



**From Privative To Equipollent:**

**Towards a Unified Model of the  
Heritage Russian Aspectual System**

Conference on Formal Approaches to Heritage Languages  
April 21-22, 2012  
University of Massachusetts Amherst

Oksana Laleko  
SUNY New Paltz

# Aspect

- Russian verbs come in two forms: **perfective** (PFV) and **imperfective** (IMP), morphologically marked by prefixes and/or suffixes.
- Distinction corresponds to **viewpoint aspect** (Smith, 1991), which signals how a situation is to be viewed:
  - *perfectively* = “from the outside,” “as a completed whole” or
  - *imperfectively* = as on-going, incomplete, or otherwise not distinctly bounded, “from the inside” (Comrie, 1976; Dahl, 1985; Binnick, 1991).

# Aspect in heritage Russian?

- Early work on HR: loss of aspect
  - Polinsky, 1996, 1997; Pereltsvaig, 2002, 2007
- PFV-IMP opposition is no longer observed; verbs are retained in one form: either invariably PFV or invariably IMP (frequency or root semantics)
- No PFV-IMP aspectual system as such (“Without Aspect”)
- Low proficiency speakers
  - Aspectual morphology retained on a verb by verb basis, not sensitive to context

# However, ...

- Bar-Shalom and Zaretsky (2008) challenge the lexicalization hypothesis for HR
  - Investigate the use of aspectual forms in storytelling (15 HS compared to age-matched monolinguals)
  - Main finding: no differences between monolingual and heritage speakers on aspect
    - Numerous lexical and morphosyntactic errors in other domains
  - Explanation: proficiency level!
  - the higher end of the proficiency continuum is not affected by the restructuring of aspect; “preservation” of the aspectual system.

# Summary so far

- Low-proficiency speakers are characterized by a **total loss** of PFV-IMP opposition; verbs no longer stored as aspectual pairs.
- High-proficiency speakers exhibit **fully target-like** behavior with respect to aspectual marking, measured by absence of overt errors in production.
  - Low-proficiency HS ..... High-proficiency HS  
[total loss of aspect]                      [total preservation of aspect]
  - The heritage continuum (Polinsky & Kagan 2007)

# Questions

- If a continuum is “a constant succession of restructurings of the original system” (Bickerton, 1977), then...
- How does the reorganization of the aspectual system proceed from a total lack of errors to a complete disappearance of aspect as a category?
- Is error-analysis the right approach for acrolectal speakers? In the absence of errors, are the two systems equivalent? Or: signs of *covert reorganization*, not (yet) manifested in errors?
- Answers could be important for determining the mechanism, nature, and directionality of grammatical development in a HLA context across the sectors of the continuum.

# Preview

- Advanced HR speakers are not fully target-like (locus of change: **the syntax-pragmatics interface**, aka the C-domain)
  - In the absence of errors with aspect, HS differ on use, acceptability ratings, and accuracy of interpretation of the **pragmatically conditioned IMP** with completed actions (total single events)
- This leads to a gradual shift in the type of aspectual opposition from **privative** (baseline) to **equipollent** (HR)

# Theory of binary oppositions

- **PRIVATIVE** opposition = a binary opposition where one member is **marked** by the presence of a feature and the other member is **unmarked** with respect to that feature.
  - +A vs. [unspecified value A, or +/- A]
    - Slavic aspect as a privative opposition (Jakobson, 1932; 1957; Forsyth, 1970; Comrie, 1976; Binnick, 1991, inter alia)
    - Perfective is defined with respect to totality/completion
    - Imperfective is underspecified: interpretation determined by contextual cues and pragmatic inferences
- **EQUIPOLLENT** opposition = a binary opposition where one member is marked by the **presence** of a feature and the other member is marked by the **absence** of that feature.
  - +A vs. -A



# Empirical Data

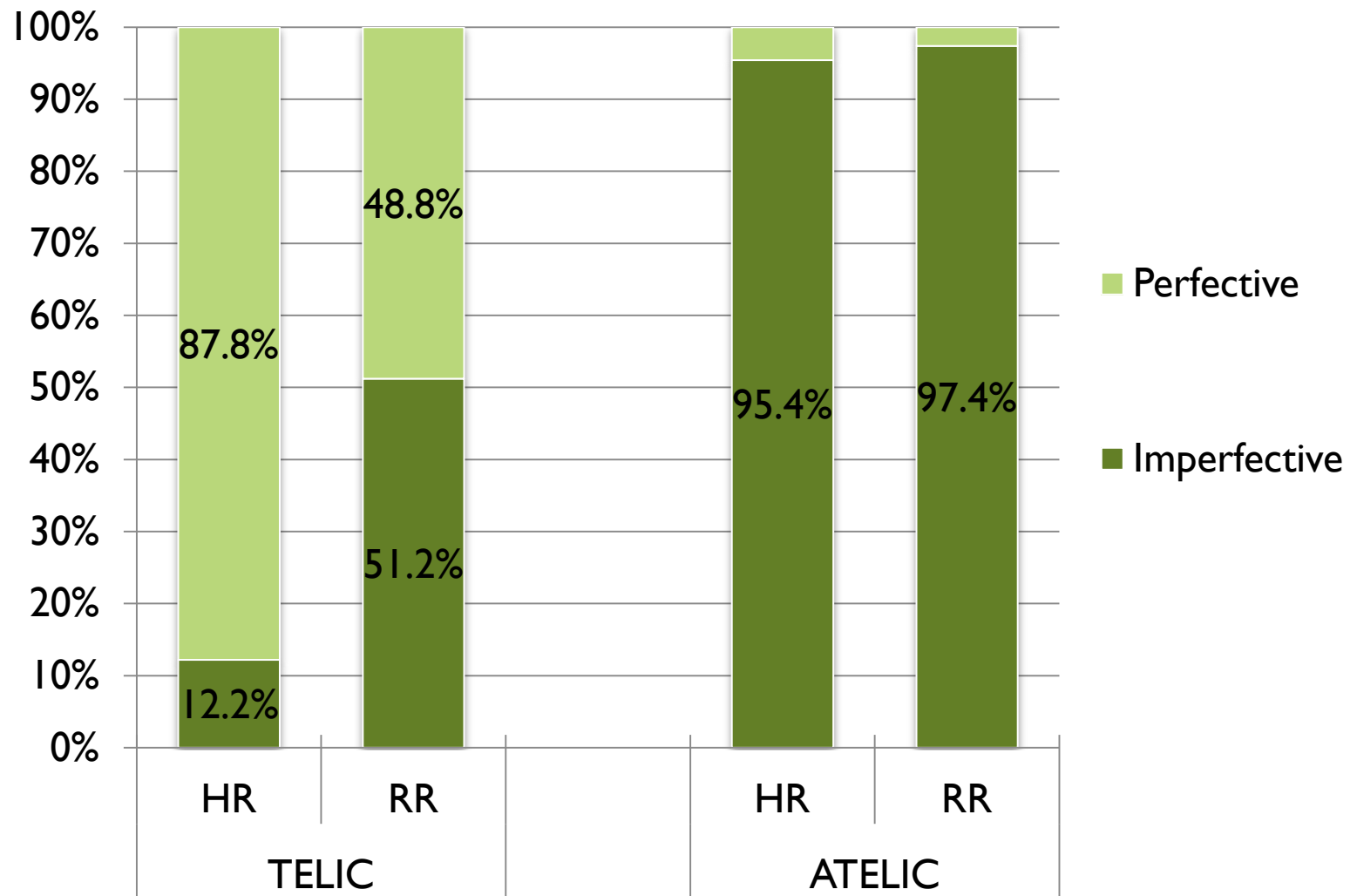
- Demographic data:
  - 23 HR, mean age = 21, mean age of arrival to the US = 5.5, time in the US = 15.9, mean Russian use 23%, tested in the US
  - 22 RR mean age = 30, mean Russian use 100%, tested in Russia
- 3 experimental tasks
  - Production: sentence construction
  - Scaled acceptability judgments
  - Interpretation (forced choice matching)

# Laleko (2008)

- Production study
  - previous work focused on verbal roots; what about information at higher levels?
  - does the direct object matter for aspectual marking?
- Methodology: sentence construction (N=20)
- Verb plus...
  - object of specified quantity (Verkuyl's [+SQA])
    - *write two letters, drink a glass of wine (TELIC)*
  - object of unspecified quantity (Verkuyl's [-SQA])
    - *write letters, drink milk (ATELIC)*

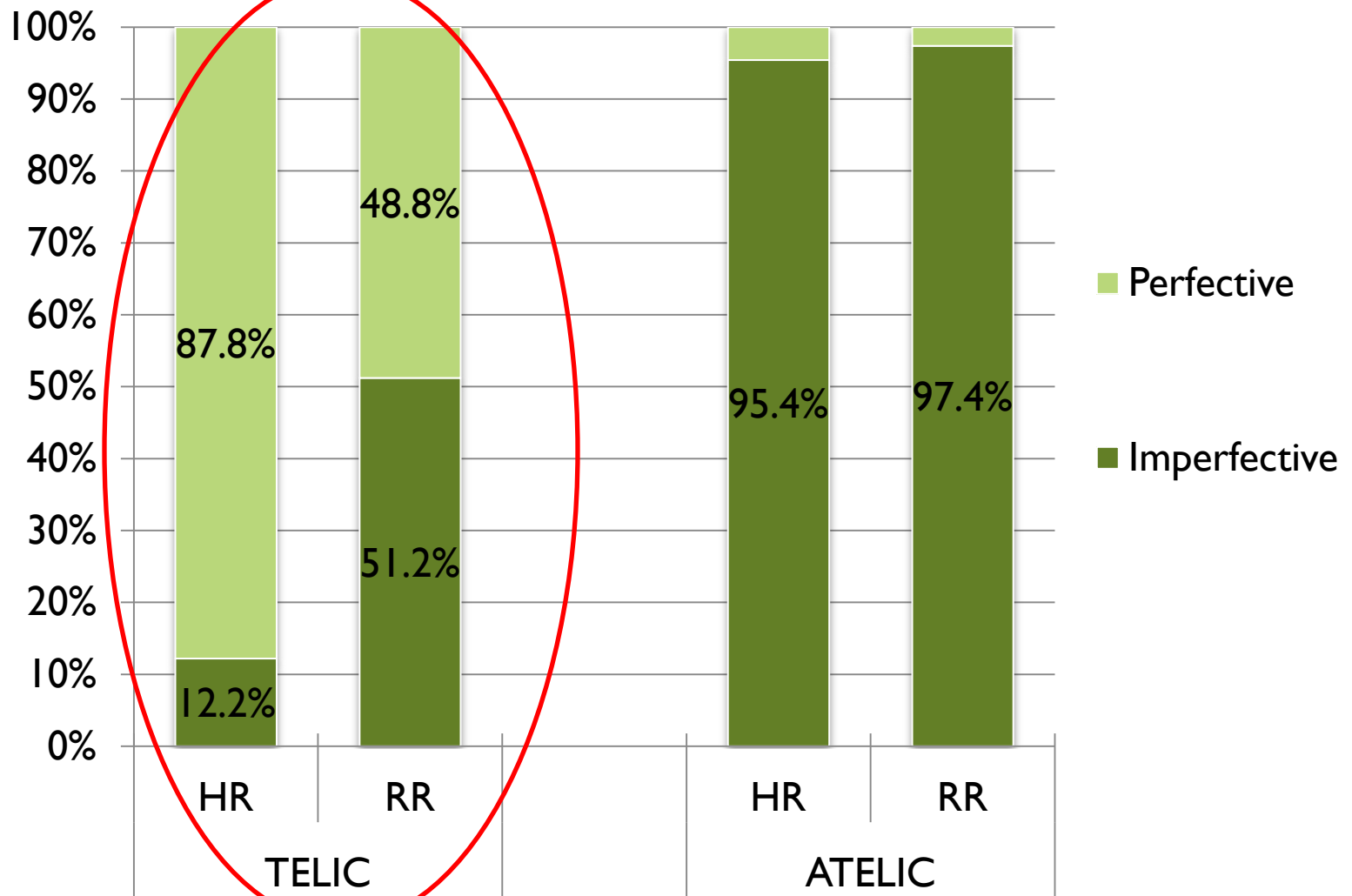
# Fig. I Production: Results

\*HR = Heritage Russian, RR = control group




# Fig. I Production: Results

\*HR = Heritage Russian, RR = control group



# Discussion

- Aspectual Asymmetry
  - HR and RR pattern together in the atelic condition
    - atelic  $\rightarrow$  IMP
  - HR and RR diverge in the telic condition, where IMP is 'underused' in HR
- Questions:
  - Under what conditions does IMP occur with telic predicates in RR?
  - Which of these IMP functions are affected in HR?

- 
- PFV: *pro-chital*
    - completed event ('finished reading')
  - IMP: *chital*
    - on-going process (PROG) 'was reading'
    - series of repeated events (HAB) 'used to read'
    - completed event (various translations depending on context)

◦ PFV: *pro-chital*

- completed event ('finished reading')

◦ IMP: *chital*

- on-going process (PROG) 'was reading'
- series of repeated events (HAB) 'used to read'
- completed event (various translations depending on context)

# Aspectual Competition

- Completed events may be marked with either PFV or IMP, creating conditions for **aspectual competition**
  - *I read.PFV War and Peace in college.*
  - *I read.IMP War and Peace in college.*
- The competition is **contextually resolved** in favor of the IMP when the relevant discourse-pragmatic conditions are met.
- The general-factual IMP (Forsyth, 1970):
  - statement of fact
  - thematicity / backgrounding of the predicate
    - *When did you read.IMP War and Peace?*
  - annulled result (reversed action)
    - *Who opened.IMP the window?*



# Towards a unified model

- Multi-level approach to aspect (Laleko, 2010)
- lower level: the default aspect
  - telic VP → PFV
  - atelic VP → IMP
- higher level: sentential triggers of IMP
  - such as PROG, HAB, certain modals
    - convert the default VP aspect into IMP
- highest level: discourse-pragmatic triggers of IMP
  - The general-factual Imperfective

# Towards a unified model

- Multi-level approach to aspect (Laleko, 2010)
- **VP-aspect**: the default aspect
  - telic VP → PFV
  - atelic VP → IMP
- **IP-aspect**: sentential triggers of IMP
  - such as PROG, HAB, certain modals
    - convert the default VP aspect into IMP
- **CP-aspect**: discourse-pragmatic triggers of IMP
  - The general-factual Imperfective

# Cf.

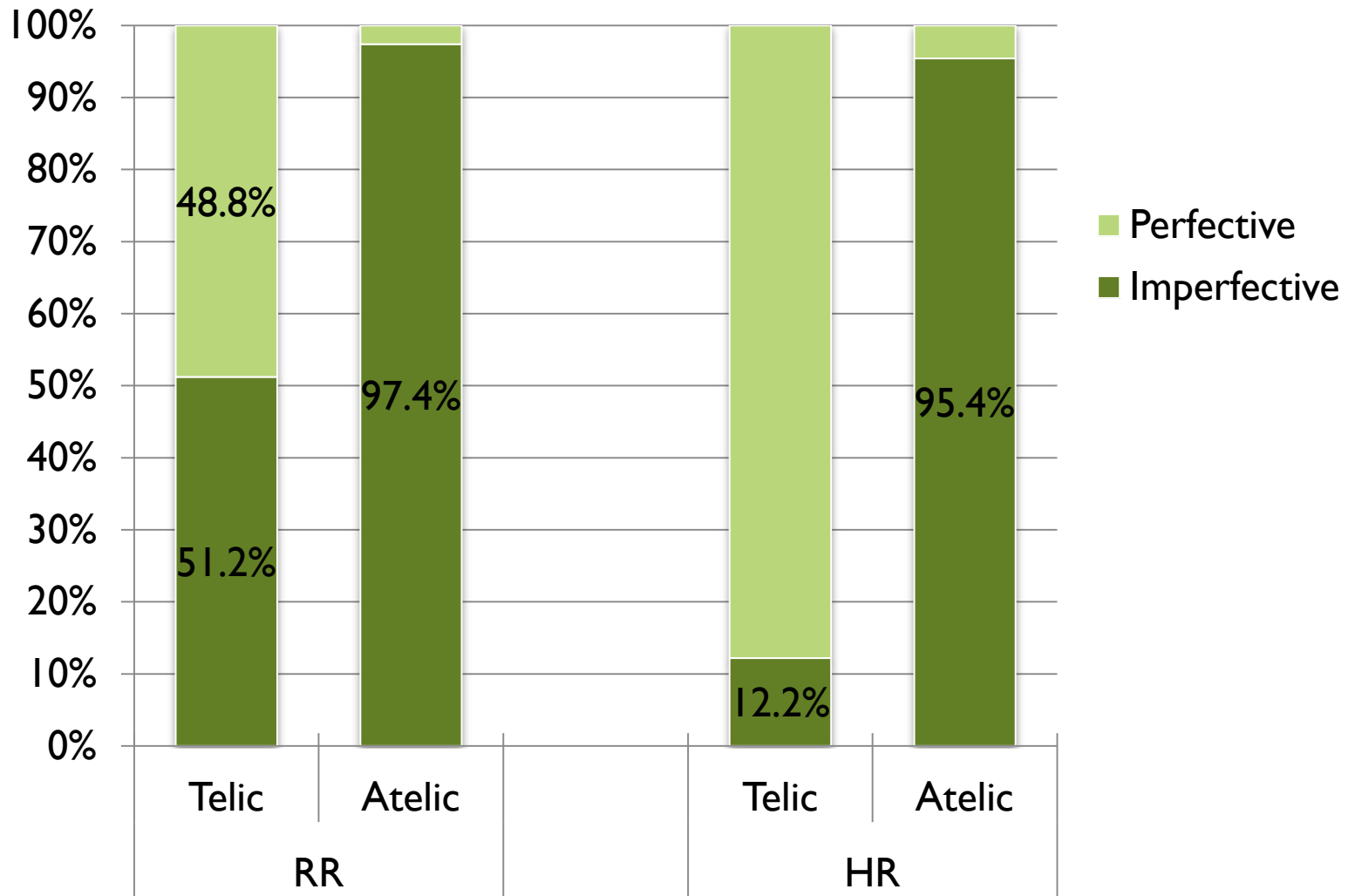
- Minimalist assumptions about clause structure (Chomsky, 1995; Rizzi, 1997):
  - [CP [IP [VP]]
- VP + IP = **the I-domain** (grammatical information within the sentence)
- CP = **the C-domain** (“closes” the I-domain, i.e. links grammatical information at VP and IP levels to discourse-pragmatic context) (Rizzi, 1997; Platzack, 2001)

# Aspectual calculation in Russian

- No triggers: default VP aspect projects directly
- With imperfectivizing triggers: the resulting aspectual value is IMP
  - VP-telicity contributes to, but does not single-handedly determine the aspectual value
- Prediction:
  - atelic VPs → IMP (default / triggers)
  - telic VPs → PFV (default) or IMP (triggers)

# Fig. 1a Production: Results

\*RR = control group; HR = Heritage Russian



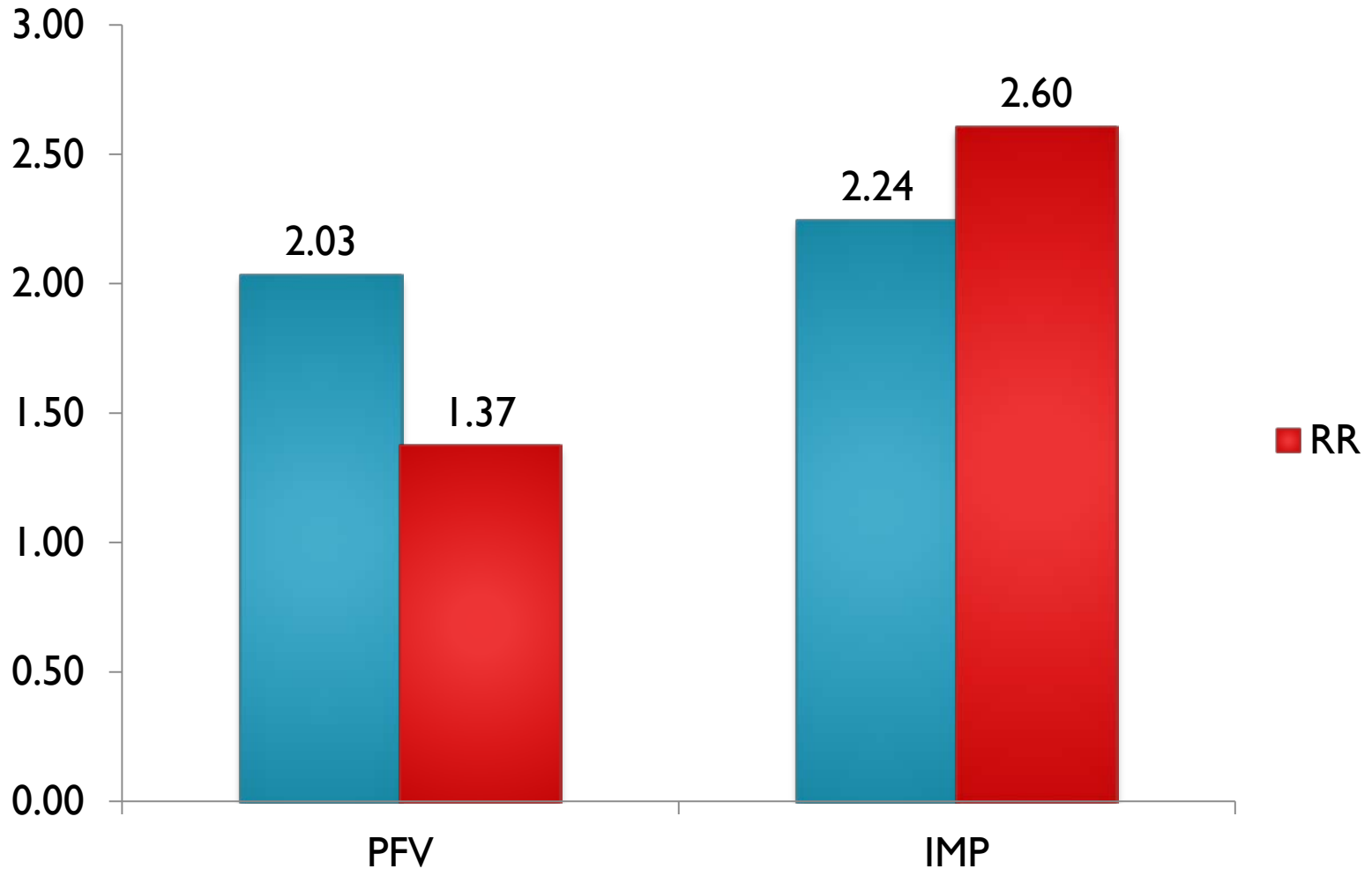
# Where the two grammars diverge

- Heritage and monolingual grammars of Russian converge with respect to the default VP aspect:
  - VP telicity → aspect
- ...but diverge at higher aspectual levels, at which imperfectivizing triggers operate
- Syntax-pragmatics interface:
  - Interface domains are generally more vulnerable in acquisition (Sorace, 2005, *inter alia*)
  - integrating various types of knowledge across domains; require more linguistic exposure to be acquired
  - C-group: early L1, L2, SLI, Broca's aphasia (Avrutin, 1999; Platzack, 2001)
    - + heritage speakers?

# Exp. 2 Scaled Acceptability Ratings

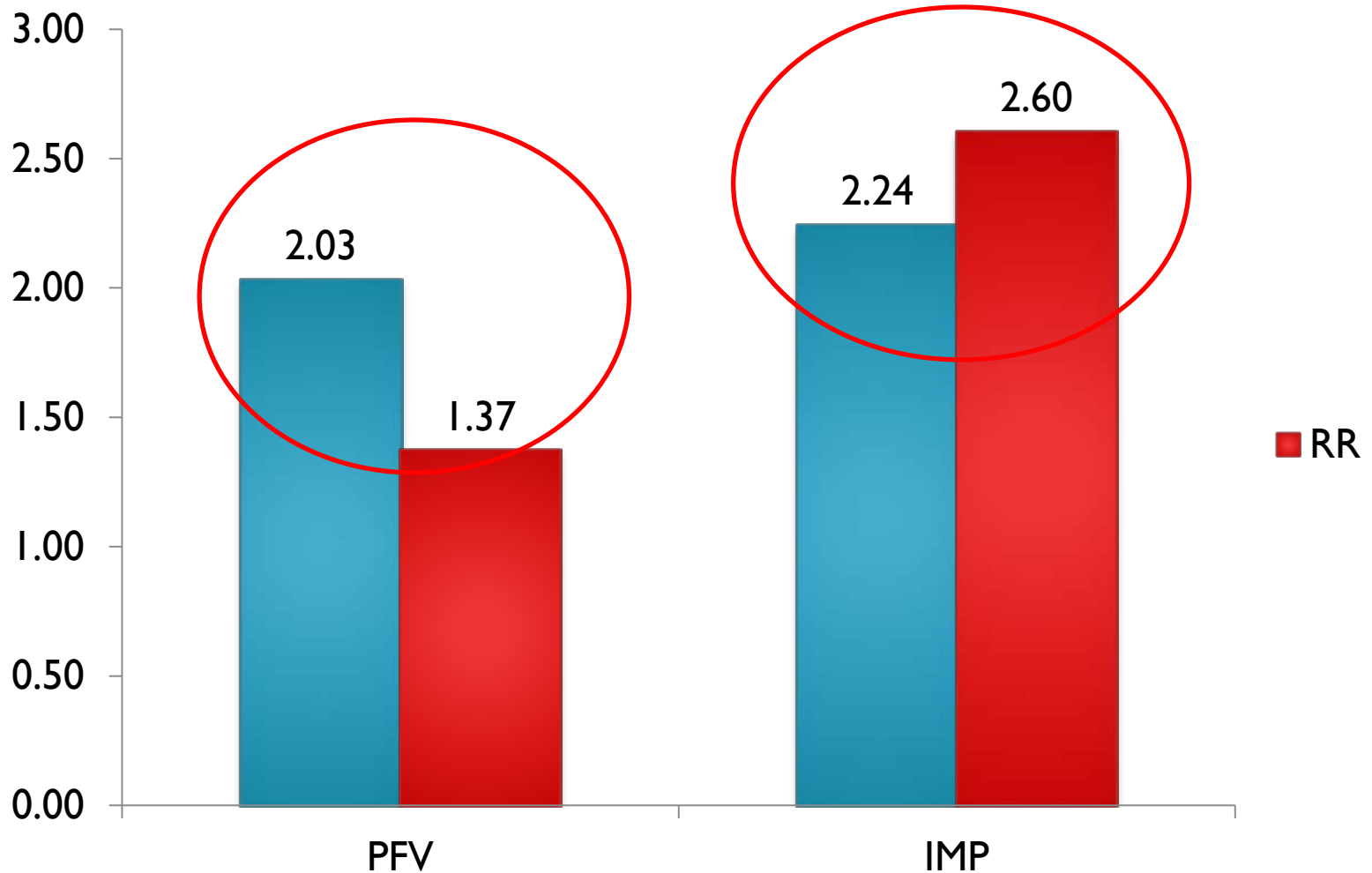
- Test the knowledge of the general-factual IMP
- Methodology:
  - 10 short stories in Russian, missing verb, two verb forms (PFV and IMP) provided, N=20
  - task: rate each candidate on a 4-point scale relative to context: “perfect,” “okay,” “awkward,” “unacceptable”
  - condition: telic predicates (completed actions) placed in the context which would favor IMP for pragmatic reasons, resolving competition in favor of IMP
- Predictions: heritage speakers will...
  - (i) rank the IMP forms lower than the Russian controls
  - (ii) rank the PFV forms higher than the Russian controls

# Fig.3 Scaled judgments: Results (Mean ratings)





# Fig.3 Scaled judgments: Results (Mean ratings)



# Exp. 3: Aspectual Interpretations

- A comprehension experiment (the reversed action implicature).
- Maxim      **bral**                      knigu v                      biblioteke.  
Maxim      took.IMP                      book in                      library  
'Maxim got the book from the library'
- a.    Kniga                      seichas                      u                      Maxima.  
      book                      now                      at                      Maxim's  
      'The book is now in Maxim's possession'
- b.    Kniga                      seichas                      v                      biblioteke.  
      book                      now                      in                      library  
      'The book is now at the library'

# Exp. 3: Aspectual Interpretations

- A comprehension experiment (the reversed action implicature).
- Maxim      **bral**                      knigu v                      biblioteke.  
Maxim      took.IMP                      book in                      library  
'Maxim got the book from the library'

a.    Kniga                      seichas                      u                      Maxima.  
      book                      now                      at                      Maxim's  
      'The book is now in Maxim's possession'

b.    Kniga                      seichas                      v                      biblioteke.  
      book                      now                      in                      library  
      'The book is now at the library'

# Exp. 3: Aspectual Interpretations

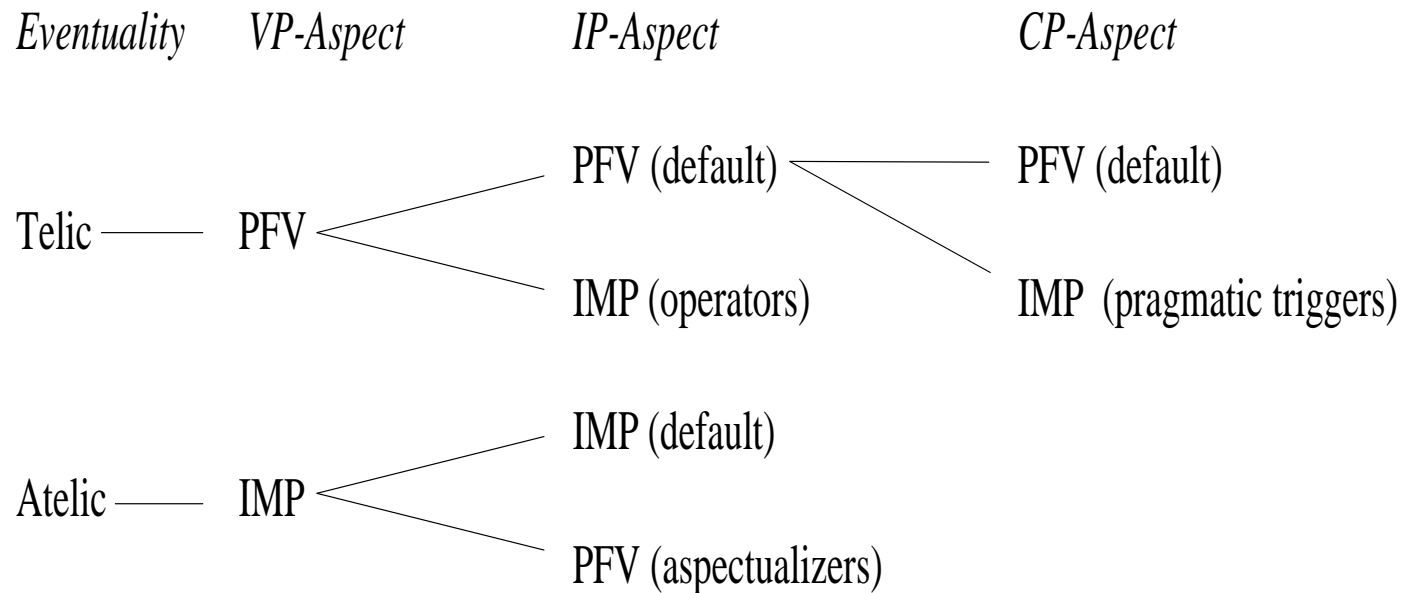


# Summary and Discussion

- The general-factual imperfective is the key argument for the privative status of the Russian aspectual opposition
  - IMP: wider contextual distribution
- HR: Statistically significant reduction in the range of discourse-pragmatic functions of IMP
  - Without the general-factual IMP, no contextually resolvable aspectual competition; asp. contrast mediated in the grammar; thus, the aspectual opposition shifts towards the equipollent type

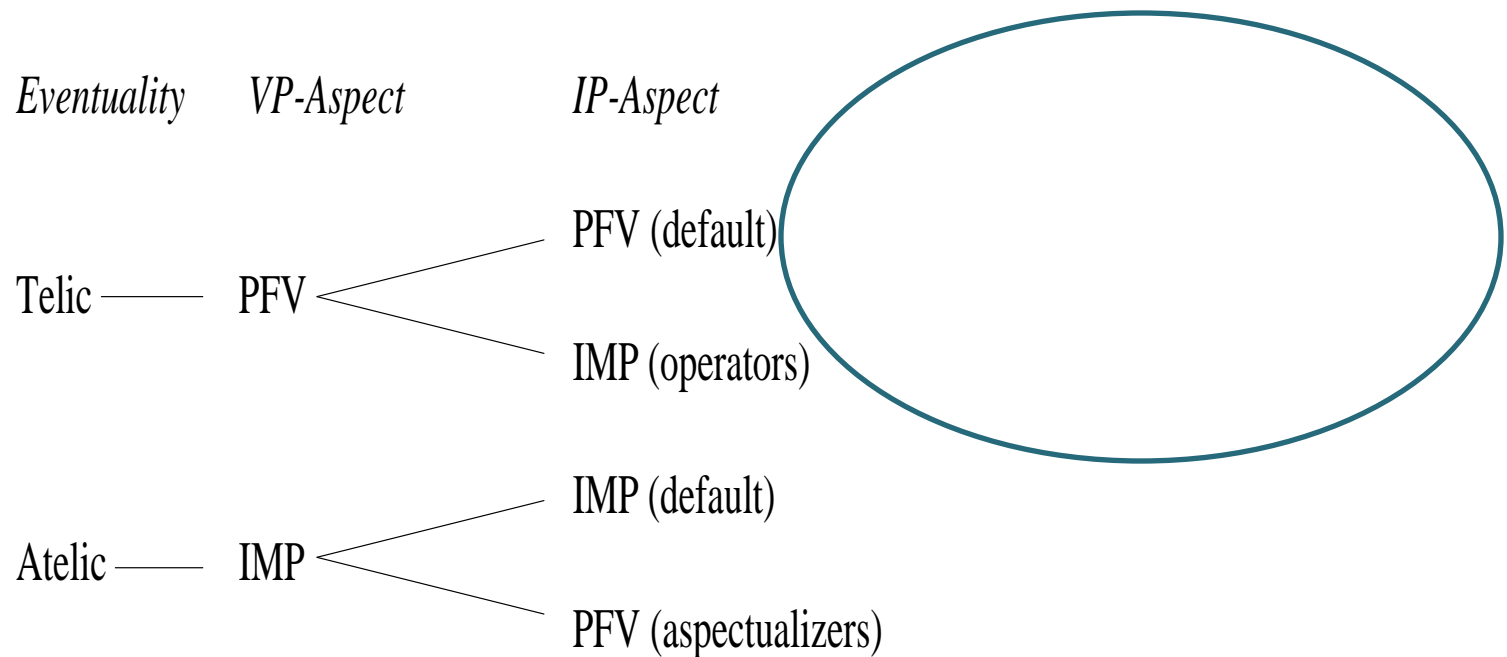
# Model of Aspect in Baseline Russian

- A layered structure, with aspectual calculation taking place in three stages: VP, IP, CP



# Model of Aspect in Heritage Russian

- A layered structure, with aspectual calculation taking place in three stages: VP, IP, CP



# Unifying the findings

- Aspectual restructuring across the continuum:
- Implicational hierarchy:
  - V aspect < VP aspect < IP aspect < CP aspect
  - basilectal    mesolectal    acrolectal    baseline
  - verb-by-verb  
    basis
  - no asp. opposition



# Unifying the findings

- Aspectual restructuring across the continuum:
- Implicational hierarchy:
  - V aspect < VP aspect < IP aspect < CP aspect
  - basilectal **mesolectal** acrolectal baseline
  - verb-by-verb errors with  
basis sentential aspect
  - invariability

Moj        djaja        chasto on        prijexal        k nam        v Brooklyn  
my.NOM    uncle.NOM    often he.NOM    came.PFV    to us.DAT in Brooklyn  
'My uncle often came to see us in Brooklyn' (cf. RR *prijezzhal*.IMP 'came')

# Unifying the findings

- Aspectual restructuring across the continuum:
- Implicational hierarchy:
  - V aspect < VP aspect < IP aspect < CP aspect
  - basilectal    mesolectal    **acrolectal**    baseline
  - verb-by-verb                      errors with                      problems with  
    basis                      sentential aspect                      pragmatically-conditioned IMP
  - invariability

Moj              djaja              chasto on                      **prijexal**              k nam              v Brooklyn  
my.NOM    uncle.NOM    often    he.NOM              came.PFV    to us.DAT    in Brooklyn  
'My uncle often came to see us in Brooklyn' (cf. RR *prijezzhal*.IMP 'came')

# Unifying the findings

- Aspectual restructuring across the continuum:
- Implicational hierarchy:
  - V aspect < VP aspect < IP aspect < CP aspect
  - basilectal    mesolectal    acrolectal    **baseline**
  - verb-by-verb basis                      errors with sentential aspect                      problems with pragmatically-conditioned IMP
  - invariability

Moj              djaja              chasto on              **prijexal**              k nam              v Brooklyn  
my.NOM    uncle.NOM    often    he.NOM              came.PFV    to us.DAT    in Brooklyn  
'My uncle often came to see us in Brooklyn' (cf. RR *prijezzhal*.IMP 'came')



**Thank you!**