

# Change of state verbs and aspect in Bulgarian

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Perspectives  
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# Observation and question

- ▶ En CoS predicates correspond to verbal triplets in Bg

ENGLISH CoS PREDICATES	BULGARIAN EQUIVALENTS
<b>punctual, non-durative CoS</b> (achievements)	
<i>dry</i>	<i>suša–izsuša–izsušavam</i>
<i>die</i>	<i>mra–umra–umiram</i>
<i>win</i>	<i>pečelja–spečelja–spečelvam</i>
<b>non-punctual, durative CoS</b> (accomplishments)	
<i>build a house</i>	<i>stroja–postroja–postrojavam</i> (kâšta)
<i>eat an apple</i>	<i>jam–izjam–izjaždam</i> (jabâlka)
<i>run a mile</i>	<i>bjagam–probjagam–probjagvam</i> (milja)

- ▶ Which member(s) of a triplet denote(s) (what types of) CoS?

## Aspectual triplets in Bg and the ipfv/pfv distinction

Simplex vs. secondary ipfv: (a)telicity

Secondary ipfv vs. pfv: (non-)durativity

Interim summary: aspectual triplets encode aspectual classes

## Aspectual composition

## The role of the IPF/PF distinction

## Summary and conclusions

# Outline

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# The ipfv/pfv distinction in Bg

- ▶ Aspectual triplets:

simplex ipfv	prefixed pfv	secondary ipfv	
<i>piš-a</i>	<i>na-piš-a</i>	<i>na-pis-vam</i>	'write'
<i>mi-ja</i>	<i>iz-mi-ja</i>	<i>iz-mi-vam</i>	'wash'

- ▶ Views on aspectual nature of distinction:
  - ▶ Viewpoint: ipfv (simplex, secondary) = IPF, pfv = PF
  - ▶ Aktionsart: ipfv (simplex, secondary) = atelic, pfv = telic

# The ipfv/pfv distinction in Bg: Problems

- ▶ A second aspectual layer: Aorist vs. Imperfect (Viewpoint)

Aorist (PF)			Imperfect (IPF)		
smpl ipfv	pfv	sec ipfv	smpl ipfv	pfv	sec ipfv
<i>pisa</i>	<i>na-pisa</i>	<i>na-pis-va</i>	<i>piše-še</i>	<i>na-piše-še</i>	<i>na-pis-va-še</i>
<i>mi</i>	<i>iz-mi</i>	<i>iz-mi-va</i>	<i>mie-še</i>	<i>iz-mie-še</i>	<i>iz-mi-va-še</i>

- ▶ PF/IPF and ipfv/pfv make independent contributions  
⇒ (simplex, secondary) ipfv ≠ IPF, pfv ≠ PF
- ▶ simplex ipfv and secondary ipfv differ in
  - ▶ homogeneity/telicity (time adverbials, temporal interpretation)
  - ▶ dynamicity
  - ▶ (argument restrictions)

## Simplex vs. secondary ipfv: homogeneity/telicity

smpl ipfv are homogenous/atelic:

- (1) Ivan **četé** edna kniga edin čas.  
Ivan **read.smp-ipfv.prs** a book one hour  
'Ivan is reading a book for an hour.'  
→ Ivan **četé knigata prez pǎrvite 30 minuti.**  
'Ivan is reading the book during the first 30 minutes.'

sec ipfv are non-homogenous/telic:

- (2) Ivan **pročita** edna kniga za edin čas.  
Ivan **read.sec-ipf.prs** a book for one hour  
'Ivan is (finishing) reading a book in an hour.'  
↗ Ivan **pročita knigata prez pǎrvite 30 minuti.**  
'Ivan is (finishing) reading the book during the first 30 minutes.'

(cf. e.g. Rothstein 2004, Bennet & Partee 1972 on telicity)

## Simplex vs. secondary ipfv: temporal adverbials

smpl ipfv compatible with **time span** adverbials (and incompatible with time frame adverbials):

- (3) Ivan se **mie** **#za/v** prodĺženie na  
Ivan REFL wash.smp-ipfv.prs in/in duration of  
15 min.  
15 min.  
'Ivan is washing himself in/for 15 min.'

sec ipfv compatible with **time frame** adverbials (and incompatible with time span adverbials):

- (4) Ivan se **izmiva** **za/#v** prodĺženie na  
Ivan REFL wash.sec-ipfv.prs in/in  
15 min.  
duration of 15 min.  
'Ivan is (finishing) washing himself in/for 15 min.'

## Simplex vs. secondary ipfv: temporal interpretation

- (5) Kogato četé pismoto, toj  
when(ever) **read.smp-ipfv.prs** letter.DEF, he  
plače.  
cry.smp-ipfv.PRS  
'When(ever) he reads/is reading the letter, he cries/is  
crying.'  
↪ **While** he reads the letter, he cries.
- (6) Kogato pročita pismoto, toj  
when(ever) **read.sec-ipfv.prs** letter.DEF, he  
plače.  
cry.smp-ipfv.PRS  
'When(ever) he reads/is reading the letter, he cries/is  
crying.'  
↪ **After** reading the letter, he cries.



## Simplex vs. secondary ipfv: summary and further questions

	simplex ipfv	secondary ipfv
argument restrictions	-	+
homogeneity	+	-
time frame adverbials	-	+
time span adverbials	+	-
temporal simultaneity	+	-
dynamicity	±	+

⇒ **simplex ipfv** in Bg are dynamic or static and atelic:

activities/states

⇒ **secondary ipfv** in Bg are dynamic and telic:

achievements AND/OR accomplishments?

⇒ Difference to pfv (dynamic, telic)?

## Secondary ipfv vs. pfv: aspectual verbs/adverbs

sec ipfv are durative:

- (9) a. Toj *započna* da **napisva** knjigata.  
He start.pfv.PF to **write.sec-ipfv.inf** book.DEF  
'He started writing the book.'
- b. Patsientât *ošte* **umira**.  
patient.DEF still **die.sec-ipfv.prs**  
'The patient is still dying.'

pfv are non-durative:

- (10) a. Toj *započna* da **\*napiše** knjigata.  
He start.pfv.PF to write.pfv.INF book.DEF  
'He started writing the book.'
- b. Patsientât *ošte* **\*umre**.  
patient.DEF still die.pfv.PRS  
'The patient is still dying.'

(cf. Mittwoch 1991 on aspectual verbs/adverbs)

## Secondary ipfv vs. pfv: present tense

secondary ipfv have ongoing reading:

- (11) V tozi moment Ivan napsiva pismoto.  
in this moment Ivan write.sec-ipfv.PRS letter.DEF  
'In this moment Ivan is finishing the letter.'

pfv do not have ongoing reading:

- (12) \*V tozi moment Ivan napiše pismoto.  
in this moment Ivan write.pfv.PRS letter.DEF

## Secondary ipfv vs. pfv: negative imperatives

secondary ipfv appear in negative imperatives, where speaker wants the addressee to preserve the initial state of affairs (not to bring about the resultant state):

- (13) Ne nalivaj vino (v čašata)!  
not pour.sec-ipfv.IPR wine in glass.DEF  
'Don't pour wine into the glass!'  
↪ Leave the glass empty!

pfv are prohibited in negative imperatives since they focus on resultant state of event:

- (14) \*Ne nalej vino (v čašata)!  
not pour.pfv.IPR wine in glass.DEF

(cf. Kuehnast 2008)

## Secondary ipfv vs. pfv: summary and further questions

pfv and secondary ipfv denote/describe different CoS:

- ▶ pfv: +telic, -durative  $\Rightarrow$  achievements
- ▶ sec. ipfv: +telic, +durative  $\Rightarrow$  accomplishments

	BG CoS PREDICATES	EN EQUIVALENTS
<b>non-durative</b> (achievements)	<i>umra</i>	die win build a house run a mile
	<i>spečelja</i>	
	<i>postroja</i>	
	<i>probjagam</i>	
<b>durative</b> (accomplishments)	<i>umiram</i>	
	<i>spečelvam</i>	
	<i>postrojavam</i>	
	<i>probjagvam</i>	

*build a house* in Bg: accomplishment AND achievement!?

## Events, event descriptions and aspectual shifts

- ▶ In En, an event falling under the same verbal predicate can be described as either telic (*run a mile*, accomplishment) or atelic (*run*, activity)

„[...] the distinction between telicity and atelicity should not be one in the nature of the object described, but in the description applied to the object.“ Krifka (1998: 207)

- ▶ In Bg, an event (type) denoted by the same verbal root can be described as either atelic (*bjagam*), telic and non-durative (*probjagam*) or telic and durative (*probjagvam*)
- ▶ ipfv/pfv distinction in Bg: morphological encoding of aspectual shifts (Karagjosova subm.)
  - ▶ prefix shifts a simple ipfv (state/activity) into achievement (pfv)
  - ▶ suffix shifts a pfv into accomplishment (sec ipfv)

But what about aspectual composition? What about IPF/PF?

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## Aspectual composition

- ▶ direct object and the count/mass distinction

- (15) a. Mary drank **a glass of wine**.                    quantized > telic  
b. Mary drank **wine**.                                    non-quantized > atelic

- (16) a. Marija **izpi/izpiva** \*vino/čaša vino/vinoto.                    telic > quantized  
b. Marija **pi** vino/čaša vino/vinoto.                    atelic > quantized or non-quantized

- ▶ goal argument and endpoint specification

- (17) a. Jim ran **towards the bridge** for 20 min.                    atelic  
b. Jim ran **to the bridge** in 20 min.                    telic

(Arsenijevič 2006)

- (18) a. Ivan **tiča** #do/kam mosta #za/v prodĺženie na 20 min.                    atelic  
b. Ivan **iztiča/iztičva** do/#kam mosta za/#v prodĺženie na 20 min.                    telic

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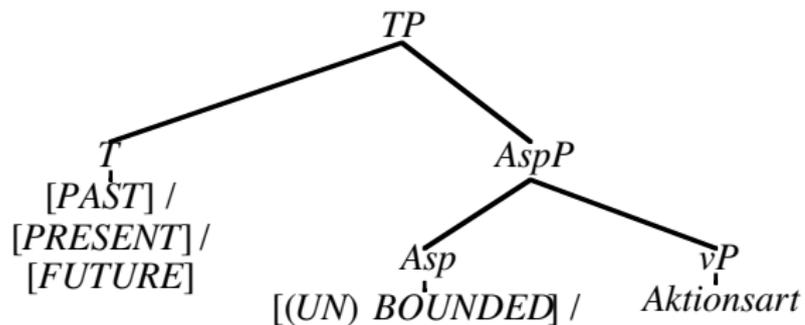
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## Combining ipfv/pfv with IPF/PF



(Pancheva 2003, slightly modified)

# Combining ipfv/pfv with IPF/PF

	IPF: $t \subseteq \tau(e)$	PF: $\tau(e) \subset t$
simpl ipfv	+homogenous +durative <b>-bounded</b> (ongoing, habitual) <i>Ivan stoeše edna kâšta.</i> 'Ivan was building a house.' $\approx$ En past Progressive	+homogenous +durative <b>+bounded</b> : culmination implicat. <i>Ivan stroí edna kâšta.</i> 'I. was engaged in building a house' $\approx$ Ru factual IPF
sec ipfv	-homogenous: culm. entailment +durative <b>-bounded</b> (habitual, ongoing: „unsuccessful attempt“) <i>Ivan postrojávaše edna kâšta.</i> 'I. was finishing building a house.' $\approx$ modal/intensional Progressive	<b>+homogenous(?)</b> +durative <b>+bounded</b> : culm. entailment, „successful attempts“ <i>Ivan postrojává edna kâšta.</i> 'I. built a house in several attempt' $\approx$ „perfective paradox“?
pfv	-homogenous: culm. entailment -durative <b>-bounded</b> (habitual) <i>Ivan postroeše edna kâšta.</i> 'Ivan used to/would build a house.' $\approx$ En Habitual	-homogenous: culm. entailment -durative <b>+bounded</b> <i>Ivan postroi edna kâšta.</i> 'Ivan built a house.' $\approx$ En simple Past (PF)/Ru PF



## The Bg „factual imperfective“?

simple ipfv+PF: past activity

- (21) Ivan stroi edna kâšta, no ne ja dovârši.  
+> there is a house

(cf. also Sonnenhauser 2006: 138)

## pfv+IPF

only habitual, culmination entailment:

- (22) Ivan postroeše edna kâšta, #no nikoga ne ja dovâršvaše/#i ošte ja stroi. → Ivan finished building the house (each time)  
'Ivan used to build a house, but he never finished it/and he is still building it.'

non-homogenous:

- (23) Ivan postroeše edna kâšta za 1 mesets ↗ Ivan postroeše edna kâšta prez pârvite 5 dena.

individual events incompatible with time span adverbials:

- (24) Ivan postroeše edna kâšta za/#v prodâlženie na edin mesets.  
'Ivan used to build a house in/for a month.'

sequence of repeated events compatible with time span adverbials:

- (25) V prodâlženie na 1 godina, Ivan postroeše edna kâšta (za 1 mesets) i posle ja prodadeše.  
'For a year, Ivan used to build a house for a month and sell it.'

## Secondary ipfv+IPF I

ongoing/habitual uses with culmination entailment:

- (26) Ivan postrojávaše edna kâšta, #no ne ja dovârši/dovâršvaše/#i ošte ja stroi.

'Ivan was finishing building a house, but he never finished it/used to finish it/and he is still building it.'

habitual use non-homogenous (non-cumulative):

- (27) Ivan postrojávaše edna kâšta za 1 godina.

↗ Ivan postrojávaše 1 kâšta prez pârvite 3 mesetsa

- (28) Ivan postrojávaše edna kâšta + Ivan postrojávaše edna kâšta ≠  
Ivan postrojávaše edna kâšta

incompatible with time span adverbials:

- (29) Ivan postrojávaše edna kâšta za/#v prodâženie na 1 mesets.

'Ivan was finishing building a house in/for a month.'

## Secondary ipfv+IPF II

allows conative ongoing uses (Rivero & Slavkov 2014):

- (30) Ivan postrojávaše kâštata, kogato bankata mu sprja zaema.  
'Ivan was finishing building the house when the bank cancelled his loan.'

→ Ivan would have finished (building) the house if the bank hadn't cancelled his loan

(modal/intensional use, cf. also Landman's (1992) intensional theory of the progressive)

habitual use compatible with time span adverbials (single events still telic/culminating):

- (31) **V prodâženie na** 1 godina, Ivan postrojávaše edna kâšta za 1 mesets i posle ja prodavaše.  
'For a year, Ivan used to build a house for a month and then sell it.'

→ Ivan finished building the house (each time)

→ there was a house (each time)

## Secondary ipfv+PF

culmination entailment but compatible with time span adverbials:

- (32) Ivan postrojavá edna kâšta v prodâlženie na/#za 1 godina, #no ne ja dovârši/#i ošte ja stroi.

'Ivan built a house (on several attempts) for/in one year, but he never finished it/and he is still building it.'

↪ There was/were one/several occasion(s) on which Ivan made several/repeated trials until he finally built the house

→ Ivan finished building the house eventually

→ there is a house Ivan built

homogenous (cumulative and divisive):

- (33) Ivan postrojavá edna kâšta v prodâlženie na 1 godina.

→ Ivan postrojavá 1 kâšta prez pârvite 3 mesetsa.

- (34) Ivan postrojavá edna kâšta + Ivan postrojavá edna kâšta = Ivan postrojavá edna kâšta

- (35) a part of Ivan postrojavá 1 kâšta = Ivan postrojavá 1 kâšta

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- ▶ morphological encoding of (shifts between) aspectual classes in Bg (perfectivizing prefix shifts simple ipfv into pfv achievement; imperfectivizing suffix shifts pfv into accomplishment)
- ▶ Aktionsart properties are not subject to shifts due to aspectual composition (to be further explored)
- ▶ pfv/ipfv and PF/IPF morphology make independent semantic contributions and interact in non-trivial ways (to be further explored)
- ▶ application to different kinds of CoS predicates: degree achievements, causatives, verbs of creation and consumption (others?)

## Theoretical implications

- ▶ Bg aspect  $\neq$  „Slavic aspect“
- ▶ Bg aspectual class distinctions pertain to verbs, not to VPs (?)
- ▶ a (cross-linguistically attested) „perfective paradox“?
- ▶ „aspectual properties are properties of event descriptions, or of events under a particular description“ (Rothstein 2004: 2)

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## Simplex vs. secondary ipfv: argument restrictions

smpl ipfv compatible with quantized and non-quantized themes:

- (36) Marija **pie** vino/čaša vino/vinoto.  
Maria **drink.smp-ipfv.prs** wine/glass wine/wine.DEF

'Mary is drinking wine/a glass of wine/the wine.'

sec ipfv require/only compatible with quantized themes:

- (37) Marija **izpiva** \*vino/čaša vino/vinoto.  
Maria **drink.sec-ipfv.prs** wine/glass wine/wine.DEF  
'Mary drinks wine/a glass of wine/the wine.'