them from the imperfective verbs. In Section 4 the notion of a derivational history is introduced, followed by showing how the aspect of a given verb can be determined from the derivational history (or histories) associated with it. This section also addresses certain intriguing cases of prefixation that does not yield perfective outputs. Section 5 summarizes the main claim.

2. Previous Work

Recent syntactic approaches to Russian complex verbs (Ramchand 2004, Romanova 2004, Svenonius 2004b, Tatevosov 2008 and Tatevosov 2009, among others) share the following four basic claims. First, the internal structure of complex verbs is to be represented by means of syntactic trees. Second, derivational affixes are classified according to their different structural positions in the syntactic trees. Third, the imperfective or perfective aspect of a given complex verb is determined by the properties of the highest affix in the relevant syntactic

thanks to Daniel Altshuler and Stephen Dickey for personal discussions of the topic and to numerous native speakers of Russian we consulted with.

1 We would like to leave the question whether the discussed verbs must be treated equally with the basic biaspectual verbs open. It could be either possible that such verbs are represented by one lexeme that can get assigned two different aspects or two homonymous lexemes, each of which is aspectually unambiguous. In what follows, we use the term 'biaspectual verbs', but keep different representation options open. We also use the term 'verb' to address a combination of a given root with given affixes (with fixed interpretation), which under the second option could result in being represented as two different verbs. structure. Fourth, prefixes are generally taken to fall into two main, syntactically motivated, classes (originally proposed in Babko-Malaya 1999): lexical (inner) prefixes that originate inside the VP and superlexical (outer) prefixes that originate outside the VP. Lexical and superlexical prefixes can be separated by an Aspect head (Asp) in the syntactic structure. Finally, an aspect head can be overtly realized by the imperfective suffix (see, e.g., Svenonius 2004a).

These assumptions lead to the following predictions about the grammatical aspect of a given complex verb: if a verb contains a prefix and no imperfective suffix, it is perfective (see ex. $(2a)^2$); if a verb contains a lexical prefix and the imperfective suffix, it is imperfective (see ex. (2b)); if a verb contains a superlexical prefix (like the cumulative prefix *na*-) and the imperfective suffix, it is perfective (see ex. (2c)).

a. zapisat^{PPF} pref.write.inf 'to write down'
b. zapisyvat^{PPP} pref.write.imp.inf 'to be writing down/to write down'
c. nazapisyvat^{PPF} cum.pref.write.imp.inf to be writing down/to write down'

These are the core cases at least, and we also find a number of studies offering additional finer grained analyses which capture some of the more complicated facts related to Russian verbal prefixation. For example, Tatevosov (2008) argues for the existence of intermediate prefixes (like the iterative *pere-*) in addition to lexical and superlexical ones, which leads to the additional claim, in addition to the above four: if a verb contains an intermediate prefix and the imperfective suffix, it is imperfective (see ex. (3)).

(3) *perezapisyvat*^{TPF} iter.pref.write.imp.inf 'to (be) rerecord(ing)

(2)

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, acc = accusative, inst = instrumental, sg = singular, pl = plural, f = feminine, m = masculine, n = neuter, pres = present tense, pst = past tense, inc = inceptive, com = completive, cum = cumulative, iter = iterative, pref = lexical prefix, imp = imperfective suffix.

In subsequent refinements, Tatevosov (2009) argues for a three-way distinction among superlexical prefixes. The first group consists of one prefix: the distributional prefix *po*- as in *pobrosat*^{*i*PF} X 'to throw all of X one by one' that is claimed to occupy the left periphery of the verbal structure. The second group includes those prefixes that can only be added to a formally imperfective verb: the delimitative prefix *po*- (*posidet*^{*i*PF} 'to sit for some time'), the cumulative prefix *na*- (*navarit*^{*i*PF} 'to cook a considerable amount of something'), the distributional prefix *pere*- (*perelovit*^{*i*PF} X 'to catch all of X'), the inchoative prefix *za*- (*zabegat*^{*i*PF} 'to start running about'). The third group consists of those prefixes that, according to Tatevosov (2009), can only be added before the secondary imperfective suffix -*yva*-/-*iva*-, and effectively end up in the same structural position as intermediate prefixes in the account proposed by Tatevosov (2008). This group includes the completive prefix *do*- (*dodelat*^{*i*PF} 'to finish doing'), the iterative prefix *pere*- (*perelosat*^{*i*PF} 'to rewrite') and the attenuative prefix *pod*- (*podustat*^{*i*PF} 'to become a little bit tired').

This should suffice to illustrate the kind of complexities that characterize derivationally complex Russian verbs. While it is important to acknowledge that the notion of a structural position in a syntactic tree associated with affixed verbs is helpful in motivating at least certain facts about their formation, the proposed syntactic analyses are often viable only if prefixes are subdivided into finer and finer classes, which conspicuously differ among different analyses and often seem rather ad hoc. The finer the distinction, the more do the proposed analyses effectively amount to the description of observed facts, rather than offering any explanatory insights.

Regardless of the details of the individual analyses proposed, all purely syntactic approaches share the following common weakness: namely, given that the structural position for each use of a given prefix is fixed, there is exactly one syntactic structure allowable for a given complex verb with fixed interpretation. Generally, all the proposed structural analyses of derivationally complex verbs enforce a given complex verb to be unambiguously assigned to either the perfective or the imperfective aspect category. This excludes the existence of prefixed biaspectual verbs. In sum, syntactically based analyses often fail to provide insightful predictions about a possible form and aspectual status of a given Russian verb and they also exclude the existence of a subclass of derivationally complex verbs that systematically exhibit biaspectual properties.

3. Biaspectual Verbs

Perfective verbs are commonly distinguished from imperfective ones by the following three negative tests: (i) perfective verbs do not get an "ongoing"

interpretation in non-past tense; (ii) perfective verbs cannot be used as complements of phasal verbs (e.g. *načať* 'to begin', *zakončiť* 'to finish'); (iii) perfective verbs cannot form present participles. While these tests clearly delimit perfective verbs, they cannot distinguish between imperfective and biaspectual verbs. Let us illustrate this point with the class of verbs illustrated by our initial examples in (1). They follow the derivational pattern in (4):

(4) $do_{COMP} - PREF - ROOT - yva - t^{3}$

Apart from examples given in (1), other good examples are: *do-pere-pis-yva-t*' 'to finish/be finishing rewriting/copying', *do-pere-za-pis-yva-t*' 'to finish/be finishing writing down/recording again', *do-vy-task-iva-t*' 'to finish/be finishing pulling out', *do-pere-stra-iva-t*' 'to finish/be finishing rebuilding'.

These verbs behave either as perfective or imperfective, in dependence on context. In (5a), the verb *doperezapisyvaju* is used as an imperfective verb, because it has a progressive interpretation ('I am finishing rerecording') triggered by the phrase *v dannyj moment* 'currently', an interpretation that is unavailable for perfective verbs. In (5b), the same verb (*doperezapisyvala*, 'finished rerecord-ing') is used as a perfective verb, which is enforced by its co-occurring in the conjunction with the perfective verb *doperevela* 'finished translating' (see Zinova and Filip 2014):

- (5) a. V dannyj moment doperezapisyvaju^{IPF} ešče 2 pesni.
 - In given moment com.iter.record.imp.pres.1sg also 2 song.pl 'I'm currently finishing rerecording two more songs'
 - b. Doperevela^{PF} "Talisman" i doperezapisyvala^{PF} sobstvennye com.translate.pst "Talisman" and com.iter.record.imp.pst own pesni.

song.pl

'I finished translating "Talisman" and finished rerecording my own songs.'

Although verbs like *doperezapisyvat*' exhibit a truly biaspectual behavior, as the above examples show, they are aligned with imperfective verbs according to the standard three diagnostic tests: apart from receiving progressive interpretation in non-past tense, they can occur as the complements of phasal verbs (^{ok}ja zakončil doperezapisyvat' pesnju 'I finished finishing rerecording the song') and form present participles (^{Ok}doperezapisyvajuščij). The problem is that what these tests are designed to do is to exclude perfective verbs.

Examples like (5b) also suggest a new positive test for the perfective status of a verb: namely, the idea is to use a test context in which one conjunct in a

The role of derivational history in aspect determination 601

narrative sequence is unambiguously perfective (see the perfective verb in the first conjunct in (5b)) and excludes an unambiguously imperfective verb in the other conjunct of a coordinate sentence with the conjunction 'and'³. Following examples like (5b), one schematic context of this type is exemplified in (6).

(6) Ja VERB ... i pojdu^{PF} / pošel^{PF} domoj.
 I.nom 1.sg.pres/past ... and go.pres / go.past home 'I VERB ... and will go/went home.'

As argued in Zinova and Filip (2014), the most natural interpretation sentences following the pattern in (6) have is a sequence of two non-overlapping events. Contexts such as (6) exclude an unambiguously imperfective verb in the VERB slot, and only sanction an unambiguously perfective or a biaspectual verb in this slot, whereby the latter behaves like a perfective verb in this context. Hence, contexts like (6) allow to distinguish between imperfective and biaspectual verbs. In order to illustrate the workings of this test, consider (7):

- (7) a. Ja zapišu^{PF} disk i pojdu^{PF} domoj.
 I record.pres.1sg CD and go.pres.1sg home
 'I will record the CD and go home.'
 - b. *# Ja zapisyvaju^{IPF}* disk i pojdu^{PF} domoj. I record.imp.pres.1sg CD and go.pres.1sg home
 - c. Ja kaznju prestupnika i pojdu^{PF} domoj.
 - I execute.pres.1sg criminal and go.pres.1sg home 'I will execute the criminal and go home.'
 - d. Ja dozapisyvaju disk i pojdu^{pp} domoj. I comp.record.imp.pres.1sg CD and go.pres.1sg ome 'I will finish recording the CD and go home.'

(7a) with an unambiguously perfective verb in the test VERB slot is unproblematic. It straightforwardly describes a sequence of two consecutive events. In contrast, (7b) with the unambiguously imperfective verb *zapisyvaju* 'I (am) record(ing)' in the VERB slot makes the whole compound sentence odd, in fact it is uninterpretable. Most importantly, both simple biaspectual verbs like *kaznju* 'I execute' (7c) and complex biaspectual verbs like *dozapisyvaju* 'I finish recording' (7d) are perfectly acceptable in the test VERB slot, showing that they behave like perfective verbs in this context (for more details about applying the test to simple native biaspectual verbs see Zinova and Filip, 2014).

Together with standard diagnostic tests (given above) that exclude the perfective status of a given verb, and lump together imperfective with biaspectual verbs, the examples in (7) clearly separate these two classes, and consequently strongly suggest the necessity of acknowledging the existence of a third, biaspectual, class of Russian prefixed verbs, which is clearly distinct from unambiguously perfective verbs, on the one hand, and also from unambiguously imperfective verbs, on the other hand.

4. Proposal: Derivational History

4.1 Basic idea and background

We rely on the notion of a 'derivational history' in order to differentiate between perfective, imperfective and biaspectual verbs, and also to motivate the grammatical aspect of a given verb form in a given context. As has been observed above, in a given context, a biaspectual verb is enforced to behave either as perfective or imperfective. The notion of a 'derivational history' used here is inspired by Karcevski (1927) who proposed that

"[l]a valeur aspective d'un verbe dépend de la place qu'il occupe dans la chaîne de la dérivation déverbative." [The aspectual value of a verb depends on its place in the chain of verbal derivation].

In the spirit of Karcevski (1927), the basic idea we pursue here is to use the derivational history as a predictor for the aspectual value (perfective or imperfective) of a given verb form, rather than relying on the syntactic structure, as it is done in contemporary syntactic analyses⁴. We attempt to make Karcevski's (1927) suggestions not only more precise, but also add a novel idea: namely, the derivational history does not have to be unique for a given verb.

We propose the following characterization of the derivational history: (i) a verb V_2 is derived from a verb V_1 , if both V_1 and V_2 are attested in the language, (ii) the meaning of V_2 can be (possibly not entirely compositionally) derived

³ Note that in general an imperfective verb in the past tense can refer to a completed event. However, it is not possible if it is conjoined with a perfective verb in a context like (6). See Zinova and Filip (2014) for more details about the testing context.

⁴ For example, all existing syntactic theories include the assumption that the result of a prefixation at the last step of the derivation is a formally perfective verb and thus if the resulting verb is formally imperfective, such derivation should not be allowed (see example (12b) below). What we propose is to start from observing how derivation happens in the language without imposing any syntactic constraints on it.

from the meaning of V_1 , and (iii) there is no other verb V_3 such that V_3 is derived from V, and V_2 is derived from V_3 .

To illustrate the notion of a derivational history, let us consider *kupit*^{'PF} and *pokupat*^{'PF'} 'to buy'. There are three possible ways in which these verbs might be related:

(8)	a.	kup-i-t'PF	\rightarrow	*po-kup-i-ť	\rightarrow	po-kup-a-t' ^{rpp}
		to buy	\rightarrow		\rightarrow	to buy/to be buying
	b.	kup-i-t'PF	\rightarrow	po-kup-a-t ^{IPI}	2	
		to buy	\rightarrow	to buy/to be	buyinş	5
	с.	kup-i-t ^{'PF}	$^{*} \rightarrow$	kup-a-t ^{ərp}	$^{*}\rightarrow$	po-kup-a-t ^{ııpF}
		to buy	*→	to bathe	*→	to buy/to be buying

The derivation in (8a) is excluded, because **pokupit*' does not exist (violation of the first condition). The derivation in (8b) is fine and what we have to check for is that there is no other verb such that it is derived from *kupit*^{*PF}. A candidate verb, formally speaking, would be *kupat*', but it has an unrelated meaning of 'to bathe someone' (violation of the second condition). This also means that (8c) cannot be considered to constitute a derivational history. While the pair of verbs in (8b) stands in a derivational relation, according to the three conditions above, it raises a number of difficult questions in the area of morphophonology: e.g., what counts as a single morpheme and the existence of discontinuous morphemes in Russian. It would go well beyond the scope of this paper to address such questions.

4.2 Predicting the aspect of the derived verb

A key feature of our analysis is that a given verb does not need to have a unique derivational history. For example, the arguably biaspectual verb *dozapisyvat*' 'to (be) finish(ing) recording/writing down' is associated with two derivational histories given in (9): one motivating the perfective aspect of the whole verb (9a)⁵, while the other motivating the imperfective aspect of the same verb (9b):

(9)	a.	$pisat^{TPF} \rightarrow$	zapisat' ^{PF}	\rightarrow	zapisyvat' ^{IPF}	\rightarrow	dozapisyvat' ^{PF}
		to write \rightarrow	to record	\rightarrow	to (be) record(ing)	\rightarrow	to finish recording
	b.	$pisat^{n_{PP}} \rightarrow$	zapisat' ^{PF}	\rightarrow	dozapisat' ^{PF}	\rightarrow	dozapisyvat ^{'nPF}
		to write \rightarrow	to record	\rightarrow	to finish recording	\rightarrow	to (be) finish(ing)
		recording					-

This is desirable given the fact that *dozapisyvat*' to (be) finish(ing) recording/ writing down' is genuinely ambiguous with respect to the perfective/imperfective distinction, and it is the context that enforces one or the other grammatical aspect assignment. Notice that the two derivational histories in (9a) and (9b) straightforwardly follow from the two general patterns that are widely accepted as governing the formation of Russian verbs, although there are also some exceptions to them (see below):

1) the output of a prefixation is perfective;

2) adding the imperfective suffix to a verb yields an imperfective verb.

The root verb in (9a) and (9b) is the primary imperfective verb *pisat*' to write/ to be writing'. Adding the prefix *za*- to it yields a perfective verb, in compliance with 1), and the addition of the imperfective suffix *-yva*- yields a secondary imperfective verb, following 2), which in turn serves as the basis for the prefixation with the completive prefix *do*-. The result is the perfective verb *dozapisyvat*', in compliance with 1). In (9b), the second and third step is reversed, leading to the imperfective category assignment to the derived verb *dozapisyvat*'.

Just as in the syntactic accounts (discussed in Section 2), it is the final step of a derivation of a given verb form that determines the aspect of a whole complex verb. On our approach, however, the order of the derivational steps is determined based on possible derivational histories that are constructed on the basis of the knowledge about the verbs that are attested in the language and their semantics.

To give another example, let us consider the verb *dovyšivat*' 'to finish embroidering'. It follows the pattern in (4) and contains the same type of affixes as *dozapisyvat*' 'to finish recording' in (9): namely, the superlexical completive prefix *do*- (see the category of "intermediate" superlexical prefixes in Tatevosov, 2008 and "positionally limited" in Tatevosov, 2009), one lexical prefix and the imperfective suffix. The verbs *dovyšivat*' 'to finish embroidering' and *dozapisyvat*' 'to finish recording' are morphologically alike and thus there should be no difference between them on any existing syntactic account of complex verbs, as

602

⁵ The authors are aware of two speakers that do not accept the perfective aspect of this verb, one of them being Sergei Tatevosov. In Tatevosov (2013) that implicitly reacts on Zinova (2012) the author claims that the speakers he consulted with do not accept the perfective interpretation of *dozapisyvat*'. He offers to solve the problem as follows: for those people in whose dialect *dozapisyvat*' is biaspectual he proposes that the completive *do*- can attach either below or above the secondary imperfective suffix without any constraints on the aspect of the source verb. However, it is not clear why

in this case verbs like *dopisyvat*^{PPF} 'to (be) finish(ing) writing' do not display biaspectual behaviour.

the structure of the verb and the order of the affix attachment is determined only on the basis of the syntactic properties of the affixes.

However, these verbs are clearly different for most native speakers: while the perfective uses of the verb *dozapisyvat*' are judged odd by some speakers, all the speakers we consulted agree that the verb *dovyšivat*' can be used as a perfective verb. Moreover, most speakers are very reluctant to accept *dovyšivat*' as an imperfective verb. At the same time, they reject the existence of the verb '*dovyšit*'^{PF}' to finish embroidering'. This behavior is easily explained on our account. For the group of speakers who reject the existence of the verb '*dovyšit*'^{PF}' to finish embroidering', the derivation in (10b) is not available, as it requires the verb *dovyšit*'^{PF} 'to finish embroidering' to be attested. Thus the verb *dovyšivat*' cannot be assigned the imperfective aspect.

(10) a. šit^{npp} → vy-šit^{pp} → vy-š-iva-t^{npp} → to sew → to embroider → to be embroidering → do-vy-š-iva-t^{pp} to finish embroidering
b. šit^{npp} → vy-šit^{pp} → do-vy-šit^{pp} → to sew → to embroider → to finish embroidering → do-vy-š-iva-t^{npp} to be finishing embroidering

The (non-)availability of different derivational histories also motivates the difference between verbs like *dopisyvat*^{*APF*} 'to (be) finish(ing) writing' and *dozapisyvat*^{*APF/PF*} 'to (be) finish(ing) writing down / recording', which are indistinguishable from the point of view of syntactic accounts of complex verb formation (see Section 2). Both verbs are predicted to be imperfective. While the verb *dozapisyvat*^{*APF/PF*} 'to (be) finish(ing) writing down/recording' has two derivational histories, as has been shown by (9a) and (9b), which motivates its biaspectual nature, the imperfective verb *dopisyvat*^{*APF/PF*} 'to (be) finish(ing) writing' has only one, as is shown by (11).

(11)	a.	pisat' ^{IPF}	\rightarrow	do-pisat [?]	\rightarrow	do-pis-yva-t ^{əpp}
		to write	\rightarrow	to finish writing	\rightarrow	to finish/be finishing writing
	b.	pisat ^{upr}	\rightarrow	pis-yva-t [≈]	$^*\!\!\rightarrow$	do-pis-yva-t'
		to write	\rightarrow	to write repeatedly	*→	to finish/be finishing writing

A reasonable question to ask is whether there are prefixes whose application always results in the derivation of perfective verbs. This would seem to mean that such prefixes must always be attached later then the secondary imperfective suffix. Although this is one of the classical characteristics of superlexical prefixes (see, e.g., Ramchand 2004, Svenonius 2004a, Romanova 2006), Tatevosov (2008, 2009) provides a lot of counterexamples to it. According to Tatevosov (2009) (see also above), the constraints are formulated in different terms: either the prefixes must be attached before the imperfective suffix or to a verb that in non-past tense has present time reference (i.e., satisfies the imperfectivity test (i) in Section 3). Only the distributional prefix *po*- that occupies the left periphery of the verb, according to Tatevosov (2009), is than clearly a prefix that occurs on verbs that are necessarily perfective.

4.3 The puzzle of non-perfectivizing prefixation

For a verb to have two derivational histories implies that it is structurally (and also semantically) ambiguous: each derivational history yields exactly one grammatical aspect for a whole verb. This also allows for a situation in which two distinct derivational histories that are assigned to a single complex verb form result in the same grammatical aspect assignment, as is shown in (12).

(12)	a.	$pisat^{'IPF} \rightarrow$	zapisat' ^{PF}	\rightarrow	• perezapisat' ^{pp}	\rightarrow	perezapisyvat ^{upp}
		to write \rightarrow	to record	\rightarrow	• to rerecord	\rightarrow	to (be) rerecord(ing)
	b.	$pisat^{'\!$	zapisat' ^{pp}	\rightarrow	· zapisyvat ^{*IPF}	\rightarrow	perezapisyvat" ^{IPF}
		to write \rightarrow	to record	\rightarrow	to (be) record(ing)	\rightarrow	to (be) rerecord(ing)

(12b) also illustrates an intriguing exception to the general pattern according to which the output of prefixation is perfective. Although the prefix *pere-* in its iterative use in (12b) yields a perfective verb when added to a simplex (primary) imperfective verb (e.g., *pisat*[']*PF* 'to write/to be writing' \rightarrow *perepisat*[']*PF* 'to rewrite'), when it is added to a secondary imperfective verb (formed with the imperfective suffix), the derived verb remains imperfective.

There are two main arguments that can be adduced in support of the claim that the prefix *pere-* (used in the iterative sense) is not 'perfectivizing'. First, both the verbs *perezapisat*^{''PF} 'to rerecord' and *zapisyvat*^{''PP'} 'to (be) record(ing)' are attested and commonly used by native speakers. Hence, both the derivational histories, (12a) and (12b), are needed, and the derivational history in (12b) cannot be eliminated for the sake of rescuing the general rule that the output of prefixation is perfective. Second, *pere-* (used in the iterative sense)

⁶ The verb *pisyvat*' is a generic verb with approximately the meaning of 'to write repeatedly, often, sporadically', which is not the meaning of the stem to which the completive prefix *do*- is applied to yield the verb *dopisyvat*', and thus condition (ii) is not satisfied. In Russian, there are only a few generic verbs of this type, and they are archaic.

when attached to borrowed biaspectual verbs yields new prefixed verbs that are still biaspectual⁷, rather than perfective, as will be shown in the following.

A case in point is the biaspectual verb *kvalificirovat*' 'to qualify/to categorize'. It is formed with the native imperfective suffix *-ova*-, which instantiates one of the systematic patterns of formation of borrowed verbs. The only way to form the verb *perekvalificirovat*' is to attach the iterative prefix *pere-* to the biaspectual verb *kvalificirovat*', as there is no verb like **kvalificirit*' (i.e., *kvalificirovat*' to requalify/to recategorize' is clearly biaspectual, rather than perfective. Most importantly, in appropriate contexts, it exhibits all the hallmark properties of interpretation (13a), it can be used as a complement of a phasal verb (13b), form periphrastic future (13c) and a present participle (13d) (examples taken from the internet).

(13) a. V dannyj moment on perekvalificiruet^{IPP} svoju "Armiju Maxdi" v in given moment he iter.qualify.pres.3.sg his "Armija Maxdi" in političeskoe dviženie.

political movement

'Right now he is recategorizing his "Armija Maxdi" into a political movement.'

- b. *Sejčas advokaty načnut perekvalificirovat*^{'IPF} *delo v političeskoe.* now advocates start.pres.3.pl iter.qualify.inf case in political 'Now the advocates will reclassify this case as a political one.'
- c. *Policejskix budut perekvalificirovat*^{TPP} v *buxgalterov.* policemen will.be iter.qualify.inf in accountant.pl.acc 'Policemen will be requalified and become accountants.'
- d. *Ne pozvoljaetsja smotret' na perekvalificiruemye sdelki s* not allow look on iter.qualify.part.pres.pl.acc deals from *pozicii togo, čto nalogoplatelščik mog sdelat' v tex* position that, that tax.payer can.pst.sg.m do.inf in that *uslovijax.* conditions

'It is not allowed to regard the deals that are recategorized from the point of view of what the person paying the taxes could have done in the past situation.'

This suffices to show that the prefix *pere-* in its iterative use only yields a perfective verb if it is attached to an imperfective simplex, otherwise, the aspect of its base verb and the verb derived by it remains the same (imperfective or biaspectual).

Apart from *pere*- (in its iterative use), the attenuative prefix *pod*- also belongs to a limited class of notable exceptions to the strong tendency of prefixes to derive perfective verbs. The prefix *pod*-, when attached to a borrowed biaspectual verb, also yields another biaspectual verb, as exemplified by its attachment to *amortizirovat*' to cushion': in (14a) the resulting verb *podamortizirovat*' to cushion slightly' is used as a perfective verb and in (14b) the same verb is uttered in the context that only allows imperfective verbs.

- (14) a. ...krome togo, možno ešče snizu porolončikom podamortizirovat^{vF}.
 ...aside that, possible also below foam rubber atten.cushion.inf
 'It is also possible to put some hard foam rubber below as a cushion.'
 - b. Čto tolku podamortizirovat^{¹PF} perednee koleso, esli zadnie žestko what sense atten.cushion.inf front wheel if back hardly sidjat na rame.

sit.pres.pl on frame

"What is the point to cushion the front wheel when the back ones are sitting hard on the frame?"

5. Conclusion

In this paper we have proposed a novel analysis of a class of morphologically complex biaspectual verbs. These verbs, to the extent of our knowledge, have remained largely unexplored in the aspectual studies, and are intractable within the existing syntactic accounts to Russian prefixation. The biaspectual nature of such verbs can be motivated on the assumption that they are associated with two derivational histories, and hence are structurally ambiguous, each leading to a different grammatical aspect category assignment. Verbs of this type constitute an independent class of verbs, and cannot be aligned with either unambiguously perfective or imperfective verbs.

What remained outside of the scope of the current paper is an account of what makes the observed derivational histories available in the first place. On

⁷ This group of verbs may be seen as an intermediate step between native simple biaspectual verbs and complex biaspectual verbs that are discussed earlier in the paper: the verbs of this new group have only one derivational history, as native simplex biaspectual verbs, but they have complex structure as prefixed biaspectuals verbs like *dozapisyvat*' 'to (be) finish(ing) recording'.

our approach, this question is equivalent to the question of why a particular verb exists, with fixed aspect and interpretation. Consequently, answers to it ought to be sought at the intersection of the constraints governing the morphological system of Russian verbs with semantics, rather than in purely syntactic terms.

Bibliography

- Anderson, C. (2002). Biaspectual Verbs in Russian and their Implications on the Category of Aspect. Honors Thesis, University of North Carolina-Chapel Hill.
- Babko-Malaya, O. (1999). Zero Morphology: A Study of Aspect, Argument Structure, and Case. Dissertation, Rutgers University.
- Borik, O. and Janssen, M. (2012). A Database of Russian Verbal Aspect. Proceedings of the conference Russian Verb, St. Petersburg, Russia.
- Čertkova, M. Ju. and Čang, P.-Č. (1998). Evoljucija dvuvidovyx glagolov v sovremennom russkom jazyke [Evolution of biaspectual verbs in contemporary Russian]. *Russian linguistics* 22: 13-34.
- Gladney, F. Y. (1982). Biaspectual verbs and the syntax of aspect in Russian. *Slavic and East European Journal* 26, pages 202-215.
- Jászay, L. (1999). Vidovye korreljaty pri dvuvidovyx glagolax [Aspectual correlates of biaspectual verbs]. *Studia Russica* 17, pages 169-177.
- Karcevski, S. (1927). Système du verbe russe. Prague: Plamja.
- Ramchand, G. (2004). Time and the event: The semantics of Russian prefixes. *Nordlyd*, 32(2), pages 323-361.
- Romanova, E. (2004). Superlexical versus lexical prefixes. *Nordlyd*, 32(2), pages 255-278.
- Svenonius, P. (2004a). Slavic prefixes and morphology. An introduction to the Nordlyd volume. *Nordlyd*, 32(2), pages 177-204.
- Svenonius, P. (2004b). Slavic prefixes inside and outside VP. Nordlyd, 32(2), pages 205-253.
- Tatevosov, S. G. (2008). Intermediate prefixes in Russian. In Antonenko A., Baylin J., Bethin C. (eds.) *Formal approaches to Slavic Lingustics*. The Stony Brook Meeting 2007. Ann Arbor: Michigan Slavic Publications, pages 423-442.
- Tatevosov, S. G. (2009). Množestvennaja prefiksacija i anatomija russkogo glagola [Multiple prefixation and the anatomy of Russian verb]. In Kiseleva K. L.,

Plungjan V. A., Raxilina E. V., Tatevosov S. G. (eds.) Korpusnye issledovanija po russkoj grammatike. Moscow, pages 92-157.

- Tatevosov, S. G. (2013). Grammatika glagola i dialektnoe var'irovanie [Grammar of verb and dialectal variation]. Komp'juternaja lingvistika i intellektual'nye texnologii: Po materialam ežegodnoj Meždunarodnoj konferencii «Dialog», 12(19). Moscow: Izd-vo RGGU.
- Zinova, Y. (2012). Russian Verbal Prefixation Puzzles. Handout of the talk given at the Graduate Research Seminar at Heinrich-Heine University, Düsseldorf. Available online at: https://www.academia.edu/8359697/ Russian_Verbal_Prefixation_Puzzles
- Zinova, Y. and Filip, H. (2014). Biaspectual Verbs: A Marginal Category? Manuscript, Heinrich-Heine-University, Düsseldorf. Submitted to Proceedings of Tenth International Tbilisi Symposium on Language, Logic and Computation.