



Does perfective
aspect entail
culmination in
Russian?

Natasha Kasher & Aviya Hachon
Ben-Gurion University of the Negev

CoS Verbs - Empirical and Theoretical Perspectives
(DGfS 2022)

February 23-25, 2022



Background



- Perfective (PFV) telic accomplishments are argued to describe events that have a non-arbitrary, natural point of completion, or **culmination**
- Towards which the event proceeds
- And beyond which it cannot continue
- For example:
 - (1) Malčik narisoval zvezdu.
boy PFV.drew star
'A boy drew a star.'



However, the crosslinguistic availability of non-culminated readings of such predicates has become increasingly recognized (e.g., Arunachalam & Kothari 2011, Bar-el et al. 2005, Filip 2017, van Hout 2018)

Mandarin

(2) Wo zuotian xie-le yi-fen xin, keshi mei xie-wan.

1SG yesterday write-PERF one-CL letter, but not.have write-complete.

'I wrote a letter yesterday, but didn't finish writing it.'

(Zhang 2018, adapted from Soh & Kuo 2005)

French

(3) Ils ont réparé mais cela ne fonctionne toujours pas.

they have repaired but this NEG works still NEG

'They repaired [it] but it still doesn't work.'

(Martin & Schäfer 2017)

- Nonetheless, the Slavic PFV has been consistently argued to enforce strict culmination requirements on telic accomplishments within its scope (e.g., Filip 2017, Martin 2019)
 - Such that non-culminating readings of Slavic PFV accomplishment are entirely disallowed
 - And PFV accomplishment + cancellation phrase results in a contradiction
-

- This is illustrated in the literature by the (assumed) contrast between Hindi:

(4) maya-ne biskuT-ko khaa-yaa par us-e puuraa nahiin khaa-yaa
Maya-Erg cookie-ACC eat-PERF but it-ACC full not eat-PERF
'Maya ate a cookie (but not completely).' (Arunchalan & Kothari 2011)

- And Russian:

(5) Masha s'ela prjanik (#no ne ves').
Masha. PFV.ate.SG.F gingerbread.cookie.ACC (#but not all).
'Masha ate a/the gingerbread cookie (#but not all of it).'



Current study



Our goal

To test the availability of PFV non-culminating accomplishments in Russian

Methods

Participants

33 native Russian adults

Recruited online through Russian social media

Task

Gradable acceptability task

4-point forced-choice scale:

1 = *ni malejšega šansa* ('not a chance')

2 = *vrjad li* ('not likely')

3 = *vozmožno, xotja čto-to ne tak* ('possible but slightly off')

4 = *vpolne verojatno!* ('highly probable')

Design and Materials

Verbal stimuli

8 accomplishments (incremental transitive verb + singular count direct object)

Creation	Consumption	Destruction
<i>složit' pazl</i> assemble puzzle.ACC	<i>s'est' šokoladku</i> eat chocolate-bar.ACC	<i>steret' nadpis'</i> erase writing.ACC
<i>postroit' piramidku iz koleček</i> build small-pyramid.ACC from rings	<i>vypit' stakan soka</i> drink glass.ACC juice.GEN	<i>rastvorit' kubik saxara</i> dissolve cube.ACC sugar.GEN
<i>narisovat' zvezdu</i> draw star.ACC		
<i>sdelat' taburetku</i> make bench.ACC		

Design and Materials

Visual stimuli

8 animated clips, depicting a human character performing the action denoted by the 8 accomplishments

- 8 **test** items: event stops short **before** reaching culmination
- 8 **control** items: 5 clips - culminated events; 3 clips - event doesn't even begin

Design and Materials

- Each base accomplishment appears in three aspectual frames:

Condition	Example
Condition 1: PFV (Perfective)	Malčik na risoval zvezdu. boy PFV.drew star.ACC 'The boy drew a/the star.'
Condition 2: PFV+CNCL (Perfective + Cancellation)	Malčik na risoval zvezdu, <i>no od novo lučika ne xvataet</i> . boy PFV.drew star.ACC but one ray not sufficient 'The boy drew a/the star, but one point is missing.'
Condition 3: IMP (Imperfective)	Malčik risoval zvezdu. boy IMP.drew star.ACC 'The boy was drawing a/the star.'

Procedure

Presentation: online via Qualtrics

- Visual stimuli: one pseudo-randomized order across participants
- Verbal stimuli: fully randomized for each clip and for each participant

Example

How likely is it for a Russian speaker to describe the scene this way:

Malčik **n**arisoval zvezdu. ('The boy drew a/the star.')

1. not a chance 2. not likely 3. possible but slightly off 4. highly probable
-

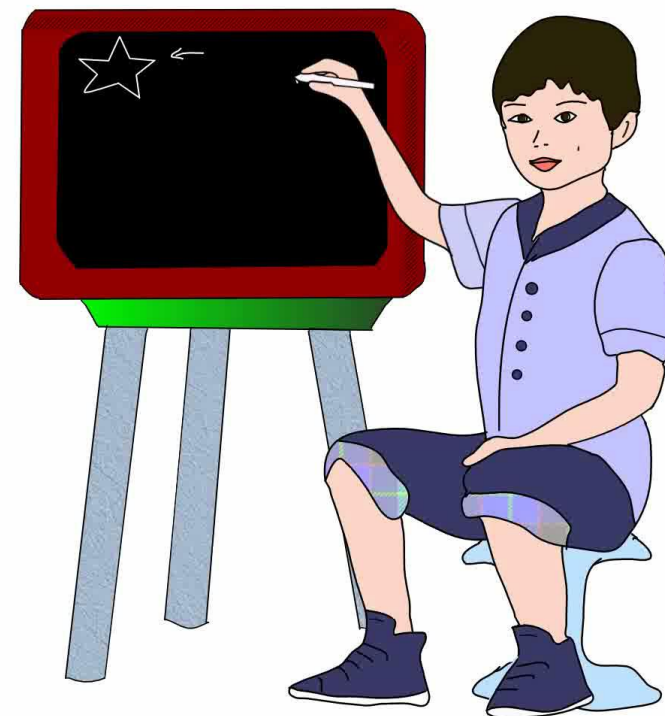
Malčik **n**arisoval zvezdu, no odnovo lučika ne xvataet.

('The boy drew a/the star, but one point is missing.')

1. not a chance 2. not likely 3. possible but slightly off 4. highly probable
-

Malčik **r**isoval zvezdu. ('The boy was drawing a/the star.')

1. not a chance 2. not likely 3. possible but slightly off 4. highly probable
-
-





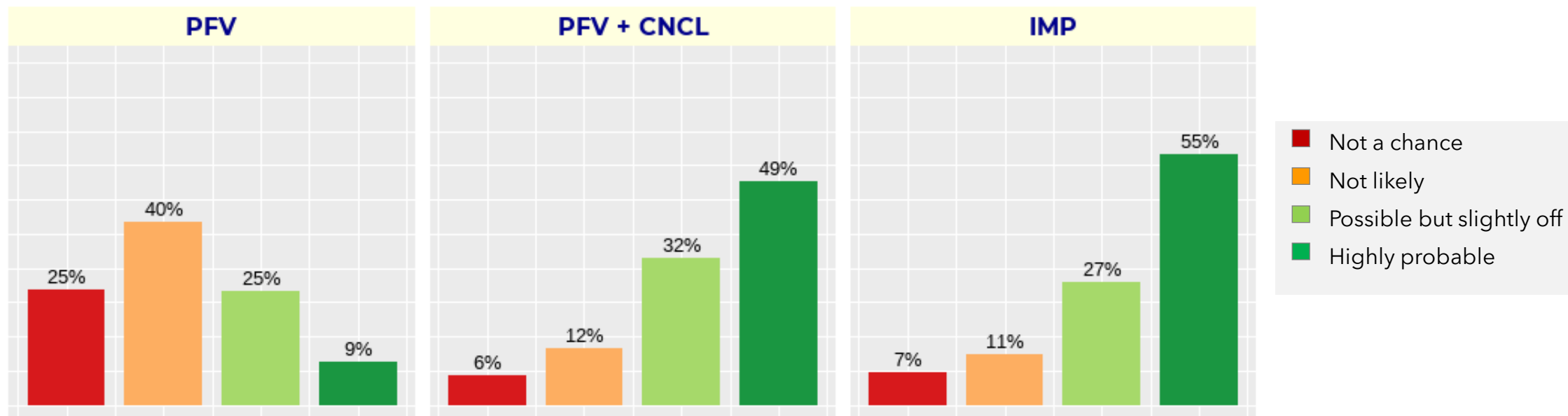
Predictions

-
- **Perfective**: mismatch between PFV frame and non-culminated event →
low acceptability scores
 - **Perfective + cancellation**: sentence-internal contradiction → low acceptability scores
 - **Imperfective**: IMP does not encode culmination → high acceptability scores

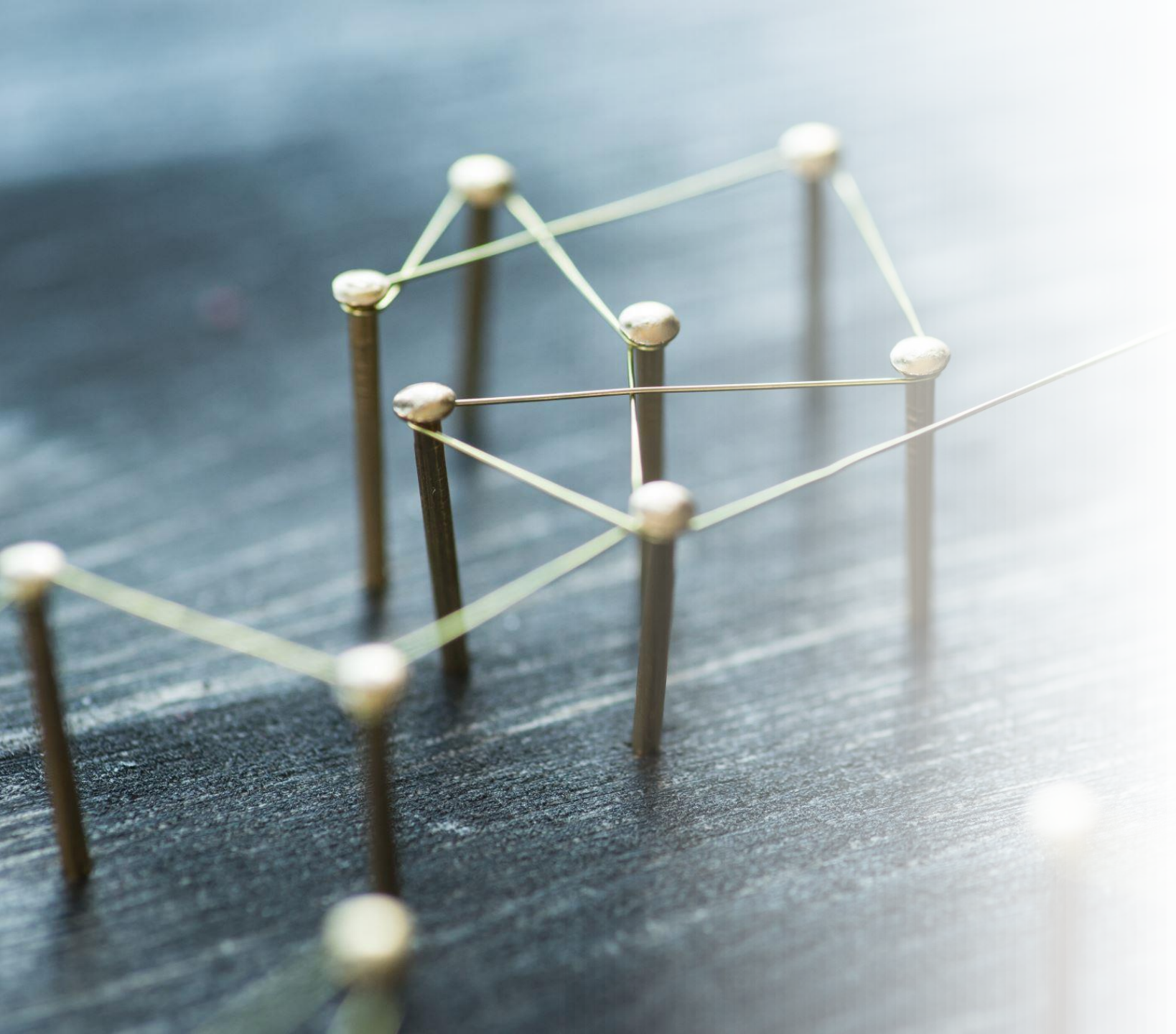
Results & analysis



Acceptability ratings across aspectual frames



- ❑ **Friedman's Chi-Square**: significant main effect of aspectual frame ($p < 0.001$)
- ❑ But this effect is due to the distribution of the PFV
- ❑ **Wilcoxon Signed-Rank**: no significant difference between PFV+CNCL and IMP ($p = 0.470$)



Discussion

- Russian PFV accomplishments do carry culmination requirements
- But they are **not** stricter than what has been reported for other languages
- Most strikingly: high acceptability ratings of PFV+CNCL
- Which were essentially identical to IMP

- ➔ Contra to literature, in Russian, PFV+CNCL is **not** a contradiction
- ➔ Culmination inference of the PFV accomplishment is defeasible, even in Russian

But **what** exactly is being cancelled...?



Option 1

The culmination inference of the Russian PFV is cancellable

→ Culmination itself is merely an **implicature** of Russian PFV accomplishments

But...

→ Culmination is not part of the truth-conditional meaning of the perfective
(contra to the entire literature on Russian aspect)

→ No semantic distinction between PFV and IMP

Alternatively...

- What's being cancelled is not the culmination inference *per se*
- But rather the **maximal interpretation** of Culmination (cf. Martin 2019, Martin & Demirdache 2020)
- Culmination is **not** a single point “beyond which the event **cannot proceed**” (Declerck 2015:121, Depraetere 1995:3)

Alternatively...

- Following Kearns (2007): Telic PFV accomplishments do **not** necessarily entail the maximal endpoint
- But rather, the **standard endpoint**: the **onset** of a specified endstate
- Our data support Kearns' claim that while the standard endpoint is part of the semantics of telic PFV accomplishments
- The maximal endpoint is only implicated by such predicates
- And may therefore be cancelled

Crucially...

- Events depicted did not end at some early, arbitrary point
- In all scenarios, the action was completed up to approximately 80%

Proposal

- This range between 80% and 100% may reflect the margin between the standard endpoint and the maximal endpoint
- Any point within this range can qualify as Culmination
- This proposal recognizes the critical role of pragmatics in licensing maximal interpretations of telic PFV accomplishments
- While not abandoning Vendler's original claim that culmination is an integral part of the semantic denotation of accomplishments

Proposal

- This allows us to avoid the inevitable (and unfortunate) consequence of the “culmination via implicature” view à la Hay et al. (1999) and subsequent works
- Which is that if culmination is not part of the semantics of telic PFV accomplishments
- We are left with very little semantic content for such constructions
- Our proposal, thus, accounts for the empirical facts without having to abandon the important fundamental theoretical observations



Thank you!

