

Verbal aspect in Old Church Slavonic Kamphuis, J.

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4 VARIOUS APPROACHES TO DETERMINING ASPECT IN OCS

4.0 Introduction

In order to establish the functions of derivational aspect in OCS, it is necessary to first establish which verbs express (which) aspect. This is a step one rarely sees in the study of aspect in modern Slavic languages, where the aspect of a verb is often taken as a given, or as a starting point.¹ For example, scholars studying the Russian verbal aspect system "know" that the verbs like est³pf eat', javljat'sja¹pf appear', kljast'sja¹pf curse' ležat³pf 'lie', s"edat³pf eat up', vesti³pf 'lead' and videt⁴pf 'see' are all imperfective verbs, while javit'sja¹pf 'appear', sojtīpf 'descend', or s"est¹pf eat up' are perfective verbs.² And if one is not sure, the aspect can be looked up in any dictionary. However, for OCS the situation is more complicated. Compare the categorization of OCS equivalents of the above mentioned verbs in the three studies that I will discuss below:

¹An exception is the study by Janda & Lyashevskaya (2011) in which the grammatical profile of verbs is used to determine to which aspect they belong. I will further review this method of establishing aspect when discussing the study by Eckhoff & Janda (2014).

² I have handpicked these verbs to illustrate my point. My main criterion: the verb has a cognate in OCS which occurs in the three studies that I discuss.

| Author | Aspect | | | | |
|---------------------------|----------|-------------|--------|---------------|--|
| Dostál (1954) | Pf | Pf/Ipf | Ipf/Pf | Ipf | |
| | aviti sę | klęti sę | vesti | avljati sę | |
| | sъněsti | | jasti | sъnědati | |
| | sъniti | | , | ležati | |
| Amse-de Jong (1974) | Pf | Anaspectual | | Ipf | |
| | aviti sę | vest | i | avljati sę | |
| | sъněsti | jasti | į | sъnědati | |
| | | klęti | i sę | | |
| | | leža | • | | |
| | | sъni | iti | | |
| Eckhoff & Janda (2014) | Pf | | | Ipf | |
| | aviti sę | | | avljati sę | |
| | sъněsti | | | jasti | |
| | sъniti | | | , sъnědati | |
| | vesti | | | klęti sę | |
| | | | | ležati | |

Table 4.1 Various categorizations of OCS verbs³

As the table shows, Dostál uses four different categories to categorize aspect, Amse-de Jong three and Eckhoff & Janda only two. The relationship between the three different categorizations is however not immediately clear. For example, in the anaspectual category of Amse-de Jong there are more verbs than in both biaspectual categories by Dostál. And the categorization by Eckhoff & Janda cannot easily be deduced from the other two either. Moreover, if one resorts to a dictionary for a definite answer, the results differ again from all of the above. For example, the authoritative dictionary *Slovník jazyka staroslověnského* (Kurz 1958-1994) categorizes *klęti sę* 'curse' as imperfective (as opposed to Dostál), but *vesti* 'lead' as both perfective and imperfective (as opposed to Amse-de Jong and Eckhoff & Janda). And although the *Staroslavjanskij slovar*' (Cejtlin, Večerka, & Blagova 1994) categorizes the verbs in the table similarly to the SJS, in other cases the two dictionaries also differ in their assessment of the aspect of verbs.⁴

³ The various authors use different terminology, which I will discuss below.

⁴I have not systematically compared both dictionaries, but a number of differences could be found quite easily. For example, *Slovník jazyka staroslověnského* categorizes *piti* 'drink' as ipf/?pf, while *Staroslavjanskij slovar*'categorizes it as ipf/pf and *Slovník jazyka staroslověnského* categorizes *soniskati* 'acquire' as pf/ipf while *Staroslavjanskij slovar*' calls it ipf. Thus, the answers offered by the various dictionaries are not conclusive either. This should not be surprising, given the fact that specialized studies do not arrive at identical conclusions either.

In the discussion below I will show that the different categorizations in the three studies are the result of different methods and that the different methods reveal different perspectives on aspect. Dostál (1954) uses a combination of semantic analysis and morphological categorization to establish the aspect of individual verb attestations. His approach is the most fine-grained, since he concentrates on individual attestations and deduces the aspect of a verb from his analysis of these attestations. Amse-de Jong (1974) uses morphological criteria and categorizes verbs based on those morphological criteria. Her approach is the most coarse-grained, as it takes groups of verbs as starting point. Finally, there is the approach by Eckhoff & Janda (2014) who take the grammatical profile of individual verbs, as their starting point. In their approach, aspect is a characteristic of the verb, not of individual verb forms as in Dostál's approach. However, because they ignore the morphological markers of aspect in their study, aspect emerges as a continuum on which individual verbs take up a position, rather than as a system in which two (or more) groups are clearly distinct from each other (cf. the continuum of terminativity in Chapter 2). They regard verbs on the one side of the continuum as perfective and verbs on the other side as imperfective. However, verbs that are posited somewhere in between pose a problem.

Below I will first discuss the terms 'anaspectual' and 'biaspectual', since these are central to two of the approaches in this chapter. Moreover, anaspectual verbs form an important category in my own verb classification in Chapter 5. Subsequently, I will discuss the three approaches to categorizing verbs and argue why I prefer the morphological approach of Amse-de Jong, supplemented by the method of grammatical profiling that Eckhoff & Janda use and a semantic analysis of individual attestations as performed by Dostál. I will not discuss the approaches in order of appearance of the studies, but from the most fine-grained to the most coarse-grained, starting with Dostál and ending with Amse-de Jong, since the latter is the approach I will continue to build on in the following chapters.

4.1 Anaspectual verbs

In Chapter 2 I already used the term 'anaspectual' a few times. It is not a broadly used term, but I believe it to be of great importance for a good understanding of the verbal aspect system in OCS. I will first give my own definition of anaspectuality and subsequently discuss the differences with the similar term 'biaspectual' as well as the use of 'anaspectual' by various authors.

4.1.1 Definition of anaspectual

In the present study I will regard verbs without morphological markers of aspect (suffixes, prefixes or derived partners, cf. Chapter 5) as anaspectual verbs. My line of reasoning is as follows: the grammatical aspect opposition between perfective and imperfective verbs is a form-meaning category (cf. section 2.2), in which the expression of either perfectivity or imperfectivity (meaning) is connected to certain morphological markers (form). When the form is absent in the verb, the meaning is not expressed by the verb. Hence the verb is anaspectual. In OCS this concerns a rather large group of 521 verbs, out of a total of 2,883 verbs. These 521 anaspectual verbs have a total of 26,683 attestations in my database, which is more than 30% of all attestations (cf. Chapter 5). This group will therefore play a major role in the present study and discerning anaspectual verbs next to perfective and imperfective verbs, is absolutely necessary for a good understanding of the OCS verbal aspect system.

A major argument in this study is that the verbs that I classify as anaspectual based on the absence of morphological markers of aspect also share a semantic feature: they are not inherently terminative (cf. Chapter 8). Verbs with aspectual morphology, on the other hand, always express an inherent boundary and are thus terminative. This fits with the definition of perfective aspect as expressing the attainment of an inherent boundary and imperfective aspect as defocusing the inherent boundary. From this definition it also follows that inherently aterminative verbs are anaspectual.

4.1.2 Anaspectual versus biaspectual

In Table 4.1 the term 'anaspectual' can be found in the categorization by Amse-de Jong. Dostál (1954) does not use this term; he uses 'biaspectual', and although many of the verbs that according to Dostál are biaspectual, and would be anaspectual in Amse-de Jong's approach (as they are in mine), the terms are not synonymous, and cover different verbs as o also shows. The different terminology turns out to be not merely a question of terminology, but implicates different views on aspect, or on the nature of the aspect system in a language.

⁵ In addition to this core group of anaspectual verbs, there are some verbs that can be regarded as anaspectual based on their grammatical profile and functional similarity with anaspectual verbs, as I will demonstrate in Chapters 7 and 9, making the group even larger.

⁶ Amse-de Jong (1974: 51 ff.) herself uses 'non-aspectual' for verbs 'without aspect' (ibidem: 126). The terms 'non-aspectual', 'anaspectual' and similar terms (e.g. the German term 'aspektindifferent', used by Birnbaum 1958) are synonymous and indicate that a verb does not express aspect.

Bermel (1997: 9) also discusses the difference between the two terms and defines anaspectual verbs as follows: "they lack evidence of restriction to a particular set of aspectual functions and usages". According to Bermel anaspectual verbs are generally more flexible in their application, which is something I will demonstrate for OCS anaspectual verbs in Chapters 7 and 8 as well. Biaspectual verbs are also "not restricted to a certain subset of functions and usages" but "the same verb or predicate functions in some places clearly like a perfective and in other places clearly like an imperfective" (ibidem). Bermel remarks that biaspectuality is easiest to posit for marginal verbs in a system in which most verbs express aspect, like Modern Russian. Anaspectuality is easier to posit in a system in which there is a considerable group of verbs that do not partake in the perfective-imperfective opposition, like Old Russian. Růžička already noted that the situation in Old Russian differs from the Modern Russian situation in this respect. He remarks:

"Es gibt zweifellos noch viel mehr Verben, die hinsichtlich des Aspekts im frühen Altrussischen als merkmallos bezeichnet werden können. [...] Wenn sich bei Verben wie tvoriti, ljubiti, služiti, knjažiti, sěděti, stojati, byti (esmb), obwohl sie zu diesen Bereichen gehören, nur imperfektive Verwendung nachweisen läßt, ist das mehr Sache der lexikalischen Bedeutung als des Aspekts." (Růžička 1957: 100).

However, since Růžička eventually uses the same method as Dostál, he is not able to identify exactly which verbs fall into this category, for reasons that will become clear in the discussion of Dostál's approach.

Other scholars, like Forsyth (1972) and Timberlake (2004) suggest that in Modern Russian as well, verbs that are normally considered to be biaspectual (e.g. organizovat pt/ipf 'organize') do not express aspect at all and are, in fact, anaspectual, since the aspectual interpretation of their various uses depends completely on the context, not on the inherent characteristics of the verb. Since Modern Russian is the type of system that Bermel calls 'highly aspectual', this line of reasoning by Forsyth and Timberlake shows that the difference in terminology is not just related to the kind of system a verb occurs in, but also to the approach of derivational aspect.

⁷ Note that all verbs that Růžička mentions here are aterminative verbs, which fits with the idea discussed in Chapter 2 that Slavic-style aspect revolves around terminative verbs. It is not entirely clear to me whether "hinsichtlich des Aspekts … merkmallos" should be interpreted as anaspectual or as 'having no morphological markers of aspect', but both interpretations would result in a statement I could agree with, as the lack of morphological marker of aspect indicates anaspectuality (cf. Chapters 5, 7 and 8; I transcribed the Cyrillic words in the quotation.)

In a semantic approach, in which certain usages are seen as typically perfective or imperfective, verbs that occur in both types of usages would be considered biaspectual.⁸ This is the approach Dostál takes. If one takes this approach and still wants to retain the position that aspect is a characteristic of the verb and not of individual attestations of the same verb, it is possible to see biaspectual verbs as a homophonous "pair", in which the aspect opposition is not morphologically expressed (cf. Janda 2007b: 89).

In an approach that takes morphological characteristics as a starting point, as adopted by Amse-de Jong (1974) and by myself in the present study, the presence or absence of certain morphological markers is decisive for determining the aspect of a verb. In such an approach there can be discussion about the markers that are used in the expression of aspect (e.g. is a prefix a marker of perfectivity?), but the basic assumption is that verbs with the same morphological markers express the same aspect, independent of the context or verb form they occur in (and until proven otherwise, cf. Chapters 8 and 9). The absence of morphological markers implies anaspectuality and not biaspectuality, since the verb does not express aspect.

In the following section, containing a discussion of Dostál's study, I will show why taking a purely semantic approach to determine the aspect of a verb is problematic, which makes the use of the concept 'biaspectual' problematic as well.

4.2 Dostál 1954

The first comprehensive overview of verbal aspect in OCS is *Studie o vidovém systému v staroslověnštině* by Antonín Dostál (1954). Dostál sets himself the task of determining the aspect of each individual verb in OCS (1954: 56). He categorizes the verbs based on two grounds: morphological characteristics and semantic characteristics.

The overall order in which Dostál treats the OCS verbs is based on morphological characteristics. He starts out with simplicia (e.g. aviti sę 'appear', jasti 'eat', ležati 'lie' and pasti 'fall'), subsequently treating the prefixed formations of those simplicia, (e.g. nadoležati 'lie upon', obaviti 'reveal', otopasti 'fall off' and soněsti 'eat up') and finally suffixed verbs, which

⁸ The well-known test proposed by Maslov (1948) to establish whether two Russian verbs form an aspect pair by rephrasing a past tense utterance with a perfective verb into a historical present with an imperfective verb is also based on the close relationship between aspect and usage/context, more precisely, on the incompatibility of the Modern Russian perfective aspect with the historical present.

he calls 'iterativa',9 both unprefixed (avljati se 'appear', padati 'fall') and prefixed (obavljati 'reveal', otopadati 'fall' and sonedati 'eat up'). Within the simplex groups Dostál uses a semantically based categorization, which he also uses as a basis in his discussion of the prefixed formations of these verbs. Dostál distinguishes the following simplex categories: perfective simplicia, biaspectual simplicia (more perfective), biaspectual simplicia (more imperfective) and imperfective simplicia. Only the suffixed verbs, Dostál's iterativa, both prefixed and unprefixed, are not semantically subdivided.

The semantic categories are based on the way Dostál analyses individual examples of verbs with regard to the aspect they express. In case a verb shows examples of both imperfective and perfective usage, the verb is biaspectual and depending on the ratio perfective: imperfective, the verb is either 'more perfective' or 'more imperfective'.¹⁰

4.2.1 Dostál's criteria to establish aspect

Since Dostál bases his categorization of verbs within the morphological categories on the semantics of individual attestations, he needs a semantic definition of aspect to establish criteria for the categorization. Dostál defines perfective aspect as "a total, complete view of the event from the outside" (Dostál 1954: 15), which is similar to the definition by Comrie (1976: 16) as discussed in sections 2.2 and 2.2.1. The imperfective aspect is defined as the opposite of the perfective aspect and expresses the lack of totality (*celivost*) or completeness (*ucelenost*) (ibidem).

The criteria based on these definitions, by which Dostál differentiates between perfective and imperfective examples, are far from clear. For one, the difference between Slavic-style totality and Romance-style totality is not made. One important criterion for distinguishing perfective verbs that Dostál mentions is the use of the perfective present to express futurity (Dostál 1954: 45), which is widespread throughout the modern Slavic languages, except for BCS (Dostál does not mention Bulgarian and Macedonian here). In other words: when a present tense form expresses futurity, the form can be regarded as perfective. However, Dostál acknowledges that even this important criterion is not absolute. Other criteria, like the existence of derived imperfective verbs to prove the perfectivity of the base verb, or the question what are you doing there? to prove imperfectivity also turn out to not be absolute (ibidem: 45-46). He concludes that there is no single criterion

⁹ The term 'iterativa' is used for verbs with an aspectual suffix (-(j/v)ati, -(j/v)aje-, cf. Chapter 5), but is not used by Dostál to imply that these verbs always express iterativity. Iterative verbs are not treated as a separate aspect group, but belong to the imperfective verbs (Dostál 1954: 18-20) ¹⁰ Within each semantic category, the verbs are discussed in order of their Leskien's class (cf. Leskien 1969, see also Chapter 5), starting with verbs from class I and ending with class V.

that works under all circumstances (ibidem: 54). For present forms, the future meaning could indicate perfectivity; past perfectives are compatible with the question did it happen at once, fast, suddenly, while events that can be described with adverbs like for a long time, permanently or slowly are imperfective (ibidem: 55).11 His struggle for clear criteria shows that it is difficult to arrive at a categorization of aspect by relying on usages/contexts to establish aspect only. This also emerged in the discussion of grammatical aspect in Chapter 2: the meaning and usage of aspect differ per language, even in closely related Slavic languages, which makes it impossible to use a general definition, or standard criteria, to distinguish between perfective and imperfective aspect in different languages. A detailed description of the functioning of aspect in a particular language is not a precondition for the study of aspect, but rather the result of such a study. Interestingly, even in Modern Czech, Dostál's mother tongue, there are examples of a combination of quickly/at once with imperfective aspect, showing the difficulties of such semantic criteria to establish the aspect of a verb:

(24) Potom do něho kousl^{pf}, odporem zkřivil^{pf} tvář a *vracel*^{pf} jej <u>rychle</u> Matějovi.

Then he bit into it, twisted his face with disgust and *returned* [it] to Matěj <u>quickly</u>. [Cz; Ivančev 1961: 83; Drda]

Regarding the morphological expression of verbal aspect, the only clear criterion that can be distilled from Dostál's discussion (Dostál 1954: 18-24) is that derived verbs, 'iterativa' in his terminology, always express imperfective aspect.

Now that I have very concisely discussed Dostál's approach, I will turn to the actual analysis of some of the OCS examples given by Dostál.

4.2.2 Dostál's categorization

The best way of understanding the semantic principles of the aspectual categorization by Dostál, is by concentrating on the biaspectual verbs in which some attestations are regarded as imperfective and others perfective. This is on the one hand, because it is precisely these verbs where aspect appears to be more a characteristic of individual attestations than of the entire verbs. On the other hand, this category is useful because Dostál describes these verbs extensively and with many examples, more so than he does for verbs that he regards as completely perfective or completely

[&]quot;The criteria (or tests) show the difficulty of approaching aspect from the semantic side in a language that is no longer spoken. One could ask the question *Did it happen at once?*, but who will answer the question? A large part of the analysis depends on the investigator's intuition in that case.

imperfective. An example of such a biaspectual verb is the verb *klęti sę* 'curse'. According to Dostál, this verb is biaspectual (more perfective), indicating that he has found more perfective attestations than imperfective. Dostál (1954: 107) considers the following example of a present tense of *klęti sę* to express imperfective aspect:

(25) klъnyi sę oltaremъ *klъnetъ*^{pres} *sę* imъ i sjoštiimi vrъхu ego [*M*] whoever swears by the altar, *swears* both by the altar and by everything on it (Matthew 23:20)

In this case, the OCS present tense translates a Greek present tense, which can be considered to express the Greek imperfective aspect (cf. Chapter 2), which is probably why Dostál considers this an example in which *klęti sę* expresses imperfective aspect as well. There is, however, still some doubt in his mind as he translates *kloneto sę* with Czech *zaklíná*^{ipf} *se*, but also adds in parentheses (*zaklne*^{pf} *se*?).¹²

An example of an allegedly perfective attestation is the following in which the OCS present tense form translates a Greek future tense (Dostál 1954: 107):

(26) ne vъ lъžǫ *klъneši*^{pres} se . vъzdasi^{pres} že g[ospodo]vi klętvy tvoję [Z, M, Sk] you *shall* not *make* false *vows*, but shall fulfil your vows to the Lord (Matthew 5:33)

In this example it is the Greek future form ἐπιορκήσεις 'you shall make false vows' that convinces Dostál of the perfectivity of the OCS form kloneši sę. And since Dostál is now convinced of the perfectivity of this example, he also chooses a perfective interpretation, namely kloneši sę as a total/complete event. Therefore, he translates this OCS example with a perfective Czech verb nezapřisáhneš sepf. He notes that his translation of the OCS example differs from the Modern Czech Bible translation that he uses, which reads nebudeš klnoutipf. ¹³ In this case Dostál attaches great importance to the Greek original, which has a future tense. He might equally have used one of his other tests, like the 'control questions' for the imperfective aspect, whether the event can be described by the adverb trvale 'permanently', to which a positive answer seems possible in case of example (26). Hence, his criteria to

¹² The translation with the perfective *zaklne*^{Ff} *se* could maybe be seen as an instantiation of 'singularization' or 'exemplary use', the use of one occasion of an event to exemplify a recurring phenomenon (cf. section 8.1.2.1, for Russian cf. Forsyth 1970: 173 ff.).

¹³ Modern Czech (like other Slavic languages in which perfective present expresses perfective futurity, e.g. Russian) uses an analytic future with imperfective verbs, a construction with a present tense form (*budu*, *budeš*, *bude* etc.) of the verb *být* 'be' and an imperfective infinitive. In OCS there are similar periphrastic constructions, but they do not occur as frequently as they do in Modern Czech, and often carry a modal connotation (cf. Birnbaum 1958).

establish aspect are not mutually exclusive, which is in line with the idea that grammatical aspect adds to the meaning of an utterance and cannot simply be deduced from it. In both cases, examples (25) and (26), the translation in Czech allows either a perfective or an imperfective Czech equivalent, depending on the way the translator intends to construe the event. This is a recurring problem, as the following example of an allegedly perfective example of *jasti* 'eat' and *piti* 'drink' shows:

(27) ne p'cěte sę ubo gl[agol]ošte . čьto *ěmъ*^{pres} li čьto *piemъ*^{pres} . li čimь odeždemъ sę^{pres} [*Z, M, A, Sk*]¹⁴ do not worry then, saying, "What *will* we *eat*?" or "What *will* we *drink*?" or "What will we wear for clothing?" (Matthew 6:31)

The Greek original has subjunctive aorist forms, which have a future meaning here, which is probably the reason Dostál sees these OCS forms as perfective. Dostál (1954: 126, 142) translates the OCS example with Modern Czech future forms, but even though he considers this example to express typical perfective usage, he gives a first translation with imperfective forms: Co budeme jísti^{pf} a co budeme píti^{pf}, which seems to catch the essence of both the Greek and the OCS well. However, to account for his analysis of these verbs expressing perfective aspect in this context, he adds the following alternative translation with perfective verbs: čeho se najíme^{pf} a napijeme^{pf}, which apparently is not his preferred translation. Again, Dostál's uncertainty about the rendering of the OCS example in Modern Czech, indicates that his approach, in which the context determines the aspect of an individual attestation, is problematic.

Examples of derived verbs translating Greek future forms complicate the picture even further. Compare the following two derived present tense forms, translating the Greek future forms $\pi \alpha \rho \alpha \lambda \eta \phi \theta \dot{\eta} \sigma \epsilon \tau \alpha \iota$ 'will be taken' and $\dot{\alpha} \phi \epsilon \theta \dot{\eta} \sigma \epsilon \tau \alpha \iota$ 'will be left':

(28) vъ tǫ noštь bǫdete dъva . na loži edinomъ . edinъ *poemleto*^{pres} *sę* a drugy *ostavlěeto*^{pres} [Z, M] on that night there will be two in one bed; one *will be taken* and the other *will be left* (Luke 17:34)

¹⁴I will disregard *odeždemo sę* 'will we wear for clothing' for now. It concerns a prefixed verb *oděti* 'dress' that has a derived partner (two in fact: *odějati* and *oděvatí*) and thus fits with the idea of 'perfective' present forms in OCS being used to indicate futurity. It is interesting, though, that *jasti* 'eat' and *piti* 'drink' are used alongside *oděti* in the same utterance, translating similar Greek forms. However, in my opinion this does not make *jasti* and *piti* perfective in this example. On the contrary, such examples indicate that future reference is not exclusively tied to perfective aspect (cf. also example 28).

Dostál discusses these particular examples of *poimati* 'take' and *ostavljati* 'leave' because they translate Greek future forms. He concludes that these OCS present tense forms express a generalized event $(d\check{e}j\ obvykl\acute{y})$ and considers the verbs to express imperfective aspect (ibidem: 560, 576). I agree with Dostál in his assessment of this example, but examples like the above demonstrate that using future meaning as a test case for aspect is problematic. The choice of aspect depends on a number of factors, of which the future tense in the Greek original is important, but not decisive. Dostál is aware of this fact, but it does not withhold him from invoking future meaning as a cause for a perfective interpretation of OCS verbs in cases where aspectual morphology is absent, for want of better criteria.

Another possible reason for Dostál to regard verbs like *kleti se* as biaspectual (more perfective) is that it rather frequently occurs in aorist form; almost 23% of the attested forms is an aorist.15 However, such considerations are not made explicit and it is not clear whether and how these facts have influenced his assessment of individual attestations or, for that matter, of the verb kleti se. Furthermore, Dostál does not consider the OCS agrist to automatically express perfective aspect. He categorizes 40% of all aorist attestations as imperfective (ibidem: 600), as also becomes clear from his discussion of the verbs jasti 'eat' and piti 'drink' (ibidem: 126, 142). On the other hand, his discussion of the varying distribution of verb forms between the semantic categories (e.g. Dostál 1954: 247) shows that he considers the forms in which a verb is attested to be of relevance for the aspect of the verb. It may have influenced his general opinion of kleti se that the verb occurs frequently in the agrist and past participles, forms that are typical of perfective verbs (ibidem). The varying relative distributions of verb forms, the 'grammatical profiles' of verbs, are the basis for the analysis by Eckhoff & Janda (2014), which I will discuss below in section 4.3. They also form the basis for the statistical analysis in Chapter 7. For Dostál, though, these distributions seem to function more as circumstantial evidence for his categorization.

The difficulty of using the context and the Greek original as a diagnostic tool for the assessment of the aspect of an individual verb attestation in OCS, also emerges in the following example:

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(29) i prědastъ is[us]a tepv^{PastAP \, I}[Z] i prědastъ is[us]a bivv^{PastAP \, I}[M] and after \ having \ Jesus \ scourged, he handed Him \ over \ (Mark \ 15:15)
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¹⁵ Compare this to the biaspectual (more imperfective) verbs *jasti* 'eat' with 12% aorist attestations and *piti* 'drink' with 6%, or the derived verb *ostavljati* 'leave' without aorist attestations.

In this case the Greek original has an agrist participle, which in OCS is mostly translated with a PastAPI. Dostál (1954: 125) argues that the example in the codex Zographensis convincingly shows perfective use of the OCS verb teti 'beat'. The fact that teps in this example is considered to be perfective, results in Dostál's interpretation give a wound (dáti^{pf} ránu) as opposed to give wounds (dávatipf rány), which would be the meaning of teti in its imperfective attestations. The form bivo from the verb biti 'beat', on the other hand, that can be found in the translation of this text in the codex Marianus, Dostál considers to be an imperfective form. According to Dostál (ibidem: 168), all attestations of the verb biti clearly show that we are dealing with an imperfective simplex. That means that in this case, the OCS examples are interpreted differently, even though the Greek original, the context and the OCS verb form are the same. It is not clear which criteria Dostál uses to come to a different conclusion for these attestations. It may be that the grammatical profile of the verb was decisive in his analysis, but even though the profiles show a difference, ¹⁶ a typical Slavic-style perfective interpretation of tepto does not seem called for by the context. This example shows that the criteria used by Dostál lead to categorization of similar verbs into different categories. This criticism of Dostál's method has already been expressed by Růžička (1957: 99), who concentrates his argument on the classification of vesti 'lead' as biaspectual and *nesti* 'carry' as imperfective.

Even though Dostál's work without doubt is a valuable, and the most comprehensive contribution to the study of verbal aspect in OCS, and the discussion above, rather unfairly, concentrates only on the problematic side of his analysis, the examples show that his semantic approach comes with a number of issues. The criteria he uses for categorizing are not mutually exclusive, leaving Dostál unsure of the aspect in examples (25) to (27), as his translations into Modern Czech show. Moreover, the criteria cannot be implemented consistently, as becomes apparent from example (28) with present tense forms of derived verbs translating a Greek future tense, which Dostál still regards as imperfective. Finally, similar cases are not treated equally and similar verbs end up in different categories because of the difficulty to consistently categorize, as example (29) shows. The examples above all show that it is difficult, impossible even, to deduce the aspect of an OCS verb based only on semantic intuitions regarding the context, the Greek

¹⁶ The verb *biti* 'beat' has 115 attestations of which 19% consist of aorists and past participles, while *teti* 'beat' has only 7 attestations, of which about 71% are an aorist or past participles. Here, another issue with Dostál's categorization emerges: he does not seem to take into account the size of the sample per verb. For example, he considers *bezočbstvovati* 'dishonour' to be biaspectual (more imperfective), based on two examples only (Dostál 1954: 130), one perfective and one imperfective. Eckhoff & Janda (2014) use a threshold of 20 attestations for a verb profile to be considered in the analysis, to deal with this issue.

original, or the characteristics of the OCS verb form. It is, as Amse-de Jong (1974: 36) puts it: "clear that in the substance, or the nature of things, there is usually no particular necessity for making one choice rather than the other", as it is the speaker that "expresses a certain view of objective reality". The choice of aspect thus is a way of adding a certain view to the utterance and often a context allows either choice. In Chapter 8 I will demonstrate how examples like the ones discussed above are accounted for in my approach.

Below I will discuss the approach by Eckhoff & Janda, which can be seen as a reaction to Dostál's approach, generally supporting Dostál's resulting categorization, but relying on a different method of categorizing the verbs.

4.3 Eckhoff & Janda (2014)

In their article "Grammatical profiles and aspect in Old Church Slavonic" Eckhoff & Janda take an agnostic stance regarding the state of the aspect system in OCS (Eckhoff & Janda 2014: 232), hence they do not start out with definitions of aspect or semantic criteria for establishing aspect. The questions they intend to answer are: "Was there an aspectual distinction between imperfective and perfective verbs in Old Church Slavonic? If so, was the aspectual distinction in Old Church Slavonic different from that in Modern Russian? If so, how and to what extent was it different?" (ibidem). The method they use to establish the existence of a derivational aspect opposition is grammatical profiling. Before going into the study of Eckhoff & Janda, I will first briefly discuss the background of the method.

4.3.1 Grammatical profiling

Janda & Lyashevskaya (2011) developed the method of grammatical profiling inspired by the behavioural profiling method as developed by Divjak & Gries (e.g. Divjak & Gries 2006). In short, behavioural profiling can be described as a method for distinguishing between meanings based on patterns of co-occurrence of certain linguistic parameters (syntactic, semantic, morphological, and lexical) with the linguistic elements that are studied. A famous quote by Firth (1957: 11) can be regarded as the basic idea behind the approach: "You shall know a word by the company it keeps". Harris (1954: 156) describes the approach more specifically:

"If we consider words or morphemes A and B to be more different in meaning than A and C, then we will often find that the distributions of A and B are more different than the distributions of A and C."

The method of behavioural profiling is often used in studies of synonymy. Divjak & Gries (2006), for example, study near-synonym 'verbs of trying' in Russian, comparing the co-occurrence of these verbs with a total of 87 different parameters. Their statistical analysis shows that the 9 verbs of trying

that they study form three main clusters, based on similarity of the profiles. These clusters can subsequently be compared with the traditional distinctions made within the group of verbs of trying.

Grammatical profiling is a specialized version of behavioural profiling, since it uses only morphological parameters. In case of verbal aspect, the grammatical profile is established by the relative distribution of the verb forms that the verb occurs in (cf. section 4.3.1.1). Janda & Lyashevskaya (2011) show that in Russian the grammatical profile differs between imperfective and perfective verbs, irrespective of whether it concerns a pair formed by suffixation like sostavit pf - sostavljat pf 'compose' or a pair formed by prefixation, like pisat'ipf - napisat'pf write (down)'. 17 Their results show that the aspect of a Russian verb puts a constraint on the forms it occurs in. Janda & Lyashevskaya (2011: 732) find, for example, that in Russian imperfective verbs occur more frequently in the present tense while perfective verbs are more often attested in the past tense. It is important to note that the restrictions they demonstrate are relative, which shows why it is so difficult to work the other way around, as Dostál does. If one starts out from a particular Russian example, the fact that it concerns a past tense only means that it is slightly more likely to be a perfective verb, but it would be a bad test to establish the aspect of a verb (or an individual attestation of the verb in case of Dostál's study), given the large margin of error.

The method of grammatical profiling can easily be applied to older stages of Slavic. In fact, the method is ideal for languages that are no longer spoken, where no native speaker judgment is available, since it relies on parameters that can be objectively established in the extant manuscripts. Bermel (1997: 209) hints at the possibility of comparing inflectional patterns to establish whether aspect is present as a grammatical category in Old Russian and Eckhoff & Janda (2014) employ this method for OCS in their study "Grammatical profiles and Aspect in Old Church Slavonic". Unlike Dostál, who uses a predefined semantic notion of aspect as a starting point for his categorization, they take an agnostic stance as to the existence of aspect in OCS. They hypothesize that "[i]f there is an aspectual distinction between imperfective and perfective verbs in Old Church Slavonic, it can be discovered on the basis of the grammatical profiles of verbs". I will first present the concept of a 'grammatical profile' in a little more detail, and subsequently discuss the approach by Eckhoff & Janda.

¹⁷ Janda & Lyashevskaya (2011) do not analyse verbs that are not 'paired', nor do they include participles and gerunds in their study. It would be interesting to see what inclusion of other kinds of verbs and disregarded verb forms would do to the analysis.

4.3.1.1 The grammatical profile of an OCS verb

If the verb *byti* 'be' is left out of the equation, an OCS verb can be attested in a maximum of 11 verb forms.¹⁸ These forms are: present, imperfect, present active participle, present passive participle, imperative, infinitive, supine, aorist, past active participle I, past active participle II, past passive participle.¹⁹ I will treat these verb forms and their usage in Chapter 6, but for now it suffices to know that these are all the verb forms an OCS verb can theoretically occur in. Verbs differ not only in number of attestations, but also with respect to the relative distribution of forms they appear in: the grammatical profile of the verb. This profile consists of the relative contribution of the various verb forms in the total of the attestations. Figure 4.1 shows the profile of the verb *viděti* 'see', which is attested a total of 1636 times (n=1636) in my database:

¹⁸ I disregard the various ways in which agrist and the past participles can be formed.

¹⁹ The OCS data that I use in this study come from my own database, which I will discuss more extensively in Chapter 5, where I will also discuss all verb forms. Only four verbs in the complete OCS canon are attested in all eleven forms, namely viděti 'see' (n=1636), močiti 'torment' (n=97), povědati 'proclaim' (n=85) and slyšati 'hear' (n=771). Of these verbs, only viděti, with 1636 attestations, is in the top 5 of most attested verbs in OCS in my database at number 5, while slyšati holds the 12th position and the other two verbs are not even included in the top 125. So there must be other reasons than sheer numbers of attestations that account for the fact that a verb is attested in all eleven forms. And, as it turns out, three of the four verbs mentioned above share one important feature: they belong to the category of verbs without a morphological marker of aspect and thus in the category of anaspectual verbs (cf. Chapter 5). The verb povědati is a different case. It can be regarded as derived from pověděti but has a derived partner povědovati as well. This is a relatively rare pattern of derivation and verbs exhibiting this pattern are categorized in a separate category in Chapter 5 and discussed in Chapter 9 (section 9.5). There is one other verb that is attested in all eleven forms, but this is a special verb, sokazati 'clarify, indicate' with two present stems and not all forms are attested of both stems. I will treat this type of verbs extensively in Chapter 10.

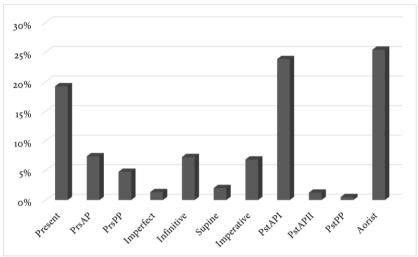


Figure 4.1 The grammatical profile of the verb viděti 'see' (n=1636)

The profile in Figure 4.1 shows that the verb *viděti* relatively often occurs in the present tense (315 attestations, 19.25% of the total), in the aorist (416, 25.23%) and in the past active participle I (390, 23.84%), as compared to the other verb forms. These facts, however, do not reveal much; 60% of all verb attestations in OCS are present tense forms, aorists and past active participles. Therefore, the question whether a profile shows certain restrictions or lack of restrictions can only be answered when profiles are compared with each other. Eckhoff & Janda (2014) do this for OCS and compare the profiles of individual verbs to find a possible difference between imperfective and perfective verbs.

4.3.2 Method and results

Eckhoff & Janda (2014: 235-236) extract their data from the PROIEL corpus, which contains 15,720 attestations of verbs in OCS, primarily from the codex *Marianus*. Of those attestations a number of 129 verbs with 9,694 attestations remain to be analysed after the exclusion of:

- the verb *byti* 'be'
- verbs that have two present tense stems and only one infinitive stem (cf. Chapter 10, Kamphuis 2015)
- all verbs that are attested less than 20 times

The profiles of the verbs are composed as follows: infinitive and supine are taken together as one category, voice is not considered and the Past Active Participle II (the *l*-participle, e.g. *viděl* from *viděti* 'see', cf. Chapter 6) is not included in the study. This results in a profile with seven categories: present,

imperfect, aorist, imperative, infinitive/supine, present participles and past participles. The profiles that are thus established are subsequently used in a correspondence analysis and a divisive clustering analysis (ibidem: 237).²⁰ The method they employ differs in one important respect from that of Janda & Lyashevskaya (2011): Janda & Lyashevskaya compare the profiles of morphologically defined *groups* of verbs, while Eckhoff & Janda compare individual profiles. I will argue below why comparing predefined groups of verbs is preferable in OCS as well.

Based on the correspondence analysis that Eckhoff & Janda perform, they create a two-dimensional scatter plot in which the seven categories included in the analysis are reduced to the two largest factors that are responsible for the variance in the dataset. This scatter plot (Figure 4.2) shows the position of every verb and every category in the analysis with regard to the distance from the centre of these two dimensions. Verbs that cluster together in the scatter plot have similar profiles and the further apart the verbs are, the more different their profiles. The two largest factors resulting from the correspondence analysis (Eckhoff & Janda 2014: 238), together account for 57.8% of the variance and can be found on the x-axis and y-axis in Figure 4.2 below:

²⁰ In this study I will only discuss the outcomes of the correspondence analysis, since Eckhoff & Janda discuss the outcomes of this analysis more extensively and the results of both analyses are 95 percent identical (Eckhoff & Janda 2014: 243). In Chapter 7, I will perform a correspondence analysis on the data in my own database, based on the categorization into morphological groups. I will discuss the method more in detail in Chapter 7.

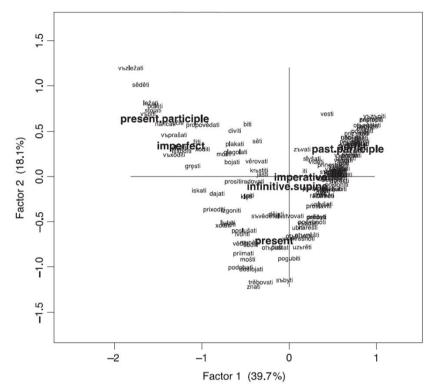


Figure 4.2 Scatter plot based on correspondence analysis (Eckhoff & Janda 2014: 238)

Factor 1, accounting for 39.7% of the variance, ranging from -1.81 to 0.98, functions as the x-axis in the scatter plot based on the correspondence analysis. Eckhoff & Janda (2014: 239) draw a vertical line at 0 (zero) on this dimension and call the verbs that have a negative value (on the left side of the line) 'lefties' and those that have a positive value 'righties'. Factor 2 is of less importance for the purpose of the study, although Eckhoff & Janda's (2014: 241) comments regarding the possibility that this factor represents tense, are interesting. Eckhoff & Janda give all verbs that they analyse in a table with their Factor 1 values (ibidem: 240-241). I will base my discussion of their approach on that table as well, since the scatter plot does not allow the identification of all individual verbs.

When they compare their results to Dostál's categorization, Eckhoff & Janda find that the lefties correspond to Dostál's imperfective verbs and the righties

to Dostál's perfective verbs in at least 93% of the cases (ibidem: 244-245)²¹ and conclude that Factor 1 stands for aspect, with the lefties expressing imperfective aspect and the righties perfective.

4.3.3 Possible issues

Upon closer examination, this approach to the verbal aspect in OCS comes with a number of issues. I have included a somewhat enlarged version of Figure 4.2 to allow for such closer examination.

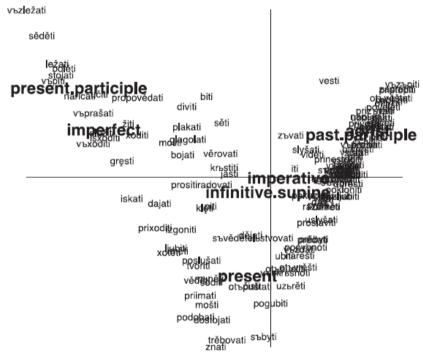


Figure 4.3 Zoomed in version of the scatter plot by Eckhoff & Janda (2014: 238)

The first thing we notice is that the verbs that are shown in the scatter plot and in the corresponding table (Eckhoff & Janda 2014: 240-241) show a continuum and not a clear division into two groups. This makes the vertical line drawn at o (zero), dividing the lefties and the righties, look arbitrary. The zero does not have a clear meaning, nor does it seem to be a natural boundary

²¹ Depending on how the various categories that Dostál uses are clustered (Eckhoff & Janda 2014: 245).

in the scatter plot. The continuum in combination with the dividing line at zero also leads to other questions such as: what does it mean that the lefty *jasti* 'eat' (-0.31) is much closer on the Factor 1 dimension to the righty *ubiti* 'kill' (0.10) than it is to its lefty colleagues *vopiti* 'cry' (-1.62) or *sěděti* 'sit' (-1.70)?

It seems probable that lexical factors play a role here, which can explain why there is a continuum and not a clear division into two or three aspectual groups, as one would expect if it were just grammatical aspect that played a role. A number of smaller clusters that can be discerned on the scatter plot also indicate that lexical factors probably have an influence on the position of verbs on the x-axis: verbs that share lexical properties can be found clustered together. On the top left side there is a cluster of verbs of bodily position <code>vvzležati</code> 'lie (at the table)', <code>sěděti</code> 'sit', <code>ležati</code> 'lie', <code>stojati</code> and 'stand', a bit closer to the centre, but still on the left side of the x-axis verbs expressing a psychological state <code>diviti se</code> 'be surprised', <code>bojati se</code> 'be afraid' and <code>věrovati</code> 'believe'.' Finally, on the right side of the x-axis, in the perfective area, two verbs of perception are clustered together, <code>viděti</code> 'see' and <code>slyšati</code> 'hear'.

This issue is also related to the fact that drawing a line at o automatically results in two groups. There is, however, reason to believe that there are more groups, based on the categorization by Dostál in imperfective, biaspectual (2x) and perfective that Eckhoff & Janda use as control mechanism. Other studies of the verbal aspect system in OCS and Old Russian also identify a third group of verbs which are neutral with regard to aspect (Růžička 1957, Birnbaum 1958, Forsyth 1972, Amse-de Jong 1974, Bermel 1997). This latter group can never be shown to exist if beforehand it is decided that there are only two groups, by drawing a single dividing line. This is also the reason that Eckhoff & Janda are forced to categorize the biaspectual groups of Dostál as either imperfectives (biaspectual, more imperfective) or perfectives (biaspectual, more perfective). If one would apply this method to, for example, Modern Russian, the group of biaspectual (or anaspectual, cf. Timberlake 2004) verbs would also have to be divided among the imperfective and perfective verbs.

The second issue has to do with the fact that the study is based on an unbalanced sample of verbs with regard to the morphology of the verbs. On the far right side there is a strong clustering on the x-axis. The main shared characteristic of this group is that it concerns mostly terminative base verbs, not verbs with a similar lexical content as in case of the clusters I mentioned before (e.g. 'perception' for *slyšati* 'hear' and *viděti* 'see'). The bulk of this

²² Maybe *plakati* 'cry' could be seen as part of this group as well, as a physical expression of a psychological state.

cluster on the right side is made up of prefixed base verbs like vozopiti 'cry', pristopiti 'ascend, approach', posolati 'send', and ubojati se 'become afraid'. On the left side one would expect to see the derived partners of these verbs cluster together in an imperfective cluster.²³ However, the expected clustering of the derived partners is not there, in fact, derived verbs are almost completely absent from the picture. While the group of righties largely consists of prefixed verbs, i.e. 52 (62 if the prefixed determinate verbs of motion are counted as well) of the 76 verbs (68.4% or 81.6%), the lefties only have 5 derived prefixed verbs (9 if the prefixed indeterminate verbs of motion are counted) on a total of 53 verbs (9.4% or 17.0%). This causes a bias in the data, given the fact that suffixation is one of the central morphological characteristics of Slavic verbal aspect (cf. Maslov 1961, Forsyth 1972: 498-499, Schuyt 1990; see also Chapter 5). The reason behind the omission of these verbs must be that they did not pass the threshold of 20 attestations, although Janda and Eckhoff do not explicitly mention the (reason for the) absence of these verbs. ²⁴ The threshold in itself makes sense: a profile can only be based on a relatively large number of attestations (cf. the categorization of bezočostvovati 'dishonour' by Dostál; fn. 16 above). It would not be very meaningful to say that a verb that is attested only once, in a present tense form, has a profile of 100% present tense and 0% for all other six categories (Eckhoff & Janda 2014: 236) and thus, for example, differs radically from a verb that is attested only once in an imperfect tense form. Notwithstanding the rationale behind the threshold, the fact remains that derived verbs have a much lower frequency than the base verbs from which they are derived, which makes the threshold of 20 especially harsh on these verbs, resulting in a biased sample of verbs that remains for analysis.

Thirdly, much of the spread on the 'aspect factor' consists of simplex verbs, verbs that do not show a morphological indicator of aspect, while prefixed base verbs (together with some simplex verbs that have a derived partner, like *pasti* 'fall', which has a derived partner *padati* 'fall'), cluster together. This could, again, indicate that the spread on this factor is, in part, caused by the

²³ Of the mentioned verbs *ubojati sę* 'become afraid' is the only one for which no derived partner is attested in OCS. The closest relation it has, is with the simplex *bojati sę* 'be afraid'. I have shown an example of this in Chapter 2 already and I will return to the relation between simplex and prefixed verbs in Chapter 8, section 8.3.3.

²⁴ For my database, which contains a larger number of attestations, the threshold would mean that 145 out of the 376 prefixed base verbs with a derived partner (38.6%) would pass the threshold while of their derived partners only 34 out of 455 verbs (7.5%) would do so. The reason that there are more derived verbs than derivational base verbs stems from the fact that a derived verb can be recognized even if the base verb is not attested, while I treat base verbs without a derived partner separately, since it is often impossible to know whether the derived verb did not exist or whether it is simply not attested (cf. Chapter 5).

lexical aspect of the individual verbs. It would make sense for the verbs that are not part of the overarching perfective-imperfective dichotomy to show the largest spread, or in other words, the least restrictions on their profile.

Eckhoff & Janda note that many of the verbs that have an atypical distribution compared to other verbs of the group (lefties and righties) they belong to "may not have a clear aspectual identity in Old Church Slavonic" (ibidem: 255-256). They also remark that many of the verbs with 'unstable aspectual behaviour' are simplex verbs, including determinate verbs of motion. Eckhoff & Janda (ibidem: 248-256) identify such verbs by means of an outlier analysis. It is, however, not clear what the status of these verbs, or of the individual attestations is.

Take, for example, the verbs *diviti* sę 'wonder, marvel' and *bojati* sę 'be afraid'. The verb *diviti* sę occurs relatively often in the aorist form. Eckhoff & Janda (ibidem: 249) therefore discuss the verb *diviti* sę as an outlier showing strong attraction to the aorist. The verb *bojati* sę, however, which is very close to *diviti* sę on the x-axis, does not turn up as an outlier in their analysis. ²⁵ They give the following two examples of *diviti* sę in the aorist and in the imperfect:

- (30) pilatъ že *divi*^{aor} *sę*. ašte uže umrětъ [*Z*, *M*, *A*] Pilate *wondered* if He was dead by this time (Mark 15:44)
- (31) boěxo bo sę ego . ěko vьsь narodъ $divlěaxo^{impf}$ se o učenii ego [Z, M, A] they were afraid of Him, for the whole crowd was astonished at His teaching (Mark 11:18) 26

The difference between these examples can be compared to the difference between the aorist and imperfect of *bojati sę* that I discussed in Chapter 2.

(32) slyšavъ že jako arxilai c[ĕsar]гьstvuetъ vъ ijudei . vъ iroda město o[tь]ca svoego . boja^{aor} sę tamo iti [Sk] when he heard that Archelaus was reigning over Judea in place of his father Herod, he was [became, my translation] afraid to go there (Matthew 2:22)

²⁵ The verb *diviti sę* occurs in the aorist in 26% of the attestations of the verb in the database Eckhoff & Janda use, and similarly 25.6% in my own database (31 out of 121 attestations vs. 49 attestations (40.5%) in the imperfect). The verb *bojati sę* is not an outlier in the study by Eckhoff & Janda, so they do not give percentages of aorist attestations, but from their database, which is available on the internet, it becomes clear that 0% of the attestations of *bojati sę* in their database is an aorist. In my database *bojati sę* occurs in 1.6% of the attestations as an aorist against 14.6% as an imperfect.

ігодъ bo **boěše**^{impf} **sę** ioana . vědy moža pravъdъna i s[ve]ta [Z, M, A] Herod was afraid of John, knowing that he was a righteous and holy man (Mark 6:20)

The aorists in (30) and (32) express the start of a state (of mind), while the imperfects in (31) and (7) only express the existence of the state. So even though the usage pattern is the same (both verbs allow aterminative and terminative construals with a similar difference in meaning between the two) only diviti sę is considered by Eckhoff & Janda to have unstable aspectual behaviour, since it turns up in their outlier analysis, being attested more frequently in the aorist. This example shows that the method is not suitable for identifying all verbs that do not express aspect, because it relies solely on the grammatical profile of individual verbs, which is dependent on more than aspect alone.

Moreover, since Eckhoff & Janda do not go into possible semantic definitions of perfective and imperfective aspect, it is not entirely clear what they believe an aorist attestation to express. The aorist in (30) "emphasizes suddenness" (ibidem: 249), but does this mean that it is a perfective attestation? And that the more perfective attestations a leftie verb has, the more aspectually unstable it is? And would that also mean that *ležati* is a bit perfective, since it occurs in aorist form, as in (34):

priděta vidita město . ideže *leža*^{aor} x[ristos]ъ [*Z*, *M*, *A*, *Sk*] come, see the place where He *was lying* (Matthew 28:6)²⁷

In my opinion, there are several factors at play, when it comes to the grammatical profile of a verb. One important factor that determines the grammatical profile of a verb, is derivational aspect, but there are other important factors, like the lexical content of the verb and the presence or absence of alternative forms. For example, for some reason the prefixed form *ubojati sę* 'become afraid' (159 attestations)²⁸ is much more frequent than the prefixed forms *podiviti sę* 'become astonished' (1) and *vozdiviti sę* (3) 'become astonished'.²⁹ This could account for the difference between the grammatical profiles of *bojati sę* (185) and *diviti sę* (121), verbs where the aorist can also be used to indicate the start of a state. Something similar could be the case for *ležati*. Next to *ležati* there is the verb *lešti* 'lie down' (with derived *lěgati* 'lie

²⁷ The King James Version has 'where the Lord lay'.

²⁸ There is even a verb *vvzbojati sę* 'become afraid' with 6 attestations.

²⁹ The verb *diviti sę* might be higher on the 'continuum of terminativity' (cf. section 2.2.2) than *bojati sę*, making it easier to express the start of a state with *diviti sę*. This in turn could be the reason for the relative infrequent prefixed formations in which the start of the state is lexically expressed as well as for the different grammatical profiles.

down') in OCS, which makes it less probable that the aorist of *ležati* would be used to indicate the start of a state (there are no examples of this in OCS). Regarding the influence of the lexical content: verbs differ in terms of the extent to which they allow for a terminative construal, as I have mentioned above. This has consequences for the individual grammatical profiles of verbs as well (cf. section 8.3).

Therefore, although derivational aspect has a considerable influence on the forms a verb occurs in, the method cannot be reversed by using the forms a verb occurs in to come to a conclusion regarding the aspect of the verb, because such an approach disregards the other factors that restrict the grammatical profile of a verb. Doing so would be similar to Dostál's method where the individual attestations determine the aspect of the verb.

Apart from the issues I have discussed above, the approach by Eckhoff & Janda shows how objective statistical methods can be employed to approach verbal aspect in OCS, as opposed to the more subjective approach by Dostál (1954) in which intuitions about the aspectual nature of an utterance are ultimately decisive. In Chapter 7 I will use the same method as Eckhoff & Janda, however, I will approach the material from a different angle by analysing morphologically predefined groups (cf. Chapter 5), taking into account the issues with the approach as mentioned above.

4.4 Amse-de Jong (1974)

The approach of the verbal aspect system in OCS by Amse-de Jong in her dissertation *The Meaning of the Finite Verb Forms in the Old Church Slavonic Codex Suprasliensis* is the most coarse-grained approach of the three approaches discussed in this study, because she groups verbs based on their morphological characteristics and treats the aspectual characteristics of those groups. This differs from the approach by Dostál (1954), who concentrates on individual attestations and adds those up to draw a conclusion about the aspect of a verb, but also from that of Eckhoff & Janda, who concentrate on the grammatical profile of individual verbs. Amse-de Jong (1974: 11) remarks that: "[i]t is assumed that the formal elements in the OCS finite verb form correspond to elements of meaning". In this respect, Amse-de Jong follows the theoretical framework as laid out by Ebeling (1960), who himself, in a more recent publication, notes that his "method of research is, to a considerable extent, determined by the principle 'one form – one meaning', together with the complementary principle 'different forms, different

meanings" (Ebeling 2006: 12).30 Amse-de Jong takes a clear stance on the possibility of approaching the verbal aspect system from a semantic point of view, as Dostál does, or approaching it without taking into account morphological characteristics as Eckhoff & Janda do:

"It is clear that we cannot begin our description with the 'things meant' without, on the one hand, overlooking the dividing lines present in the language to be studied and, on the other hand, projecting the dividing lines of our own language onto the language to be studied. Our examination is therefore bound to begin with the formal elements as constants."

In the present study I follow the same procedure, which is why I will not extensively discuss the morphological distinctions that Amse-de Jong makes at this point; these distinctions will be discussed in Chapter 5. There are, however, a few issues in her approach that I would like to address.

First, although Amse-de Jong basically ends up with the same major categories as I do (perfective, imperfective and anaspectual)³¹, I use a more fine-grained classification system resulting in many more categories. For example, the verbs vozalkati 'become hungry' or pomoliti se 'request/pray' which are anaspectual in the categorization by Amse-de Jong (1974: 7, 126), because of the fact that it no derived partner of these verbs is attested, form a separate category in my classification, i.e. prefixed verbs without a derived partner. As the analysis of in Chapter 7 will show, the grammatical profile of these prefixed verbs without a derived partner is very similar to that of prefixed verbs with a derived partner (and rather different from simplex verbs like jasti 'eat' or viděti 'see'). Amse-de Jong assumes that true perfectivity can only occur in an aspect pair, but fails to account for the similarity between, for example pomoliti 'request/pray' and pozwati 'call', which has a derived partner *pozyvati* (and, again, the dissimilarity with verbs like jasti and viděti). In my opinion this is due to a lack of a control mechanism for her assumptions about which verbs express aspect and which

³⁰ 'Voor mij is de methode van onderzoek in aanzienlijke mate bepaald door het principe "één vorm – één betekenis", samen met het complementaire principe "verschillende vormen – verschillende betekenis".'

³¹ Amse-de Jong does not use the traditional terminology 'perfective' and 'imperfective' etc., because her view is so drastically different from the traditional views of aspect (Amse-de Jong 1974: 126). In this study, I will use 'perfective' for her term EXCLUSIVE, 'imperfective' for NONEXCLUSIVE, 'aorist' for COEXTENSIVE and 'imperfect' for NONCOEXTENSIVE. As already mentioned, Amse-de Jong uses 'non-aspectual' (e.g. ibidem: 51) for what I call anaspectual. The formal elements of derivational aspect she discerns can be found in the opposition between Ø (perfective) and -a- (imperfective), as in pasti - pad-a-ti 'fall' and sonésti-sonéd-a-ti 'eat up'. Anaspectual are all verbs in which the formal elements of aspectuality are absent (cf. Chapter 5).

do not. My analysis indicates that in OCS prefixation can largely be seen as a way of perfectivizing verbs (cf. section 9.1).

Secondly, Amse-de Jong starts her study with extensive definitions of perfective, imperfective, aorist and imperfect (ibidem: 33-42), which are problematic. To demonstrate this, I will first briefly discuss her approach and the main terminology she uses. Amse-de Jong's approach of the semantics of aspect is comparable to the well-known time-relational approach by Klein (1994, 1995). Like Klein, she basically considers aspect as a relation between the *Time of the Situation* (in her terminology *Full Event Period, FEP*) and the *Time for which the Assertion is made* (*Narrated Period NP*) (Amse-de Jong 1974: 11-24).³² The precondition for the existence of an opposition between perfective and imperfective aspect that Amse-de Jong gives is "Full Even Period limited by termini" (ibidem: 33). This is comparable to what Lindstedt (1995) and Tomelleri (2010) say about Slavic-style aspect revolving around terminative predicates. Hence, in the approach Amse-de Jong takes, the terminativity of the verb is central.

For clarity's sake, I will give a simplified version of Amse-de Jong's definition of both aspects and of the aorist and imperfect, disregarding elements that are not relevant to the present discussion. Perfective aspect means FEP=NP, imperfective aspect means FEP=NP (Amse-de Jong 1974: 34).³³ The definition of the aorist is FEP=NP, while the imperfect does not implicate anything about the relation between FEP and NP (ibidem: 40).³⁴ From these definitions it becomes clear that a combination of an imperfective verb FEP≠NP is incompatible with the definition of the aorist FEP=NP (ibidem: 43). All other combinations of derivational and inflectional aspect are possible, not only according to the definitions, but Amse-de Jong also provides examples of them throughout her study.

The problematic part is the fact that the definitions rule out the existence of imperfective agrists beforehand, while there are examples of such forms in OCS manuscripts, even some in the codex *Suprasliensis* that Amse-de Jong

³² In addition to these two factors, Amse-de Jong discerns a *Narrated Event Period (NEP)*, the time belonging to both the *FEP and the NEP* and a *Marked Period (MP)*, the total period of time characterized by the event. Finally, similar to Klein's *Time of the Utterance*, she has an *Orientation Point (OP)*, but also an extra orientation point (*P*), and a *Speech event Period (SP)*. I will not go into these factors.

³⁵ For perfective aspect the other condition is an orientation period that is outside of the FEP, while for imperfective aspect the orientation period is inside the NP, if there is an orientation period. I will not go into this part of the definition any further, but it has to do with a perfective event being a "completed whole" which can only be seen from an orientation point that is outside of the FEP (Amse-de Jong 1974: 34-35).

³⁴ For the definition of the (perfective) imperfect the Marked Period (MP) plays a role (Amse-de Jong 1974: 40).

studies, as well as in OR.³⁵ But examples from OCS are discarded by Amse-de Jong by her pointing at the fact that the definitions of aorist and imperfect are incompatible. She remarks for example: "As NONEXCLUSIVE (imperfective, JK) precludes the occurrence of an aorist [...] this is proof that the morphological element -a- in voprašati does not carry NONEXCLUSIVE meaning." (ibidem: 150). Hence, the verb voprašati 'ask', is no longer regarded as a derived imperfective of prefixed voprositi 'ask', because of the fact that aorist forms of voprašati are attested (ibidem: 150-153). Amse-de Jong treats voprašati - voprositi 'ask' as if it were a simplex with a prefixed verb. Even though Amse-de Jong might be right about a special position for voprašati 'ask', the mere fact that a verb occurs in aorist form is not necessarily an indication that the verb is not imperfective. In Chapter 8, I will discuss a few examples of true imperfective aorists, like the following:

(35) i vъzide na goro i **prizyva**^{aor} jaže samъ vъsxotě . i idošę къ nemu [Z] and He went up on the mountain and *summoned* those whom He Himself wanted, and they came to Him (Mark 3:13)

In such cases, I see no reason to assume that *prizyvati* 'summon' is no longer the derived imperfective of *prizvati* 'summon'. Where Amse-de Jong sees a categorical incompatibility between aorist and imperfective aspect, I believe that the incompatibility is a matter of degree and that occurrences of imperfective aorists require close analysis. In some cases the conclusion may be that the meaning of an etymologically derived verb has shifted towards that of a simplex verb, while in other cases, like in the example above, other explanations for the use of this rare form can be found.³⁷ Similarly, imperfect forms of perfective verbs require close analysis, since they too are burdened with a load of aspectual information.³⁸

Finally, Amse-de Jong (ibidem: 3, 70-72) distinguishes the morphological element -a- with an iterative meaning from a morphological element -a- with an imperfective meaning, based on a semantic characteristic of the base verb, although there is no morphological difference between them. This is a deviation from her general principle that formal elements determine meaning and not the other way around. Her idea is that if there is an attestation of the

³⁵ Of the latter, Amse-de Jong (ibidem: 43) gives an example, stating that the definition of the aspectual elements in OR must be different from those in OCS because of the occurrence of imperfective agrists.

³⁶ I transliterated the Cyrillic parts of the quote.

³⁷ This particular example could be explained by the fact that the Greek original has a historical present (cf. Chapter 8 for more on the translation of Greek historical presents)

³⁸ This is also clear from the description that Amse-de Jong (1974: 40-42) gives of the perfective imperfect and the fact that this particular form forces her to include the 'Marked Period', which she does not need for anything but the definition of the perfective imperfect.

base verb that has a durative character, which is incompatible with her definition of perfectivity (orientation point outside event period), the derived form can never express imperfectivity, since imperfectivity can only occur in opposition to perfectivity. For example, according to Amse-de Jong the verb *plěniti* 'plunder' occurs in a durative context in:³⁹

(36) prěpluvъše rěkǫ rekǫmǫjǫ dunavъ . *plěnjaaxǫ*^{impf} thrakijǫ [S] after they swam across the river called Danube, they *plundered* Thrace (191, 17-19)

Amse-de Jong (ibidem: 111) acknowledges that the imperfect *plěnjaaxo* can also be a form of the verb *plěnjati*. However, she prefers the translation 'plundered' (for some time?) over 'repeatedly plundered', which she feels to mean that this imperfect must be a form of *plěniti*.⁴⁰ This, in turn, leads her to consider the present active participle of *plěnjati* in example (37) to express iterativity, as opposed to imperfectivity, since *plěnjati* is not opposed to a perfective verb (*pleniti* cannot be perfective since it expresses a durative event in example (36)) and therefore the *-a-* element is an indication of iterativity, not of imperfectivity:

(37) ide na aravijo I na palestinъ sъ mnogojo jarostijo na grъky vъsody **plěnjag**^{PrsAP}. I nesъvědami pojemlę plěnniky I mnogo be zakona tvorę [S]

he went out to Arabia and Palestine with great cruelty towards the Greeks, everywhere *plundering* [repeatedly], and taking masses of captives, and doing a lot of unlawful deeds (291, 27 - 292, 1; Amse-de Jong 1974: 82)

The iterative interpretation does not seems logical in this context. In my opinion the imperfect in (36) can simply be seen as a form of *plěnjati*, without the necessary interpretation of repetition (cf. Chapter 8 on the functions of the imperfective aspect). That would simply make *plěnjaaxo* and *plěnjae* two forms of the same verb, *plěnjati*, the imperfective partner of *plěniti*.

Moreover, since iterativity is one of the possible functions of imperfective aspect, I believe it is not necessary to distinguish iterative verbs as a separate category based on deviating behaviour of the partner verb. Even if a

³⁹ Other verbs in the iterative category that Amse-de Jong discerns are verbs derived from verbs of motion (ibidem: 91).

⁴⁰ Amse-de Jong does not explicitely refer to the discussed example of the imperfect of *plěniti* (or *plěnjatî*) but given the fact that this is the only occurrence of an imperfect of this verb in OCS, while no present tense forms are attested. Hence, this is the only attestation that is a candidate for proving that *plěniti* is not perfective (Amse-de Jong 1974: 82) and she, therefore, must have based her analysis of *plěnjati* on this example of *plěniti*.

perfective verb would allow for a durative interpretation in some cases, this could be seen as a remnant of an older stage of the system, from before the derivation of the imperfective verbs, in which these verbs were simply highly terminative verbs with a 'general' aspect (cf. Maslov 1961: 192). Such a phenomenon would not necessarily result in a difference in meaning of the verbs derived from those verbs. It would just indicate that perfective verbs could in some cases express durativity.

Although the issues discussed above result in a different classification of a large number of verbs (cf. e.g. Chapter 9, sections 9.1 and 9.3, see also Table 11.2 in Chapter 11) and in a different analyses of some examples, Amse-de Jong's approach and mine share one important characteristic: in both approaches, the morphological characteristics of a verb are the starting point, leading to a categorization into three core groups: two groups of verbs that have aspectual morphology and are terminative (imperfective and perfective verbs) and one group of verbs that have no aspectual morphology and allow aterminative construals (anaspectual verbs). There are, however, a number of differences between my approach and that of Amse-de Jong. First, I use a database in which all verb forms of the major OCS codices are included, as opposed to the finite verb forms in the codex Suprasliensis that Amse-de Jong analyses. Secondly, I use a more fine-grained classification, resulting in many more groups than Amse-de Jong's three groups. Thirdly, this fine-grained classification allows for differentiation between the various verbs that in Amse-de Jong's classification are all regarded as anaspectual, but that in practice show rather divergent behaviour. Finally, I use a statistical method (cf. Chapter 7) and a semantic analysis of individual forms (cf. Chapters 8 and 9) as control mechanisms to test the presumed aspectual distinctions between morphologically different verbs. This makes it possible to still classify verbs that are on the basis of their morphological characteristics initially separated from the core groups as either perfective, imperfective or anaspectual, as well as to differentiate between verbs that are initially grouped together (cf. Chapter 9).

4.5 Concluding remarks

In the preceding sections, I have discussed three different approaches to the verbal aspect system in OCS.

The approach by Dostál is problematic, mainly because he is not able to establish absolute criteria to determine the aspect of a verb. These problems become especially apparent in verbs that have no clear morphological markers of aspect. When there is a clear morphological marker, like in derived imperfectives, this seems to overrule possible semantic criteria, as I have demonstrated with example (28). This points in the direction of a solution to the problem: when a verb can be recognized by its morphology as

either perfective or imperfective, it can be said to add a layer of aspectual meaning to the meaning of the utterance, independently of the context or the form it occurs in. However, the other side of the medal should then be: when a verb cannot be recognized as perfective or imperfective, it does not contribute aspectual meaning. In other words: morphological characteristics should be decisive in the categorization of verbs into aspectual categories.

The approach by Eckhoff & Janda offers a way of using objective criteria to establish the presence of aspect in OCS. The few weaknesses in the analysis can be counterbalanced by analysing morphologically determined groups of verbs, as opposed to individual verbs, which is the approach Amse-de Jong takes as well.

The main reason for taking a morphological approach is that Slavic verbal aspect is characterized by a morphological encoding, which is visible throughout the entire paradigm. An extra indication that clustering verbs based on morphological criteria makes sense follows directly from the results of Eckhoff & Janda: prefixed base verbs cluster closely together on their aspect factor. Moreover, Eckhoff & Janda (2014: 255-256) state that many of the outliers are simplex verbs and (unprefixed) determinate verbs of motion, and thus morphologically clearly discernible groups. Incidentally, the grammatical profiling method Janda & Lyashevskaya (2011) use for their study of Modern Russian aspect, is similar to the approach I advocate in this study, since Janda & Lyashevskaya also take morphological groups as the basis for their grammatical profile analysis and not individual verbs.

By grouping verbs based on morphological criteria, the issues with the various approaches discussed in the preceding sections can be circumvented. First, the criteria for establishing aspect can be objectively established and are mutually exclusive, unlike the criteria Dostál uses. This will give the semantic analysis of individual attestations a clear direction; no longer is the analysis intended to establish the aspect of the verb, but it can be used to establish the functions of aspect. Secondly, the individual lexical properties of a verb are controlled for when the verb is grouped together with other verbs. This is especially important in the groups of verbs in which morphological markers of aspect are absent, since here lexical properties are an important factor in the behaviour of the verb, influencing the individual grammatical profiles. Thirdly, grouping verbs together allows for including all verbs in the grammatical profiling analysis, also the much less attested verbs, since there is no need for a threshold: even if a verb is only attested once, it simply contributes to the overall profile of the verb group. This is especially important for the inclusion of the derived verbs, which are much less attested than the verbs from which they are derived. Finally, since the groups are already predefined based on shared morphology, in this approach there is no need to draw lines separating lefties from righties: the analyses will show which groups behave similarly and which differ from each other. So, unlike in the approach of Amse-de Jong, it is not necessary to exclude all verbs that do not show the basic aspectual morphology from the verbal aspect system beforehand. For example, the analysis in Chapters 7 and 9 will show that prefixed verbs without a derived partner (*ubojati sę* 'become afraid' or *vozalokati* 'become hungry') have a similar grammatical profile and similar functions as prototypical perfective verbs, just as prefixed determinate VOMs (*soniti* 'descend'). This indicates that prefixation is a way of perfectivizing a verb, even in absence of a derived form.