Aktionsart and Aspect
in Verb-Particle Constructions

Peter Svenonius
CASTL, University of Tromsø

Workshop on Verbal Periphrasis, UMR 7023, CNRS/Paris 8

1 Prefixes, particles, and prepositions

Slavic prefixes are closely related to the P system; most verbal prefixes also have a use as prepositions, as illustrated with the following pairs of Russian examples (here and throughout I illustrate Slavic with Russian).

(1) Russian prefixes and prepositions, Matushansky (2002); Svenonius (2004b)

<table>
<thead>
<tr>
<th>Russian prefixes and prepositions</th>
<th>English meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>iz-bežatj</td>
<td>1. iz out from doma</td>
</tr>
<tr>
<td>out from run</td>
<td>out from house</td>
</tr>
<tr>
<td>avoid'</td>
<td>'out of the house'</td>
</tr>
<tr>
<td>pod-bežatj</td>
<td>2. pod under domom</td>
</tr>
<tr>
<td>under run</td>
<td>under house</td>
</tr>
<tr>
<td>'run up to'</td>
<td>'under the house'</td>
</tr>
<tr>
<td>pri-bežatj</td>
<td>3. pri by dome</td>
</tr>
<tr>
<td>by run</td>
<td>by house</td>
</tr>
<tr>
<td>'come running'</td>
<td>'by the house'</td>
</tr>
<tr>
<td>ot-bežatj</td>
<td>4. ot away from doma</td>
</tr>
<tr>
<td>away from run</td>
<td>away from house</td>
</tr>
<tr>
<td>'run off'</td>
<td>'from the house'</td>
</tr>
<tr>
<td>v-bežatj</td>
<td>5. v in dom</td>
</tr>
<tr>
<td>in run</td>
<td>in house</td>
</tr>
<tr>
<td>'run into'</td>
<td>'into the house'</td>
</tr>
</tbody>
</table>

The same can be said for Germanic: verbal particles are closely related to the P system; many such particles have uses as prepositions, as illustrated here (and throughout) with English.

(2) English verbal particles and prepositions

<table>
<thead>
<tr>
<th>English verbal particles and prepositions</th>
<th>English meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>take off ('launch')</td>
<td>off the table</td>
</tr>
<tr>
<td>run out ('be used up')</td>
<td>out the door</td>
</tr>
<tr>
<td>fall in ('line up')</td>
<td>in the house</td>
</tr>
<tr>
<td>choke up ('be seized with emotion')</td>
<td>up the ladder</td>
</tr>
</tbody>
</table>
However, the match is not perfect: some Slavic prepositions are not prefixes, and vice versa. For example, *k* is a preposition, but not a prefix, and *pere-* is a prefix, but not a preposition.

(3) a. k domu
   * to house
   ‘to the house’
b. *k-bežatj
   * to-run
c. pere-bežatj
   * across-run
   ‘run across’
d. *pere domu
   * across house

Again, Germanic is similar. For example, *from* is a preposition, but not a particle (e.g. there are no verb-particle constructions in which *from* alternates between a position after the object and a position before it), and *away* is a particle but cannot be used as a (simple) preposition.

(4) a. from the house
b. *take (X) from
c. take X away
d. *away the house

This state of affairs can be modeled in terms of a set of features which allow exponents to be matched to syntactic/semantic structures. The fact that a prepositional phrase does not admit all prefixes, and a prefixal or particle structure does not admit all prepositions, means that the featural specifications of preposition and prefix or particle are disjoint. For example, prepositional structures might include features X and Y, while prefixal or particle structures include features W and X. An exponent like Russian *iz*, which can be either a prefix or a preposition, must then bear the feature X, at the very least. The presence of this feature X on *iz* allows it to be inserted in some prepositional structures as well as some prefixal structures, as sketched in the trees below.

(5) A substantial set of exponents, including *iz*, can lexicalize either a prefix or a preposition.

```
(5)

PP
/ \ 
X[x,y] DP
/ \ 
i2((w),x,(y)) doma

AspP
/ \ 
X[w,x] VP
/ \ 
i2((w),x,(y)) bežatj

= “avoid”
```
On the other hand, an exponent like $k$, which cannot be prefixal, must have the other prepositional feature $Y$, and lack the feature $X$ (though it may bear other features), as illustrated in the tree below and to the left.

An exponent like $pere$-, which is only prefixal, must then bear the feature $W$; whatever other features it bears, it does not bear $X$ (or $Y$). This is illustrated below to the right.

(6) But some exponents can only lexicalize one or the other

2 Lexical prefixes, Germanic particles

The senses of Slavic prefixes which are typically at their ‘core’ (now speaking informally) are spatial. That is, most Slavic prefixes have some essentially spatial or directional sense which appears to be literal, that is nonmetaphorical.

(7) Russian lexical prefixes often have essentially spatial senses
   a. ot-bežatj
      away.from-run
      ‘run off’
   b. v-bežatj
      in-run
      ‘run into’

From these literal spatial senses a vast wealth of extensions are made in more and less conventionalized ways. Thousands of prefix-verb combinations are idiomatic or lexicalized, and all shades between fully literal to fully opaque are found. A small set of examples serves to illustrate.

(8) Russian lexical prefixes often have idiomatic senses (exx. from Matushansky 2002)
   a. iz-pravitj
      out.from-drive
      ‘repair’
   b. pod-pravitj
      under-drive
      ‘correct’
   c. pri-pravitj
      by-drive
d. v-pravitj
in-drive
‘set’

Exactly the same is true of Germanic. The Germanic particles have core spatial senses—actually directional, with static spatial senses being derivative of these (see Svenonius 2010).

(9) Germanic verb particles also have core spatial senses
a. run away
b. run in
c. run up

Just as with Slavic, Germanic languages have thousands of idiomatized verb-particle collocations, in many cases just as if the verb plus particle were a simple lexical verb.

(10) ...and often acquire idiomatic senses
a. bring up ‘mention’
b. put off ‘postpone’
c. take on ‘confront’
d. play up ‘highlight’

Lexical prefixes can change Aktionsart, or argument structure, by licensing (lexicalizing) predicative structure inside VP, which in turn supports DP arguments. For instance, in the example here, the verb meaning ‘lie’ is intransitive, rejecting a direct object, but when prefixed by za- becomes transitive.

(11) a. Sobaka ležala (*odejalo).
    dog lay blanket
    ‘The dog lay (*the blanket)’
b. Sobaka pro-ležala odejalo.
    dog about-lay blanket
    ‘The dog wore out the blanket by lying on it’ (Dimitrova-Vulchanova 2002)

In the following example, the verb meaning ‘write’ is optionally transitive, but becomes obligatorily transitive when perfectivized by na-.

(12) a. Ivan pisal (pisjmo).
    Ivan wrote letter
    ‘Ivan was writing (a letter)’
b. Ivan na-pisal *(pisjmo).
    Ivan on-wrote letter
    ‘Ivan wrote a letter’ (Babko-Malaya 1999:18)
The same verb can be seen in the following example to change its argument structure with the prefix `za-`, in these sense that the object of `pisatj` ‘write’ is a text, while the object of `zapisatj` ‘write out’ is an instrument.

(13) Ona is-pisala svoju rukcu.

`she out.of-wrote RFX.POSS pen`

‘She has written her pen out [of ink]’ (Spencer and Zaretskaya 1998, 17)

Such effects are characteristic of what are known as ‘lexical’ prefixes in Slavic languages. They also are characteristic of the Germanic verb-particles. Particles can be seen to add arguments, make optional arguments obligatory, or change the thematic nature of arguments, as briefly illustrated below.

(14) Adding arguments
   a. The dog barked (*the cat).
   b. The dog barked the cat out.

(15) Making optional arguments obligatory
   a. Ivan wrote (a letter).
   b. Ivan wrote up *(a letter).

(16) Changing the thematic structure
   She has thrown out her elbow.

These factors strongly suggest an analysis in which the Slavic prefix and the Germanic particle are tightly integrated into the verbal structure, contributing an essential part of the VP, in a kind of ‘complex predicate’ analysis. A formal proposal to this effect is presented, among other places, in Svenonius (2004b), building on Babko-Malaya (1999).

In Slavic languages, the prefixes formally perfectivize the verb, suggesting that they also interact with outer aspect. In Svenonius (2004b), I suggest that they achieve this by moving into an aspectual position outside VP to formally license a perfective feature, having made their thematic and event-structural contribution to meaning inside VP. This is illustrated in the tree in (18), from Svenonius (2004b), based on the example in (17) and its structural analysis in Rojina (2004).

(17) Lexical prefixes originate inside VP, but move into an aspectual position

   On vy-sel iz-za stola.

   `he out-went out.of-behind table`

   ‘He got up from the table’
In Germanic, there is no formal perfective feature associated with the particle, and it is not generally morphologically bound to the verb: in VO Germanic languages like English, Icelandic, and Norwegian one can see the particle ‘shifting’ from one side of the direct object to the other, and in OV languages like German and Dutch one can see the particle being stranded by verb movement. These two differences can be unified if the movement of the Slavic prefix into the aspectual position is what causes it to become prefixed; then the Germanic particle is not incorporated morphologically because it fails to undergo this movement.

This means that the analysis of the two languages can be fully unified: the Slavic lexical prefixes and the Germanic verbal particles originate in the complement of V. Particle shift is the movement of the particle from one VP-internal position to another VP-internal position, as argued in Svenonius (1992, 1996) and Ramchand and Svenonius (2002). The two alternative structural positions of the particle are illustrated in (19) and (20), using Ramchand’s (2008) decomposition of the verb into PROC[ess] and RES[ult] projections.
Thus, I have suggested, Slavic lexical prefixes and Germanic verbal particles have very many characteristics in common, and hence a unified analysis. The spatial and directional contribution is made in the same way to the event description denoted by the VP, because the element is essentially drawn from the same lexical category and is inserted into the tree in the same position. Its effect on argument structure comes because it is fully integrated in the structure of the verb, located in the res projection in Ramchand’s terms, where the result of a process is lexicalized. The fact that Slavic lexical prefixes and Germanic verbal particles are so frequently idiomatized is explained by the tight locality of the P element to the verb root; a verb like *break*, in Ramchand’s system, lexicalizes both proc and res projections, and a complex verb like *run away* or Russian *izbežatj* ‘avoid,’ in this analysis, does too. Thus V-P combinations (whether particle verbs or prefixed verbs) lexicalize the same complex syntactic structure that a simplex resultative verb like *break* or *avoid* does.
The chief difference between them, seen at this level of abstraction, is the perfective feature on the Slavic prefix, which forces it to move into the aspectual domain outside VP, movement which results in its becoming prefixed to the verb (the details of which I have not explicated here). Hence the Slavic prefix will never be stranded by verb movement or otherwise found loose in the verb phrase, the way the Germanic particle is.

3 Superlexical

In addition to the lexical prefixes already discussed, Slavic languages also have a ‘superlexical’ use of prefixes. A sample inventory of labels of superlexical senses of prefixes in Russian is listed in (21), along with examples of the prefixes which can be used to express these senses.

(21) Russian superlexical prefixes (from Svenonius 2004a)

<table>
<thead>
<tr>
<th>Label</th>
<th>Gloss</th>
<th>Exponent</th>
</tr>
</thead>
<tbody>
<tr>
<td>INCEPTIVE</td>
<td>INCP</td>
<td>za</td>
</tr>
<tr>
<td>TERMINATIVE</td>
<td>TRMN</td>
<td>ot</td>
</tr>
<tr>
<td>COMPLETIVE</td>
<td>CMPL</td>
<td>do, iz</td>
</tr>
<tr>
<td>PERDURATIVE</td>
<td>PRDR</td>
<td>pro</td>
</tr>
<tr>
<td>DELIMITATIVE</td>
<td>DLMT</td>
<td>po</td>
</tr>
<tr>
<td>ATTENUATIVE</td>
<td>ATTN</td>
<td>po</td>
</tr>
<tr>
<td>DISTRIBUTIVE</td>
<td>DSTR</td>
<td>po, pere</td>
</tr>
<tr>
<td>CUMULATIVE</td>
<td>CMLT</td>
<td>na</td>
</tr>
<tr>
<td>SATURATIVE</td>
<td>STRT</td>
<td>na</td>
</tr>
<tr>
<td>REPETITIVE</td>
<td>RPET</td>
<td>pere</td>
</tr>
<tr>
<td>EXCESSIVE</td>
<td>EXCS</td>
<td>pere</td>
</tr>
</tbody>
</table>

Most of the exponents which can be used as superlexical prefixes are also used as lexical prefixes (and as prepositions). Superlexical uses of prefixes tend to have temporal or quantificational meanings. A few are illustrated here (from Babko-Malaya 2003 and Romanova 2006), the inceptive, the delimitative, and the cumulative.

(22) a. Ivan za-pel (pesnju).
   *Ivan INCP-sang song*
   ‘Ivan started to sing (a/the song)’

b. Ivan po-čital (knigu).
   *Ivan DLMT-read book*
   ‘Ivan read (a book) for a little while’ (Babko-Malaya 2003)

c. On na-kolol orexov.
   *he CMLT-crackedP nuts*
   ‘He cracked a sufficiently large quantity of nuts’

I noted above that lexical prefixes take on many metaphorical meanings which shade off from the spatial core to all kinds of idiomatic extensions, and
that there are thousands of idiomatic, lexicalized combinations. This is not true of superlexical prefixes. Superlexical prefixes tend strongly to be strictly compositional. A particular temporal or quantificational reading is applied in a regular way to the class of verbs with which that superlexical prefix combines.

For example, there is a superlexical ‘distributive’ reading for Russian pere-, which consistently gives a reading where the process denoted by the verb stem is distributed over the entities denoted by the internal argument, so that there is a distinct event for each entity, as illustrated in (23). The stem kidatj means ‘throw,’ and the prefixed verb perekidatj, on its distributive reading, means that each entity in the denotation of the object is involved in a separate throwing event, hence ‘throw one by one.’

\[(23) \quad \text{a. pere-kidatj DSTR-throw ‘throw one by one’} \]
\[(23) \quad \text{b. pere-kusatj DSTR-bite ‘bite one by one’} \]
\[(23) \quad \text{c. pere-bitj DSTR-beat ‘beat one by one’} \]
\[(23) \quad \text{d. pere-ˇzeˇcj DSTR-burn ‘burn one by one’} \]
\[(23) \quad \text{e. pere-paˇckatsja DSTR-sully ‘sully one by one’} \]

Several diagnostics exist to distinguish superlexical prefixes from lexical prefixes, as discussed in the various literature already cited. Based on that data, it can be concluded that superlexical prefixes, unlike lexical prefixes, are interpreted entirely outside the verb phrase (Svenonius 2004b, building on Babko-Malaya 1999). The main arguments are listed here.

\[(24) \quad \text{Evidence that Russian Superlexical prefixes are outside VP:} \]
\[(24) \quad \text{a. Temporal meanings, rather than spatial} \]
\[(24) \quad \text{b. Absence of idiomatic collocations} \]
\[(24) \quad \text{c. Argument structure: Failure to license unselected arguments} \]
\[(24) \quad \text{d. Secondary Imperfective scopes over lexical, not over superlexical} \]
\[(24) \quad \text{e. Stacking: Superlexical are outside lexical} \]

I assume that the denotation of a verb phrase is an atemporal event description, which must be combined with functional structure before it can have a temporal dimension (cf. e.g. Giorgi and Pianesi 1997). Thus, the domain of temporal interpretations is outside the verb phrase, so the fact that superlexical prefixes can have formally temporal meanings supports the proposal that they are interpreted outside VP.

Turning to the second argument, recall that I suggested that idiomatic listing of verb-particle and lexical prefix-verb combinations was made possible by the fact that they are structurally close together, approximately occupying Ramchand’s PROC and RES components of the decomposed verb. Superlexical prefixes show no sign of being included in listed entries of verb stems, and this supports my contention that they are outside the VP.

As for (24-c), the failure of superlexical prefixes to license unselected arguments also follows if the superlexical prefixes are outside the domain of argument structure, that is, they are outside the VP where arguments are thematically licensed (cf. e.g. Baker 1988 for arguments that the thematic arguments of a
predicate are linked tightly to syntactic configuration, so that a thematic argument of a predicate cannot be introduced just anywhere).

Argument (24-d) is based on the distribution of the ‘secondary imperfective’ of Slavic languages like Russian (Bulgarian works somewhat differently with respect to this particular diagnostic, but I set that aside here and focus on Russian which is more broadly representative).

A prefix makes a Russian verb perfective, as can be confirmed by a number of diagnostics. Thus, the verb stem *pisatj* ‘write’ is imperfective (as indicated in the gloss in (25-a) by a superscripted ‘I’), but the prefixed version *nadpisatj*, meaning something like ‘annotate’ (e.g. mark with one’s name) is perfective (note the superscripted ‘P’ in (25-b)). In order to use the verb meaning ‘annotate’ imperfectively (for example in a progressive sense), it must be modified by the secondary imperfective, as illustrated in (25-c).1

(25) Secondary imperfective scoping over a lexical prefix

a. pisa-tj
   *write-INF*′
   ‘write’ (imperfective)

b. nad-pisa-tj
   *above-write-INF*P
   ‘annotate’ (perfective)

c. nad-pis-yva-tj
   *above-write-ImpF-INF*′
   ‘annotate’ (imperfective)

Since the lexical prefix induces perfectivity, and the secondary imperfective suffix undoes this effect, it can be said that the secondary imperfective ‘scopes over’ the lexical prefix.

But the secondary imperfective generally does not scope over a superlexical prefix. The usual effect of adding a secondary imperfective suffix to a superlexically prefixed stem is ungrammaticality. This makes sense if the superlexical prefix is structurally higher than the secondary imperfective: The prefix needs to attach to an imperfective base, and the stem is already imperfective. The secondary imperfective cannot be attached to an already imperfective base, so the combination stem plus secondary imperfective is ungrammatical, unless there is a lexical prefix; a superlexical prefix doesn’t help, as it is attached too late. This is argument (24-d), illustrated in (26).

(26) Secondary imperfective unacceptable with a superlexical prefix

a. pro-pisa-tj
   *PRDR-write-INF*P
   ‘write [for a specified amount of time]’ (perfective)

b. *pro-pis-yva-tj
   *PRDR-write-ImpF-INF
   (ungrammatical as a perdurative)

1Thanks to Inna Tolskaya for assistance with the data set in (25)–(27).
However, in some rare cases it is possible to combine lexical and superlexical prefixes, as in the following example:

(27) Stacking of superlexical over lexical
   a. pro-nad-pis-yva-tj
      PRDR-above-write-IMPF-INF$^P$
      ‘annotate [for a specified amount of time]’ (perfective)
   b. *pro-nad-pisa-tj
      PRDR-above-write-INF

The combination of prefixes is known as ‘stacking’ in the literature on Slavic prefixes. Note that the secondary imperfective is present here, in fact obligatorily. This is exactly what is expected. The stem is basically imperfective; prefixes attach fairly freely to imperfective stems. The lexical prefix nad- makes it perfective. Further prefixation of the perfective form is then impossible, as prefixes do not attach to perfective stems. But if the prefixed stem is imperfectivized by the secondary imperfective, then further prefixation can, in principle, take place, and this is how (27) is derived.

I have skipped several important details, see Svenonius (2004a,b) and references cited there for a fuller story. But note that the order of the stacked prefixes in (27) is superlexical outside lexical, consistently with my claim that superlexical prefixes are outside VP, while lexical prefixes originate inside VP (cf. argument (24-e)).

4 Are there Superlexical particles in Germanic?

I have shown that the Slavic lexical prefixes have counterparts in Germanic, and that the properties of Slavic lexical prefixes are strikingly similar to the properties of Germanic verbal particles. But now that I have also shown that Slavic languages have superlexical prefixes, the question arises whether these too have a counterpart in Germanic. I cautiously suggest here that they do not, though more work on this issue is needed and the following remarks can be considered to be work in progress.

Since Slavic superlexical prefixes have temporal and quantificational meanings, the natural place to look for a counterpart in Germanic is in the same meaning domain. At first blush, the following examples might seem to be candidates.

(28) Germanic languages also have some ‘aspectual’ uses of verbal particles
   a. Eat up your soup (completive)
   b. The band played on (continuative)

I will focus on ‘completive up’ in English. This is a case that seems to contribute some sense of completion to the predicate. Where eat is compatible with incomplete eating, eat up requires some kind of telos or at least a nonhomogeneous interpretation of the event. Consider the following pair.
Since the grass can be understood as either quantized or nonquantized, (29-a) is ambiguously telic or atelic. But (29-b) is obligatorily telic, because of the contribution of completive up. There are nontelicizing, noncompletive senses of up, for example suck up can mean ‘take in by sucking,’ as in (30), in which case it is telic only if the object is understood as quantized, just as with eat in (29-a) (actually eat up can also have a similar noncompletive reading, and on that reading (29-b) need not be telic).

(30) The cow sucked up the grass for an hour {in an hour/*for an hour}.

Completeive up can be combined with a number of verbs, with a consistent effect on meaning, just like distributive pere-.

(31) a. eat up  
    b. drink up  
    c. burn up  
    d. chop up  
    e. scrape up  
    f. fold up  
    g. smash up

This observation is consistent with the possibility that completive up is ‘super-lexical’. But some lexical prefixes also have a consistent meaning contribution, especially on a spatial reading, but also in some abstract extensions of those spatial meanings, so (31) in itself is not conclusive evidence that up can be superlexical.

If there are superlexical particles in Germanic, then we would expect them to be outside VP, like their Slavic counterparts. In that case, there should be syntactic evidence supporting their location outside VP, just as there is for Slavic superlexical prefixes. If there are particles which turn out to be super-lexical but nevertheless originate inside VP, that would be surprising from the perspective of crosslinguistic comparison (and therefore interesting). It would also be a problem for Cartography in the spirit of Cinque (1999), since that framework holds that quite generally, categories of meaning have similar hierarchical relations across languages (much as Baker argued earlier for the specific domain of thematic roles).

(32) If there are superlexical particles in Germanic, then  
    a. Either they are outside VP, in which case there should be syntactic evidence supporting this  
    b. or they are inside VP, which is surprising from a cartographic perspective

I now briefly examine some syntactic evidence which suggests that completive up in English is inside the VP, in more or less the same syntactic position as
spatial and idiomatic particles.

First, consider particle shift. Particle shift is a useful syntactic diagnostic, especially so in English, because the verb moves very little in English if at all, and so it normally remains adjacent to an unmoved direct object. There is extremely little that can come in between an unmoved verb and an unmoved direct object, but verb particles do. There is so little structural space in between the verb and the direct object that this rather precisely delineates the position of the shifted particle.

Particle shift for a spatial and an idiomatic particle are illustrated in (33).

(33) a. Shoot the arrow up.
    b. Shoot up the arrow.

(34) a. Look the number up.
    b. Look up the number.

The fact that completive *up also undergoes particle shift, i.e. it can also occupy either the position to the left or to the right of an unmoved object, suggests that it is structurally in the same position.

(35) a. Eat up your soup.
    b. Eat your soup up.

Further syntactic tests strengthen the parallel. The distribution of pronouns, for example, is identical across the three cases.

(36) a. Shoot {up} it {up}.
    b. Look {up} it {up}.
    c. Eat {up} it {up}.

The distribution of the modifier *right is identical in the three cases.

(37) a. Shoot {*right up} the arrow {right up}.
    b. Look {*right up} the number {right up}.
    c. Eat {*right up} the soup {right up}.

See Ramchand and Svenonius (2002) for a detailed analysis of particle shift which accounts for these patterns in structural terms. The fact that completive *up shows exactly the same syntax suggests that it is in the same location, and would be very surprising if it were outside VP like the superlexical prefixes.

Syntactic tests such as VP-fronting also suggest that the completive particle is inside the VP. A fronted VP must bring up along, and cannot strand it.

---

2 There are many analyses in which elements in their base positions have moved there from an underlying position, for example Johnson (1991) on short verb movement in English; thus my use of the expression ‘unmoved’ must include this hedge. Nonetheless, even if the verb and/or the object have moved in the examples I use to illustrate particle shift, it is significant that adverbs, indirect objects, and PPs are excluded from the position which the shifted particle occupies, while all kinds of particle, including the completive, can occupy precisely that position.
He said he would eat up his soup,

a. and eat up his soup, he did.
b. *and eat his soup, he did up.

This would be surprising if completive *up were outside VP.

Recall from Russian that the secondary imperfective scoped over lexical prefixes, but was outscoped by superlexical prefixes. If completive *up were outside VP, then it might be possible to find some other operator which takes scope in between it and the other particles. The progressive aspect in English is fairly low, as an aspectual operator, in the sense that it combines directly with the verb phrase (hence it is sensitive to the lexical aspect of the verb and does not combine with stative: *I am knowing the answer).

But the progressive aspect semantically scopes over the completive, not vice-versa. For example, the progressive of a completive VP is atelic, not telic.

He was eating up his soup.

a. = PROG [COMPL [eat soup] ]
b. ≠ COMPL [PROG [eat soup] ]

In sum, there is evidence putting completive *up at the same height as other verbal particles, and no evidence from syntax that it is higher.

So I conclude that completive *up is inside VP. This means that either it is not superlexical in the sense of the Slavic superlexical prefixes, or else it means that the properties that make those prefixes superlexical are not linked to their position outside VP. The latter conclusion would be quite bad for a broadly configurational approach to meaning, and especially for the narrowly configurational approach to meaning espoused by Cartography.

I believe that the data is consistent with the configurational approach, and is even consistent with Cartography. Hence I have to argue that completive *up has more in common with the meanings of lexical uses of prefixes than with the superlexical ones.

So now the question becomes, how good were the reasons in the first place to think that completive *up might be superlexical? It is vaguely temporal in that it refers to something finishing. This is similar to the ‘terminative’ or ‘compleitive’ senses of Russian superlexical *ot- or do- (examples from Tolskaya 2007).

IL-76 svoe ot-letal.

IL-76 its TERM-fly_NON-DIR

‘(The plane) IL-76 has done its flying (and will never fly again)’

(terminative)

b. do-plavatj rejs

CMPL-swim_NON-DIR trip

‘to sail up till the end of the trip (and then quit)’. (completive)

However, there are significant differences between the English and the Russian here. McIntyre (2001, 2002) suggests that the meaning contribution of English completive *up is to express that the object is fully affected by the event de-
scribed, which only indirectly implies telicity. McIntyre (2003) and Cappelle (2005) suggest that the real contribution of English completive up is resultative. Resultativity is commonly part of the lexical semantics of a verb (recall the discussion of break and Ramchand’s decomposition of the verb phrase), and even the most lexical of verb-particles are commonly resultative (see the discussion of break of the handle in Ramchand and Svenonius 2002). So it is quite reasonable to conclude, along with McIntyre and Cappelle, that English completive up is not really about time; hence nothing stands in the way of analyzing it as VP-internal.

The Russian completive, on the other hand, is not resultative. For example, (40-b) does not mean that the trip is completely affected by the sailing. It seems to actually express that the time-span of a situation comes to an end, as suggested by Tolskaya (2007) (see also Borik 2006 on the need to differentiate event descriptions from temporal semantics).

Compare also the temporal senses of some other Russian superlexical prefixes.

(41) Temporal sense in the superlexicals, Tolskaya (2007)

<p>| | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>a. pro-xoditj vesj denj</td>
<td>PRDR-walk\textsubscript{NON-DIR} all day</td>
<td>‘to walk (around) all day’ (perdurative)</td>
<td></td>
</tr>
<tr>
<td>b. po-bégatj</td>
<td>DLMT-run\textsubscript{NON-DIR}</td>
<td>‘to run for a little bit’ (delimitative)</td>
<td></td>
</tr>
<tr>
<td>c. Časy za-xodili.</td>
<td>clock INCP-walk\textsubscript{NON-DIR}</td>
<td>‘The clock started to work’ (inceptive)</td>
<td></td>
</tr>
</tbody>
</table>

There is unfortunately not space (or rather time) to substantiate the claim further here, but it seems that these senses of superlexical prefixes will not easily reduce to event dynamics in the way that English completive up arguably does (see Tolskaya 2007 for some relevant discussion).

5 Conclusion

The term aspect has been used in innumerable ways, and there is a sense in which both English completive up and Russian superlexical completive do- are aspectual, but I have suggested here that they are also crucially different. I suggest that the difference can be understood in terms of structure.

This finding suggests the importance of a distinction between what is sometimes called Aktionsart, concerning event structure, and a more temporal kind of aspect, which includes a temporal dimension in a more formal sense. I have suggested that temporal operators are structurally outside the verb phrase, and that VP-internal operators cannot directly introduce strictly temporal notions. They can change argument structure, and resultativity, and thematic relations,
and they can even affect event dynamics such as telicity and durativity. However, these, I think, need to be distinguished from time proper.

I have also tried to make a careful distinction between syntactic/semantic structure and the exponents which are used to lexicalize it. In this way we can distinguish different structures, such as preposition or prefix, or lexical prefix and superlexical prefix, and hold open the possibility that the same morpheme might spell out two different structures. This appears to be the case rather systematically for a class of particles and prefixes.

Once these issues are taken into consideration, the question can be posed whether Germanic has any superlexical uses of particles. I examined one candidate, the completive use of *up* in English, and asked whether it might be the counterpart of some of the superlexical prefixes in Russian. I answered that question in the negative, suggesting that despite initial appearances, completive *up* has far more in common with lexical prefixes than with superlexical ones.

Syntactic tests and semantic interpretation converge on this answer. This is compatible with an account that links structure fairly directly to meaning, as the Cartographic project does. On a Cartographic approach, the reason that superlexical prefixes make the meaning contribution they do is partly because they are structurally located at the height that they are located. They can introduce temporal measures and bounds because they are introduced at a level of structure in which temporal semantics is accessible. Lexical prefixes cannot, because there is no temporal semantics at the VP level. The VP denotes an event, perhaps with a beginning and an end (hence with order) and perhaps with a duration (hence with a scalar dimension), but without a sense of time. In order to delimit time, an operator must be outside the VP. I have suggested that the fact that completive *up* is syntactically confined to the VP makes the prediction that it should not have ‘superlexical’ semantics, and have suggested that this prediction is confirmed. I furthermore predict that any Germanic particle that does have ‘superlexical’ semantics should also have syntactic properties consistent with its being outside VP.

All Slavic languages have superlexical senses of prefixes. If it is true that no Germanic languages do, then that is a fact which is in need of an explanation. I suggest that the sharp distinction between VP-internal and VP-external meanings is part of that explanation. The perfective feature on the Slavic prefix, which forces even lexical prefixes to leave the VP, might be another part of the explanation, as it sets the stage for a reanalysis in which the prefix is base-generated outside VP.

**References**


