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

Olga Borik
Universitat Autònoma de Barcelona

1

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

2

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)

3

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)

4

The empirical evidence

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

5

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

6

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
    - Comparable to compounds, perhaps
  - Independence of aspect: perhaps right

7

A radical alternative

- Syntactic approaches
  - Piñon (1994), Slabakova (1997), Borer (2005), Basilico (2006), van Hout (2007)
- 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 → perfective & telic

8

Huge empirical problem

- Perfective ≠ Telic
  - Filip (2003), Borik (2002/2006), Gehrke (2008)
- My claim: perfectivity and telicity are two independent systems
  - Borik & Reinhart (2004), Borik (2006)
  - Universally true (e.g. Cipria & Roberts (2000) for Spanish)

9

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

10

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

11

Morphologically simple perfectives

- Take prefixes
- They do not change aspect
  - kupiť'   za-kupiť'
    buy.Pf   stock.up.Pf
                          pod-kupiť'
                          bribe.Pf
                          vy-kupiť'
                          buy.out.Pf
                          etc.

12

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)

13

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	pour.out-Imp
		*vy-[li-va-t']

14

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

15

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

16

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

17

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

18

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 then semantic distinctions between pf/imp or telic/atelic
  - Perfectivization: by-product in some cases

19

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

20

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

21

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

22

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

23

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)]

24

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

Selection properties

- Argument is not selected by the prefix ONLY
- Intuition:
  ▫ A prefix makes it possible to have an object
  ▫ Lexical selection is still conditioned by the main verb

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

31

References:

Basilico, David. 2008. The syntactic representation of perfectivity. Lingua, 118-11, 1716-1739.

Borer, Hagit. 2005. *Structuring Sense: An Exo-Skeletal Trilogy*. Oxford: Oxford University Press.

Borik, Olga. 2002. *Aspect and Reference Time*. Doctoral Dissertation, Utrecht University. LOT Dissertation Series 64. Revised version: Oxford University Press, 2006.

Borik, Olga & Maarten Janssen (to appear) A database of Russian Verbal Aspect. To appear in the Proceedings of the conference Russian Verb, St.Petersburg, Russia.

Borik, Olga & Tanya Reinhart. 2004. Telicity and Perfectivity: Two Independent Systems, In: Hunyadi L, Rákosi G, Tóth E (eds) LoLa. The Eighth Symposium on Logic and Language, Debrecen, 12–33.

32

Cipria, Alicia & Craige Roberts. 2000. Spanish Imperfecto and Pretérito: Truth Conditions and Aktionsart Effects in a Situation Semantics*, Natural Language Semantics 8:4, 297–347*.

Filip, Hana. 2003. Prefixes and the delimitation of events. Journal of Slavic Linguistics 11.1, 55–101.

Gehrke, Berit. 2008. *Ps in Motion: On the Semantics and Syntax of P Elements and Motion Events*. PhD Thesis, Utrecht University.LOT Dissertation Series, 184.

van Hout, Angeliek. 2007. Acquiring telicity crosslinguistically: On the acquisition of telicity entailments associated with transitivity. In *Crosslinguistic Perspectives on Argument Structure: Implications for Learnability*, ed. Melissa Bowerman and Penelope Brown. Mahwah: Lawrence Erlenbaum Associates.

Isačenko, Aleksand Vasil'evič. 1960. Grammatičeskij stroj russkogo jazyka v sopostavlenii so slovackim. Morfologia, čast' 2. Bratislava.

33

Jackendoff, Ray. 1990. *Semantic Structures*. MIT Press.

Piñon, Christopher. 1994. Aspectual composition and the 'pofective' in Polish. *Formal Approaches to Slavic Linguistics: The MIT Meeting, 1993*, Sergey Avrutin, Steven Franks, and Ljiljana Progovac (eds.), pp. 341–373. Ann Arbor: Michigan Slavic Publications.

Ramchand, Gillian. 2008. Perfectivity as aspectual definiteness: Time and the event in Russian. *Lingua*, 118-11, pp. 1690-1715.

Slabakova, Roumyana. 1997. Bulgarian Aspect in Phrase Structure, *Linguistics*, 35-4, 673-704.

Spencer, Andrew & Marina Zaretskaya. 1998. Verb prefixation in Russian as lexical subordiation. Linguistics 36, 1-39.

34