Adverbial functions of Slavic prefixes

Berit Gehrke, Utrecht University (berit.gehrke@let.uu.nl)

INTRODUCTION

given the distinction between inner aspect (telicity) and outer aspect (imperfective vs. perfective)

- Slavic prefixes have been treated as perfective aspect markers

  BUT: *On*   **pod-pis-yva-l^i**   *pis'mo.*   – 'He signed / was signing the letter.'
  he UNDER-write-IPF-PAST letter.ACC

  On   **po-vy-da-va-l^p**   *knigi.*   – 'He gave out (the) books.'
  he PO-OUT-give-IPF-PAST books.ACC

- Slavic prefixes have been treated as telicity markers

Questions:

Which prefixes go with which verbs?
What are the meanings that certain verbal prefixes contribute to the predicate?
Are prefixes in the lexicon (in the lexical domain) or in the syntax (in the functional domain)?
How / in which contexts are prefixes used?

1. PREMISES

> **PREMISE I: Some Slavic verbs are in and by themselves culminations.**

Młynarczyk (2004): formationally-driven classification of Polish verbs

	'empty prefix'	*po-*	semelfactive -*nq*-	morphonological change[1]
class$_1$	yes			
class$_2$		yes		
class$_3$	yes	yes		
class$_4$	yes	yes	yes	
class$_5$				yes

formational classification induces semantic distinction:

	IMPERFECTIVES	PERFECTIVES
class 1	statives and ongoing gradual transitions	inchoatives and completed gradual transitions
class 2	ongoing processes	completed processes
class 3	ongoing culminating processes	completed culminated processes completed non-culminated culminating processes
class 4	ongoing unitisable processes	completed arbitrary unitisable processes completed non-minimal unitisable processes completed minimal unitisable processes
class 5	**ongoing culminations**	**completed culminations**

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[1] Morphonological change (to a great extent suffixation, less often vowel alternation) derives secondary imperfectives. The verbs in class 1 to class 4 are imperfective base verbs which derive their perfective counterparts by prefixes or the semelfactive suffix. The class 5 verbs are perfective base verbs (derive secondary imperfectives).

can be carried over to Russian (and Czech), examples:

class 1 *(u)videt'* – 'see'   **class 3** *(na)pisat'* – 'write'
           (po)krasnet' – 'become red'   *(po)pisat'*

class 2 *(po)sidet'* – 'to sit'   **class 4** *(po)kričat'* – 'shout'
                                              Czech *(za)kričet*
                                              kričat'– krik-nu-t'

(1)   *On **ot-kryl**^{p} okno.*   (Russian class 5 verb) [2]
         he   open.PAST   window.ACC

         'He opened (the / a) window.'

(2)   *On **ot-kry-va-l**^{i}, no ne **ot-kryl**^{p} okno.*   (Russian class 5 verb)
         he   open.IPF.PAST but not   open.PAST window.ACC

         'He tried to open the window, but didn't.'

> **PREMISE II: The culmination point is marked by internal prefixes.**

Młynarczyk's class 5 verbs are perfective base verbs that derive imperfectives by morphonological change ('secondary imperfectives').

Class 5 verbs usually contain prefixes (in the lexicon).

po-: applies at a higher level in the syntax.

Di Sciullo & Slabakova (forthcoming): internal vs. external prefixes

internal prefixes: prepositional properties
external prefixes: adverbial properties

(3)   [TP External T [vP [VP Internal T]]]

External [T] feature in T° – BOUNDEDNESS
Internal [T] feature in v° – TELICITY

internal vs. external prefixes

- Internally prefixed verbs are lexically distinct from the unprefixed verb and the semantic contribution of the prefix is highly idiosyncratic (⇨ lexical).
  The application of external prefixes leads to a predictable meaning change.

- Internal prefixes show argument structure effects, external prefixes do not.

- Internally prefixed verbs derive secondary imperfectives.
  Perfective verbs with external prefixes do not.

- Externally prefixed verbs cannot occur as infinitival subjects. Infinitives of these verbs are always dependent on some other verbal form:

  (4) *Nado **po-govorit'**^{p} s nim.* – 'It is necessary to (have a) talk with him.'

- Only external prefixes can stack (on top of internal or external ones) but not internal ones.

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[2] Remark on the glosses of the Russian and Czech examples: Since every Slavic verb form is unanimously either grammatically imperfective or perfective but since there is not a clear line in the literature as to what exactly and in all cases morphologically marks grammatical aspect, the grammatical aspect will be indicated as superscripts on each verb form in the original. Only secondary imperfectives that are always marked as such will also be glossed as IPF.

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PREMISE III: Internal but not external prefixes induce telicity.

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- compatibility with temporal adverbials:

    (5) *On **po-spal**^{P} (*za) dva časa.*   (Russian external prefix)
    he PO-sleep.PAST (*in) two hours

    (6) *On **ot-kryl**^{P} okno   *(za) dva časa.*   (Russian internal prefix)
    he open.PAST window.ACC *(in) two hours

- telicity entailments:

    (7) *Ja **pro-čital**^{P} knigu.*   **entails** *Ja (bol'še) ne **čitaju**^{i} knigu.*   (Russ. int. pref.)
    I THROUGH-read.PAST book.ACC   I (anymore) not read.PRES book

    (8) *Ja **po-čital**^{P} polčasa.* **doesn't entail** *Ja (bol'še) ne **čitaju**^{i}.*   (Russ. ext. pref.)
    I PO-read.PAST ½ hour   I (anymore) not read.PRES

- compatibility with *to the end, stop / finish*:

    (9) **Ja **po-čital**^{P} knigu **do konca**.*   vs. *Ja **pro-čital**^{P} knigu **do konca**.*
    I PO-read.PAST book to the end   I THROUGH-read.PAST book to the end

    (10) *On **po-spal**^{P}. - On **prekratil**^{P} spat'^{*i}. / *On **zakončil**^{P} spat'^{*i}.*
    he PO-slept   he stopped sleeping / *he finished sleeping

    (11) *On **u-bil**^{P} svoju ženu. - On **zakončil**^{P} ee **ubivat'**^{i}.*   (Russ. ext. pref.)
    he killed his wife   he finished killing her

    (12) *On **prekratil**^{P} ee **ubivat'**^{i}.* (in this case she is still alive)
    he stopped killing her

2. EXTERNAL PREFIXES

differences among particular Slavic languages with respect to external but not internal prefix <u>usage</u> (Gehrke (2002); cf. also Petruxina (2000)):

- Czech external prefixes are used less often and do not act as Aspect markers but fulfil certain adverbial functions.[3]

- Russian external prefixes mark temporal boundaries and act as Perfectivity markers on imperfective predicates.

e.g. *po-* - 'a bit':

<u>Czech 'spatial'</u>: ***po-o-točila**^{P} křeslo* – 'she turned the chair a bit'; ***po-klek-l**^{P}* – 'he kneeled a bit'

    (13) *Pak holička   **po-od-stoupila**^{P} [...]*   (Czech original)
    then hairdresser.NOM PO-FROM-step.PAST

    'Then the hairdresser stepped aside a little bit.'

    *Potom parikmaxerša **oto-šla**^{P} čut' [...]* (Russian translation)
    then   hairdresser.NOM FROM-go.PAST bit

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[3] Secondary Imperfectives, instances of grammatical Imperfectivity, are also less often used than in Russian.

Russian temporal: *po-* (*pro-*, *za-*)[4] primarily to mark grammatical aspect and to move R

(14) *On **pomolčal**^p   nekotoroe vremja v smjatenii, **vsmatrivajas**^{ʼi}   v lunu,*
he PO-be-silent.PAST for a while   in confusion IN-look.IPF.PART in moon.ACC

*plyvuščuju za rešetkoj, i   **zagovoril**^p: [...]*   (Russian original)
swimming behind bars and ZA-speak.PAST

'Bewildered, he was silent for a while and looked at the moon behind the bars. Then he said: […]'

*Chvíli zaraženě   **mlčel**ⁱ,   **sledoval**ⁱ plující měsíc   za mříží,*
a-while bewildered be-silent.PAST follow.PAST swimming-moon.ACC behind bars

*a   **pak** se **zeptal**^p: [...]*   (Czech translation)
and then SE PF-ask.PAST

(15) *... že **jsem**ⁱ   u něho **byla**ⁱ   celou hodinu   a o   jeho ústavu*
     that AUX.1SG at him be.PAST whole-hour.ACC and about his   institute

*jsem   **věděla**ⁱ tolik   co předtím...*   (Czech original)
AUX.1SG know.PAST so much what before

'…that I spent a whole hour with him and about his institute I knew as much as before…'

*... čto ja **protorčala**^p   u nego bityj čas   i   **ušla**^p,*
   that I PRO-be(-located).PAST at him   beaten-hour.ACC and AWAY-go.PAST

*tak i   ne **uznav**^p   dlja sebja ničego novogo...* (Russian translation)
so also not PF-know.PART for   self   nothing new

3. STRUCTURING EVENTS

Moens & Steedman's (1988) 'nucleus'

"a single elementary contingency-based event structure comprising a culmination, an associated preparatory process, and a consequent state […] any or all of these elements may be compound"

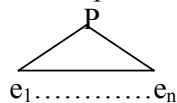### Pustejovsky (1991): Syntax of Event Structure

State (S): a single event, which is evaluated relative to no other event
Examples: *be sick, love, know*

```
      S
      |
      e
```

Process (P): a sequence of events identifying the same semantic expression
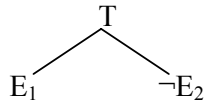Examples: *run, push, drag*

```
        P
       /|\
      / | \
    e₁ ......... eₙ
```

Transition (T): an event identifying a semantic expression, which is evaluated relative to its opposition.
Examples: *give, open, build, destroy*
E is a variable for any event type (recursive type of event structure)

$$T$$
$$E_1 \qquad \neg E_2$$

(16) *The door is closed.*   S   – [closed (the-door)]
       The door closed.   T[P,S] – BECOME ([closed(the-door)])
       John closed the door. T[P,S] – CAUSE ([ACT (j,the-door)], BECOME ([closed(the-door)]))

Event composition:

(17) *Mary ran.*   P   – [run(m)]
       Mary ran to the store. T[P,S] – CAUSE (ACT (m), BECOME (at(m,the-store)) BY run)

van Hout (2000): Projection Based on Event Structure

- Each kind of event (e.g. *sleeping, eating, killing*) can happen as different types of events (frame alternations, event-type shifts)

  (18) ingredients for the lexicon-syntax mapping:
        (i)   Every predicate is lexically specified for its event structure
        (ii)   Event structures determine the mapping to syntax
        (iii) Event structures can be combined into complex event structures forming the basis for complex predicates

event structure as a trigger for projection of argument positions in syntax

Grimshaw (1990): an event needs to be 'identified' in syntax

- Arguments (phrases in argument positions) function as event identifiers by being interpreted as participants on the event

- simple event structures (state, process) require at least one argument to be properly identified

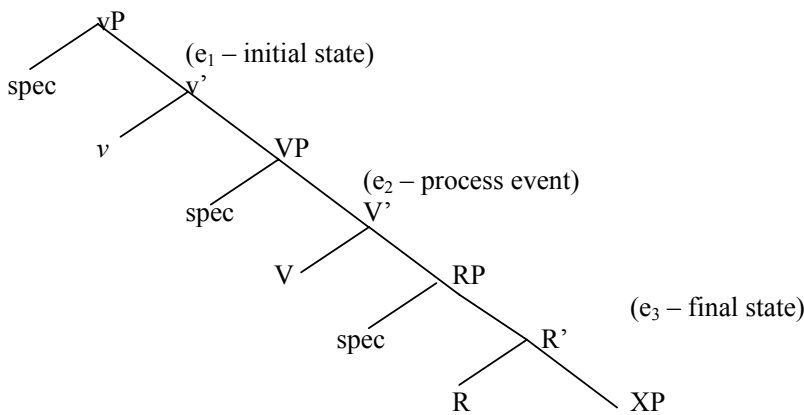- complex event structures (transition): two subevents need to be identified by two arguments

event-type shift from P to T can be derived in two ways:

⇨ combining a P and an S (thereby creating a T from P to S) (Germanic particle verbs)

⇨ combining a P and a T with an unspecified first subevent (Slavic cognates)

(19) *af* 'off'   Prt   S   (Dutch)
       schrijven 'write'   V   P   (Dutch)
       pisat' 'write'   V   P   (Russian)
       po- 'for a while'   Pfx   P   (Russian)
       na- PERF   Pfx   T[E,S]   (Russian)
       pere- 'over'   Pfx   T[E,S]   (Russian)

(20) *af-schrijven*   P + S   → T[P,S]   (Dutch)
       na-pisat'   P + T[E,S]   → T[P,S]   (Russian)
       pere-pisat'   P + T[E,S]   → T[P,S]   (Russian)
       po-pisat'   P + P   → P   (Russian)

Ramchand (2003): First Phase Syntax

vP
spec   (e_1 – initial state)
v'
v   VP
spec   (e_2 – process event)
V'
V   RP
spec   (e_3 – final state)
R'
R   XP

Romanova (forthcoming): Lexical vs. Superlexical Prefixes

external ("superlexical") prefixes are generated in vP

internal ("lexical") prefixes are generated in RP

4. SLAVIC INTERNAL AND EXTERNAL PREFIXES (PART II)

comparison to:

- predicate modifiers (bare object) vs. arguments (object with strong case) (van Hout (2000))
- arguments vs. adjuncts
  - ⇨ internal prefixes identify parts of the event structure: T[E,S] / RP / BECOME
  - ⇨ external prefixes are predicate modifiers

clause is split into lexical domain (VP level, vP etc.) and the functional domain ((split) IP and CP) (cf. Jackendoff (1972))

- inner aspect / lexical aspect / event structure belongs to the lexical domain
- outer aspect / grammatical aspect belongs to the functional domain
  - ⇨ Internal prefixes as instances of inner aspect belong to the lexical domain.
  - ⇨ Russian external prefixes: perfectivity markers; belong to the realm of outer aspect and thus to the functional domain.

Question: If Czech external prefixes fulfil adverbial functions, what exactly do they modify?

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5. ADVERBIAL MODIFICATION

Costa (2004)

Adverbs are adjuncts and adjoin to both lexical (VP) and functional categories (TP, CP)

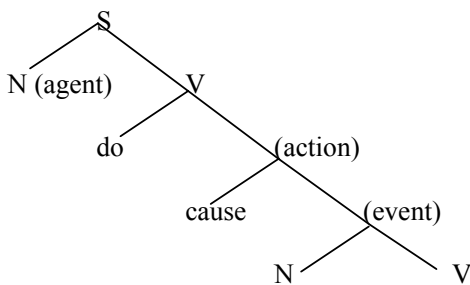(21)   [CP AdvP [CP [AgrSP [TP AdvP [TP [VP AdvP [VP]]]]]]]

Adverbs may be lexically specified as either sentential or VP-modifiers.

Vendler (1985): Adverbs of Actions

Question cut to distinguish between sentential and verbal modifiers:

(22) *Did he drive fast / carefully / easily?* (verbal modifiers)
      Did he drive stupidly?
      ?Did he drive probably? (sentential modifier)

⇨ <u>Czech *po*- behaves like a verbal modifier.</u>

action: *He broke the glass.*
event: *The glass broke.*

general form of an action sentence: (agent) does c(event)

  1. <u>event adverbs</u> (modify the basic verb of the event):

(23) *He drove the car fast.*
         ⇨ The car ran fast.
      belongs to the verb in the event sentence (run)

  2. <u>manner adverbs</u> (action adverbs – modify cause):

(24) *He drove the car carefully.*
         ⇨ He was careful in driving the car.
         ⇨ He drove it in a careful manner.

      belongs to c(run) (not just to run)
      can be described to the agent directly, posits a trait in him

  3. modifiers of the do-part of the action:
      a. <u>facility adverbs</u>: *He solved the problem easily. He climbed the stairs with some difficulty.*
      b. <u>moral adverbs</u>: *He spilled the tea accidentally. He killed her with malice afterthought.*
      c. <u>timing adverbs</u>: *He answered quickly. He applied late.*

(25) *He drove the car easily.*
         ⇨ It was easy for him to drive the car.
         ⇨ For him it was an easy thing to do.

      do not qualify the event but the doing of the action; do not posit a trait in the agent
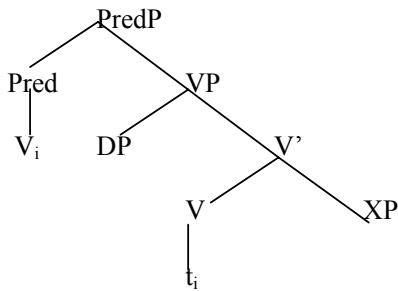

⇨ <u>Czech *po*- modifies the do-part.</u>

Ernst (2004)

manner reading (subject-oriented) vs. clausal reading (sentence-oriented):

(26) *Jim looked at me oddly.* – in an odd manner

   Oddly, Jim looked at me. – the fact that he looked at me was odd

adverbs adjoin to IP, PredP or VP

(27) Only event-internal modification is possible in l-syntax.

(28) <u>FEO calculus</u>: speech act > fact > proposition > event > specified event (SpecEvent)

   <u>Main constraint on the FEO calculus</u>:
   Any FEO type may be freely converted to any higher FEO type, but not lowered.

<u>event internal modification</u>

- manner and measure adverbs are interpreted by rules which require the constituent to which they are adjoined to be interpreted as SpecEvents (may occur anywhere within PredP)

- map events onto the scale designated by the adverb

- involves an implicit comparison of the event described with other events of the same type (no reference to other types of events)

(29) *Paula (*deftly) pulled (*deftly) the pot (deftly) out of the fire (deftly).*

(29) is true iff the event of Paula's pulling the pot out of the fire is above the norm of pulling pots out of the fire, on a scale of deftness.

<u>event external modification</u>

- involves comparison to events of any sort (e.g. on the scale of oddness)

- predicational adverbs select propositions or events to combine with semantically

<u>How to define the upper limit of the Low Range</u>?

aspectual, temporal and negative operators require a 'full event', not a SpecEvent

Summary

- Slavic prefixes can be divided into internal and external prefixes.

- Internal prefixes mark telicity and identify (parts of) the event structure in the lexical domain of the clause.

- External prefixes are predicate modifiers.

- Russian external prefixes are perfectivity markers in the functional domain of the clause.

- Czech external prefixes fulfil certain adverbial functions. In particular, the external prefix *po-* behaves like a measure adverbial. Measure adverbials are in the lexical domain of the clause.

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