

The syntax of perdurative-prefixed verbs and the VP-internal/VP-external prefix distinction

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1. Introduction

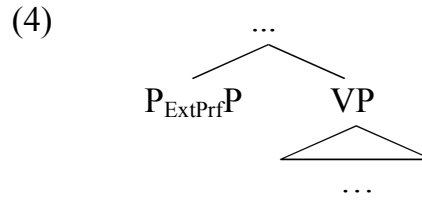
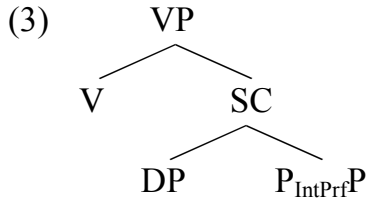
This paper discusses Slavic verbs with so-called perdurative prefixes, in which the addition of a prefix and a concurrent temporal/measure expression contributes to the input predicate an aspect-like sense of duration (e.g. Filip 1999, Borik 2006, Ramchand 2008). ‘Perdurative’ uses can be realized by more than a single prefix (e.g. Russian *pro-* and *pere-*, Flier 1975, 1985), and as will become clear below, such verbs are not a homogeneous class—two subtypes are presented in (1)-(2).¹

- (1) Juš je v arestu pre-sedel *(dve leti).
Juš is in jail through-sat two years
‘Juš was in jail for two years / Juš spent two years sitting in jail.’
- (2) Takrat se je Juš *(ogromno) pre-smejäl.
then self is Juš a-great-deal through-laughed
‘Back then Juš laughed a lot / spent a lot of time laughing.’

The discussion is cast against the background of the widely-accepted view that Slavic prefixes split into two large groups: one group contains ‘internal’ or ‘lexical’ prefixes, which contribute spatial or idiosyncratic meanings, affect the base-verb’s argument structure, cannot stack over other prefixes and will always be the only one of its kind on the verb stem; the other group contains ‘external’ or ‘superlexical’ prefixes, which contribute adverb-/measure-/aspect-like meanings, do not affect the base-verb’s argument structure and can stack over another prefix. These differences have been proposed to find a straightforward explanation if we assume that internal prefixes originate as resultative secondary predicates in a small-clause-like complement to the VP, (3), whereas external prefixes originate as heads or specifiers of aspectual, quantificational, etc., functional projections above the VP, (4) (e.g. Babko-Malaya 1997, Svenonius 2004, Romanova 2007, Ramchand 2008, cf. also Spencer & Zaretskaya 1998).^{2,3}

1 Unless marked otherwise, examples in this paper are from Slovenian.

2 Going into more detail, Tatevosov (2008) proposes that VP-external prefixes further split into one group that originates between VP and vP and one that originates above vP. This refinement is not important for the purposes of this paper.



As for perdurative prefixes from (1)-(2) above, they are often seen as external: Ramchand (2008) considers all Russian perduratives with *pro-*, including the word-for-word counterpart of (1), external and their measure expression an adjunct (also Fowler 1994, Borik 2006, Gehrke 2008, etc.). On the other hand, Schoorlemmer (1995) has advocated a split approach to Russian perduratives, whereby some of them would be internal, with the measure expression functioning as an object (also Gehrke 2008 for Czech), and some external, with the measure expression functioning as an adjunct.

In this paper I will argue that both types of perduratives in (1)-(2) are internal, i.e. with a resultative origin along the lines of (3). In section 2, I will discuss the type of perduratives from (1), arguing that their measure expression functions as a direct object—an unselected direct object—which in turn shows that we are dealing with an argument-introducing, resultative prefix. Section 3 will discuss the type of perduratives from (2), arguing that while not a direct object, their measure expression is not an adjunct either but rather a complement of the resultative prefix. Two slightly different versions of resultative structures will be proposed for (1) and (2). Section 4 will discuss the stacking options of perdurative prefixes, section 5 some residual cases, and section 6 will conclude.

2. Perdurative-prefixed verbs – Type 1

The perdurative construction under consideration contains two distinguishing elements, a prefix and an obligatory measure expression, (4).

- (4) Juš je v arestu pre-sedel *(dve leti).
 Juš is in jail through-sat two years
 ‘Juš was in jail for two years / Juš spent two years sitting in jail.’

In determining whether the prefix in (4) is an argument-introducing resultative prefix, the question we must ask is whether the measure expression in this perdurative construction functions as a direct object. If it does, this makes it an unselected object that can only be licensed by the prefix since the base verb, ‘sit’, does not support direct objects; following Svenonius (2004), this would mean that we are witnessing a resultative, argument-introducing prefix. But if

3 The result portion of the tree is now typically assumed to be built around a dedicated functional projection labelled ResulP/RP (Svenonius 2004, Ramchand 2008, etc.).

the measure expression functions as an adjunct, we have no proof that the prefix is resultative.

As it turns out, there is ample evidence that at least on one possible parse, the measure expression in (4) functions as a direct object—an unselected direct object—which in turn suggests that *pre-* in (4) is a resultative prefix.⁴ First, the measure expression can act as the antecedent of ordinary relativization, (5); as the latter requires a direct object, the measure expression must be a direct object.

- (5) Štiri leta, katera je Juš pre-sedel v arestu, so minila en dva tri.
 four years which is Juš through-sat in jail are passed one two three
 ‘The 4 years which Juš spent in jail went by like a flash.’

Secondly, unlike its modified counterparts like ‘all morning’, an unmodified noun such as ‘morning’ cannot function as an adjunct and is as such impossible with the unprefixed ‘sit’, (6). But the measure expression in our perdurative construction *can* be realized by an unmodified noun such as ‘morning’, (7); the measure expression in (7), then, must be acting as a direct object.

- (6) Juš je *(celo) jutro sedel na tleh.
 Juš is all morning sat on floor
 ‘Juš sat on the floor all morning.’
 (7) Juš je (celo) jutro pre-sedel na tleh.
 Juš is all morning through-sat
 ‘Juš sat on the floor all morning/spent the whole morning sitting on the floor.’

Thirdly, whereas Slovenian direct objects undergo the genitive of negation, adjuncts do not. So since the measure expression in our perdurative construction undergoes the genitive of negation, (8), it must be acting as a direct object; and as expected, in the absence of the prefix, the (then optional) measure expression with ‘sit’ indeed does not undergo the genitive of negation, (9).

- (8) a. Juš je v ječi pre-sedel 3 leta. b. Juš v ječi ni pre-sedel 3 let.
 Juš is in jail through-sat 3 yrs_{Acc} Juš in jail is.not through-sat 3 yrs_{Gen}
 ‘Juš spent 3 years in jail.’ ‘Juš did not spend 3 years in jail.’
 (9) a. Juš je v ječi sedel 3 leta. b. Juš v ječi ni sedel {3 leta / *3 let}.
 Juš is in jail sat 3 yrs_{Acc} Juš in jail is.not sat 3 yrs_{Acc} 3 yrs_{Gen}
 ‘Juš spent 3 years in jail.’ ‘Juš did not spend 3 years in jail.’

4 Note that the mere fact that the measure expression in (4) is in the accusative does not prove that it functions as a direct object since durative adjuncts can also be realized by accusative-marked NPs (e.g. Szucsich 2001).

Fourthly, the ‘do so’ VP pro-form is known to substitute for the verb and its direct object and to leave adjuncts outside the substituted part. Applying this constituency test to the perdurative construction, it turns out that the measure expression is indeed part of what is substituted for by the verbal pro-form and thus cannot be left out, as attempted in (10), so it must be acting like a direct object; but as expected, in the absence of the prefix, the (then optional) measure expression with ‘sit’ is not part of what is substituted for by the verbal pro-form and thus can be left out, as in (11).

- (10) *Juš je na tleh pre-sedel 5 ur, Jan pa je to {naredil / počel} 3 ure.⁵
 Juš is on floor through-sat 5 hours Jan ptcl is this did^{Impf} did^{Pf} 3 hours
 (intended: ‘Juš sat on the floor for 5 hours, and Jan did so for 3 hours.’)
- (11) Juš je na tleh sedel 5 ur, Jan pa je to počel 3 ure.
 Juš is on floor sat 5 hours Jan ptcl is this did^{Impf} 3 hours
 ‘Juš sat on the floor for 5 hours, and Jan did so for 3 hours.’

To sum up, we have seen four pieces of evidence that show that the measure expression in the perdurative construction under consideration acts like a direct object and not like an adjunct. Since our test-case perduratives were based on the intransitive verb ‘sit’, which accepts measure-expression adjuncts but not direct objects, this makes the direct-object measure expression in the perdurative construction an unselected object. As unselected objects are widely held to be the hallmark of resultative prefixation (Spencer & Zaretskaya 1998, Svenonius 2004, Ramchand 2008, etc.), the prefix *pre-* in this Slovenian perdurative construction must be a resultative prefix.

Before concluding, let me note that as shown in Žaucer (2009), the relativization evidence from (5) and the unmodified-noun measure-expression evidence from (6) also works for the Russian counterpart of (4), i.e. (12) below. This supports Schoorlemmer’s (1995) claim that at least with one type of Russian perduratives, the measure expression must act as a direct object, and so at least on one parse of sentences such as (12), the Russian perdurative *pro-* must also be a resultative prefix. According to Gehrke (2008: 175), the same also holds for perduratives in Czech.⁶

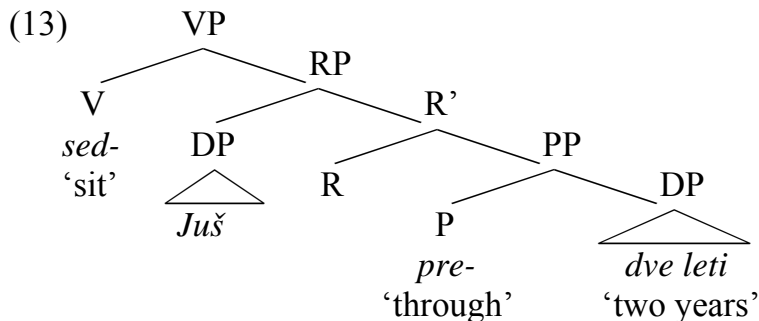
5 The two forms of ‘do’—the suppletive imperfective ‘počel’ and perfective ‘naredil’—are used to make sure that the ungrammaticality is not due to an aspectual incompatibility between the verbal pro-form and the substituted VP.

6 Though this paper focuses on the syntax of *pre-*perduratives, an aspect-related note may be in order. As the temporal expression does not function as an adjunct but as a VP-internal argument, its presence does not show that perdurative predicates are atelic (contra Borik 2006: 78), just as the presence of *two hours* in *Jim wasted two hours* is not a sign of atelicity. To test their (a)telicity, such predicates must be tested for compatibility with (a)telicity-diagnosing ‘for x time’/‘in x time’ *in the presence* of the obligatory VP-

- (12) Petja pro-sidel v tjur'me *(5 let). (Russian)
 Petja through-sat in jail 5 years
 'Petja was in jail for 5 years / spent 5 years in jail.' (Borik 2006: 80)

2.1 Structure of perdurative-prefixed verbs of type 1

The previous section established that the perdurative *pre-* from (1) is a resultative prefix and that the measure expression in (1) acts like a direct object. Based on this evidence, coupled with the assumption that resultatives have the basic structure from (3) above, I propose that the perdurative *pre-* sentence from (1) has the structure in (13).⁷



The starting configuration of the perdurative *pre-* sentence from (1) thus has 'Juš' as the subject of result and the temporal expression as the complement of *pre-*. In having the Location/Ground argument merged as the internal argument of P, (13) thus adheres to the UTAH as extended to the P domain in Svenonius (2003); at the same time, *pre-* is assumed to be special among prefixes either in being transitive or in allowing overt complements (as claimed for the particle *through* in McIntyre 2004), though it is still unable to assign prepositional case (see Svenonius 2003, 2004). From its original position, 'Juš' is then promoted to the sentential subject position and the measure expression, in search for case, to the direct object position (say, AgrOP). In (13) we thus have an 'unaccusative' structure, although the special type that has two low-originating arguments rather than one, along the general lines of what has been proposed for verbs such as *have* and *get* (e.g. Pesetsky 1995, McIntyre 2005, etc.) as well as, in fact, for the Russian spatial manner-of-motion *pere-*construction, as in *Samoljot pereletajet granicu* (lit. plane across-flies border) 'The plane is flying across the

internal temporal argument. Understandably, for such attempts to be feasible at all, rather special contexts have to be set up; see Žaucer (2009: 165-9) for data and discussion.

7 It is irrelevant for my purposes here whether the prefix is in R itself (with the Figure argument in its specifier and the Ground argument in its complement) or in a RP-internal PP, with R being null (cf. Svenonius 2004 for discussion).

border’ (Svenonius 2004: 218-23).⁸ Indeed, what (13) represents is a manner-of-motion construction, but with the derived sentential subject moving in time rather than space (yielding the meaning ‘sit(Juš) & BECOME/GO through(Juš,two years)’). For a longer discussion of this account, see Žaucer (2009), and for further details of the syntactic and semantic composition of RP-based structures for resultatives, see Svenonius (2004) and Ramchand (2008).⁹

3. Perdurative-prefixed verbs – Type 2

In section 2, I presented evidence that with some intransitive-based perdurative *pre*-verbs, the measure expression functions like a direct object (with what Schoorlmemmer 1995 claimed for Russian *pro*-perduratives, contra Borik 2006, Ramchand 2008), which makes it an unselected object, suggesting that *pre*- is a resultative, argument-introducing prefix. I will now turn to perduratives such as (14), repeated from (2) above.

- (14) Takrat se je Juš *(ogromno) pre-smejäl.
 then self is Juš a-great-deal through-laughed
 ‘Back then Juš laughed a lot / spent a lot of time laughing.’

Just like the perduratives from section 2, (14) contains the prefix *pre*- and an obligatory measure expression. But unlike those perduratives, (14) is not built on an obvious intransitive but rather on an inherently reflexive verb, and this reflexive seems to be retained in the perdurative construction. It is clear, then, that unlike with the perduratives from section 2, the measure expression of these perduratives cannot be a direct object.¹⁰ So the question that arises is: Is this evidence that the *pre*- of these perduratives is not resultative? I will argue that the answer to this question is negative; this *pre*- is also resultative, and the reflexive is retained because we are dealing with a ‘selected resultative’

8 This is also why despite the proposed structure, such sentences will not be expected to pass the usual unaccusativity tests (see also Fn. 9 below).

9 One might ask whether the observed situation—where the prefix is resultative, the measure expression acts like a direct object, and resultatives are assumed to have the basic structure from (3) above—is not also compatible with a version of (13) in which Juš would originate outside the result (in Spec,VP or Spec,vP) and the measure expression as the subject of result (in Spec,RP). I cannot go into this here, but I refer the reader to Žaucer (2009: 170-6) for evidence against this alternative (based on an intransitive denominal subtype of temporal *pre*-verbs that also form lexical causative counterparts, which is compatible with an unaccusative and not unergative configuration).

10 It is irrelevant for my purposes here whether the reflexive should be analyzed as an actual argument or as some sort of valency-reducing element; one way or another, it is an element that is generally in complementary distribution with direct objects.

construction (in the sense of Bowers 1997, i.e. with a structure along the lines of $[_{VP} [_{Spec,VP} NP] [_{V'} [_{V} VERB] [_{SC} NP \text{ PREFIX}]]]$).

Clear evidence that whereas unselected objects diagnose a resultative prefix, obligatory occurrence with the verb's usual object does not diagnose a non-resultative prefix comes from one type of manner-of-motion constructions (cf. also Bowers 1997). Consider the pattern in (15)-(17), where it is the prefix that turns a sound-emission verb into a manner-of-motion construction.

- | | |
|-----------------------|-----------------------------------|
| (15) a. cviliti (*se) | b. Juš (*se) je pri-cvilil domov. |
| whine self | Juš self is at-whined home |
| 'whine' | 'Juš came home whining.' |
| (16) a. jokati (se) | b. Juš (se) je pri-jokal domov. |
| cry self | Juš self is at-cried home |
| 'cry' | 'Juš came home crying.' |
| (17) a. smejati *(se) | b. Juš *(se) je pri-smejäl domov. |
| laugh self | Juš self is at-laughed home |
| 'laugh' | 'Juš came home laughing.' |

(15) shows that 'whine' on its own has no inherent reflexive, and it also cannot have it in the manner-of-motion counterpart; (16) shows that 'cry' on its own *may* have an inherent reflexive, and it also *may* have it in the manner-of-motion counterpart; and (17) shows that 'laugh' on its own *must* have an inherent reflexive, and it also *must* have it in the manner-of-motion counterpart. Now, if spatial prefixes such as the *pri-* in (16) and (17) are resultative, as is widely assumed (e.g. Svenonius 2004)¹¹, this means that the presence of the verb's usual object in and of itself cannot be an argument against a resultative analysis of perdurative prefixes either. Moreover, as the pattern of impossible/optional/obligatory inherent reflexive from (15)-(17) repeats perfectly with their perdurative counterparts, as shown in (18)-(20), this match in fact suggests that on a par to (15)-(17), the perduratives in (18)-(20) should also be analyzed as resultative manner-of-motion constructions.

- | | |
|-----------------------|---|
| (18) a. cviliti (*se) | b. Juš (*se) je ogromno pre-cvilil. |
| whine self | Juš self is a-great-deal through-whined |
| 'whine' | 'Juš spent a lot of time whining.' |

11 Note that the assumption that spatial prefixes are always resultative is pervasive also among the proponents of the internal/external prefix split, e.g. Svenonius (2004), Romanova (2007), etc. Similarly, spatial particles and PPs are widely assumed to be resultative in Germanic languages, including their use in sound-emission-based manner-of-motion constructions, e.g. McIntyre (2004), Folli & Harley (2006), etc.

- (19) a. jokati (se) b. Juš (se) je ogromno pre-jokal.
 cry self Juš self is a-great-deal through-cried
 ‘cry’ ‘Juš spent a lot of time crying.’
- (20) a. smejati *(se) b. Juš *(se) je ogromno pre-smejaj.
 laugh self Juš self is a-great-deal through-laughed
 ‘laugh’ ‘Juš spent a lot of time laughing.’

3.1 Status of measure expression

We have established that we need a resultative analysis for this type of perduratives. We have also established that their direct-object position is occupied by the verb’s usual object, which means, in turn, that the obligatory measure expression cannot function as the direct object. The question we are faced with, then, is where in the structure the measure expression originates.

A first reaction may be that it must be an event-quantifying adjunct (cf. Borik 2006 for the measure expression with Russian perdurative *pro-*); and if it is an adjunct, the plausibility of a resultative status of the perdurative prefix diminishes. Note, however, that if (15)-(17) and (18)-(20) are ‘selected resultatives’ and thus have the verb’s usual argument as both Spec,RP and Spec,VP, the structure proposed for perdurative-prefixed verbs of type 1 in (13) above *does* have another argument position available, i.e., the complement of the prefix, (21):

- (21) [_{VP} *se* ... [_V *sed-*] [_{ResultP} *se* ... [_{PP} *pre-* *ogromno*]]]
 self sit self through a-lot

Of course, unlike in (13) above, where the complement of the prefix was claimed to be promoted to the direct-object position, thus receiving accusative, this structure in (21) poses the question of how the complement of the prefix is licensed, given that the same promotion-to-direct-object solution is not available. Before addressing this question, however, I will first provide some support for the idea that the measure expression originates as an argument (complement to *pre-*) rather than as an event-quantifying adjunct.

The first piece of support comes from passivization. As shown in (22), the adjectival participle in a passivized perdurative of this type is marked genitive.

- (22) a. Takrat je bilo veliko pre-plesanega.
 then is been a-lot through-danced_{Gen}
 ‘A lot of dancing was done back then.’
- b. Takrat je bilo veliko (hudega) pre-trpljenega.
 then is been a-lot (bad_{Gen}) through-suffered_{Gen}
 ‘A lot (of bad stuff) was gone through back then.’

Knowing that complements to measure phrases such as ‘a lot’ are regularly genitive in Slovenian (e.g. *veliko vode*_{Gen} ‘a lot of water’), the genitive on the adjectival participle of the perdurative in (22) can easily be explained as an instance of agreement with the expressed or unexpressed complement of ‘a lot’, quite comparably to what is found outside the perdurative construction, (23).

- (23) *Veliko (pametnega) je bilo povedanega, ampak ...*
 a-lot smart_{Gen} is been said_{Gen} but ...
 ‘A lot has been said / A lot of smart things have been said, but ...’

On the other hand, if ‘a lot’ is an event-quantifying adjunct, the genitive marking on the adjectival participle of the perdurative in (22) is mysterious. Furthermore, note that unlike in the intransitive-based *pre*-perdurative in (22), in transitive-based *pre*-perduratives, it is not the measure expression that externalizes but the verb’s usual object, (24).

- (24) *Lansko leto je bil pa naš šef ogromno pre-sekiran.*
 last year is been ptcl our boss a-great-deal through-pestered
 ‘Last year, our boss was pestered a lot / was put through a lot of pestering.’

If the measure expression originates as the complement to *pre*- and ‘boss’ as the subject of small clause/*pre*-, this is expected, since ‘boss’ is higher. Likewise expected is the case of the adjectival participle, which—via agreement with the non-measure externalized object—will now be nominative rather than genitive.¹²

A different kind of support for the view that the measure expression is not a simple event-quantifying adjunct also comes from its aspectual contribution. If rather than a resultative prefix, *pre*- were a Cinquean measure-/aspect-type F⁰ or FP, or a vP-adverbial (cf. Svenonius 2004), the measure expression should be associated with the same FP. But what we would expect, then, is that all effects that *pre*- contributes to its unprefixed-verb predicate will also be there if we modify such a predicate with just *ogromno* ‘a lot’, without *pre*-. This, however, is not the case, as shown by (25a-b), which differ in terms of aspect as diagnosed by compatibility with the *in-x-time* expression.

- (25) a. *Tiste cajte smo se v pol ure ogromno pre-smejali.*
 those times are self in half hour a-great-deal through-laughed
 ‘Back then, we did/could do a lot of laughing in five minutes.’

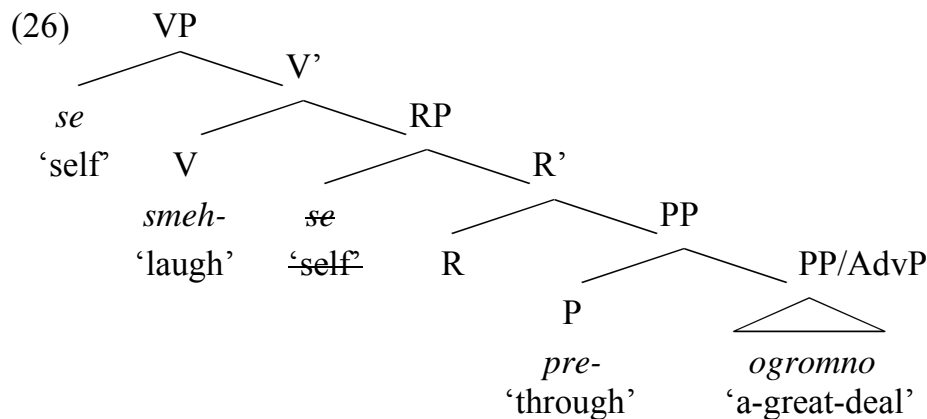
12 Here I do not test perduratives based on inherent-reflexive predicates (*smejati se* ‘laugh’), which do not passivize; this is expected given inherent-reflexive predicates do not passivize outside of the perdurative construction either.

- b. ??Tiste cajte smo se v pol ure ogromno smejali.
 those times are self in half hour a-great-deal laughed

In sum, after revealing parallels between spatial manner-of-motion constructions and the second type of *pre*-perduratives which suggest that the latter should also be analyzed as ‘selected resultative’ manner-of-motion constructions, we have now determined that the presence of the verb’s usual direct object does not imply that the measure expression must be an adjunct. With Spec,RP taken by the verb’s usual direct object, we still have the position of *pre*-’s complement; having the measure expression there is in fact supported by passivization facts.¹³

3.2 Structure of perdurative-prefixed verbs of type 2

Based on the evidence from the previous two subsections, coupled with the assumption that resultatives have the basic structure from (3) above, I propose that the perdurative *pre*- sentence from (2)/(14) (i.e. the second type of perdurative *pre*- sentences) has the structure in (26).



The tree in (26) thus derives a ‘selected resultative’, with the inherent reflexive (and more generally, the verb’s usual object) associated via movement with both the Spec,RP and the Spec,VP position. The measure expression, in turn, originates as the complement of the resultative prepositional prefix, just as was the case with the first type of *pre*-perduratives (see (13) above). But unlike what was the case in (13), where the measure expression could then be promoted to the sentential direct-object position (say, AgrOP) to get accusative case, the

13 The ‘do so’ constituency test, which I used in section 2 to defend the argument status of the measure expression in type-1 *pre*-perduratives, gives unclear results with respect to the argument/adjunct status of the measure expression in type-2 *pre*-perduratives. I leave the interpretation of the results of this test for future work.

measure expression in (26) cannot be case-licensed by getting promoted to the sentential direct-object position, since the latter will be taken by the higher originating inherent reflexive (and more generally, the verb's usual object). However, what I propose is that the measure-expression complement of the prefix in *pre*-perduratives of type 2 can survive alongside the direct object because it is not a nominal/NP argument but rather an adverbial/PP argument (Neeleman 1997) and as such does not need structural case to be licensed.¹⁴

Whereas supporting this with positive evidence is not an easy matter and cannot be undertaken here for reasons of space, I wish to stress that adverbial complements to verbs and prepositions, such as the underlined chunks in the English examples in (27)-(28), abound in Slavic as well as (see Žaucer 2009 for a longer discussion and for more English and Slovenian data).

- (27) a. We spent till 10:30 bird-watching along the ridge.
 b. I told her that I needed till Friday to make the decision.
- (28) a. ... till after 3 p.m.
 b. Before long, we'll all be selling our shirts to buy cigarettes.

Note that these adverbials do not function as adjuncts. This is shown by the word-order facts in (29): whereas the place adjunct *there* comes between the verb and the temporal adverbial when modifying the verb *stand*, it must follow the temporal adverbial when standing next to *spend*, which is expected if the temporal adverbial is actually the complement of the verb. The same is also shown by the 'do so' constituency test in (30): whereas the 'do so' pro-form is perfectly compatible with the predicate under consideration, it cannot be used so that it would leave the temporal adverbial outside of its scope, which is expected if the latter is an argument but not if it is an adjunct outside the VP.

- (29) a. I didn't spend long enough there to realize what was going on.
 b. *I didn't spend there long enough to realize what was going on.
 c. I didn't stand there long enough to realize what was going on.
- (30) We spent till 10:30 bird-watching along the ridge and they did so {✓too / *till 11:30}

To sum up, I have proposed that unlike type-1 *pre*-perduratives from section 2, type-2 *pre*-perduratives are 'selected-resultative' manner-of-motion constructions. The measure expression originates as the complement of the resultative prefix in both types. But whereas in type-1 *pre*-perduratives, the

14 Inside the PP argument, the complement of P, if nominal, *does* of course need case. In the case of overtly prepositional adverbials, it will get it from the overt P; in the case of bare-NP adverbials such as *vse jutro* 'all morning' or adverbials such as *veliko* 'a lot', it will get it from a null P (cf. McCawley 1988).

measure expression is an NP which surfaces in the structural case-marking direct-object position, in type-2 *pre*-perduratives, the measure expression is an adverbial argument. A nominal argument is impossible in this case since the structural case-marking direct-object position is taken up by the verb's 'selected' internal argument and so there is no case-licensing position in the clausal structure for an NP measure expression to survive; an adverbial complement to *pre*-, however, can survive since it does not need structural case to be licensed.¹⁵

4. Stacking: possibilities and restrictions

In sections 2 and 3, I argued that the prefix in both types of perduratives is resultative, i.e. an internal rather than an external prefix. Now, it has been claimed that one characteristic of resultative prefixes is that they do not stack (Svenonius 2004, etc.), which is in line with the widely-assumed generalization that there can be only one independent resultative secondary predicate per verb (Goldberg 1995, Rappaport Hovav & Levin 2001, Ramchand 2008, etc.). However, in what was just argued to be a resultative use, *pre*- is occasionally found stacked, (31).¹⁶

- (31) a. *za-jebavati se (s tem)*
 behind-screw self with this
 'fiddle (with this)'
 b. *Juš se je s tem ogromno pre-za-jebaval.*
 Juš self is with this a-lot through-behind-screwed
 'Juš spent a lot of time fiddling with this.'

A discussion of such cases is beyond the scope of this paper, so I will simply note that several versions of a structure for constructions with two resultative prefixes have been proposed (Arsenijević 2006, Žaucer 2009, 2010), the strongest support for which comes from various kinds of data with doubly-prefixed verbs with two unselected objects, such as the Slovenian *na-od-povedovati se koncertov* (on-off-tell concerts_{Gen} self) 'get one's fill of calling off

15 Russian also has a very closely related subtype of 'selected-resultative' type-2 perduratives, (i), which essentially differs only in the type of adverbial complements the prefix will accept. I refer the reader to Žaucer (2009) for some data and discussion.

(i) *Ivan pro-smijal-s'a do utra.* (Russian)
 Ivan through-laughed-refl till morning

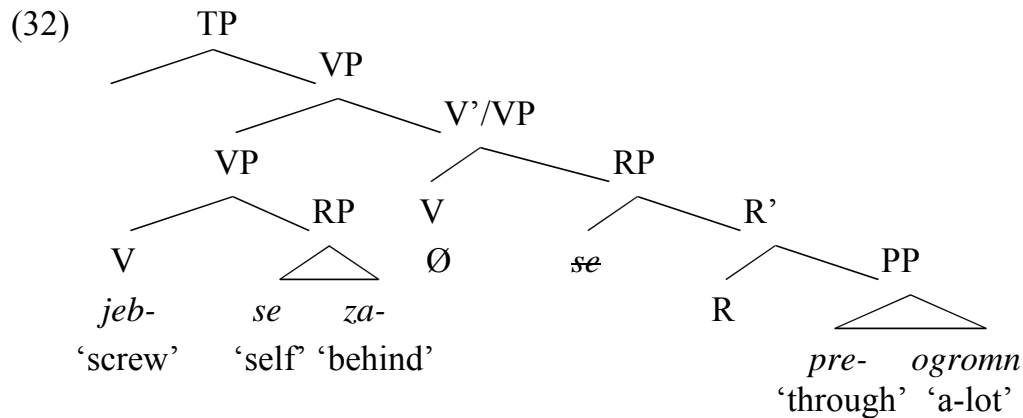
'Ivan laughed till the morning / spent till the morning laughing.'

16 The same holds for Russian *pro*-perduratives, (i).

(i) *Pro-vy-dergival morkovku poldnja.* (Russian)
 through-out-pulled carrot half-day

'He spent half a day pulling out carrots.' (Tolskaya 2007: 346)

concerts'. It is argued there that there is evidence for two resultative VPs under one TP – with one of the V's null. Although all of the versions of that approach have their shortcomings, I believe that if one adopts the approach to resultatives from (3) above, something along the general lines of those proposals must be on the right track, so I will simply assume that the perduratives built on a resultative-prefixed construction have a structure along the general lines of (32), and then proceed to pointing out a welcome consequence of this analysis.



The two types of perduratives show an asymmetry with respect to stacking. While type 2 shows occasional cases of stacking, I have not come across a spontaneous case of stacking with type 1. At the same time, stacking examples of type-1 perduratives *can* be constructed, but with stringent restrictions. The stacking pattern just described, or rather, the possible combinations are governed by case. That is, since there is just one non-nominative structural case, the subjects of the two results in (32) will either have to be the same, or one will have to be such that it does not rely on structural case (i.e. that it has inherent case, that it is an implicit argument, etc.). Now, when the measure expression of perduratives is an adverbial argument, as in type 2, there is one nominal less to take care of with respect to case, which means fewer restrictions on possible combinations. But when the measure expression of perduratives is a nominal argument functioning as the sentential direct object, as in type 1, we will be able to insert an already prefixed verb in this construction only if it is an unaccusative verb without an object or a verb with an implicit object, (33), but not if each of the prefixes introduces a nominal argument that is to surface as an object, (34).

- (33) a. za-rdevati b. Juš je jutro pre-za-rdeval na balkonu.
 behind-red Juš is morning through-behind-blushed on balcony
 'blush' 'Juš spent the morning blushing on the balcony.'

- (34) a. za-jebavati Jana
 behind-screw Jan_{Acc}
 'pester Jan'

- b. *Juš je jutro pre-za-jebaval Jana na balkonu.
 Juš is morning_{Acc} through-behind-screw Jan_{Acc} on balcony
 (intended: ‘Juš spent the morning pestering Tone on the balcony.’)

So, assuming that cases with a stacked a perdurative *pre-* have a structure along the lines of (32), which has been argued to be needed independently, our case-sensitive analysis of the two types of perduratives nicely captures the different stacking possibilities and restrictions of the two perdurative subtypes; on a unified account, in which the measure expression is always an adjunct, these differences remain mysterious.¹⁷

6. Conclusion

I have argued that *pre-*perduratives fall into two subtypes. Both are temporal manner-of-motion constructions with a resultative *pre-* and both have the measure expression originating as the complement of *pre-*. However, the measure expression is nominal in type 1 and can thus only surface as a direct object—which makes it an unselected object—it is an adverbial argument in type 2, independent of structural direct-object case, so it can coexist with the verb’s usual object in a ‘selected-resultative’ structure. The proposed case-sensitive approach was also shown to account for the different stacking possibilities and restrictions of the two perdurative subtypes.

As a final note, I add that it is still possible that prefixes split into two subclasses in one of which the prefix is more tightly fused with the verb root than in the other (cf. Ziková 2012). The results of this paper only argue against the claim that prefixes which are less tightly fused with the root cannot be resultative—if resultative means what it means for Svenonius (2004), Ramchand (2008), etc. The same holds for the results of my work on some other putatively external and stacking prefixes, for which see Žaucer (2009, 2011).

17 Above I assumed that cases such as (i) are essentially caused-motion (i.e. manner-of-caused-motion) constructions. Note, in view of the existence of (32), that such cases may also be compatible with a two-VP structure, specifically, with a structure with non-resultative VP within a resultative VP. This might make sense in view of their relative rarity. The same could also be the approach to take with respect to Russian perduratives like (ii), invariably based on atelics (Schoorlemmer 1995) and reminiscent of the well-known problematic cases like *Jim danced mazurkas across the room*. I leave this for future work, but see Žaucer (2009: 211-6) for some discussion.

- (i) Juš je ogromno pre-sekiral šefa.
 Juš is a-lot through-pestered boss
 ‘Juš put his boss through a lot of pestering.’
- (ii) Galja pro-poloskala bel’e vse utro. (Russian)
 Galja through-washed laundry_{Acc} all morning
 ‘Galja spent all morning washing the laundry.’

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