The effects of prefixation on aspect and argument structure: a case study in Russian

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Introducing the problem

• The effect of prefixes on aspect
  ▫ Morphologically simple verbs become perfective

• The effect of prefixes on the argument structure
  ▫ Changing AS
  ▫ Adding a new argument
  ▫ Modifying AS
    ▫ Making an optional argument obligatory

Some examples

(1) a. Katya risovala (portret)
    Katya paint.pst.imp (portrait)
  b. Katya na-risovala *(portret)
    Katya pf-paint.pst portrait

(2) a. Katya slušala *(musyku)
    Katya listen.pst.imp *(music)
  b. Katya po-slušala *(musyku)
    Katya pf-listen.pst *(music)

Some more examples

(3) a. Katya šla (po ulice)
    Katya walk.pst.imp (along street)
  b. Katya pere-šla *(ulicu)
    Katya pf-cross.pst *(street)

(4) a. Katya sidela (na divane)
    Katya sit.pst.imp (on couch)
  b. Katya ot-sidela nogu
    Katya pf-sit.pst leg
    Katya’s leg went numb (as a result of sitting on the couch)

The empirical evidence

• seems to show that the effects of prefixes on argument structure
  ▫ are not uniform
  ▫ are not obligatory

Traditional (Slavic) perspective

• No puzzle
  ▫ Prefixation is a derivational process
  ▫ Hence creates new lexical items
  ▫ New lexical items have their own properties
    ▫ Aspectual value
    ▫ Argument structure
    ▫ Lexical meaning
  ▫ Nothing to explain there, really
Pro’s and con’s of the traditional view

• A prefixed verb not completely “new”
  ▫ Often inherits the argument structure of a base
  ▫ Is an accident, then?
  ▫ In most cases, has a related lexical meaning
  ▫ Independence of aspect: perhaps right

A radical alternative

• Syntactic approaches
• Rationale:
  ▫ Prefixes are like a resultative particles
  ▫ A prefix makes a verb perfective
  ▫ It may add an argument, in a SC-like configuration
  ▫ This turns a VP into telic
  ▫ Hence: prefix $\rightarrow$ perfective & telic

Huge empirical problem

• Perfective ≠ Telic
• My claim: perfectivity and telicity are two independent systems
  ▫ Universally true (e.g. Cipria & Roberts (2000) for Spanish)

Less radical syntactic approaches

• Ramchand (2007)
  ▫ Perfective/telic correspondence dropped
  ▫ “… the event structure properties of the verb phrases created by Russian prefixation are clearly different from each other, but they nevertheless uniformly pass the diagnostics for perfectivity…” (Ramchand, 2007:1698)
  ▫ Conclude: (lexical) prefixation induces aspect change from imperfective to perfective

Yet another empirical problem

• Prefixed ≠ Perfective (# Telic)
  ▫ Isačenko (1960), Gehrke (2008), Borik & Janssen (to appear)
  ▫ Classes of counterexamples
    ▪ Morphologically simple perfective verbs
    ▪ Prefixed imperfective verbs (no other morphology)
    ▪ Secondary imperfective verbs
    ▪ Non-directional motion verbs

Morphologically simple perfectives

• Take prefixes
• They do not change aspect
  ▫ kupit’    za-kupit’
  ▫ buy.Pf     stock.up.Pf
  ▫ pod-kupit’
  ▫ bribe.Pf
  ▫ vy-kupit’
  ▫ buy.out.Pf
  ▫ etc.
Prefixed imperfective verbs:

- Gehrke (2008:159):
  - nad-zirat’ ‘to super-vise’ (lit. ‘above-watch’)
  - cf. German über-wachen
  - protivo-stojat’ ‘to re-sist’ (lit. ‘against-stand’)
  - cf. German wider-stehen
  - vy-gljadet’ ‘to look like’ (lit. ‘out-see’)
  - cf. German aus-sehen
  - so-čuvstvovat’ ‘to sym-pathise’ (lit. ‘with-feel’)
  - cf. German mit-fühlen

Secondary imperfectives

- Secondary imperfective: an imperfective derived from (prefixed) perfective
- Very productive process
- Example:
  - lit’ vy-lit’ [vy-li]-va-t’
    - pour.Imp pf-pour out-pf
    - *vy-[li-va-t’]

Secondary imperfective: a problem

- The verb still has a prefix, but is imperfective
- Imperfectivity is marked by a suffix
  - If a prefix is a marker of perfectivity, the item marked with both [+pf] and [+imp] should not be possible
  - If pf value is overriden, then we should expect SI’s and simple (morphologically) imperfectives have different properties
  - And they do not

Non-directed motion

- Russian has ‘pairs’ of directed vs. non-directed “motion” verbs
  - polzat’ vs. polzti
crawl.Imp.-dir crawl.Imp.+dir
  - nosit’ vs. nesti
carry.Imp.-dir carry.Imp.+dir
- Aspect: imperfective in both cases

Prefixed (non-)directional verbs

- Non-directional → directional, stay imperfective
- Directional → directional, become perfective

  - za-polzat’ vs. za-polzti
crawl.into.+dir.Imp crawl.into.+dir.Pf
  - ot-nosit’ vs. ot-nesti
carry.away.+dir.Imp carry.Imp.-dir.Pf

Some statistics

- Made on the basis of the aspectual database (Borik & Janssen, to appear; http://ru.oslin.org/index.php)
  - 9864 morphologically complex verbs
  - 1105 out of them are imperfective
  - 10% of morphologically complex verbs are imperfective
Conclusions

• Prefixation (as a morphological phenomenon)
  ▫ Cannot be associated with aspect
  ▫ Nor with telicity
• Effects at a deeper ‘lexical’ level
• The distinctions between prefixes
  ▫ Much more fine-grained than semantic distinctions between pf/imp or telic/atelic
  ▫ Perfectivization: by-product in some cases

Methodology

• Look at various groups of prefixes
• Classified by its effects
  ▫ For instance, on argument structure
• Possibly no uniform effect of ‘prefixation’
  ▫ Smaller, more homogeneous groups instead

Unselected objects

(1) a. Katya sidela (na divane)
   Katya sit.pst.Imp (on couch)
b. Katya ot-sidela nogu
   Katya pf-sit.pst leg
c. Katya sidela *nogu (na divane)
   Katya sit.pst.Imp *leg (on couch)
• Intuition: the object is selected by a prefix

Spencer & Zaretskaya (1998)

• Resultative prefixes
  ▫ As opposed to aspectual and phasal ones
  ▫ Compared to resultatives in English
(1) We drank the pub dry
(2) We shouted ourselves hoarse

Main idea of S&Z:

• Prefixes
  ▫ Syntactically, are secondary predicates
    ▪ That is, they are lower than the main verb
    ▪ And they introduce/select a direct object
  ▫ Semantically primary, are core predicates
    ▪ That is, they denote a change of state
    ▪ And the main verb specifies manner/means
  ▫ Lexically derive complex predicates

Resultatives

(1) They painted the door green
   = we caused the door to become green by painting
  ▫ Semantically: ‘cause to become green by painting’
  ▫ Syntactically: ‘door’ is the object of ‘green’
  ▫ Lexical-conceptual structure (cf. Jackendoff 1990)
    [[CAUSE [ACT (they)], BECOME [GREEN (door)]], by [PAINT (they)]]
Prefixes

(1) Ona is-pisala svoju tetrad’
   she out-write.pst self notebook
   ≈ She has filled her notebook (by writing)
   • is- is a semantically primary predicate
   • it also selects the object

   = Lexical-conceptual structure
   [[CAUSE [ACT (she)], [IS- (notebook)], by [WRITE (she)]]

Pro’s and contra’s of S&Z

• Correct intuition behind ‘duality’
• However,
  • selectional properties are not captured entirely
  • the parallel with resultatives imposes limits
    • we are not sure if these limits are desirable
    • too much load on lexical derivations
    • what does it mean for a prefix to be a semantically primary predicate?

Selection properties

(1) a. Katya ot-sidela nogu
   Katya out-sit.pst leg
   b. *Katya otsidela ruku
   Katya out-sit.pst arm

(2) a. Dima pisal (v tetradi)
   Dima write.pst (in notebook)
   b. Dima is-pisal ručku/avtobus/*sad
       Dima out-write.pst notebook/bus/*garden

Resultatives vs. prefixes

(1) a. Ona begala po magazinam
    she run.pst on/around shops
    She ran around all the shops
   b. Ona iz-begala vse magaziny
    she out-ran.pst all shops
    She’s been around all the shops

(2) a. Katya šla (po ulice)
    Katya walk.pst.Imp (along street)
   b. Katya pere-šla *(ulicu)
    Katya pf-cross.pst *(street)

Prefixes vs. resultatives

• Some examples make it more difficult to draw a parallel with resultative constructions
• Argument structure
  • Not really unselected, but ’promoted’ objects
  • Should these cases be united with ‘real’ unselected objects?
  • Semantically: is it the same sense of ‘resultative’?
Prefixes as primary predicates

- Presupposes a uniform semantics for a prefix
  - Comparable to particles
- Not necessarily or/and obviously the case...
  - is-:
    - is-pisat’ out-write
    - is-krošit’ out-crumb/crumble
    - is-kupat’ out-bathe

References:

