Chapter 42

The (un)expectedly stacked prefixes in Slovenian

Authors

When a Slavic verb occurs with multiple prefixes their order is often claimed to follow certain restrictions of a fairly formal character. Firstly, lexical prefixes, which can modify the argument structure of the verb and contribute idiosyncratic interpretations, are always found adjacent to the verbal root, while superlexical prefixes, which do not alter the argument structure and whose interpretative contribution is adverbial, can be stacked over the lexicals. And secondly, when multiple superlexicals stack on a verbal stem, they follow a fixed order. We set out to test these two generalizations with a corpus study. We find that there exist a number of verbs which seem to have more than one lexical prefix, in direct contradiction of the standard assumptions about prefixation.

Keywords: verbal prefixes, internal prefixes, external prefixes, prefix stacking
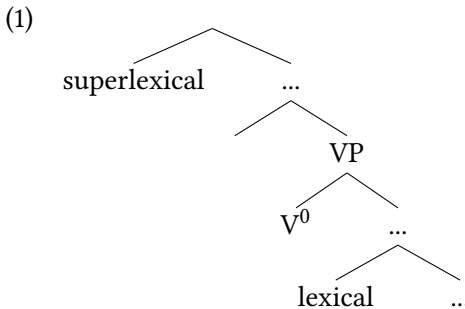
1 Introduction

In Slovenian and in Slavic languages more generally, simplex verbs consist of a root, a theme vowel [TV] and a tense and agreement ending [TAM], and are typically imperfective (though this is not a rule, cf. e.g. the Slovenian verb *kupiti* 'to buy'). Verbs can also carry one or more prefixes, with the prefixed form generally being perfective (unless imperfectivized through, for example, suffixation in the process called secondary imperfectivization [SI]). We demonstrate this for the verb *deliti* 'to share' and some of its derivatives in Table 1.

Turning to verbal prefixes, these are, in general, all formally related to prepositions (e.g., *ob* 'by/next to', *pri* 'at', etc., cf. Matushansky 2002; Gehrke 2008; Caha & Ziková 2022, a.o.), but are often assumed to differ among themselves in terms

Table 1: The various parts of the Slavic verb.

prefix	prefix	root	SI	TV	TAM	Gloss
		del		i	ti	'to deal.IPFV'
	raz	del		i	ti	'to deal-out.PFV'
	raz	del	jev	a	ti	'to deal-out.IPFV'
po	raz	del		i	ti	'to distribute.PFV'
po	raz	del	jev	a	ti	'to distribute.IPFV'

of their position within the verbal domain. Typically, a distinction is made between so-called lexical and superlexical prefixes. The former are often analyzed as affixal prepositions functioning as VP-internal resultative secondary predicates, similarly to resultative particles in Germanic, the latter as affixal prepositions functioning as VP-external, INFL-level material, e.g., Ramchand (2004); Romanova (2004); Svenonius (2004), and each type is said to behave uniformly with respect to a number of properties. The tree in (1) sketches the relevant positions. A more detailed overview is given in §2.

(1)

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        superlexical        ...
                          ┌──────┴──────┐
                                VP
                          ┌─────┴─────┐
                         V⁰          ...
                              ┌───────┴───────┐
                            lexical          ...
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One basic distinction between the two types of prefixes is assumed to be that a verb can only have one lexical prefix, while superlexical prefixes can stack. When both types of prefixes appear in a verb, the superlexical prefix(es) linearly precede the lexical prefix, and if a verb has multiple superlexical prefixes, these appear in a certain order (e.g., Istratkova 2004; Milićević 2004; Wiland 2012). The central question of this paper is to what extent Slovenian corpus data can be used to corroborate these basic assumptions tied to the lexical–superlexical division, in particular, the tenets that any stacked prefix is a lexical prefix and that superlexical prefixes are governed by strict ordering constraints. Whereas we find our corpus data to be of limited use for testing fine-grained proposals for orderings

of superlexicals, we do also find that they offer corpus support for some aspects of the ordering claims. At the same time, our corpus data also reveal several cases that deviate from the expected division. Specifically, while isolated examples of verbs that seem to have two lexical prefixes have been pointed out in the past, e.g., *iz-pod-riniti* 'from-under-drive' and *iz-pod-makniti* 'from-under-move' have been considered in Žaucer (2002) and Svenonius (2004: 242), our corpus leads us to an expanded set of verbs that display this unexpected combination. Using this set of verbs we then consider how to analyze verbs in which two prefixes both exhibit properties typical of lexical prefixes.

The paper is organised as follows, in §2 we go over some widely assumed properties ascribed to the two classes of prefixes. §3 presents a corpus study that focuses on stacked verbal prefixes. §4 discusses the problematic cases with unexpectedly stacked prefixes, §5 is the Conclusion.

2 What we know: Lexical and superlexical prefixes in Slavic verbs

A fairly standard division of prefixes that is also characteristic of the more traditional literature (e.g. Toporišič 2000; Vidovič Muha 1993), and is said to hold for all Slavic languages, establishes two main uses of prefixes. Lexically used prefixes tend to have spatial or idiosyncratic meanings, where 'idiosyncratic' is meant to capture situations in which the prefix's addition to the verb does not lead to a predictable interpretation of the prefix-V complex, as shown in (2). With superlexically used prefixes, on the other hand, the addition of the same prefix predictably adds the same (adverbial) interpretation, and the interpretation of the verb stays transparent and constant across the prefixed verb class, (3).[1]

(2) ob-delati | ob-soditi | ob-noviti | ob-leteti
     at-work | at-judge | at-new | at-fly
     'to process' | 'to accuse' | 'to renew' | 'to shed (leaves)'

(3) po-sedeti | po-bingljati | po-plesati |
     over-sit | over-dangle | over-dance |
     'to sit for a while' | 'to dangle for a while' | 'to dance for a while' |

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[1]For expository reasons, we ignore Slovenian orthography and separate prefixes from the rest of the verb with a hyphen. Prefixes are glossed on the basis of the basic meanings of their prepositional counterparts.

po-igrati se
over-play REFL
'to play for a while'

The two classes are said to differ in a number of other properties. Lexical prefixes are said to appear directly on the verb root while superlexicals can be separated from the root by another prefix, and consequently, lexical prefixes can never be stacked, while there should be no such restriction, across the board, for superlexicals. Also, only lexical prefixes are said to be able to affect argument structure. And only lexical prefixes, but not superlexicals, can form secondary imperfectives (cf. Svenonius 2004, among many others). These properties are summarized in Table 2.

Table 2: Lexical and Superlexical prefixes

LEXICAL PREFIXES	SUPERLEXICAL PREFIXES
adjacent to the root	outside of lexical prefixes
idiosyncratic/PP meanings	adverbial meanings
affect argument structure	don't affect argument structure
form secondary impf.	don't form secondary impf.
don't stack	can stack

Many aspects of these generalizations, however, have also been questioned; Žaucer (2009), for example, shows that the cumulative prefix *na-* introduces an unselected object–a hallmark of lexicality–but can, at the same time, also stack over another prefix. It is not surprising, then, that proposals introducing additional classes of prefixes also appeared: Tatevosov (2008) argues for an independent, third class of *intermediate* prefixes, and Babko-Malaya (2003) and Markova (2011) argue for tripartite divisions into, respectively, *lexical, resultative*, and *superlexical* prefixes (where the traditional lexical prefixes are split into *lexical* and *resultative* prefixes), and *outer, inner*, and *lexical* prefixes (where the traditional lexical prefixes are split into *inner* and *lexical* prefixes).

2.1 Identity of prefixes

Phonologically one and the same prefix can often be used as either a lexical or a superlexical prefix, as shown in (4)-(5). So if prefixes are defined with their phonological shape one should really only talk of their lexical or superlexical uses, rather than of lexical and superlexical prefixes.

(4) a. po-liti
         over-pour
         'to spill'

     b. po-sedeti
         over-sit
         'to sit for a while'

(5) a. do-staviti
         to-put
         'to deliver'

     b. do-od-pirati
         to-off-push
         'to finish opening'

Po- will standardly be analyzed as a lexical prefix resulting in a spatio-idiosyncratic interpretation on the verbal stem in (4a) and as a superlexical prefix with adverbial interpretation in (4b), and *do-* as a lexical prefix added to the verbal stem *staviti* (which never occurs on its own without a prefix) and as a superlexical prefix added to an already prefixed stem in (5b). Moreover, a prefix can have more than one superlexical use, as shown by the Polish example (6) where *po-* serves once as a delimitative and once as a distributive prefix (cf. also Žaucer 2009).

(6) Kucharze po-   po-   roz- kładali przez chwilę naczynia i   zajęli
     cooks   po.DEL- po.DIST- roz- put.SI over all   tables   and began
     się czymś   innym.
     REFL something else
     'The cooks put the dishes on the table for a while and they turned their
     attention to something else.'   (Klimek-Jankowska & Błaszczak 2022)

2.2 Stacking

As briefly mentioned above, it has been observed that when Slavic verbal prefixes stack their ordering is not random, but it rather reveals certain restrictions of a fairly formal character. The most obvious restriction is that lexical prefixes can only attach directly onto the verbal base. As a consequence, in any form with multiple prefixes, the lexical prefix will appear closest to the verb, as sketched in (7). The other observation, also sketched in (7), is that superlexical prefixes (and only superlexical prefixes) can stack even further so that a single verb can have more than one superlexical prefix but at most one lexical prefix (cf. Romanova 2004; Svenonius 2004; Gehrke 2008) (though some authors, e.g. Tatevosov (2008), argue that Russian actually does not allow stacking of "genuine" superlexical prefixes (i.e., inceptive *za-*, delimitative *po-*, cumulative *na-* and distributive *pere-*) but only of "intermediate" prefixes, cf. above).

(7) superlexical prefix > superlexical prefix > lexical prefix > verb

The restriction to no more than one lexical prefix is taken to reflect the widely assumed general restriction to one independent resultative secondary predicate per verb (a.o. Rappaport & Levin 2001; Ramchand 2008), and suggests a further difference between lexical and superlexical prefixes. Slavic lexical prefixes are parallel to resultative secondary predicates in languages like English, while superlexicals appear to be something different.

The superlexical prefixes are also said to follow a fixed order when stacked to the same verbal stem (Istratkova 2004; Wiland 2012; Endo & Wiland 2014; Klimek-Jankowska & Błaszczak 2022). For example, as claimed by Wiland (2012), who develops an even more fined-grained, cartography-inspired differentiation of superlexical prefixes, the cumulative prefix *na*- needs to precede the completive prefix *do*-, as shown in (8). Istratkova (2004) proposes the order in (9) for Bulgarian, Wiland (2012) proposes the sequence in (10) for Polish, which was later modified by Klimek-Jankowska & Błaszczak (2022) to (11).

(8) a. na-do-kładaj   sobie jeszcze
        CUML-COMPL-put self   more
        'get yourself some more (e.g. food)'

  b. *do-na-kładaj sobie jeszcze   (Wiland 2012)

(9) ATT > INCP > TERM > COMPL > DIST > CUML > EXC > REP
     po   za   do   iz   po   na   raz   pre
                                                                    (Istratkova 2004)

(10) DIST > ATT > DELIM > SAT > CUM > EXC > REP > PERD > COMPL > TERM
      po   pod   po   na   na   na   prze   prze   do   od
                                                                    (Wiland 2012)

(11) DELIM > DIST > SAT > CUM > {PERD, EXC, REP, ATT, TERM, PURELY PFV}
      po   po   na   na   prze   prze prze pod od   s/na
                                               (Klimek-Jankowska & Błaszczak 2022)

3 Corpus-study results

In order to get a better empirical insight into multiply prefixed verbs in Slovenian, we considered two sets of data. First, we looked at the 3000 most common verbs in Slovenian (see *WeSoSlaV* to appear), to explore the behavior of common verbs with more than one prefix in general (assuming that such a 3000-verb sample is representative of the language). In the second step we created a list of multiply

prefixed verbs from the list of all verbs occurring *Gigafida 2.0* (2019), a reference corpus of written standard Slovenian.

Starting with *WeSoSlaV*, while we were able to confirm that multiple prefixation exists, we found that only 8 out of 3000 verbs had 3 prefixes (no verbs have more), 185 verbs had 2 prefixes, while 2,070 had a single prefix.[2] Table 3 gives the relevant results.[3] Note that each verb was counted only once (that is, verbs with three prefixes were not also counted as verbs with one and with two prefixes).

Table 3: Prefixation in WeSoSlav

NUMBER OF PREFIXES	NUMBER OF VERBS	PERCENT
zero	741	24.70%
one	2,071	69.03%
two	180	6.00%
three	8	0.27%
TOTAL	3,000	

This data leads us to certain conclusions. On the one hand, prefixed verbs are more common than verbs without prefixes (the latter are not necessarily simplex, since some have a suffix, e.g. *kup-ova-ti* 'to buy.ɪᴘꜰᴠ'). But more importantly, while verbs with a single prefix are extremely common, multiple prefixation is not. In order to create a better empirical base for investigating multiple prefixation, we therefore created a larger list of multiply prefixed verbs.

3.1 Corpus-study results, additional data

The new set of data was created from the list of all 90,000 verbs found in the *Gigafida 2.0* (2019) corpus. Prefixed verbs were automatically extracted from the list using a simple formula that looked at each individual verb and checked whether it begins with one of the prefixes. The prefix was subtracted from the verb and the verb was checked again if the remaining part of the verb starts with one of the listed prefixes. This procedure was repeated five times. Automatically extracted

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[2]These 8 verbs include three aspectual pairs (e.g. *s-po-raz-umeti* 'to agree/communicate.ᴘꜰᴠ', *s-po-raz-umevati* 'to agree/communicate.ɪᴘꜰᴠ') so that there are really only 5 different verbs with three prefixes. Employing the same exclusion criteria, there are only 127 different verbs with two prefixes and approximately 1500 different verbs with a single prefix.

[3]Verbs that have a non-Slavic prefix like *re-* in *re-organizirati* 'to reorganize' or *dis-* in *dis-kvalificirati* 'to disqualify' were counted as unprefixed. Similarly we also disregarded the negative prefix *ne-* as in *o-ne-sposobiti* 'to disable'.

multiply prefixed verbs were then also manually checked as in some cases the automatic procedure led to the beginnings of stems/roots to be counted as prefixes, as in the case of verbs like *stati* (incorrectly analyzed as *s-tati*) 'to stand' or *vleči* 'to pull' (incorrectly analyzed as *v-leči*), and some combinations of prefixes could be misparsed as combinations of different prefixes, e.g. *pod-o-...* 'under-about-...', which is string-homophonous with *po-do-...* 'over-to-...' etc.

With this procedure we were able to retrieve a list of 377 multiply-prefixed verbs that exhibit at least 100 occurrences in the corpus. As above, the list contains some aspectual pairs, see footnote 2, but we did not exclude aspectual pairs for the figures we made. Verbs with three prefixes are extremely rare in Slovenian (see §3.2), and among the verbs with at least 100 occurrences in the corpus, there are no verbs with more than three prefixes.

In figure 1 prefixes are ordered from left to right with increasing likelihood to appear as the prefix closest to the verb. The first thing to note is that no prefix is restricted to the root-adjacent position – in the presented set of verbs they all appear in the first position of a pair of prefixes at least once.
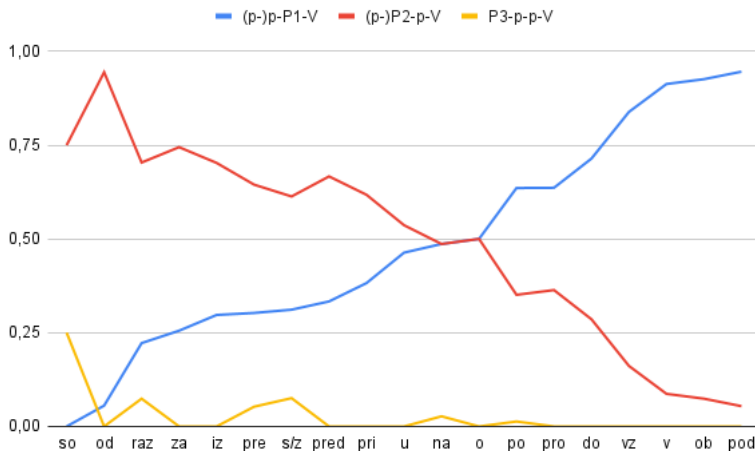

Figure 1: The frequency of prefixes relative to their position in a multiply prefixed verb (counting tokens of combinations).

This last observation is very clearly visible also from figure 2. Even the prefixes *pod-* 'under-' and *vz-* 'up-', which can be, based on Šekli (2016), taken as essentially exclusively lexical prefixes in Slovenian, appear in up to 20% of cases stacked over another prefix. Actually, even the prefixes which seem to be most common in the root-adjacent position (*vz-* 'up-', *v-* 'in-', *ob-* 'around-', *pod-* 'under-' according to figure 1 and 2) appear in at least 10% of cases also stacked over

another prefix. Thus, all prefixes that are possible in the root-adjacent position can also be used as stacked prefixes and thus, according to the description so far, as superlexical prefixes. The implication does not go both ways, as *so-* 'co-' and *od-* 'from-' are never used as verb-adjacent in multiply prefixed verbs.
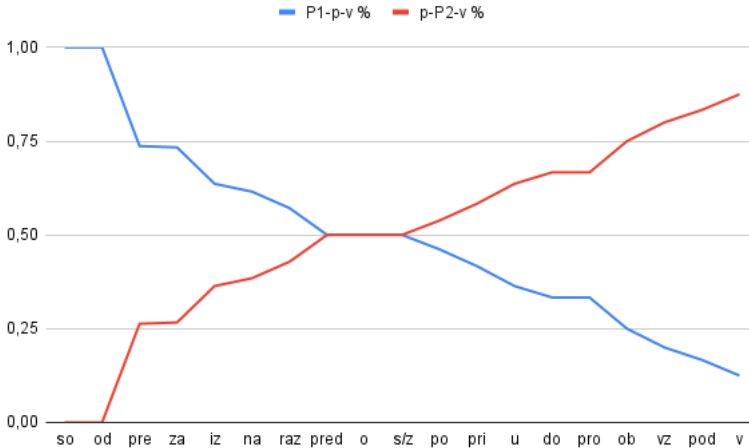

Figure 2: Relative amount of prefixes that a prefix can appear with either when it comes first in a pair of prefixes or second (counting types of combinations).

The table in figure 3 seems to confirm a tendency for a hierarchy, but given the fact that certain prefixes have more than one use, that is they can be either used as lexical or superlexical prefixes, and some have even more than one superlexical use (cf. Wiland 2012; Klimek-Jankowska & Błaszczak 2022), they can appear in more than one position, hence automatic extraction obviously cannot produce a clear picture, and none of the proposed orders can be either confirmed or rejected.

3.2 Verbs with three prefixes

Given that prefixes should be able to stack, and that quite some claims have been made on the basis of the possible and impossible ordering patterns in stacking, we expected that we will find substantial numbers of verbs with three or more prefixes. However, this prediction was not confirmed since out of 377 multiply-prefixed verbs no verb included more than three prefixes and only a few included three prefixes. Specifically, an initial count of 20 verbs included three prefixes, but a closer review of the 20 verbs showed that this number needs to be even further

	so	pred	od	za	pre	iz	na	raz	o	s/z	po	pri	u	do	pro	ob	vz	pod	v
so		1	1	0	0	0	0	0	0	0	0	0	4	0	0	2	0	1	3
pred	0		0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0
od	0	0		0	2	0	0	0	0	2	6	0	0	0	2	0	2	1	2
za	0	0	0		1	0	0	0	5	2	6	1	6	1	0	7	3	1	2
pre	0	0	0	1		3	7	2	4	2	8	1	6	0	2	9	4	1	3
iz	0	0	0	0	0		1	0	4	0	9	0	2	0	0	3	2	5	0
na	0	0	0	0	1	0		0	0	2	3	0	1	3	0	0	1	1	7
raz	0	0	0	0	0	0	0		3	0	12	0	0	0	4	2	0	0	0
o	0	0	0	2	2	0	0	0		3	8	2	0	0	0	0	0	0	0
s/z	0	0	0	0	19	2	1	0	0		26	2	0	1	0	0	0	21	1
po	0	0	0	4	0	4	8	5	1	8		3	6	3	0	2	8	0	3
pri	0	0	0	5	0	0	0	0	0	0	7		0	3	0	0	5	1	0
u	0	0	0	0	0	0	0	0	0	13	6	2		0	0	0	0	1	0
do	0	0	0	0	0	0	0	0	0	0	2	2	0		0	0	0	0	0
pro	0	0	0	0	0	2	0	0	0	2	0	0	0	0		0	0	0	0
ob	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0		0	0	0
vz	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0		2	0
pod	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1		0
v	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	

Figure 3: The cross-table of prefix combinations. The first prefix of a pair is listed vertically, the second horizontally.

reduced. "Deduplication" of aspectual pairs reduces the number to a mere 12 verbs.

Furthermore, we used a list of prefixes to annotate the verbs as prefixed (essentially: if the verbs look like prefixed, it was counted as prefixed), but this resulted in the inclusion of some problematic items. For example, if we consider its etymology (Snoj 2009), *s-po-do-biti* 'to be appropriate' is probably derived form *podoba* 'image.N'. And since, at the same time, the verb **podobiti* does not exist in Slovenian, but the base *podobiti* can also occur with another prefix (*u-podobiti* 'depict'), it seems reasonable to treat the verb *s-podobiti* as only containing one prefix, i.e., *s-*. Etymology was also used to exclude *raz-pro-s-treti* 'to spread' since, following Snoj (2009), the root of the verb is *-stir* and not *-tir*. Another problematic example is *s-po-za-biti* 'to forget to'. At least in some varieties, this verb has the stress on what looks like the prefix *za-* (i.e. pozAbiti), which argues against treating this *za-*string as a prefix, as prefixes do not get stress in Slovenian (stress in verbs is always on the theme vowel or the syllable preceding it, i.e., on the root, see Simonović & Mišmaš 2023); as expected, the prefix *za-* is not stressed in other verbs, so it stands to reason to not treat *za-* in *s-po-zabiti* 'to forget to' as a prefix (but as part of the root). Similarly, if a verb appears to include a prefix but the apparent root never appears without that or any other prefix, then what initially comes across as a prefix is probably part of the root (e.g., given that there is no verb *tvariti*, nor does *tvariti* appear with any other prefix, *po-u-s-tvariti* 'recreate'

should be decomposed as *po-u-stvariti*). And finally, *na-s-pro-tovati* 'to oppose' is likely derived from the adverb *nasproti* 'opposite' and was therefore excluded.

This leaves us with only six verbs that can safely be treated as having three prefixes, listed in examples (12)–(17).[4]

(12) pre-raz-po-rediti[P] | pre-raz-po-rejati[I]
    over-from-over-order | over-from-over-order
    'to rearrange'

(13) s-po-pri-jeti[P] | s-po-pri-jemati[I]
    with-over-at-hold | with-over-at-hold
    'to wrestle'

(14) s-pre-ob-rniti[P] | s-pre-ob-račati[I]
    with-over-around-turn | with-over-around-turn
    'to turn'

(15) so-u-po-rabljati[I]
    co-in-over-use
    'to co-use'

(16) s-po-raz-umeti[P]
    with-over-from-understand
    'to agree'

(17) pre-u-s-meriti[P] | pre-u-s-merjati[I]
    over-in-with-measure | over-in-with-measure
    're-direct'

While verbs with more than two prefixes are certainly a theoretical option and are attested, there are only a few such items attested in corpus data. Why verbs with three or more prefixes are so rare in actual language is a question we leave for future work.

We will devote the remainder of this paper to the observed unexpected sequences of prefixes. As mention above, even the prefixes that are claimed to be exclusively lexical appear in up to 20% of cases as the first prefix in a sequence of

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[4]One could perhaps also exclude verbs with the prefix *so-* (similar to the English *co-*), such as (15)). This prefix behaves differently from other verbal prefixes in several respects, can also appear in non-verbal contexts, e.g. *so-avtor* 'co-author', and is consequently often not even included in works on verbal prefixation, e.g. Vidovič Muha (1993)

prefixes. Consider the verb *vz-po-staviti* 'to connect'. The prefix *vz-* has the meaning 'up' and is rarely associated with an adverbial meaning (e.g. *vz-ljubiti* 'to start loving somebody'), that we expect with the outermost prefix of a verb with two prefixes – certainly this meaning is missing in the mentioned verb. Similarly the inner prefix *po-* (as it is expected, given that *po-* in the verb under discussion follows a prefix) has a meaning, that can only be associated with a lexical prefix (over). We turn to this type of verbs, which we will call *vz-po-staviti*-type verbs of examples in the next §4.

4 Examples with two seemingly lexical prefixes

Considering the mainstream view in the literature on prefixation, one clear prediction that can be made is that if a verb has two (or more) prefixes, at most one will be lexical, while the rest will be superlexical (or intermediate). However, our corpus study described in §3 suggested that there might exist a class of multiply prefixed verbs in which the outermost prefix also contributes a typically lexical meaning (i.e., *vz-po-staviti*-type verbs). Examples (18) to (24) give a sample of such verbs. These examples are presented here in triplets: the first form is the unprefixed version, the last is the relevant example with two prefixes, and the middle example is the form (which is always an attested form) with a single prefix. We use a #hashtag to mark unprefixed forms that are not attested in modern standard Slovenian, such as #*staviti*, though they are attested in present-day dialects of Slovenian, in BCMS, or are historically attested. Note also that in *vz-po-staviti*-type verbs, the verb with a single prefix always seems to exist, which makes them different from the examples discussed in Svenonius (2004) (quoting Žaucer 2002), given in (26), in which the version with a single prefix is not attested.[5]

(18) klicati | po-klicati | v-po-klicati
      call | over-call | in-over-call
      'to call' | 'to call up' | 'to enlist'

(19) # staviti | po-staviti | vz-po-staviti
        set | on-set | up-on-set
                | 'to set' | 'to set up'

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[5]Regarding (20): some varieties do exhibit a verb *jeti* 'to start', but this is a form associated to verbs like *začeti* or *pričeti* 'to start', i.e., this must be based on a separate, independent root. This is shown by the fact that there exist minimal pairs like *začeti* 'to start' and *zajeti* 'to scoop' or *pričeti* 'to start' and *prijeti* 'to hold', and that the conjugation paradigms of the *pričeti*-set and the *prijeti*-set are clearly separate, too. In what follows we gloss *jeti* as 'grab'/'hold'.

(20) #jeti | pri-jeti | o-pri-jeti
       grab | at-grab | around-at-grab
            | 'to grab' | 'to hold on to'

(21) #peti | vz-peti | po-vz-peti
       pull | up-pull | on-up-pull
            | 'to climb' | 'to climb'

(22) #deti | o-deti | raz-o-deti
       put | around-put | from-around-put
            | 'to wrap' | 'to reveal'

(23) nesti | za-nesti | pri-za-nesti
       carry | behind-carry | at-behind-carry
       'to carry' | 'to carry in' | 'to spare'

(24) #umeti | raz-umeti | s-po-raz-umeti
       get/understand | apart-get | with-over-apart-get
                       | 'to understand' | 'to agree'

(25) nesti | pri-nesti | do-pri-nesti
       carry | at-carry | to-at-carry
       'to carry' | 'to bring' | 'to contribute'

(26) riniti | *pod-riniti | iz-pod-riniti
       push | under-push | from-under-push
       'to push' | | 'to push out'

The meaning contribution of the outermost prefix suggests that these examples
contain more than one lexical prefix. In (18) and (19) the addition of *v-* and *vz-*,
respectively, leads to an idiosyncratic meaning, in (20) and (21) the prefixes *o-* and
po-, respectively, add spatial meanings, etc. However, this clearly goes against
the theoretical prediction that lexical prefixes do not stack. The question is, then,
how these prefixes should be analyzed. Possible answers include: (i) they are,
despite their meanings, superlexical; (ii) they fall into one of the other categories
of prefixes, described in the literature (e.g., intermediate c.f. Babko-Malaya 2003;
Tatevosov 2008; Markova 2011); (iii) they are indeed lexical because some special
conditions are met. The last option then further opens several possibilities that
need to be explored, that is, that these examples only include one prefix (and
the inner prefix is somehow incorporated into the root) or that these are in fact

two prefixes which either appear in a double-VP structure with two independent lexical prefixes, that they are result modifiers or that they require a completely new approach. In what follows, we explore these options.

4.1 Option 1: They are superlexical

If the outer prefix of the *vz-po-staviti*-type verbs were instances of superlexical prefixes, then one would expect them to exhibit properties typical of superlexical prefixes. One such property is their placement and the ability to stack – since they appear on top of another (lexical) prefix they can then, in principle, be taken as superlexical.

However, there are arguments against this claim. Firstly, they do not carry typical superlexical, adverbial meanings. If we consider the verb *pri-za-nesti* in (23), adding the prefix *pri-* results in an idiosyncratic meaning shift from 'to carry in' to 'to spare', which cannot be the result of one of the two possible adverbial readings that *pri-* has, according to Šekli (2016), namely, a delimitative or an incohative reading, as in *pri-preti* 'open a little' and *pri-žgati* 'to light up', respectively.

Furthermore, superlexical prefixes typically do not allow secondary imperfectivization. Except for *vpoklicati*[P] 'to conscript' in (18), all other verbs given in (18)–(26) can be imperfectivized: *vzpostavljati*[I] 'to establish', *oprijemati*[I] 'to hold on to', *povzpenjati*[I] 'to climb', *razodevati*[I] 'to reveal', *prizanašati*[I] 'to spare', *sporazumevati*[I] 'to communicate', *spozabljati se*[I] 'to forget oneself'.[6] It should be emphasized that these do not seem to be cases of a prefix combining with an imperfecive base - if this were the case, than the resulting verb would be perfective. Rather, the imperfectivized verbs match the meaning of the perfective form (except in aspect), suggesting that these are in fact imperfectivizations of the doubly prefixed verbs:

(27) a. Veter je { za-nesel[P] / za-našal[I] } listje na dvorišče.
          wind AUX behind-carry behind-carry leaves on yard
          'The wind carried leaves to the yard.'

   b. *Veter je { pri-za-nesel[P] / pri-za-našal[I] } smeti na dvorišče.
          wind AUX at-behind-carry at-behind-carry leaves on yard

---

[6]The observation that at least for many speakers, *vpoklicati*[P] 'to conscript' does not have a natural imperfective pair is not problematic, given that it is also not the case that every perfective verb with a single prefix has a secondary imperfective pair, e.g., *za-bresti*[P] 'to get stuck'. In fact, the input of *vpoklicati*[P], i.e., *poklicati*[P] 'to call up'), also does not have a secondary imperfective pair.

(28) a. *Sodišče je { za-neslo^P   / za-našalo^I } osumljencem.
         court   AUX behind-carry behind-carry suspects.DAT

     b. Sodišče je { pri-za-neslo^P   / pri-za-našalo^I } kriminalcem.
        court   AUX at-behind-carry at-behind-carry   criminals
        'The court spared the criminals.'

And finally, according to Svenonius (2004), superlexical prefixes normally do not appear in nominalizations, in particular root/zero nominalizations. While it should be noted that not all verbs in Slovenian derive root nominalizations, several of these verbs with what appear to be two lexical prefixes do:

(29) iz-po-staviti | iz-po-stav-a
     out-over-stand | out-over-stand-F.SG.NOM
     'to single out' | 'branch'

(30) do-pri-nesti | do-pri-nos-∅   / do-pri-nos-a
     to-at-carry | to-at-carry-M.SG.NOM   to-at-carry-M.SG.GEN
     'to contribute' | 'contribution'

(31) za-pri-seči | za-pri-seg-a
     behind-at-reach | behind-at-reach-F.SG.NOM
     'to pledge' | 'pledge'

(32) v-po-klicati | v-po-klic-∅   / v-po-klic-a
     in-over-call | in-over-call-M.SG.NOM   in-over-call-M.SG.GEN
     'to call in, enlist' | 'conscription'

Such "root" nominalizations can be taken as an argument for these prefixes to be structurally similar to lexical prefixes. That is, root nominalizations do not include *v* (as evident from the absence of theme vowel in (29) and (32)) so it stands to reason that both prefixes in *vz-po-staviti*-type verbs are merged below *v*.

The only reason to consider the outermost prefix in verbs under discussion to be superlexical, then, would be their placement, whereas other properties suggest that they are lexical. We will therefore explore the latter option further.

4.1.1 Intermediate prefixes

Some of the properties of superlexical prefixes mentioned in §4.1 are also relevant for rejecting the possibility that our examples include intermediate prefixes

in the sense of Tatevosov (2008), i.e. prefixes such as the Russian completive *do-*, which appear outside the *v*P, but below superlexical prefixes.[7] Intermediate prefixes, according to Tatevosov (2008), yield compositional meanings, never influence argument structure, are not restricted with respect to the aspect of their complement, merge before imperfectivization (and can therefore result in imperfective readings), and can appear in *nie-* nominalizations.[8]

While *vz-po-staviti*-type verbs share several properties with verbs with intermediate prefixes, there is an important difference between the two. As we showed in §4.1, prefixes in *vz-po-staviti*-type verbs contribute a spatial meaning or lead to an idiosyncratic meaning shift. Furthermore, unlike intermediate prefixes, prefixes in *vz-po-staviti*-type verbs can affect argument structure, as we will show in §4.2. But just like verbs with intermediate prefixes, *vz-po-staviti*-type verbs can appear in nominalizations and can also be imperfectivized.

This means that the prefixes in *vz-po-staviti*-type verbs do not share all the properties of intermediate prefixes hence we cannot analyse them as such. In fact, the ones that they do not share are precisely the ones that make Tatevosov (2008) analyze his intermediate prefixes as located above VP. [9]
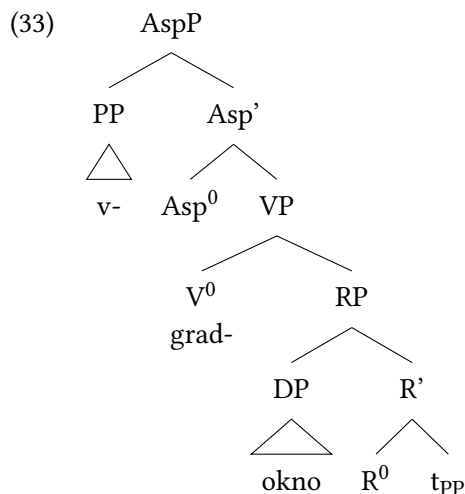
4.2 Option 2: They are lexical

If prefixes in *vz-po-staviti*-type verbs are lexical prefixes, we expect them to exhibit properties typical of lexical prefixes. Again, the argument against such an analysis is that prefixes under discussion stack, while lexical prefixes are assumed not to, see §2. The explanation for this restriction is simple. Because lexical prefixes originate in VP-internal Result Phrase [RP], as shown in (33) (based on Svenonius 2004: (80)) and because verbal structure is universally assumed to be

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[7]A proposal similar to Tatevosov (2008) is presented in Markova (2011) who argues for three types of prefixes in Bulgarian - lexical prefixes (structurally inside VP), inner prefixes (between VP and *v*P) and outer prefixes (above *v*P). In her account, only lexical prefixes are associated with idiosyncratic meaning, while inner and outer ones lead to compositional interpretation. Prefixes in *vz-po-staviti*-type verbs thus do not qualify as either inner or outer prefixes, but her analysis assumes the possibility for more than one lexical prefix. We return to this in §4.2.1.

[8]Assuming Tatevosov (2008), *nie-* nominalizations contain a larger structure than root nominalizations, which we considered in §4.1. According to Tatevosov (2008), Russian *nie-* is merged above Asp^0. This presumably means that *vz-po-staviti*-type verbs should be able to derive *nje-* nominalizations in Slovenian, which is indeed the case, e.g., *vz-po-stavljanje* 'establishing', *iz-po-stavljanje* 'emphasising' etc. We will not consider this type of nominalizations here further.

[9]Note that this need not mean that prefixes with the characteristics of Russian intermediate prefixes from Tatevosov (2008) do not exist in Slovenian. For example, the Slovenian completive *do-* in *do-pisati pismo* 'complete writing a letter' appears to behave the same way as the Russian completive *do-*.

able to host only one result/one RP (Rappaport & Levin 2001; Ramchand 2008), it should not be possible to have more than one lexical prefix per verb.[10]

(33)

```
                    AspP
                   /    \
                 PP      Asp'
                 /\      /  \
                /  \   Asp⁰  VP
               v-        \   / \
                        V⁰    RP
                       grad-  / \
                            DP    R'
                            /\    / \
                           /  \  R⁰  t_PP
                         okno
```

However, as already indicated in §4.1, these prefixes display several other properties that can be taken as arguments for a lexical analysis. In addition to non-superlexical interpretations, the availability of secondary imperfectivization and root nominalizations, the outer prefixes in *vz-po-staviti*-type verbs also exhibit some argument-structure effects.

For example, the "singly" prefixed verb *pri-jeti* 'to grab' can select for a single accusative object, a SE and an optional genitive object, or an optional SE and a prepositional phrase, as shown in (34a). The "doubly" prefixed *o-pri-jeti* 'to hold on to', on the other hand, is unacceptable (in most modern varieties) with a single accusative object, requires the genitive object with SE, and simply does not tolerate prepositional objects, as shown in (34b). Differences in the argument structure of the singly- and doubly-prefixed counterparts is observed also in other cases, as shown in (35)–(36).

(34) a. pri-jeti { ročaj   / se (ročaja)   / (se) za ročaj   }
          at-grab   handle.ACC REFL handle.GEN   REFL   for handle.ACC
          'to grab the handle/ to grab on (to the handle)'

---

[10]Though see Den Dikken (1995) for a different understanding of the structure used for particles and prefixes and the restrictions it imposes.

    b. o-pri-jeti   { *(ročaj)   / se *(ročaja)   / *(ˇse) za
        around-at-grab   handle.ACC REFL handle.GEN   REFL for
        ročaj   }
        handle.ACC
        'to grab on (to the handle)'

(35) a. pri-seči (*pričo)
        at-reach   witness.ACC
        'to swear, take an oath'

    b. za-pri-seči   (pričo)
        behind-at-reach witness.ACC
        'to take an oath; to swear in a witness'

(36) a. za-nesti   { skrbi   Vidu   / *Vidu   (s   skrbmi) }
        behind-carry worries.ACC Vid.DAT   Vid.DAT with worries
        'to carry worries to Vid'

    b. pri-za-nesti { (*skrbi)   Vidu   / Vidu   (s   skrbmi) }
        at-behind-carry   worries.ACC Vid.DAT Vid.DAT with worries
        'to spare Vid the worries'

Given that we seem to be led to the conclusion that the outer prefix in *vz-po-staviti*-type verbs is indeed a lexical prefix, it should be noted that different authors have previously observed that VP-internal prefixes are not a homogeneous group. A natural question to ask, then, is whether the outer prefixes in *vz-po-staviti*-type verbs share any of the properties of those proposed subgroups.

4.2.1 Option 2.1: They are lexical—but these verbs contain only one prefix

This option presents itself as a possibility especially in view of the fact that some of these apparently doubly-prefixed verbs are no longer used without a prefix. For example, while (37) exists in some Slovenian dialects (and in BCS), it does not exist in standard Slovenian, nor in many other dialects that normally use *vz-po-staviti*. Similarly, (38) does not exist in modern Slovenian (though it does exist in BCS), and neither does (39).

(37) #*staviti* 'set' (exists in some Western Slovenian dialects)

(38) #*peti* 'pull' (but exists in BCS)

(39) *_jeti_ 'grab'/'hold'

Given that the simplex forms are not attested (or are at best very limited), it could be the case that the innermost prefix, even if historically a prefix, is just a part of the root (cf. Fowler 1996), or that the prefix is, as proposed in Markova (2011) for all prefixes resulting in idiosyncractic meaning shifts, adjoined to V^0, forming a complex verbal head (whereas the root moves to the verbalizing head v^0). According to this analysis, a verb can have more than one lexical/adjoined prefix, and since prefixes are adjoined to v^0, they are freely ordered.

At first blush, Markova's proposal could be seen as consistent with *vz-po-staviti*-type verbs, especially for those built on verbs like *po-staviti* 'to set' or *pri-jeti* 'to grab'; however, for a number of *vz-po-staviti*-type verbs aspect presents an issue. On the one hand, several of these verbs, such as *vz-peti* 'to climb.PF', are based on stems that were historically imperfective, and just like most lexically prefixed verbs (and unlike most native unprefixed verbs), these verbs generally form secondary imperfectives, e.g. *po-stavljati* 'to stand.IPFV', *vz-penjati* 'to climb.IPFV', *pri-jemati* 'to hold.IPFV'. This suggests that these inner prefixes trigger perfectivity. Although Markova (2011) does not discuss the influence of the V^0-adjoined prefixes on aspect, it is unclear how such adjunction could account for the change of aspect. In Svenonius (2004) account, for example, it is crucial that a prefix originate in RP for the perfectivizing effect to arise. For those *vz-po-staviti*-type verbs which exhibit singly-prefixed counterparts even in modern Slovenian, such as *v-po-klicati* 'to enlist' or *za-pri-seči* 'to take an oath, to swear somebody in', this aspectual concern regarding treating their inner prefix as V^0-adjoined is even more obvious.

In addition, whereas some of these *vz-po-staviti*-type verbs do not exhibit modern-Slovenian unprefixed versions they, on the other hand, occur in a modern Slovenian with several different prefixes, (40)–(42), resulting in forms with either clearly related or with idiosyncratic meanings. We can take this as an argument against an analysis on which the innermost prefixes are simply part of the root – while we agree with Romanova (2004), who considers similar examples of "cranberry roots" in Russian, that these roots are light (according to Romanova they can have no semantics at all), a comparison of the same root with different prefixes implies some common meaning (for (40), this could be a paraphrased as 'to place') while the prefixes add a predictable spatial meaning.

(40)   ***na**-staviti* | ***po**-staviti* | ***v**-staviti* | ***pre**-staviti* | ***do**-staviti* | ***od**-staviti* …
        on-set | over-set | in-set | over-set | to-set | from-set
        'set' | 'set' | 'insert' | 'move' | 'deliver' | 'remove'

(41) **na**-*peti* | **vz**-*peti* | **v**-*peti* | **raz**-*peti* | **pri**-*peti* | **od**-*peti* ...
     on-pull | up-pull | in-pull | apart-pull | at-pull | from-pull
     'stretch'/'string' | 'climb' | 'fasten' | 'spread' | 'attach' | 'detach'

(42) **na**-*jeti* | **pri**-*jeti* | **za**-*jeti* | **ob**-*jeti* | **vz**-*eti* ...
     on-grab | at-grab | behind-grab | around-grab | up-grab
     'hire' | 'grab' | 'scoop' | 'hug' | 'take'

And finally, assuming that the forms in (40)–(42) are unprefixed poses a problem for the varieties in which the simplex forms of the verbs in (40)–(42) do exist, and it also does not account for those *vz-po-staviti*-type verbs that are perfectly normally attested both in standard Slovenian and across all Slovenian dialects without the prefix (e.g., *klicati* 'to call', the root of the doubly prefixed verb *v-po-klicati* 'to enlist'). Based on these arguments, we will not consider this option any further.

4.2.2 Option 2.2: They are lexical—but these verbs have two VPs (=double resultative structure)

As mentioned in §4.2, the restriction to one lexical prefix has been derived as a consequence of lexical prefixes' structural position; because clausal structure can only have one RP, there can only be one lexical prefix per verb phrase (and consequently per verb). However, Žaucer (2009) discusses a class of verbs in Slovenian that seem to have two resultative prefixes, and ultimately analyzes these as having a double-VP structure (cf. also Tatevosov 2022). In the discussion of the cumulative (/accumulative/saturative) prefix *na-*, a crucial piece of support for the double-VP structure is argued to be the two sets of unselected objects, (43) and (44).

(43) *(pre)-igrati Maradono
       over-play Maradona.ACC
      'fake out Maradona'

(44) *(na)-*(pre)-igravati se   Maradone
       on-over-play.PFV   REFL Maradona.GEN
      'get / getting one's fill of faking out Maradona'

As is evident from our examples in §4.2, the *vz-po-staviti*-type verbs do not behave like this. They do not appear to introduce two unselected objects.

   Furthermore, the outermost prefix in (44) and this type of examples requires an imperfective input, which is not the case in *vz-po-staviti*-type verbs. Also, (44)

and this type of examples is normally read perfectively, with the outermost prefix there triggering perfectivity; on other words, an example such as (44) does not necessarily get an imperfective reading despite the presence of the imperfective affix -*ava*. At the same time, though, the imperfective affix *can* be interpreted as scoping over the outermost prefix – in this case the interpretation of (44) is 'getting one's fill of faking out Maradona'. Unlike (44), and as shown in (45), the outermost prefix of *vz-po-staviti*-type verbs never perfectivizes its input and the imperfective affix always scopes over the outermost prefix, which further means that the whole verb is interpreted as imperfective.

(45)   a. pri-jeti^P | pri-jemati^I ‖ o-pri-jeti^P | o-pri-jemati^I
           at-grab | at-grab.sɪ ‖ around-at-grab | around-at-grab.sɪ
           'to grab' | 'to grab'   ‖ 'to grab on to' | 'to grab on to'

       b. pri-nesti^P | pri-našati^I ‖ do-pri-nesti^P | do-pri-našati^I
           at-carry | at-carry.sɪ ‖ to-at-carry | to-at-carry.sɪ
           'to carry to' | 'to carry to' ‖ 'to contribute' | 'to contribute'

       c. po-staviti^P | po-stavljati^I ‖ iz-po-staviti^P | iz-po-stavljati^I
           over-stand | over-stand.sɪ ‖ out-over-stand | out-over-stand.sɪ
           'to set' | 'to set'   ‖ 'to single out' | 'to single out'

While Žaucer (2009) discusses other properties of examples that can be analysed as including two VPs, we take these differences as evidence enough to conclude that prefixes in *vz-po-staviti*-type verbs are not similar to the cumulative *na-*.

4.2.3 Option 2.3: They are lexical—result modifiers, not main result predicates

The literature has identified one further group of prefixes that does not fully respect the standard division into lexical and superlexical. As discussed by Žaucer (2013), prefixes such as excessive (*pre-*), repetitive (*pre-*), attenuative (*pri-*, *po-*), and distributive (*po-*) have superlexical, i.e. adverbial, meanings, do not themselves affect argument structure, and can stack, so from this perspective seem to behave like ordinary superlexical prefixes. An example of this type of prefix is given in (46):

(46)   pre-na-polniti
       over-on-fill
       'overfill'

However, Žaucer (2013) argues, contrary to what would be expected given their superlexical properties, that these prefixes nevertheless merge VP-internally, supporting this claim, for example, with the fact that they scope below VP-adverbials, as shown in (47). The proposed analysis is that these prefixes are result modifiers, thus a sort of adverbial prefixes, but ones that modify the result phrase directly, before it is merged together with the verb.

(47) U-steklenčil sem tole vino sicer na roke, pre-u-steklenčil ga bom pa
     in-bottled   AUX this wine PTCL on hand over-in-bottled it will PTCL
     z   mašinco.
     with machine
     'Though I bottled this wine manually, I'll re-bottle it with a machine.'

(Žaucer 2013: 292)

What (47) says is that the first time the wine was bottled it was bottled manually, while the second time it was bottled this was done with the use of a machine, which indicates that the repetitive *pre-* is inside the scope of the *with*-adverbial, which further means that *pre-* does not originate above VP.

Interestingly, the same scopal facts can be observed with *vz-po-staviti*-type verbs. As shown in (48) the entire verb *oprijeti* 'to hold on' is in the scope of the *with*-adverbial, suggesting that all parts of the verb originate VP-internally.

(48) Vejo   sem sicer pri-jel z   roko, o-pri-jel   se je bom pa
     branch AUX PTCL at-hold with hand around-at-hold REFL it AUX PTCL
     z   rokavico.
     with glove
     'I grabbed the branch with my hand, but I'll hold on to it with a glove.'

The two sets of prefixes also behave the same with respect to the restitutive reading of *spet* 'again'. That is, both the excessive/measure prefix in (49) and the outer prefix in the *vz-po-staviti*-type verb in (50) take narrow scope with respect to the restitutive reading of *spet* 'again'.

(49) Juš je   hladilnik spet   pre-na-polnil.
     Juš AUX fridge   again over-on-filled
     'Juš restored the fridge to an overfilled state.'
     Not: Juš was overly involved in filling up the fridge.   (Žaucer 2013: 293)

(50) Miha je   stike   z   očetom spet vz-po-stavil lani.
     Miha AUX contacts with father again up-over-set last year
     'Miha restored contacts with his father last year.'
   (No other interpretation.)

While Žaucer's (2013) result-modifying prefixes have a predictable adverbial interpretation and the outer-most prefixes in *vz-po-staviti*-type verbs do not seem to, both of these types of prefixes behave comparably with respect to scopal tests, suggesting that they share the same structural position.

4.2.4 They are lexical and parallel to particles

It is well known that there exist parallels between Germanic particles and Slavic prefixes, e.g. Svenonius (2004). In fact, similarly to doubly-prefixed verbs of the *vz-po-staviti*-type verbs in Slovenian, we can also observe particle recursion in Germanic, see for example Den Dikken (1995: 80). Den Dikken (1995) claims that particle recursion is structurally possible but, for unclear reasons, rare. He analyzes recursive particles using his basic structural template from (52) by simply having the second particle as the head of XP, as in (53).

(51)   I'll send the letter on over to Grandma's house.
                    Den Dikken (1995: (116b)), quoting Di Sciullo & Klipple (1994)
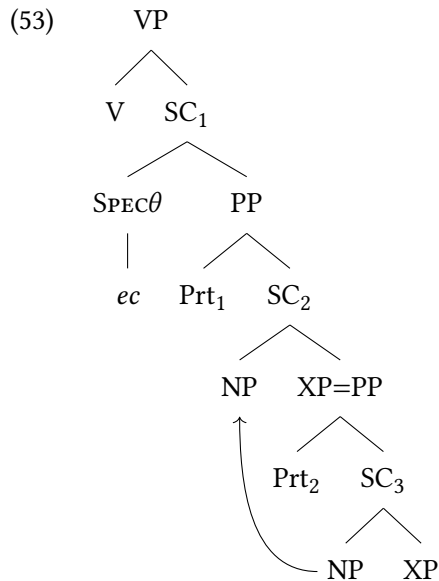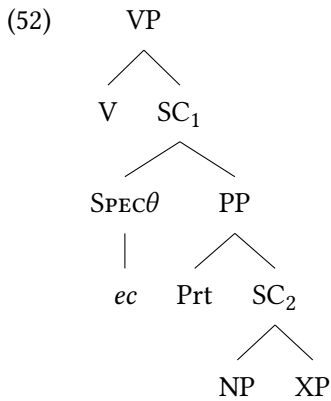
4.3 Instead of a conclusion—a partial proposal

We have shown that the outer prefixes in *vz-po-staviti*-type verbs, even though they are stacked on top of another prefix, do not behave like other superlexical

prefixes but rather much more like lexical prefixes. Table 4 presents a comparison of our *vz-po-staviti*-type verbs, or rather, their outer prefixes, lexical prefixes, superlexical prefixes and result-modifying prefixes on the basis of the six most typically considered properties. Some of these properties are clearly related to one another, so for example, their VP internal position is related to their ability to form secondary imperfectives, which are merged outside the VP and thus scope over them. Similarly, as already explained in §4.2 their VP-internal position means that they are merged inside a Result Phrase, and as there is only one RP, they should not be able to stack. Additionally, their idiosyncratic meaning and argument structure effects also seem to be related to their position inside the VP.

Table 4: Lexical, Superlexical, and other types of prefixes

	Lexical	*vz-po-staviti*	result mod.	Superlex.
VP-positioning	internal	internal	internal	external
meaning	idiosyn./spati.	idiosyn./spati.	adverbial	adverbial
affect arg. struct.	Yes	Yes	No	No
form sec. imperf.	Yes	Yes	Yes	No
form root nomin.	Yes	Yes	Yes[a]	No
stacking	No	Yes	Yes	Yes

[a]Žaucer (2013) does not discuss nominalization options. But some root nominalizations from verbs with those result-modifying prefixes are attested, e.g, *pri-vz-dig* 'a partial lift', *pre-u-stroj* 'remodeling', *pre-u-redba* 'reorganization'.

So far we mentioned 12 different *vz-po-staviti*-type verbs that used 10 different prefixes as the outer prefix. Quite clearly, the outer prefixes of *vz-po-staviti*-type verbs do not form a homogeneous class of prefixes, so we need not expect to find a single explanation for all of them.

Two verbs that were already discussed by Žaucer (2002) and Svenonius (2004), *iz-pod-riniti* 'to push out' and *s-pod-makniti* 'to jerk away', are probably just instances of a complex prefix which realizes both PATH and PLACE parts of the preposition phrase [PP] (cf. Svenonius 2004) inside a single result phrase [RP].[11]

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[11]The two combinations *iz-pod-* and *s-pod-* are synonymous. One can find both versions of these two verbs in written Slovenian—*iz-pod-riniti* and *s-pod-riniti* both with the same meaning 'to push out' and likewise *s-pod-makniti* and *iz-pod-makniti* both meaning 'to jerk away'. Spoken Slovenian hardly makes a distinction between the two pronunciations of these two forms, so we are treating them as just two realizations of the same lexical unit.

Some prefixes have a relatively clear spatial meaning, such as *o-* in *o-pri-jeti*, which is comparable in meaning to verbs where *o-* is more clearly lexical like *o-kleniti* 'grip on', *o-graditi* 'to put a fence around', or *o-črtati* 'to draw a line around' (in some cases the (core) spatial meaning got obscured by a more metaphorical interpretation) and *v-* in *v-po-klicati* 'to enlist', which can even be doubled by a preposition phrase with the same prefix, as in (54).
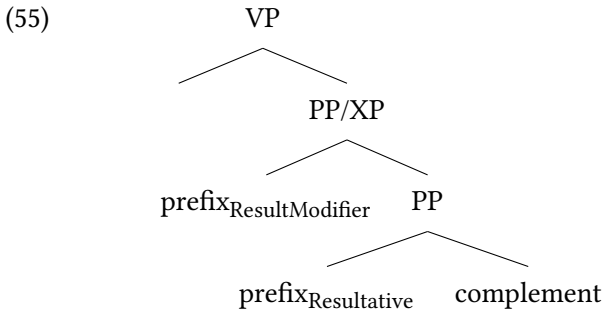
(54) Trener ga je   v-po-klical v reprezentanco.
      coach him AUX in-over-call in national-team
      'The coach called him up into the national team.'

In cases like these, the outer prefix may seem to be a proper lexical prefix that would require a result phrase of its own, which would mean that we need two RPs inside the VP. Note that even though these verbs have a different argument structure from their unprefixed counterpart, the contribution of the prefix to the argument-structure change is not very clear, suggesting that potentially one of the two prefixes can receive an alternative interpretation.

For the most part the *vz-po-staviti*-type verbs seem to behave similarly to doubly-prefixed verbs in which prefixes are "result modifiers", the main difference being the interpretation of prefixes/prefixed verbs - while the "result modifiers" in Žaucer (2013) have a clear adverbial reading, prefixes in *vz-po-staviti*-type verbs lead to anything between a slight modification in the interpretation of the input to an full-scale idiosyncratic meaning shift compared to the input. Despite this, we propose that prefixes in *vz-po-staviti*-type verbs should be subsumable under a result-modifier analysis.[12]

Based on Žaucer (2013), we thus propose that the structure in (55) captures the two positions for the prefixes in *vz-po-staviti*-type verbs. Note that the result-modifying prefix (on its own) here cannot introduce an unselected object (perhaps unlike the structure in (53)).

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[12]One could say that just like proper lexical prefixes, which contribute either a compositional spatial interpretation or a non-compositional idiosyncratic interpretation, result-modifying prefixes also have these two options: contributing either a compositional adverbial interpretation or a non-compositional idiosyncratic interpretation, which we observed with many *vz-po-staviti* type verbs.

(55)

```
              VP
            /    \
          PP/XP
         /      \
   prefix_ResultModifier   PP
                        /     \
              prefix_Resultative   complement
```

5 Conclusions

Our corpus data show that even prefixes which have been claimed to serve (almost) exclusively as lexical prefixes appear stacked over another prefix in up to 20% of their occurrences, which ultimately means that no prefix is exclusively lexical, or that lexical prefixes can sometimes also stack. Our corpus data also confirms a tendency for a hierarchy, but as multiple prefixes have more than one use and since all of them can be used either as lexical or as superlexical prefixes and can appear in more than one position, a true hierarchy of superlexical prefixes could only be determined if prefix occurrences were coded for specific prefix uses - a task that is unfortunately both unrealistic and will inevitably end up drawing in individual researcher's subjectivity. Our corpus study also showed that whereas prefixed verbs are very common in Slovenian, verbs with stacked prefixes are very rare, all in all making the use of corpora rather poorly suited for investigating prefix stacking options in Slovenian.

On the other hand, our corpus investigation revealed a set of verbs with two prefixes, of which the outer one does not seem to have any of the typical superlexical characteristics, other than the fact that it occurs stacked over another prefix. Zooming in on these verbs, which we called *vz-po-staviti*-type verbs, we compared their outer prefixes to superlexical prefixes, to intermediate prefixes, and to some types of stacked prefixes that had been previously proposed to instantiate lexical prefixes, despite being stacked. We argued that both the inner and the outer prefix in *vz-po-staviti*-type verbs are lexical and cannot be explained away easily. We found that the outer prefixes in these verbs do not seem to form a homogeneous class, and so it is clear that it need not be just one explanation that will solve all of these examples. Some of the discussed cases can be explained relatively easily, and for the majority of them they seem best treated as (a version of) result-modifying prefixes, though some cases may need alternative approaches, which we leave for future research.

Abbreviations

3	third person		PFV	perfective
ACC	accusative		PRS	present tense
INF	infinitive		PTCP	participle
IPFV	imperfective		REFL	reflexive
M	masculine		SG	singular
NOM	nominative		SI	secondary imperfectivization
			TV	thematic vowel

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