Dickey, Stephen M.

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Stephen M. Dickey

# PERFECTIVIZING PREFIXATION IN LATE COMMON SLAVIC

#### ABSTRACT

This paper argues that the earliest stage of the Common Slavic aspectual system consisted to a significant degree of simplex–prefixed aspectual pairs, in which the base verb was a factitive suffixed in -i-. Deadjectival factitives represented accomplishment predicates, and prefixation imposed a synoptic construal on the predicate, including the end-state coded by the adjective, thus vysiti 'raise' includes reference to an end-state where something is higher, and u-vysiti asserts attainment of that end-state. Data for three prefixes are given: u-, o- and po-. All show tendencies to combine with factitives in -i-. Depending on the root, denominal and deverbal factitives in -i- could also represent telic predicates, if the root profiled some end-state, e.g., the presence of a wall or fence in denominal graditi (> ograditi) or an end-state in the verbal root in grabiti 'rob' (> pograbiti). Such pairs represent a very early, if not initial stage, that arguably predates pairs of derived imperfectives such as ugasati-ugasiti 'extinguish', obnavljati-obnoviti 'renew', and potapljati-potopiti 'submerge/flood'.

#### **KEYWORDS**

Slavic languages; verbal aspect; prefixation; diachrony

This paper presents an account of perfectivizing prefixation in Late Common Slavic (LCS), as represented by the attested verbal inventory of Old Church Slavic (OCS) contained in the SJS. The details of the rise of perfectivizing prefixation in Slavic are not clear. The dominant approach to the aspectual opposition in Slavic has generally followed Maslov's (1961) hypothesis that at an early stage prefixed simplex stems (e.g., na-siliti 'do violence to') constituted a 'general aspect' (obščij vid), whereupon such verbs were eventually aspectually paired with prefixed-suffixed verbs (e.g., na-silj-ati 'idem'), which originally were specifically 'iterative'. The emphasis on derived imperfectivizing suffixation is understandable given the proportion of derived imperfectives in all Slavic languages at all historically attested stages, and some important diachronic analyses (e.g., Kamphuis 2020) adopt this approach.



As important as derived imperfectives have been at older stages of Slavic, there are problems with Maslov's approach. Most importantly, Maslov's assumption that <code>xoditi-type</code> motion verbs (e.g., <code>xoditi</code> 'walk', <code>nositi</code> 'carry') were specifically iterative does not stand up to scrutiny. Dickey (2010) shows, based on ample textual evidence, that these verbs were processual manner-of-motion verbs. Further, Dostál (1954, 516) provides counts for prefixed imperfective motion verbs (e.g., <code>isxoditi</code> 'walk out') in three stages of OCS: in stage 1 (<code>Codex Zographensis</code> and other evangelical texts), he counts 425 iterative attestations and 150 single-event attestations; in stage 2 (<code>Psalterium Sinaiticum</code>, <code>Euchologium Sinaiticum</code>, <code>Glagolita Clozianus</code>), he counts 25 iterative attestations and 7 single-event attestations; in stage 3 (<code>Codex Suprasliensis</code>), he counts 30 iterative attestations and 0 single-event attestations. Based on the proportion of single-event attestations in the earlier texts, Dostál concludes that prefixed imperfective motion verbs could not have originated as specifically iterative verbs.

If derived imperfectives were not specifically iterative formations that somehow shifted their function to the simple expression of imperfectivity, we are left more or less at square one: how can we account for the origin of a developed aspectual system that includes both simplex imperfectives (e.g., biti 'hit, strike') as well as derived imperfectives (e.g., ubivati 'kill')? In what follows, I argue that it is plausible to consider simplex-prefixed correlates as the original aspectual 'pairs', which then triggered the derivation of prefixed-suffixed pairs. That is to say, the origin of Slavic aspectual systems very possibly lies in an early correlation of simplex verbs referring to activities/processes with prefixed verbs asserting a synoptic construal of achieved telicity (completion).

## 1. Theoretical Preliminaries

In this section, I provide some brief theoretical preliminaries supporting the argument for an aspectual (proto-)system based exclusively on perfectivizing prefixation. I first consider the existence of such systems; this is followed by a consideration of the prerequisites for a system of perfectivizing prefixation, drawn from Dickey (2015; 2017); lastly, I consider the aspectual implications of a shift from a verb-based to a nominal-based linguistic system in proto-Slavic hypothesized by Nichols (2010).

Though derived imperfectives are tacitly assumed to be the *sine qua non* of an aspectual system by Slavists, there are prefixal aspectual systems lacking them in the European linguistic area. Arkadiev (2015, 120–140; cf. also the references cited there) discusses derived imperfectivization and systems in which it is lacking, which include Yiddish and Georgian, Svan and Laz. The existence of such systems, even if low in number, indicate that prefixes can have perfectivizing force regardless of the presence of derived imperfectives.



Thus, the question arises as to how prefixes as such can gain perfectivizing force. In Dickey (2015) I argued that two conditions have conspired to produce the perfectivizing force of prefixes: univerbation and semantic bleaching. Let us consider univerbation first. In all attested stages of Slavic, a set of canonical perfectivizing prefixes has been fused directly to the verbal root with no elements intervening. This is in contrast with earlier stages of Lithuanian, which allowed pronominal clitics between a prefix and the verbal root, as well as modern Lithuanian, which allows a reflexive clitic between a prefix and a verbal root (e.g., pa-si-bučiav-ome we kissed each other'; cf. Arkadiev 2015, 38–39 and the references cited there).

Similarly, older stages of Germanic allowed elements to intervene between prefixes and verbal roots, as in Gothic ga-u-hwa-sehwi 'did he see anything?', in which the interrogative particle u and the interrogative pronoun hwa intervene (cf. Los et al. 2012, 201). Germanic data are particularly instructive for the issue of univerbation and perfective value. Dewell (2015) shows that inseparable prefixes in modern German impose a synoptic construal of a spatial trajectory, whereas prepositional constructions or separable prefixes easily allow a sequential (i.e., processual) conceptualization of the trajectory. The synoptic construal imposed by an inseparable prefix consists of a distribution of attention simultaneously over the entire trajectory, which is itself the figure, as opposed to the incremental progress of the figure along a trajectory in the prepositional and separable prefix constructions. Short representative examples are given in (1).

- (1) a. Ein Panzer **bricht durch** die Außenmauer. [Internet] 'A tank breaks/is breaking through the outer wall.'
  - b. Er **bricht** eine Wand **durch**. [BÜHLER 2011, 383]
  - c. Panne im Parkhaus: Auto **durchbricht** eine Wand. [Internet] 'Mishap in the parking garage: a car breaks through a wall.'

In (1a), the verb brechen 'break' with a prepositional phrase durch die Außenmauer 'through the outer wall' profiles the trajectory as a sequence of stages; the same is true for (1b), in which the separable-prefix verb dúrchbrechen 'through-break' allows for either a sequential/processual construal (usually in the present tense) or a synoptic construal (often in the past tense). In contrast, the inseparable-prefix verb durchbréchen 'through-break' imposes a synoptic construal of the trajectory, and this is why in the Internet such verbs are used to caption photographs that show the result of a trajectory (here: the front end of a car protruding through a wall). Dewell (2015) shows that the same kind of synoptic construal is imposed by a set of inseparable prefixes (be-, ent-, er-, zer-, ver-). His conclusion is that it is the inseparability, i.e., univerbation, that is responsible for the imposition of a synoptic construal.

In contrast to German, in which only a minority of prefixes are inseparable, in Slavic, all the original aspectual prefixes were fused with the verbal root, and this



situation has remained largely unchanged. Toops (2001; cf. also the references cited there) further shows that for Baltic and Slavic, separability of a spatial particle allows for imperfective (i.e., sequential/processual) construal, which he terms paraphrastic imperfectives, as shown in Table 1.

**Tab. 1.** Prefixed perfectives and paraphrastic imperfectives in Baltic and Slavic according to Toops (2001).

	Prefixed Perfective	Paraphrastic Imperfective	
Latvian	aiz-iet 'away-go' ie-iet 'in-go'	iet proj[jā]m 'go away' iet iekša 'go in'	
Lithuanian	Ap-ėjaũ apiẽ nãmą 'Around-went around house'	Ėjaũ apiẽ nãmą 'Was going around house'	
Upper Sorbian	Upper Sorbian wot-eńć 'away-go' za-ńć 'in-go'		
Czech	vejít 'in-go'	jít dovnitř 'go inside' (cf. prefixed impf vcházet)	

The second condition for perfective value is some degree of semantic bleaching of the prefixes. This can be seen in German, according to Dewell (2015), in the case of the inseparable prefixes. For example *er*- is a very abstract resultative prefix (which has lost its original spatial meaning) that profiles the arrival of a process at a goal space (Dewell 2015, 129).<sup>1</sup>

The semantic bleaching of prefixes in Slavic languages is an enormous topic that cannot be considered in any detail here. Briefly, po- has become a despatialized prefix in East Slavic and Bulgarian (cf. Dickey 2012 and Shull 2003); in western group of languages including Czech, Slovene and Polish, s-/z- has become a major despatialized prefix (cf. Dickey 2005). However, these developments took place in historical times and are largely irrelevant for a consideration of LCS. Note that most prefixes have retained their spatial meanings, and any given Slavic language generally only has one or two prefixes that have been despatialized completely or to a significant degree. Dickey (2017) argues that in the network of prefixes for a given Slavic language, a semantic development such as the despatialization of one prefix will change the semantic nature of the entire network of prefixes. Dickey (2017) further argues that the despatialization of u- into a resultative prefix played a major role in the development of prefixal perfectives in Slavic. That is to say, in

<sup>1</sup> For the meanings of the other inseparable prefixes *be-*, *ent-*, *zer-* and *ver-*, the reader is referred to Dewell (2015).

This approach follows Klenin (1983) in the view that u- was not primarily ablative in early stages of Slavic. The SJS shows clearly that ablativity was primarily the domain of  $ot_{\overline{b}}$ . See also Ruvoletto (2016, 95–98) on u- in the *Primary Chronicle*, who argues that u- was not primarily ablative and had a strong non-spatial resultative sense.



proto-Slavic at least one prefix had become despatialized enough to shift the meanings of all proto-Slavic prefixes to one of a synoptic construal, i.e., perfectivity.

The last issue to be taken up before proceeding to the data and analysis is that of the base verbs in the prefixation. Investigations of prefixation tend to devote relatively little attention to the base verbs. An exception in this regard is Kamphuis (2020), who considers verbs besides derived imperfectives (and their corresponding prefixed perfectives) to be an aspectual, i.e., outside the aspect opposition, albeit with varying values on an atelic-telic continuum. Space does not permit a discussion of the notion of anaspectuality here; suffice it to say that Kamphuis' limitation of the aspect opposition to (mostly prefixed) perfectives and derived imperfectives forces him to consider all unprefixed verbs without a suffixed correlate to be anaspectual. I prefer a different approach, which is to consider the kinds of base verbs and the number of each in an analysis of perfectivizing prefixation in LCS. There were four main kinds of non-perfective base verbs (which are considered imperfective here unless otherwise indicated): (1) athematic verbs (e.g., biti 'hit'), (2) verbs suffixed in -ova- (e.g., balovati 'heal'), (3) inchoatives in -no- (e.g., szxnoti 'dry'), (4) verbs suffixed in -a- (e.g., zobati 'peck'), (5) stative verbs in -ĕ-/-a-, e.g., mьdlěti 'be lethargic/listless', and (6) factitives in -i- (e.g., sušiti 'dry').

The fifth class, factitives in -i- are analyzed by Nichols (2010) as a new type of verb that became important after a shift of the Slavic lexical base from a verb-base type to a noun-based type. Nichols is primarily concerned with xoditi-type motion verbs, but the associated development of a new class of factitives in -i-, either denominal, as in krasiti 'decorate' (< krasa 'decoration') or deadjectival, as in sušiti 'dry' (< suxъ 'dry') is important for this analysis. Nichols (2010, 55) posits Vendlerian features for unprefixed verbs suffixed with -i-: xoditi-type verbs, derived both from intransitive roots (e.g., xodъ 'gait') and transitive ones (e.g., nosъ 'carry') are atelic activities. However, denominal factitives such as krasiti, while activity verbs, are analyzed as ± telic (because instrument and means nominals do not necessarily involve a goal state), and deadjectival verbs such as sušiti 'dry' are analyzed as accomplishment predicates, because the adjectival state is a goal state. As factitives in -i- (apart from xoditi-type motion verbs) are the most common base verbs for prefixes included in this study, it will be argued in section 2 that the potential telicity of these verbs was a key factor in their prefixation.

In the next section, perfectivizing prefixation with three prefixes, u-, o-, and po-, is analyzed, and it is argued that the remnants of purely perfectivizing prefixation at a stage prior to the advent of derived imperfectives are visible in the OCS data.



# 2. Data and Analysis

This section analyzes perfective verbs prefixed with u-, o- and po- with respect to derived imperfectives as well as their base verbs. There are two reasons for choosing these three prefixes. First, these three prefixes are the most productive according to  $S_{\text{LONSKI}}$ 's (1937) counts: he counts 191 verbs prefixed with o-, 176 prefixed with po-, and 163 prefixed with u-; for each, the great bulk of the verbs are perfectives. Second, these verbs arguably are the most prone to abstractly perfectivizing meanings: u- and po- attest a great many abstractly resultative formations; o- does as well, in addition to a transitivizing effect in many. Other prefixes, even iz- (the next most productive prefix), had perfectivizing effects that were more straightforwardly accounted for through their spatial meanings ('out' in the case of iz-) or straightforward extensions therefrom.

My counts differ from Słoński's, as they were made on the data in the SJS. Accordingly, I counted 234 perfective verbs prefixed with u-, 244 prefixed with o-, and 211 prefixed with po-. (Note that for u- there were 28 imperfective verbs and 4 listed as biaspectual; for o- there were 43 imperfectives and 7 biaspectuals; for po- there were 48 imperfectives and 8 biaspectuals.) Table 2 gives a breakdown of the kinds of base verbs prefixed with these prefixes.

**Tab. 2.** Perfective verbs prefixed with u-, o- and po- according to the base verb, from the SJS.

	u-	0-	ро-
Athematic	35	28	41
Suffixed with -ova-	4	3	8
Suffixed with -nǫ-	20	8	22
Suffixed with -a-	15	50	37
Suffixed with -ĕ- (-a- after palatals)	26	33	18
Suffixed with -i-	134	122	85
Total	234	244	211

Unfortunately, there are many points in the data that cannot be discussed in detail. For instance, not all base verbs in  $-n\varrho$ - are imperfective inchoatives;  $ugryzn\varrho ti$  'bite' is presumably a prefixed version of an unattested perfective semelfactive  $gryzn\varrho ti$  'bite'. And not all verbs suffixed in  $-\check{e}$ - are easily related to stative meanings, e.g.,  $obid\check{e}ti$  'offend, do injustice to'. Nonetheless, the figures above represent the overall tendencies at work.

It is clear from table 1 that the biggest group of source verbs for each prefix are the factitives suffixed with -i-. Examples are ulьgъčiti 'make easier' (< lьgъčiti



'idem'), obrušiti 'destroy' (< rušiti 'idem'), poběliti 'whiten' (< běliti 'idem'). Here it is important to point out that some prefixed verbs derived from factitives in -i- have derived imperfectives. Table 3 gives the counts for simplexes and derived imperfectives for each prefix.

**Tab. 3.** Prefixed perfective i-stem verbs in u-, o- and po-: imperfective simplex correlates and derived imperfectives, from the SJS.

	u-	0-	ро-
Simplex imperfective correlate	7	15	5
Simplex imperfective correlate with identical lexical meaning	28	11	25
Derived imperfective correlate	49	43	38
No attested imperfective correlate	50	53	17
Total	134	122	85

Further, in the category of correlates which according to the SJS have the same lexical meaning, deadjectival base verbs are well represented. Table 4 gives these verbs for each prefix, along with derivational histories of the base verbs. Note that some correlations, though highly likely to have existed, are not included, since I have stuck with what is attested in the SJS. Thus, no pair is assumed for verbs such as *pozlatiti* 'gilt' or *posrъbriti* 'plate with silver', since the base verbs are not given by the SJS. The totals are given at the bottom of each cell.

**Tab. 4.** Prefixed perfective i-stem verbs in u-, o- and po- and base verbs with an identical lexical meaning, from the SJS.

	u-	0-	ро-
Deadj.	blažiti-u-~ 'do good' vysiti-u-~ 'raise' krotiti-u-~ 'tame, calm' lьgъčiti-u-~ 'make easier' močiti-u-~ 'moisten' mьniti-u-~ 'make smaller' mǫditi-u-~ 'tarry, stay' mǫtiti-u-~ 'confuse' niziti-u-~ 'lower, humiliate' sladiti-u-~ 'sweeten' sugubiti-u-~ 'double' sušiti-u-~ 'dry' truditi sę-u-~ 'exhaust oneself'³ trězviti sę-u-~ 'wake, sober up' xraniti-u-~ 'protect'	blazniti-o-~ 'confuse, lead astray' běliti-o-~ 'whiten' lъgъčiti-ob-~ 'make easier'	běliti-po-~ 'whiten' gladiti-po-~ 'pat, smoothen' krěpiti sę-po-~ 'strengthen' muditi-po-~ 'wait, hesitate' ostriti-po-~ 'sharpen, whet' čistiti-po-~ 'clean' jariti sę-po-~ 'get angry'
	total: 15	total: 3	total: 7



	u-	0-	po-
Denom.	vrěditi-u-~ 'harm, wound' gnězditi sę-u-~ 'build a nest' mastiti-u-~ 'anoint' plъčiti sę-u-~ 'form/line up' potiti sę-u-~ 'sweat' seliti-u-~ 'settle' skrъbiti-u-~ 'sadden'	dariti-o-~ ʻgive as a gift' graditi-o-~ ʻfortify' grěšiti-o-~ ʻsin' ženiti-o-~ ʻmarry' kropiti-o-~ ʻbespatter' lъstiti-ob-~ ʻoutwit'	kaditi-po 'cense' koriti-po 'humiliate' kropiti-po 'bespatter' plěniti-po 'ravage' služiti-po 'serve' soditi-po 'judge' tvoriti-po 'transform' truditi se-po 'make efforts'3 čuditi se-po 'wonder at' čъstiti-po 'honor'
	total: 7	total: 6	total: 10
Deverb.	blagovoliti-u-~ 'favor, assist'	ljubiti-ob-~ 'fall in	goniti-po-~ 'pursue'
	moliti-u-~ 'ask, beg, pray' měsiti-u-~ 'mix, knead' nuditi-u-~ 'force, compel' rěšiti-u-~ 'free, liberate'	love with' rušiti-ob-~ 'destroy, raze'	glumiti sę-po-~ 'chat' grabiti-po-~ 'rob' diviti sę-po-~ 'wonder at' doiti-po-~ 'suckle' loviti-po-~ 'catch, hunt' moliti sę-po-~ 'pray, petition' točiti-po-~ 'tap, pour'

There is surely room for disagreement about individual histories, but I believe that the counts above show important tendencies. I discuss u- first, as I have argued that it was an innovative change-of-state prefix in proto-Slavic (DICKEY 2017).

The prefix *u*- primarily perfectivizes deadjectival verbs, e.g., *vysiti* > *u*-*vysiti* 'raise/make higher'. We can make sense of such prefixed formations by recalling Nichols' (2010) view that deadjectival factitives are in fact telic accomplishments: thus, in *vysiti* 'raise' the state profiled by the adjectival root *vys*- 'high' is the endstate, i.e., telos of the predicate. As an accomplishment predicate *per se* does not necessarily assert achieved telicity, the motivation for the original prefixation is to assert such. In other words, *vysiti* profiled a telic situation aimed at making something 'high(er)', whereas *u-vysiti* asserted the entire trajectory including the end-state/telos. The same applies to deadjectival formations with *o*- (e.g., *o-běliti* 'whiten') and *po*- (*po-ostriti* 'sharpen, whet'). Thus, following Nichols (2010) it appears that some unprefixed verbs have a telos built into them, and the addition of a prefix signals/asserts attainment of that telos.

Different histories are given for truditi se for utruditi se 'exhaust oneself' and potruditi se 'make efforts' respectively. For the former, the relevant item seems to be the adjective trudont 'heavy', i.e., 'make oneself heavy/immovable', whereas for the latter trudo 'effort' seems to be more relevant.



If we recall that in Slavic derived imperfectives are telic (or terminative; cf. Kamphuis 2020 on OCS), then derived imperfectives such as OCS ugasati 'extinguish' (<u description of ugasiti 'idem'), obnavljati 'renew' (< obnoviti 'idem'), and potapljati 'submerge/flood' (< potopiti 'idem'), apart from their morphological structure (the presence of a prefix and an imperfectivizing suffix), are not that different from the deadjectival factitives discussed above. Taking this line of thought a step further, we can recognize correlates such as vysiti–uvysiti 'raise', běliti–oběliti 'whiten', and ostriti–poostriti 'sharpen' as early aspectual pairs, and thus the chicken-and-egg question of the origin of the OCS aspectual system, which eventually came to be statistically dominated by derived imperfectives, is not in fact so difficult. Note here that the numbers in table 3 show that derived imperfective partners of prefixed factitives in -i- are higher in number for each prefix than their simplex counterparts (for u- the ratio is 49: 28, for o- it is 43: 11, and for po- it is 38: 24), which indicates that by the time of OCS imperfective derivation was already established as the chief way of creating imperfective verbs.

Before concluding, it should be pointed out that some of the denominal and deverbal simplex factitives in -i- have, by dint of their lexical roots, the same kind of telicity built into them that deadjectival factitives have. For example, denominal <code>gnězditi sę</code> 'build a nest', as the root expresses the end product, can only be seen as an accomplishment profiling a process toward an end-state, and the same effect of prefixation with <code>u-in ugnězditi sę</code> applies; the same reasoning applies, <code>mutatis mutandis</code>, to denominal <code>graditi-ograditi</code> 'fence in, fortify' and <code>kaditi-pokaditi</code> 'cense'. Among deverbals, <code>lomiti</code> 'break' inherently profiles an end-state, and thus <code>ulomiti</code> 'break' asserts the entire trajectory including the end-state; the same reasoning applies, <code>mutatis mutandis</code>, for <code>rušiti-obrušiti</code> 'destroy/raze', and <code>qrabiti-poqrabiti</code> 'rob'.

# 3. Summary and Conclusion

This article has argued that prefixation can impose a synoptic construal in and of itself, consisting of attention simultaneously distributed to all phases of a trajectory including its endpoint (cf. Dewell 2015), outside of the presence of derived imperfectives. Prefixation produces such synoptic construals most reliably when prefixes are firmly fused with the verbal root and have undergone various degrees of semantic bleaching/despatialization. Following Nichols (2010) regarding the aspectual qualities of factitives in -i-, especially deadjectival factitives, which she analyzes as inherently telic, it has been argued that the prefixation of such factitives represents an early yet productive first step in the establishment of the LCS aspectual system. Data from the SJS supports this analysis.

The idea that prefixal aspectual systems cannot exist without derived imperfectives is simply too idealistic to be a working hypothesis for diachronic Slavic aspectology. The prefixal systems described by Arkadiev (2015) are certainly difficult to



reconcile with this idea, as are the facts from contemporary German described by Dewell (2015). Further Maslov's (1961) original hypothesis does not stand up to scrutiny, as there is no positive evidence that derived imperfectives were originally iterative. If recent diachronic studies such as Kamphuis prefer to limit OCS aspectual pairs to (mostly prefixed) perfectives and suffixed imperfective correlates, the examination of these relationships are certainly useful for the insights they provide; however, they do not account for the actual origin of the system, the proto-stage. The hypothesis advocated here illustrates what early aspectual pairs could have looked like. If simplex verbs suffixed in -i- are uneven with regard to their telicity, they are not messier than most linguistic data.

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#### Stephen M. Dickey

Department of Slavic, Germanic and Eurasian Studies, University of Kansas 1445 Jayhawk Blvd., Rm. 2133, Lawrence, KS 66045–7590 USA smd@ku.edu



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