# On the Aspectual Derivation of "Dual Simplexes" Ronald F. Feldstein, Indiana University (Bloomington, IN, USA) feldstei@indiana.edu

Abstract: Paradigmatic relations of word-formation are considered for both single and dual simplex (non-prefixed) verbal stems. Dual simplexes are usually linked to motion verbs, but the paper cites non-motion verbs where dual simplex stems derive two different perfective stems, e.g. **хвати-/хватай-** and **захвати-/захватай-**. The regular syncretism of the derived imperfective (**захватывай-**) is noted, along with other rules for such verbs. (Рассматривается парадигматика русского глагольного словообразования в случаях одной/двух бесприставочных (симплексных) основ. Наличие двух симплексных основ обычно связано с глаголами движения; доклад приводит ряд глаголов не движения, где двойные бесприставочные основы порождают две основы совершенного вида, типа **хвати-/хватай-** и **захвати-/захватай-**. Отмечается синкретизм в приставочной форме несовершенного вида (**захватывай-**) и ряд других правил.)

#### 0. Introduction.

This paper is a comparative study of the different possible aspectual paradigms of Russian verbal stems on three different derivational levels. The first such level is represented by the **simplex stem**, which is defined as a **non-prefixed** stem (Timberlake 2004:94). The stem **pa60taŭ**- fits this definition. The second level of derivation represents the addition of a prefix to the simplex stem, which has the invariant property of changing the aspect to perfective, e.g. the prefixes **nepe-** or **no-** can be added to paботай-, resulting in the perfective stems переработай-, nopaботай-. The third level is that of secondary imperfective suffixation; this level is only activated when the prefix of the second level has added a lexical meaning that differs from that of the simplex. When the second level prefixation has added only a sublexical difference of meaning (called Aktionsart or способ действия), there may be no imperfective suffixation at level three. Native speakers and dictionaries often disagree about whether a given prefixed perfective can indeed form a secondary suffixed imperfective. In our example, the stem переработай- permits the formation of the suffixed imperfective перерабатывай-, but the stem поработай- differs only sublexically from the simplex stem paботай- and, therefore, поработай- does not form a secondary imperfective. Note that this verb has only one simplex stem (работай-), and represents the most common Russian verb type. However, certain small classes of Russian verbs can have two simplex stems, e.g. the so-called motion verbs (e.g. **кати-/катай-**), as well as several non-motion verbs (e.g. хвати-/хватай-). I will refer to such instances of two simplex stems as dual simplexes. While the existence of dual simplexes is frequently mentioned in reference to the motion verbs of Russian, it has rarely, if ever, been discussed in relation to the non-motion verb category. This paper will attempt to examine the paradigmatic differences between the three derivational levels of verbs with a single simplex, as well as both motion and non-motion verbs with two simplex stems.

# I. The single simplex type.

As mentioned above, this is the simplest type of aspectual derivation. There is one simplex, which is imperfective, and the addition of a prefix to the simplex stem creates a perfective, which may or may not form a derived imperfective. This paradigmatic relation has been shown in table 1. Part 1A shows the non-Aktionsart type of paradigm with a derived imperfective in the third cell, while 1B illustrates the Aktionsart situation, with a defective third cell.

Table 1. One simplex and one prefixed perfective with a given prefix.

1A. With a derived imperfective.

# 1B. Without derived imperfective (Aktionsart)

Simplex:	работай-
Prefixed perfective	переработай-
Derived imperfective	перерабатывай-

Simplex	работай-
Prefixed perfective	поработай-
Derived imperfective	

#### II. Verbs of motion.

By definition, a **verb of motion** possesses two unprefixed imperfective stems (i.e. **dual simplexes**), which are grammatically opposed by the feature determinate/indeterminate (also known as monodirectional/polydirectional). In the motion verb paradigm (tables 2 and 3), two simplexes are shown on the first level of the derivational paradigm. The second level contains two prefixed perfectives, one derived from the determinate, and the other from the indeterminate. Verbs of motion can be divided into two groups on the basis of the formal relation of the two simplex stems. One group of dual simplex stems shares the same root and only differs in the suffixal part of the stem (e.g. **кати-/катай-, тащи-/таскай-, лете-/летай-, полз-/ползай-)**, shown in table 2. The other group has simplexes with suppletive roots or various irregular root alternations (e.g. **ид-/ходи-, нес-/носи-, лез-/лази-)**, as seen in table 3.

Table 2. Non-Suppletive Verbs of Motion

A. Full paradigm

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Simplex stems	кати-	катай-		
Prefixed perfective	скати-	скатай-		
Derived imperfec-	rfec- скатыва			
tive				

Table 3. Suppletive Verbs of Motion A Full paradigm

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Simplex stems	ид-	ходи-	
Prefixed perfective	зайд-	заходи-	
Derived imperfec-	заходи-	захаживай-	
tive			

# B. Partially defective (Aktionsart) Paradigm

Simplex stems	кати-	катай-
Prefixed perfective	покати-	покатай-
Derived imperfec-		покатывай-
tive		

#### B. Defective (Aktionsart) Paradigm

Simplex stems	ид-	ходи-
Prefixed perfective	пойд-	походи-
Derived imperfec-		
tive		

The concept of word-formational suppletion has been clearly defined by Mel'čuk (1995:463), who states, "Аналогогично тому, как обстоит дело в системе словоизменения, супплетивные словообразовательные формы занимают клетки, предусмотренные системой, но не занятые." Note that all six potential cells are never filled with six different forms; the maximum number of different cells is five, as seen both in tables 2A and 3A. This suggests that both suppletive and non-suppletive verbs of motion have a **regular syncretism of two cells**. In the case of **кати-/катай-**(table 2A), the syncretism is seen in the shared derived imperfective form for both stems (**скатывай-**). In the case of the suppletive simplexes **ид-/ходи-**, the syncretism occurs between the prefixed perfective derived from the indeterminate and the derived imperfective which is ultimately derived from the determinate simplex (**заходи-**).

In 2A and 3A, one sees that each simplex can derive both a prefixed perfective and a derived imperfective. Although the simplexes themselves are grammatically opposed as determinate vs. indeterminate, this feature does not oppose the prefixed forms on levels two and three of the paradigms. In our specific example of table 3A, the stems ид- and ходи- clearly represent the determinate/indeterminate opposition, but does the opposition of the two prefixed perfective stems зайд- and заходи- embody

this opposition in any way? Does the grammatical opposition of determinacy convert to a lexical opposition of an Aktionsart vs. non-Aktionsart type after the derivational process of prefixation? While a definitive answer cannot be given at this point, it does look as if the feature of determinacy (at level one) is in complementary opposition with whatever lexical features oppose the two stems at levels two and three.

#### IV. Dual simplexes other than verbs of motion.

While verbs of motion have often been treated in terms of their dual simplexes, representing the feature of determinacy, I know of no specific discussion of the role of dual simplexes in verbs outside the motion category, i.e. among verbs whose simplex (unprefixed) stems do not observe the opposition of determinate/indeterminate. This section will introduce the major types of dual simplexes verbs in the non-motion category.

In one group of non-motion dual simplex verbs, (e.g. **реши-/решай-, ступи-/ступай-, прости-/прощать**), only four of the six potential cells are filled. There is no opposition of two different prefixed perfectives. Any minimal opposition of these two stems is always accompanied by the aspectual opposition of perfective vs. **imperfective** (e.g. both **pemu-** vs. **pemaй-** and **orpemu-** vs. **отрешай-**), as shown in table 4 (see Garde 1980:368 and Isačenko 1960:141 for a list of such verbs).

Table 4. Non-motion dual simplex stems with constant aspectual opposition and one prefixed perfective.

Simplex stems	реши- (perf.)	решай- (imperf.)
Prefixed perfective	отреши-	
Derived imperfective		отрешай-

In contrast to the **реши-/решай-** type, which always has an aspectual opposition between the two stems, there is another type, in which the aspectual opposition only occurs at the simplex level, and which can have two different perfective forms on the second level of prefixed perfectives, which are then lexically opposed to each other. This type includes such stems as **броси-/бросай-** and **хвати-/хватай-**, as shown in table 5.

Table 5. Non-motion dual simplex stems with aspectual opposition only in the simplex form and two prefixed perfectives.

Simplex stems	хвати- (perf.)	хватай- (imperf.)
Prefixed perfective	захвати-	захватай-
Derived imperfective	захватывай-	

Certain other verbs are very similar to the pattern of table 5, except for the fact that both simplex stems are imperfective. This type includes such simplex pairs as вали-/валяй-, веси-/вешай-, ломи-/ломай-, меси-/мешай-, сади-/сажай-, and is shown in table 6. Thus, we can say that the dual simplex level has either a purely aspectual opposition (as in хвати-/хватай-) or a lexical opposition (as in вали-/валяй-).

Table 6. Non-motion dual simplex stems with no aspectual opposition in the simplex form and two prefixed perfectives.

Simplex stems	вали- (imperf.)	валяй- (imperf.)
Prefixed perfective	отвали-	отваляй-
Derived imperfective	отваливай-	

There is yet another category of this type, in which one of the dual simplexes may be either substandard, dialectal, or non-existent, but which still contains two prefixed perfectives, one of which is derived from the virtual second simplex which does not surface as such in the standard language. Examples of this type include -скочи-/скака-, -куси-/кусай-, -мени-/меняй-, -стрели-/стреляй-. (The virtual property of one of the simplexes in each pair is indicated by a hyphen which precedes the stem, since it can only occur when preceded by a prefix.) This type is illustrated in table 7.

Table 7. Non-motion virtual dual simplex stems, in which one simplex does not occur as such, but derives a prefixed perfective.

Simplex stems	-стрели-	стреляй- (imperf.)
Prefixed perfective	отстрели-	отстреляй-
Derived imperfective	отстреливай-	

In the type illustrated in table 7, there is no aspectual opposition on level two, where there are two prefixed perfectives. As is the case whenever there are two opposing stems at the level of the prefixed perfective (cf. tables 2, 3, 5, 6, 7), there is a lexical opposition. Among these prefixed perfectives, motion verbs derived from indeterminates seem to share a property with non-motion verbs which are derived from simplexes which use the -aj- suffix. They tend to have meanings which refer to actions which are restricted in time, repeated, or quantified, similar to the usual Aktionsart meanings. For example, the perfective заходи- (derived from indeterminate ходи-) refers to the beginning of the action, and отстреляй- refers to a cessation of the action of shooting. The opposed stems (зайд- and отстрели-) are not so easy to characterize in terms of the typical Aktionsart meanings, defined as 'drop by' and 'shoot an object off of something else'. Since one class of dual simplex stems even lacks an overt realization of one of the simplexes, it would seem that one of the most critical defining features of this class is the binary opposition of two different prefixed perfectives.

Another significant property of dual simplexes with an opposition of two prefixed perfectives is the syncretism of the suffixed imperfective stem which is derived from these two prefixed perfectives. Isačenko thought it exceptional ("Тип 3aбpocumb//3aбpacывamb: ожидаемое чередование c/uu отсутствует" 1960:189) that such a perfective stem as 3aбpocu- does not undergo a consonant mutation of  $s>\check{s}$  in the formation of its derived imperfective stem, 3aбpacывaй-. I would suggest that this is not an exception, but a rule of Russian, related to the fact that 3aбpocu- is derived from a dual simplex type, and coexists with the second prefixed perfective 3aбpocu-. Whenever prefixed perfectives are derived by the prefixation from dual simplex stems, one of the two simplexes functions as the derivational base form for both, for the purposes of forming the derived imperfective, as follows:

- 1. -aj- (or -a-) is primary and there is no consonant mutation in either the simplex or the derived imperfective, in the following stems: бросай-, ломай-, хватай-, кусай-, скака-, like the motion verbs катай- and таскай-.
- 2. -i- is primary and there is a mutation both in the -aj- simplex and the derived imperfective: валяй-, меняй-, мешай-, стреляй-, вешай-, сажай-.

The possible reasons for the invariable syncretism of the derived imperfective and its derivation from one of the two simplexes are intriguing questions and suggest that dual simplexes, which share everything in the stem except the **-i-** or **-aj-** suffixes, stand on the borderline between being a single lexeme and two lexemes, and are thus subject to various types of cross-contamination. In this connection, it might be useful to consider Mel'čuk's distinction between the terms "лексема...~вокабула" (1995:500).

### V. Some conclusions and practical considerations.

One can say that all paired instances of dual simplexes and dual prefixed perfectives have a choice of grammatical or lexical opposition. The grammatical opposition of determinate/indeterminate occurs in simplex stems of verbs of motion (кати-/катай-); the grammatical opposition of aspect occurs in some of the dual simplex pairs of non-motion verbs (броси-/бросай-, реши-/решай-). However, when two stems (either simplex or prefixed) differ only in their suffix and are **not** opposed by either the grammatical features of determinacy or aspect, we are dealing with a lexical opposition which recalls the difference between non-Aktionsart and Aktionsart meanings (вали-/валяй-, ломи-/ломай-, захвати-/захватай-, отстрели-/отстреляй-, etc.). Such verbs with dual simplexes and dual prefixed perfectives can lead to a rather complex situation, since a given root with two simplexes can present a different situation for each prefix. A given prefix may form a semantically different prefixed perfective with each of the dual simplexes (e.g. if the prefix 3a- is used with perfective simplex **XBATU-.** we obtain **3AXBATUTL** 'grab', but when used with the imperfective simplex **XBATAŬ-.** we obtain **Захватать** 'soil as result of grabbing'). Of course, both share the syncretic imperfective захватывать. However, another prefix might be used only with either the -i- simplex, or the -aj-simplex, instead of forming prefixed perfectives with both simplexes. Correspondingly, one or both of the prefixed perfectives may or may not admit the formation of a derived imperfective. Table 8 gives examples of the dual simplex use and shared imperfectives for the 11 verbal roots identified.

Table 8. Examples of dual simplexes with two prefixed perfectives and a shared imperfective.

Simplex Pair	Prefixed Perfective Pair Imperfective	
броси-/ бросай-	заброси-/забросай-	забрасывай-
	'throw far' vs. 'cover by throwing'	
вали-/валяй-	развали-/разваляй-	разваливай-
	'ruin, destroy' vs. 'spread on a field'	
веси-/вешай-	завеси-/завешай-	завешивай-
	'cover with curtains' vs. 'hang all over'	
ломи-/ломай-	переломи-/переломай-	переламывать
	'break in two' vs. 'break many things'	
меси-/мешай-	перемеси-/перемешай-	перемешивать
	'knead' vs. 'mix'	
хвати-/хватай-	захвати-/захватай-	захватывать
	'grab' vs. 'make dirty by grabbing'	
-скочи-/скака-	заскочи-/заскака-	заскакивать
	'jump across' vs. 'gallop far away'	
-стрели-/стреляй-	пристрели-/пристреляй-	пристреливай-
	'kill by shooting' vs. 'test a gun's aim'	
-куси-/кусай-	перекуси-/перекусай-	перекусывай-
	'bite through' vs. 'bite many people'	
-мени-/меняй-	обмени-/обменяй-	обменивай-
	'accidentally exchange' vs. 'exchange'	
-сади-/сажай-	просади-/просажай-	просаживай-
	'spend' vs. 'spend time planting'	

Table 8 provides a single dual simplex example for each of the eleven non-motion verbs with lexical oppositions in this category. In order to accommodate all of the verbs in table 8, only a single prefix example was selected for each verb. Table 9 is an example of a more comprehensive chart, with ex-

amples of dual perfective stems formed with 10 different prefixes, but for a single one of the eleven dual simplex stems, **броси-/бросай-**.

Table 9. **БРОС** 

Table 9. Broc		1	1	T
		Stem-1	Stem-2	Approximate meaning opposition.
Simplexes		броси-	бросай-	perfective vs. imperfective
Prefixed per-	1	вброси-	вбросай-	'throw in' vs. 'throw several times'
fectives				
Derived im-		вбрасывай-		
perfective				
Prefixed per-	2	заброси-	забросай-	'throw (cast) a long distance' vs. 'throw and cover
fectives		_		with (mud)'
Derived im-		забра	асывай	
perfective		-		
Prefixed per-	3	доброси-	добросай-	'throw up to a specific place' vs. 'finish throwing'
fectives		-		
Derived im-		добра	сывай-	
perfective				
Prefixed per-	4	наброси-	набросай-	'throw on (e.g. clothing on one's shoulders)' vs.
fectives		1	1	'throw many times or in quantity; sketch hastily'
Derived im-		набра	сывай-	
perfective				
Prefixed per-	5	отброси-	отбросай-	'throw several times (e.g. stones)' vs.
fectives			Property	'throw off to the side; round off a number'
Derived im-		отбрасывай-		
perfective		0.04		
Prefixed per-	6	переброси-	перебросай-	'throw everything, one after the other' vs.
fectives				'throw across'
Derived im-		перебр	асывай-	
perfective		переор	w bibwii	
Prefixed per-	7	приброси-	прибросай-	'throw several times' vs.
fectives	'	приороди	inprior o curr	'throw something additional, extra'
Derived im-		прибрасывай-		
perfective		приор	w constant	
Prefixed per-	8	проброси-	пробросай-	'exhaust (e.g. deck of cards) by throwing' vs.
fectives		просреда	inpeope cuit	'throw across; make a mistake while throwing'
Derived im-		пробр	ı асывай-	unio (i uotoss, munio u missumo (i mis unio (i mig
perfective		пробрасывай-		
Prefixed per-	9	разброси-	разбросай-	'carelessly throw several times in a scattered di-
fectives		Pasopoon	Pasopotan	rection' vs.
Derived im-		กลุรกิก	ı асывай-	'scatter by throwing'
perfective		ρασορί	acordan -	Source of thorning
Prefixed per-	10	сброси-	сбросай-	'throw several times' vs.
fectives	10	сороси-	соросан-	'throw off of; throw downwards'
Derived im-		сбрасывай-		unow on or, unow downwards
perfective		Сорас	, ыван <b>-</b>	
periective				

This has been a brief survey of the paradigmatic differences between a variety of Russian verbal stems which share the property of having dual simplexes. It has been seen that this stem category shares a number of specific features of morphophonemics, such as the property of stem-final consonant mutation, as well as specific properties of syncretism, particularly of the derived imperfective form. Future work might work towards a comprehensive listing of such verbs, as well as a pedagogical description of the complexities of the dual simplex class.

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