Verbal aspect in Old Church Slavonic

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5 MORPHOLOGICAL MARKERS OF ASPECT

5.0 Introduction

One of my hypotheses is that the morphological characteristics of an OCS verb are the best predictors of the aspect of the verb. They also provide a good starting point in the study of aspect in OCS since morphological markers can be determined objectively and constitute the basis on which the derivational aspect system is built, not only in OCS, but in the modern Slavic languages as well. In this chapter, I will discuss what the morphological markers of derivational aspect in OCS are and also present my categorization of the OCS verbs in various groups based on those morphological markers.

5.1 Morphological markers of aspect

The morphological characteristics of the verb and the existing opposition between base and derived form, which also form the basis for the description of the development of the aspect system by Maslov (1961), are leading in this study. Maslov (1961: 190-191) describes the role of perfectivization and imperfectivization in the development of the Slavic verbal aspect as follows: by means of prefixation, Slavic gained a category of highly terminative (*predel'nye*) verbs. An example of this is the prefixation of the simplex *jasti* 'eat' resulting in a prefixed verb *sъnĕsti* 'eat up'. This development was a necessary condition for the formation of Slavic verbal aspect; the newly formed prefixed forms constituted the basis for the derivation of imperfective verbs by means of suffixation. However, according to Maslov (1961: 191), it is only the derivation of imperfective verbs like *sъnĕdati* 'eat up' from *sъnĕsti* 'eat up', that marks the genesis of the category of aspect in Slavic (cf. Kopečný 1984; Galton 1997: 71). Alternatively, one could say: this suffixal derivation of imperfective verbs marks the genesis of a ***Slavic-style aspect system*** (cf. Dahl 1985, Tomelleri 2010, cf. also Chapter 2, section 2.2.1), a system which revolves around terminative verbs. Even though derived verbs like *sъnĕdati* are often referred to as 'secondary imperfectives', they play a vital role in the development of Slavic verbal aspect. The situation before the derivation of these imperfective verbs could probably be compared to systems in which perfective verbs are formed by means of prefixes, as discussed in Chapter 2, but which do not derive Slavic-style imperfectives (e.g. Gothic, cf. Maslov 1959, Genis 2012). In such systems, the opposition is between terminative and aterminative verbs, while in Slavic the opposition is between two terminative verbs.

The Slavic aspect system relies on visible morphological elements in individual verbs, and on pair-forming, the opposition between verb forms.

The latter means that, even though some verbs do not show visible morphological markers in their forms, they are still part of the aspect system because they have a derivational relation with another verb (cf. the -Ø- element in the theory of Amse-de Jong 1974: 33), which has consequences for their semantics. The clearest examples of this invisible element can be found in unprefixed verbs with a derived partner, in which only the derived partner has a visible morphological marker. An example is the OCS *aviti sę* 'appear', which lacks a visible morphological marker of aspect but is in opposition with *avljati sę* 'appear', which contains the OCS derivational suffix *-(j)ati, -(j)aje-* (cf. section 5.1.3.2).[1] However, in prefixed verbs the opposition plays an important role too: a prefix alone carries no information about the grammatical aspect of a verb; it is the opposition between the two prefixed partners that results in the categorization of one verb as perfective and the other one, the derived one, as imperfective. To make this even more explicit: in Modern Russian, both partners of the pair *sostavit*ᵖᶠ - *sostavljat*ⁱᵖᶠ 'compile, make up' contain the prefix *so-*, which shows that the prefix is not a distinguishing feature when it comes to the aspect of the partners. Only the imperfective partner *sostavljat*ⁱᵖᶠ, however, has an additional aspectual marker (the suffix *-ja-*) marking it as derived. Hence, one could say that the perfective *sostavit*ᵖᶠ is just as 'unmarked' as OCS *aviti sę* in terms of aspectual morphology. The only difference is that the addition of a prefix is a morphological indication of the terminativity of a verb. As I will show in Chapter 7 and 9, this has consequences for the aspectual behaviour of a verb even if no derived partner is attested.

In the sections below, I will discuss the morphological markers of aspect in OCS: prefixes, suffixes and derivational relations. Based on this, I will then present my categorization of verbs into various groups, which will form the basis for the analysis in Chapter 7.

5.1.1 Prefixes

In Old Church Slavonic there are a total of 21 verbal prefixes which are historically based on prepositions. These prefixes alter the meaning of the verb they are attached to. In some cases, like with the Russian *pisat*ⁱᵖᶠ - *napisat*ᵖᶠ 'write - write (down)' the alteration is just the addition of an inherent boundary to the lexical meaning of the verb. The prefix changes an

[1] The first suffix (*-jati*) is the aorist/infinitive stem suffix, the second (*-jaje-*) the present stem suffix (cf. section 6.1 for the two verb stems) in 3sg. I follow Schuyt (1990) in this notation (cf. section 5.1.3). Whenever I give two forms of an OCS verb, the first form is the infinitive (e.g. *avljati*) and the second form, behind the comma, is the 1sg present (e.g. *avljajǫ*), in which the present tense suffix emerges. In some, more complicated, cases I will also give a third form, the 2sg present.

aterminative verb into a terminative verb. In other cases, like *pisatʲ*ipf - *perepisatʲ*pf 'write, copy' the verb is not only made terminative, but the lexical content of the base verb undergoes a qualitative change as well.[2] Janda (2007a: 609) calls verbs like *napisatʲ*pf, which "the logical completion of the corresponding Imperfective Activity", in this case *pisatʲ*ipf, the 'Natural perfective'.[3] Verbs like *perepisatʲ*pf, which provide new semantic context she calls 'Specialized perfective'. Often a prefixed verb has a derived partner, creating a prefixed pair, for example *perepisat'* - *perepisyvat'* 'copy'.[4] By far the most aspect pairs in OCS are prefixed pairs, which emphasizes the importance of the prefix in the aspect system.

The original spatial meaning of the prefixes is often still present, like with the preposition *otъ-*'away from' in the pair *otъsěšti* - *otъsěkati* 'cut off', or the preposition *iz-* 'out of' in the pair *izlijati* - *izlivati* 'pour out'. In other cases, the prefix is used in a more abstract way to indicate, for example, a phase of an event like in *vъspěti* 'start singing', in which there is no actual spatial meaning. Such alterations of the lexical meaning of the verb in which a certain phase of the event receives emphasis is often referred to as *Aktionsart*.

Furthermore, there are prefixes that have only, or mostly, spatial meaning and do not play a role in the derivational aspect system. Comparing the frequency of the various prefixes in prefixed base and derived verbs (cf. section 5.1.3 for the morphological means involved in this derivation) with that in verbs of motion (VOMs), in which the spatial component plays a more important role, could give an idea of which prefixes are more central to the verbal aspect system and which on the other hand have a strong spatial character in OCS. In Table 5.1, the two columns on the left contain the data for the (non-motion) prefixed - derived pairs, while the two columns on the right contain the percentages for the prefixed determinate and indeterminate VOMs.[5]

[2] Obviously, there also cases in which an already terminative verb is prefixed. In that case there is no added boundary, just a qualitative alteration of the lexical content. By qualitative alteration I mean that the semantic content of the event is different. In the case of *pisatʲ*ipf - *napisatʲ*pf the event is in both cases 'write', while the prefix *pere-* in *perepisatʲ*pf not only adds boundary to the lexical context, but also changes the lexical content in a different way. It is no longer simply 'writing', but 'copying', which can be seen as a specialized manner of writing.

[3] I should note that this only concerns the occurrence of the simplex in terminative predicates. For example, *He is writing* has no 'logical completion', since there is no inherent boundary in the predicate while *He is writing a letter* has a logical completion, introduced by the discrete object *a letter*.

[4] This differs from what some authors would call a 'prefixal pair', which would be a simplex and its natural perfective, i.e. Modern Russian *pisatʲ* - *napisatʲ*p 'write - write (down)'

[5] Dickey (2010) makes a good case for treating the indeterminate verbs of motion as 'manner-of-motion' verbs. I use the traditional term 'indeterminate' here only to denote the group of motion

Prefix	*Prefixed base verb*	*Prefixed derived verb*	*Prefixed determinate VOM*	*Prefixed indeterminate VOM*
	n=377	n=455	n=57	n=67
vъ-	4.51%	4.84%	8.77%	8.96%
vъz-	7.43%	7.25%	5.26%	4.48%
vy-	0.00%	0.00%	1.75%	1.49%
do-	0.27%	0.44%	1.75%	1.49%
za-	3.71%	3.52%	1.75%	1.49%
iz-	5.84%	5.93%	15.79%	13.43%
mimo-	0.00%	0.00%	3.51%	2.99%
na-	5.04%	4.40%	5.26%	5.97%
nadъ-	0.00%	0.00%	0.00%	0.00%
nizъ-	0.00%	0.00%	3.51%	2.99%
o(b)-	11.41%	12.09%	3.51%	4.48%
otъ-	5.04%	4.62%	7.02%	8.96%
po-	14.06%	12.97%	5.26%	4.48%
podъ-	0.53%	0.66%	0.00%	0.00%
pri-	5.57%	6.15%	10.53%	10.45%
pro-	2.39%	3.08%	7.02%	5.97%
prě-	4.51%	5.05%	10.53%	10.45%
prědъ-	0.53%	0.66%	1.75%	2.99%
raz-	6.10%	5.49%	1.75%	4.48%
sъ-	12.47%	12.31%	5.26%	4.48%
u-	10.61%	10.55%	0.00%	0.00%

Table 5.1 Frequencies of OCS prefixes[6]

Two bar charts make comparison between the prefixed non-VOM verbs and the prefixed VOM verbs easier:

verbs of the *-xoditi/-nositi*-type, without implying these are also functionally indeterminate motion verbs (cf. section 9.4).

[6] The prefixed base verbs and determinate verbs concern only those verbs of which a derived partner is attested, just as the prefixed determinate verbs concern only those of which an indeterminate partner is attested. Derived verbs can be recognized by their suffix (see below) and a base verb need not be attested to classify a verb as derived (hence *uvraštati sę* 'turn away' is considered a derived verb, even though **uvratiti sę* is not attested). I did not count verbs with a non-aspectual prefix as extra verbs (e.g. *novoprixoditi* 'arrive freshly' was not counted as an extra attestation of *pri-*) (cf. section 5.1.2).

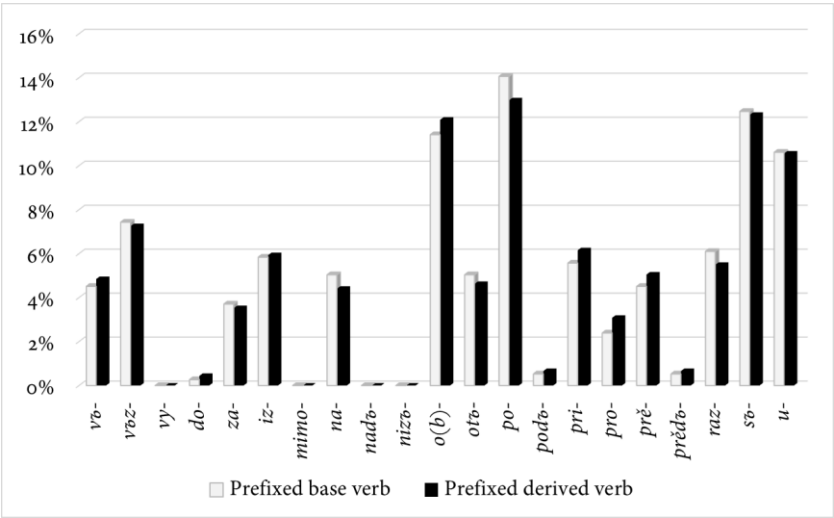

Figure 5.1 *Frequencies of OCS prefixes in non-VOM pairs*

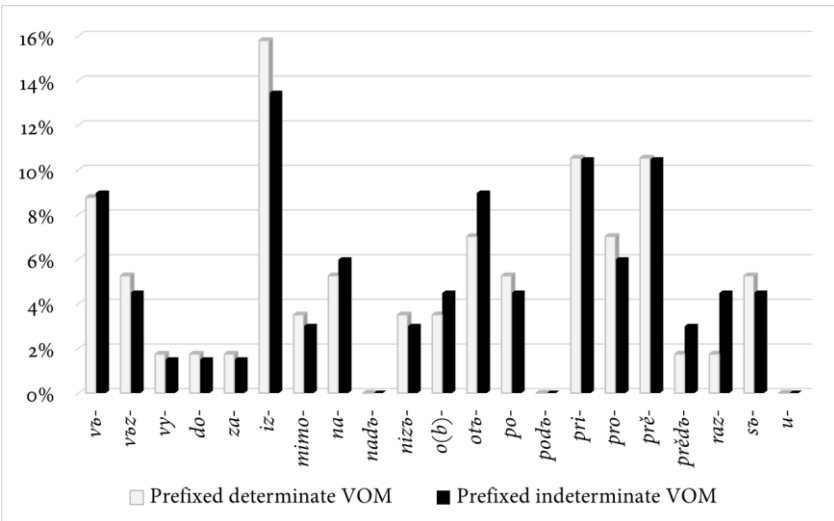

Figure 5.2 *Frequencies of OCS prefixes in VOM pairs*

It is clear that some prefixes are rather marginal within the group of prefixed-derived pairs (Figure 5.1), e.g. *do-*, *podъ-* and *prědъ-*. Others prefixes are completely absent from that group, like *vy-*, *mimo-*, *nadъ-* and *nizъ-*. Except for *nadъ-* and *podъ-* these prefixes are used with verbs of motion to indicate the direction of the motion (*mimoiti - mimoxoditi* 'pass by' or *nizъvesti - nizъvoditi* 'bring down').

Other prefixes, like *po-*, *sъ-*, *o-*, *u-*, and *vъz-* are apparently central to the aspectual derivational system of OCS; together these five prefixes occur in more than 55% of the derived verbs. The prefixed VOMs (Figure 5.2) show a completely different picture: in the prefixed indeterminate VOMs these five prefixes occur in less than 17% of the verbs, and *u-* is even not attested at all.[7] Regarding the prefix *u-*, the central role it plays in 'normal' aspectual pairs as opposed to the marginal role in VOMs, could indicate that it played an important role in the development of the aspect system as a prefix that is bleached off its spatial meaning and has become a 'perfectivizer' (Dickey, to appear). In the present study I will not go into the various contributions of the prefixes to the development of the aspect system, but the table above is useful to get a basic insight into the function of the various prefixes and shows an interesting difference between VOMs and other verb pairs.

In this study, I will treat prefixed and unprefixed verbs in different categories. VOMs will also be treated as a separate category because of their divergent suffixations patterns (see section 5.1.3 below on suffixation). The fact that the prefixation pattern is different as well, offers extra support for a separate treatment.

I should note that treating groups separately does not mean that they will by definition be classified differently with regard to their aspect. This strategy of grouping verbs together based on their morphological characteristics allows for a comparison of the grammatical profile of the various groups. In Chapter 7, I will demonstrate, for example, that prefixed VOM pairs (e.g. *otъiti - otъxoditi* 'leave, go away') show similar behaviour to prototypical prefixed aspect pairs (*ostaviti - ostavljati* 'leave, let go'), as well as unprefixed aspect pairs (*aviti sę - avljati sę* 'appear'), while unprefixed verbs of motion (*nesti - nositi* 'carry') behave differently. Such comparison would not have been possible had I not treated these verbs as separate categories.

5.1.2 Other prefixes and pseudo prefixes

Except for the prefixes with prepositional origin that originally had a spatial meaning, there are some verbs that have a prefix with a different, adverbial, origin. These do not make the verb terminative, unlike most prepositions discussed above, but only cause a qualitative alteration. Examples of such prefixes are *blago-* 'good', *bogo-*'god', *zъlo-*'bad', *novo-*'new', as in *blagodějati*

[7] The prefix *u-* is not entirely incompatible with verbs of motion, it occurs in the verbs *uběgnǫti* and *uběžati* 'run away'. These verbs are not included in this table because their derivational relationship is different and there is no derived verb **uběgati* attested (other prefixed formations of the determinate *běžati* 'flee' stand in opposition to prefixed formation of indeterminate *běgati* 'flee').

'do good', *bogosloviti* 'talk about God' *zъlotvoriti* 'treat badly', and *novojaviti* 'show for the first time'. I treat such verbs as unprefixed in this study.

Other verbs, that could be mistaken for prefixed verbs more easily, are denominal verbs like *proročьstvovati* 'prophesy' (prefix *pro-*) from the noun *prorokъ* 'prophet', or *izbytъkovati* (prefix *iz-*) 'have in abundance' from *izbytъkъ* 'abundance'. These verbs are not prefixed, they denominal verbs based on nouns with a prefix and I will treat them as unprefixed. Such verbs can often be recognized by their suffix *-ova-* (cf. Schuyt 1990: 29-33), but in some cases the suffix does not come to the rescue, like in *podobati* 'behove' from *podoba* 'manner' (Dostál 1954: 189).

Finally, there are some verbs in which the element that looks like a prefix is merely part of the lexical root of the verbs. For example *sъ* in *sъpati* 'sleep', is not the prefix *sъ-*, nor is *po* in *poiti* 'water' (1sg pres *pojǫ*) the prefix *po-* (in the infinitive of the prefixed VOM *poiti* 'go' (1sg pres *poidǫ*) the element *po* is the prefix *po-*).

5.1.3 Verb pair forming suffixes

Schuyt (1990: 16) distinguishes a number of suffixes that are used to derive imperfective verbs and one suffix, *-nǫti, -ne-*, that derives verbs that are traditionally seen as perfective. I will briefly discuss the various suffixes in the following order (see for a more elaborate discussion Schuyt 1990: 10-14, 16-33):

- *-nǫti, -ne-*
- *-(j/v)ati, -(j/v)aje-*
- *-ati, -je-*
- *-ovati, -uje-* (*-evati, -uje-*)
- *-iti, -i-*

5.1.3.1 The suffix -nǫti, -ne-

The suffix *-nǫti, -ne-* is regularly used to derive a semelfactive verb from an activity verb, thus creating a pair. It is the only type of suffixation in Slavic in which the base verb is regarded as the imperfective partner and the suffixed verb as the perfective partner. Examples from OCS are the pair *kapati, kapljǫ* 'drip' - *kanǫti, kanǫ* 'drip (once)' and *duxati, dušǫ* 'breath' - *dunǫti, dunǫ* 'blow'.[8] The verbs in *-nǫti, -ne-* are often referred to as the Leskien class II

[8] A little different are pairs like *kasati, kasajǫ* 'touch' - *kosnǫti, kosnǫ* 'touch (once)', where *kasati, kasajǫ* is not a base verb, but a derived verb itself, with the suffix *-ati, -aje-*. Such a pair actually consists of two derived verbs, while no base verb **kosati* is attested. There are two more pairs like

verbs, referring to the classification of OCS verbs into five classes as found in the grammar by Leskien (1969).

Not all verbs in Leskien's class II, however, are semelfactive verbs. In a number of cases the suffix has a different background (Schuyt 1990: 14) and there is no base verb from which the verb with the suffix is derived, like in *sъxnǫti* 'dry'.[9] In OCS this subtype of Leskien's class II verbs is not very well attested in unprefixed formations, but a number of prefixed formations with these verbs could go back to this type (Schuyt 1990: 12-13).[10]

Since the relationship between the *-nǫti, -ne-* verbs and their base verbs is different from the relationship between, for example, unprefixed verbs that have a derived partner in *-(j/v)ati, -(j/v)aje-*, like *aviti sę, avljǫ sę - avljati sę, avljajǫ sę* 'appear' (cf. section 5.1.3.2), in which it is the derived verb that is regarded as the imperfective partner and not the base verb,[11] I will treat Leskien's class II verbs and their partners as a separate category to be able to compare them to groups with other derivational patterns.

5.1.3.2 The suffix -(j/v)ati, -(j/v)aje-

According to Schuyt (1990: 26-27), the suffix *-(j/v)ati, -(j/v)aje-* in OCS is used in two ways. First, to derive verbs from nouns, like *igrati, igrajǫ* 'play' from *igra* 'game', *dělati, dělajǫ* 'work' from *dělo* 'work', or *rabotati, rabotajǫ* 'be a slave' from *rabota* 'slavery'. My database contains 48 such verbs in *-ati, -aje-*, which are not part of an aspect pair (including *podobati* 'behove', which I already mentioned in section 5.1.2).

that: *drъzati, drъzajǫ* 'be brave' - *drъznǫti, drъznǫ* 'take courage' and *rivati, rivajǫ* 'push' - *rinǫti sę, rinǫ sę* 'rush into'. For a more extensive discussion of this particular group see Chapter 9 (section 9.2).

[9] In Modern Russian *soxnut'* is imperfective. There is one attestation in OCS and opinions differ as to the aspectual value of the verb. Amse-de Jong (1974: 48) considers the verb to be either perfective or anaspectual, while Dostál (1954: 166) considers the verb to be imperfective. In my database Leskien's class II verbs without a partner form a (small) separate group of 7 verbs with a total of only 26 attestations, which makes it difficult to come to a serious comparison with other groups.

[10] The unprefixed forms are 'evolutive', they denote the gradual assumption of a state and are related to nouns of adjectives denoting that state (e.g.**kysnǫti* 'become sour', related to *kysělъ* 'sour', only attested in the prefixed formations *vъkysnǫti* and *vъskysnǫti*, both 'turn sour'). Cf. Modern Russian evolutive *-nut'* verbs like *soxnut'*^{ipf} 'dry' which differ from semelfactive *-nut'* verbs, that are perfective (e.g. *maxnut'*^{pf} 'wave' or *tolknut'*^{pf} 'hit').

[11] Some verbs in Leskien's class II are regarded as the base verb and have a derived partner. Examples are *minǫti, minǫ - minovati, minujǫ* 'pass by' and prefixed formations; prefixed formations of *-vinǫti - -vinovati* and the only verb in Leskien's class II that has no *-nǫti* element in the infinitive, *stati* 'stand up', with derived *stajati, stajǫ* and prefixed formations (cf. Schuyt 1990: 21). I will discuss the verbs in Leskien's class II and their partners more extensively in Chapter 9.

Secondly, the suffix *-(j/v)ati, -(j/v)aje-* is frequently used to derive a verb from another verb, mostly prefixed verbs, although there are also some unprefixed pairs that arise through this derivation, like the already mentioned pair *aviti sę - avljati sę* 'appear'. My database contains 612 verbs that are derived from another verb with this suffix.

The variation between *-ati, -aje-/-jati, -jaje-/-vati, -vaje-* is phonetically conditioned in OCS. The suffix appears as *-ati, -aje-* when the verb is derived from a base verb with a stem ending in a consonant (Leskien's classes I and V), like in *naklasti, nakladǫ - nakladati - nakladajǫ* 'put (up)on' or *sъněsti, sъněmъ - sъnědati, sъnědajǫ* 'eat up' and in a limited number of derivations of verbs in *-iti, -i-* (Leskien class IV), like *prědъložiti, prědložǫ - prědъlagati, prědъlagajǫ* 'put in front of'. The suffix appears as *-jati, -jaje-* in all other cases when the verb is derived from a Leskien's class IV verb, like *aviti sę, avljǫ sę - avljati sę, avljajǫ sę* 'appear' or *dosaditi, dosaždǫ - dosaždati, dosaždajǫ* 'insult'.[12] Finally, the suffix appears as *-vati, -vaje-* when the base verb ends in a vowel, mostly Leskien's class III verbs like *prěbiti, prěbijǫ - prěbivati, prěbivajǫ* 'break', but also Leskien class IV verbs in *-ěti*, like *poveléti, poveljǫ - povelévati, povelévajǫ* 'order' and in the derived formations of the Leskien's class V verb *byti, esmъ - byvati, byvajǫ* 'be'. Since the variation is clearly phonetically conditioned, even though there are some irregularities when it comes to the derivation from base verbs in *-iti, -i-* (Leskien's class IV), I will treat these as variants of the same suffix to which I will refer as *-ati, -aje-* from here on.

5.1.3.3 The suffix -ati, -je-

At first sight, the function of the suffix *-ati, -je-* might look the same as the function of the suffix *-(j/v)ati, -(j/v)aje*, i.e. the derivation of imperfective verbs from a base verb. It is not, though. Most of the verbs that have this suffix are not derived verbs, but original verbs from which verbs are derived with *-nǫti, -ne-* (cf. section 5.1.3.1).

In the few cases where verbs with the suffix *-ati, -je-* are derived from another verb, there often is a triplet involved with a 'secondary suffixed' partner which has the suffix *-(j/v)ati, -(j/v)aje-*, like in prefixed formations of *-dati, -dam* 'give' which can have both derived forms *-dajati, -dajǫ* and *-davati, -davajǫ*.[13] These verbs and their derivations are treated as

[12] In such cases, the jotation that is visible in the 1sg present of the base verb is present throughout the entire paradigm of the derived verb: it is part of the stem. So while, for example, 2sg present of *dosaditi* is *dosadiši*, hence without jotation of the stem, 2sg present of *dosaždati* is *dosaždaješi*.

[13] Other examples are prefixed formation with *-jęti, -imǫ* of which there are two derived forms *-imati, -emljǫ* and *-imati, -imajǫ*, and also *-rešti, -rekǫ* with *-ricati, -ričǫ* and *-ricati, -ricajǫ*.

separate categories, since the presence of a secondary derived verb could result in different aspectual behaviour (cf. Chapter 7).

5.1.3.4 The suffix -ovati, -uje- (*-evati, -uje-*)

The suffix *-ovati, -uje-* is first and foremost a denominal suffix (Schuyt 1990: 29). There are a lot of denominal verbs derived by this suffix, like *likovati, likujǫ* 'dance' from *likъ* 'round dance' and *sъvětovati, sъvětujǫ* 'hold council' from *sъvětъ* 'council'. The suffix also occurs as *-evati, -uje-* after soft consonants, like in *vračevati, vračujǫ* 'heal' from *vračь* 'doctor'.

In a number of cases this suffix 'comes to the rescue' when a verb has two present tense stems, but only one aorist/infinitive stem (cf. Schuyt 1990: 30-33, Kamphuis 2015).[14] One example is the base verb *pokazati* 'show', which has two present tense stems, and hence two present tense forms, *pokažǫ* and *pokazajǫ*, the second one of which is clearly an *-ati, -aje-* derivation. However, this derivation is not visible in forms that are based on the present stem and it is possible that for this reason separate verbs in *-ovati, -uje-* were derived, like *pokazovati* 'show'. Verbs with two present stems are treated as a separate category in Chapter 10.

Finally, there are a few cases in which *-ovati, -uje-* functions just like the derivational suffix *-ati, -aje-*, deriving one verb from another verb. In this respect OCS, just like OR, differs from most modern Slavic languages in which derivation with *-ovati, -uje-* (or related forms like Modern Russian *-yvat', -yvae* and *-ivat', -ivae*) has become the only productive type of aspectual derivation of imperfective verbs (Schuyt 1990: 410).[15] Examples in OCS are *iskupiti, iskuplǫ - iskupovati, iskupujǫ* 'redeem' and *naznamenati, naznamenajǫ - naznamenovati - naznamenujǫ* 'signal' (in both cases there is an unprefixed pair as well).

5.1.3.5 The suffix -iti, -i-

The suffix *-iti, -i-* is the basic characteristic of Leskien's class IV verbs. Many verbs in this class are denominal, e.g. *slьziti, slьžǫ* 'cry' from *slьza* 'tear', or *strašiti, strašǫ* 'frighten' from *strax* 'fear'.

As regards derivation from other verbs, this suffix is only in use to derive indeterminate VOMs, from determinate VOMs. Examples are *nesti, nesǫ - nositi, nošǫ/nosiši* 'carry', or *vesti, vedǫ - voditi, voždǫ/vodiši* 'lead, take' and

[14] See Leskien (1969: 122), who uses the terms 'Infinitivstamm/Zweiter Stamm' (aorist/infinitive stem) and 'Präsensstamm' (present stem) and bases his classification on the latter.
[15] For the relationship between *-ovati, -uje-* and Russian *-yvat', -yvae-* and *-ivat', -ivae-* cf. Schuyt 1990: 404-408.

all the prefixed formations of these verbs. I will treat VOMs in separate categories.

5.1.4 Derivational relationships

In the OCS corpus there are five positions attested that a verb can occupy within a chain of derivationally related verbs.[16] In the table below I have given a number of possible derivational relationships:

	Unprefixed	***Unprefixed suffixed***	***Prefixed***	***Prefixed derived***	***Extra suffixed***
1	*prazdьnovati* 'spend free time'	N/A	N/A	N/A	N/A
2	*prostiti* 'free, forgive'	*praštati* 'free, forgive'	N/A	N/A	N/A
3	*kopati* 'dig'	N/A	*iskopati* 'dig out'	N/A	N/A
4	*kryti* 'cover, hide'	N/A	*pokryti* 'cover'	*pokryvati* 'cover'	N/A
5	*pustiti* 'let go'	*puštati* 'let go'	*popustiti* 'tolerate'	*popuštati* 'tolerate'	N/A
6	*vycati*[17] 'learn'	*vyknǫti* 'learn'	N/A	*navyknǫti* 'learn'	*navycati* 'learn'
7	*vesti* 'lead, take'	*voditi* 'lead, take'	*privesti* 'bring'	*privoditi* 'bring'	*privaždati* 'bring'

Table 5.2 Possible derivational relationships

Situation 1 is clear; *prazdьnovati* is a verb that has no derivational relationship with any other verb, neither through prefixation, nor through suffixation. The verb is de-adjectival, derived from the adjective *prazьnъ* 'empty'. Situation 2 shows an 'unprefixed pair', *prostiti - praštati*. Here, the suffix *-ati, -aje-* serves to derive a new verb, with the same lexical meaning from the base simplex, a typical example of aspectual derivation with *prostiti*

[16] Actually, there are six possible positions. However, this is only relevant for the derivational chain of *iti* 'go' - *xoditi* 'go' (cf. section 9.4), which has the unprefixed extra derived form *xaždati* 'go' (cf. example 333 in Chapter 10). This results in a chain of three unprefixed forms, while there are also chains of three prefixed forms (e.g. *prěiti - prěxoditi - prěxaždati* 'cross, pass'), which together give six options. The only other extra derived unprefixed verb is *dyxati, dyxajǫ* 'blow'. However, there the simplex **dъxnǫti* is not attested and neither are suffixed prefixed forms like **izdyxati, izdyšǫ*. The only attested forms are the simplex *dyxati, dyšǫ* 'blow', prefixed formations like *izdъxnǫti, izdъxnǫ* 'breathe out' and secondary derived prefixed formations like *izdyxati, izdyxajǫ* 'breathe out'. This results in a chain with a maximum of three attested verbs.

[17] The verb *vycati* is only attested in the formation *ljubovycati*, which has just one attestation in the *Suprasliensis*, a PresAP *ljubovyčǫštǫ* 'eager to learn'.

being the perfective and *praštati* the imperfective verb. Situation 3 shows an unprefixed verb, *kopati*, with a prefixed formation *iskopati*. The prefix adds an inherent boundary, but that does not make the pair *kopati - iskopati* a Slavic-style aspect pair, because *kopati* is not inherently terminative (cf. sections 2.2.2 and 5.1). In Situation 4, there is an unprefixed verb, *kryti*, with a prefixed formation *pokryti*, which in turn is suffixed with *-ati, -aje-* to form *pokryvati*. The latter two form a 'prefixed pair'. Such pairs are prototypical aspect pairs, at least from the point of view of the modern Slavic languages (cf. section 5.3). In Situation 5, there are two pairs: an unprefixed pair *pustiti - puštati* and a prefixed pair *popustiti - popuštati*, both pairs formed by means of the suffix *-ati, -aje-*, again a case of typical aspectual derivation.[18] The unprefixed pair *vycati - vyknǫti* in situation 6 differs from the other unprefixed pairs in 2 and 5, since here it is the suffixed verb (*-nǫti, -ne-*, Leskien's class II) that is generally thought to express perfective aspect. This difference comes with consequences for the prefixed pair *navyknǫti - navycati*, in which the extra prefixed verb does not look like a prefixed formation of the suffixed simplex, as in situation 5, but shows an extra derivation (the simplex *vycati* has a present tense *vyčǫ* (it is an *-ati, -je-* verb), while *navycati* has a present tense *navycajǫ* (*-ati, -aje-*). Finally, there is situation 7 in which all fields are filled. This is a regular picture with a number of verbs of motion, a number of derivational chains with Leskien's class II verbs and a few other verbs, including the ones that occur as an unprefixed pair, in which the derived verb has the suffix *-ati, -je-*: *dati, dam - dajati, dajǫ, prědati, prědam - prědajati, prědajǫ - prědavati, prědavajǫ* (cf. Chapter 9, section 9.5). The same situation is found in derivational chains that contain unprefixed pairs in which the derived verb is from Leskien class II (although not in all those cases, see situation 6). More combinations are possible, of course. For example, in many cases a simplex is not attested, or a suffixed verb is attested, but the base verb is not. Table 5.2, though, shows the relationships that are the most important for my classification of the OCS verbs.

5.2 Database of OCS verbs

In the preceding sections I have discussed the three morphological elements that play a role in the derivational aspect system in OCS: prefixation, suffixation and derivational relationships. In my database these elements are all part of a verb entry and verbs can be grouped by searching for

[18] The verb *popuštati* could, of course, also be regarded as a prefixed form of *puštati*. There is no indication that prefixed pairs based on an unprefixed pair show different behaviour compared to those of which there is no simplex pair attested, except for prefixed pairs in which one of the partners is a Leskien class II verb (cf. Chapter 9).

combinations of elements. I will discuss the various groups in section 5.3, but first I will present the part of my database that contains this information.

In Chapter 2, I have already briefly discussed the database. Below I will show how all the information discussed in the preceding sections can be retrieved in my database and used for the classification of verbs. In Figure 5.3 part of the database entry for the verb *sɔbɒrati* 'collect' is depicted. The other half, the number of attestations per verb form, is not relevant for the morphological classification, but will be treated in Chapter 7, as this is the grammatical profile of the verb.

Below, I will briefly discuss all the fields and mention which fields are useful in the grouping of verbs with regard to morphological characteristics. Often, a field is not relevant for the particular verb, or the element in question is not present as in case of Figure 5.3 the fields 'Means of derivation' and 'Secondary suffixed' (to which I refer as 'extra derived' in this study'). In such cases the field is filled with N/A.

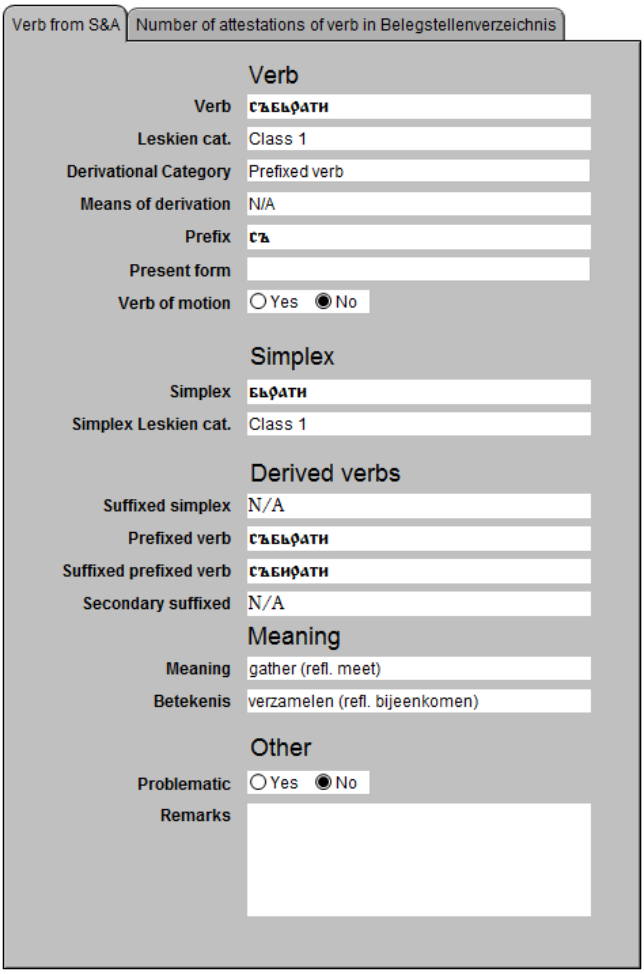

Figure 5.3 Database entry of the verb sъbьrati

The field ***Verb*** contains the lexeme, so that an individual verb can be looked up. In some cases the lexeme is followed either by a number, or by a letter. The number indicates that the verb has one infinitive stem and two present stems. If the number is 1, the entry contains the information on the underived forms (e.g. *naricati, naričǫ* 'call'); if the number is 2 the entry contains information on the derived forms (*naricati, naricajǫ* 'call'). The letter indicates a homonymous infinitive (*poiti* A 'go' and *poiti* B 'water'). The second field, ***Leskien cat.*** contains one of the five Leskien's classes. This field can, for example, be used to separate Leskien's class II verbs from other verbs, which is important in my classification, because the derivational relationship between Leskien's class II verbs and their partners differs from that of other pairs formed by suffixation. The field ***Derivational category*** allows for the five possibilities entries that can be found in Table 5.2: *unprefixed*, *unprefixed suffixed*, *prefixed verb*, *prefixed suffixed verb* and *extra derived verb*. This field makes it possible to select all prefixed verbs, or all suffixed verbs and group them together. In ***Means of derivation*** the derivational suffixes are entered; these can be found in the sections 5.1.3.2 - 5.1.3.5. The suffix *-nǫti, -ne-* is not included in this field, but can nevertheless be retrieved separately according to the Leskien classification. The field ***Prefix*** contains per verb one of the prefixes of Table 5.1: *vъ-*, *vъz-*, *vy-*, *do-*, *za-*, *iz-*, *mimo-*, *na-*, *nadъ-*, *nizъ-*, *o-*, *otъ-*, *po-*, *podъ-*, *pri-*, *pro-*, *prě-*, *prědъ-*, *raz-*, *sъ-*, *u-*. In case of more than one prefix, the prefixes are entered in the order that they occur in the particular verb, for example *pri, sъ, vъ* in case of *prisъvъkupiti* 'gather'. The field ***Present form*** is not filled out for most verbs. The field offers a quick way of discerning verbs with one infinitive stem and two present stems by taking into consideration the derivational suffix of the present stem (e.g. *naricati* 'call' has both *naričǫ* 'I call' vs. *naricajǫ* 'I call'). This is not a field of crucial importance, but it can be helpful for quicker processing while using the database. The field ***Verb of motion*** allows only a yes or a no. This makes it possible to separate VOMs from other verbs. The ***Simplex*** field contains the simplex on which the verb is based. In some cases, a simplex is not attested, which is then indicated with an asterisk (e.g. **kusiti* for *iskusiti* 'try'). The ***Simplex Leskien cat.*** contains the Leskien's class of the simplex, making it possible to group verbs according to the Leskien's class of the verb they are based on, which makes it possible to separate partners of verbs from Leskien's class II. Under the header ***Derived verbs*** the possible derived forms are entered.[19] By searching for the presence or absence of one of these forms it is possible to search very specifically for verbs with certain derivational

[19] The field called 'secondary suffixed' contains verbs that I call 'extra derived' (cf. Table 5.2) in this study, to avoid confusion with the well-known term 'secondary imperfective' which is in use for derived imperfectives.

relationships (e.g. prefixed suffixed verbs of which no extra derived partner is attested like *ostavljati* 'leave', of which no **ostavljavati* is attested). The header ***Meaning*** contains the English and Dutch equivalents of the OCS verb and under the header ***Other*** there is a field for remarks and an option to indicate a problematic entry that should either be looked at again, or that remains problematic for some reason. The latter category contains a small number of problematic cases like *otъvě* 'answer', which occurs only as an 3rd person aorist and cannot be related to similar paradigms like *otъveštati - otъveštavati* 'answer', or *?bivati* 'kill' which occurs only once as PresAP *bivajǫštiixъ* 'those who kill' (*Assemanianus*, Matthew 10:28, Kurz 1955: 249 fn.), but is probably a scribal error for *ubivajǫštiixъ*, a form of the derived verb *ubivati* 'kill'.

5.3 Classification of verbs on morphological grounds

By combining various characteristics in a query, the database can be used to group verbs together according to relevant morphological characteristics. An example of a query in the database is the search for unprefixed verbs that have a derived partner and neither belong to Leskien's class 2 nor are VOM: Derivational category: *Simplex* (incl) + Verb of motion: *no* (incl) + Simplex Leskien cat.: *Class 2* (excl) + Suffixed unprefixed: *N/A* (excl) + problematic: *No* (incl).[20] This results in a group of simplex verbs like *aviti sę* 'appear', *dati* 'give', *pasti* 'fall' and *jęti* 'take', that I expect to show perfective behaviour in the analysis in Chapter 7.

The core groups for this study are the groups that show typical aspectual morphology, and the one group in which this morphology is completely absent. In other words, the groups that are expected to show typical perfective and imperfective behaviour and an anaspectual group. For the sake of convenience I will, maybe a bit anachronistically and partly premature, refer to the prefixed base verbs in this group as 'perfective prefixed' (e.g. *ostaviti* 'leave' and to the suffixed verbs as 'imperfective prefixed' (*ostavljati* 'leave') verbs. Similarly, I will henceforth call the unprefixed base verbs 'perfective unprefixed' (*aviti sę* 'appear') verbs and their derived partners 'imperfective unprefixed' verbs (*avljati sę* 'appear'). Verbs in which derivational aspect morphology is absent, hence verbs that are not prefixed or suffixed and have no attested derivational partner, are categorized as 'anaspectual' (*viděti* 'see'). Table 5.3 contains the core groups with the number of verbs per group, the total number of attestations and a

[20] The search allows for the explicit inclusion (incl) or exclusion (excl) of certain categories. By excluding 'Suffixed unprefixed' in this query, I get only the simplex verbs that have a derived partner attested.

prototypical verb that I will use throughout this study to refer to the particular group it belongs to.

Name of the group	*Verbs*	*Attestations*
Perfective prefixed (e.g. *ostavitĭ*)	377	15,803
Imperfective prefixed (e.g. *ostavljatĭ*)	455	3,041
Perfective unprefixed (e.g. *aviti sę*)	44	2,929
Imperfective unprefixed (e.g. *avljati sę*)	49	613
Anaspectual (e.g. *vidětĭ*)	521	26,683

Table 5.3 Core verb groups for analysis

Except for these core groups, which should provide a basic picture of the aspect system in OCS, there are many other smaller and larger groups that will be included in the analysis. These groups can reveal more about the role of the various morphological means (e.g. prefixes, the suffix *-nǫti*, *-ne-*, or the existence of extra derived verbs) and the position in the aspect system of verbs that do not show the obvious aspectual morphological opposition, like VOMs and Leskien class II verbs and their partners.

Name of the group	*Verbs*	*Attestations*
Prefixed without attested suffixed (e.g. *ubojati sę*)	899	7,097
Prefixed determinate VOM with partner (e.g. *vъniti*)	57	4,977
Prefixed indeterminate VOM (e.g. *vъxoditĭ*)	59	596
Leskien II prefixed with partner (e.g. *pomanǫtĭ*)	42	1,225
Leskien II unprefixed with partner (e.g. *kanǫtĭ*)	13	354
Prefixed partner Leskien II (e.g. *pomajatĭ*)	18	123
Unprefixed partner Leskien II (e.g. *kapatĭ*)	16	75
Determinate VOM (e.g. *itĭ*)	14	1,627
Indeterminate VOM (e.g. *xoditĭ*)	11	456
Prefixed with two partners (e.g. *sъpovědětĭ*)[21]	60	3,084
Suffixed prefixed with other suffixed (e.g. *sъpovědati*)	21	460
Suffixed prefixed, other suffixed (e.g. *sъpovědovatĭ*)	25	109
byti 'be'	1	7,827

Table 5.4 Additional groups for analysis[22]

[21] In this group there are also verbs of the same 'family' of which no secondary derived verb is attested, like *zapovědĕti* 'order' of which no **zapovědovati* is attested (while in the same family *ispovědovati* 'confess', *povědovati* 'proclaim', *propovědovati* 'preach', *sъpovědovati* 'announce' are attested).

[22] The term 'additional groups' is not meant to imply that these are small groups. However, they are not prototypically perfective, imperfective or anaspectual, but should rather be compared to those prototypical groups.

Some of the groups do not contain many verbs and attestations. Such groups are therefore maybe less interesting for the analysis, because the profile can be strongly influenced by one or two larger verbs. For example, the *Unprefixed partner Leskien II* is a rather small group in which *drъzati* 'be brave' and *dvidzati* 'move' account for almost half of the attestations. However, the group *Leskien II unprefixed with partner* is a very interesting group and I have chosen to always include the so-called 'partner groups', even if it is a small group, to get a picture that is as complete as possible.[23]

Finally, in Chapter 10, I will separately discuss the verb families with one infinitive stem and two present tense stems (e.g. *sъkazati, sъkažǫ - sъkazati, sъkazajǫ* 'clarify, announce'); their specific morphological make-up does not allow for inclusion in the general analysis.

5.4 Concluding remarks

The classification as described in the preceding section will form the basis for the analyses in the following chapters. These are the groups of which I will compare the grammatical profiles (Chapter 7) and of which I will subject attestations to a semantic analysis (Chapter 8 and 9). In the remainder of this study I will use the designations for the groups as given above. In most cases, I will also mention the prototypical verb, hence 'perfective prefixed (*ostavitь*)', 'determinate VOM (*iti*)' etc.

[23] The Leskien class II family is an interesting family because there is pair forming, but the suffixed verb is thought to be the perfective partner, unlike with the suffix *-ati, -aje-* that is used to derive imperfective verbs (cf. section 9.2).