

Factual Imperfectives in Russian and Polish: A picture-selection task

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Aspect

Most Russian and Polish verbs form aspectual pairs. **Imperfective** verbs are associated with the process of an event, while **perfective** verbs are associated with the result.

Russian	
(1) čitat’	(2) pro-čitat’
read.IPFV	PFV-read
Polish	
(3) czytać	(4) prze-czytać
read.IPFV	PFV-read
Semantic Entries	
IMPERFECTIVE: $t \subseteq e$	PERFECTIVE: $\tau(e) \subseteq t$

Factual Imperfectives

In factual contexts, imperfective verb forms are used but have event completion readings—typically associated with perfectivity. These are called **factual imperfectives**.

There are two types: existential and presuppositional. This study focuses on **presuppositional** factual imperfectives:

(5) Zimnij Dvorec stroil Rastrelli.	
Winter.ACC palace.ACC built.IPFV Rastrelli.NOM	
‘It was Rastrelli who built the Winter Palace.’	(Glovinskaja 1981)

Grønn 2004

Grønn 2004 proposes the most influential account of factual imperfectives in Russian. The IPFV is underlyingly underspecified; context strengthens it to either a true or a factual IPFV. Given a factual IPFV, perfective semantics are assigned. A retrospective viewpoint (Padučeva 1996) is required, and the VP is backgrounded in non-canonical OVS word order.

Grønn’s Entries for PFV and Factual IPFV	
(6) PFV = $\lambda t.\lambda e.e \subseteq t$	(7) IPFV _{factual} = $\lambda t.\lambda e.e \subseteq t$

Predictions

- Factual imperfectives should **behave like perfectives**: once a factual IPFV reading is assigned, participants should strongly select the result image.
- Factual imperfectives should **not be ambiguous** after the factual IPFV reading is assigned by context.

Research Questions

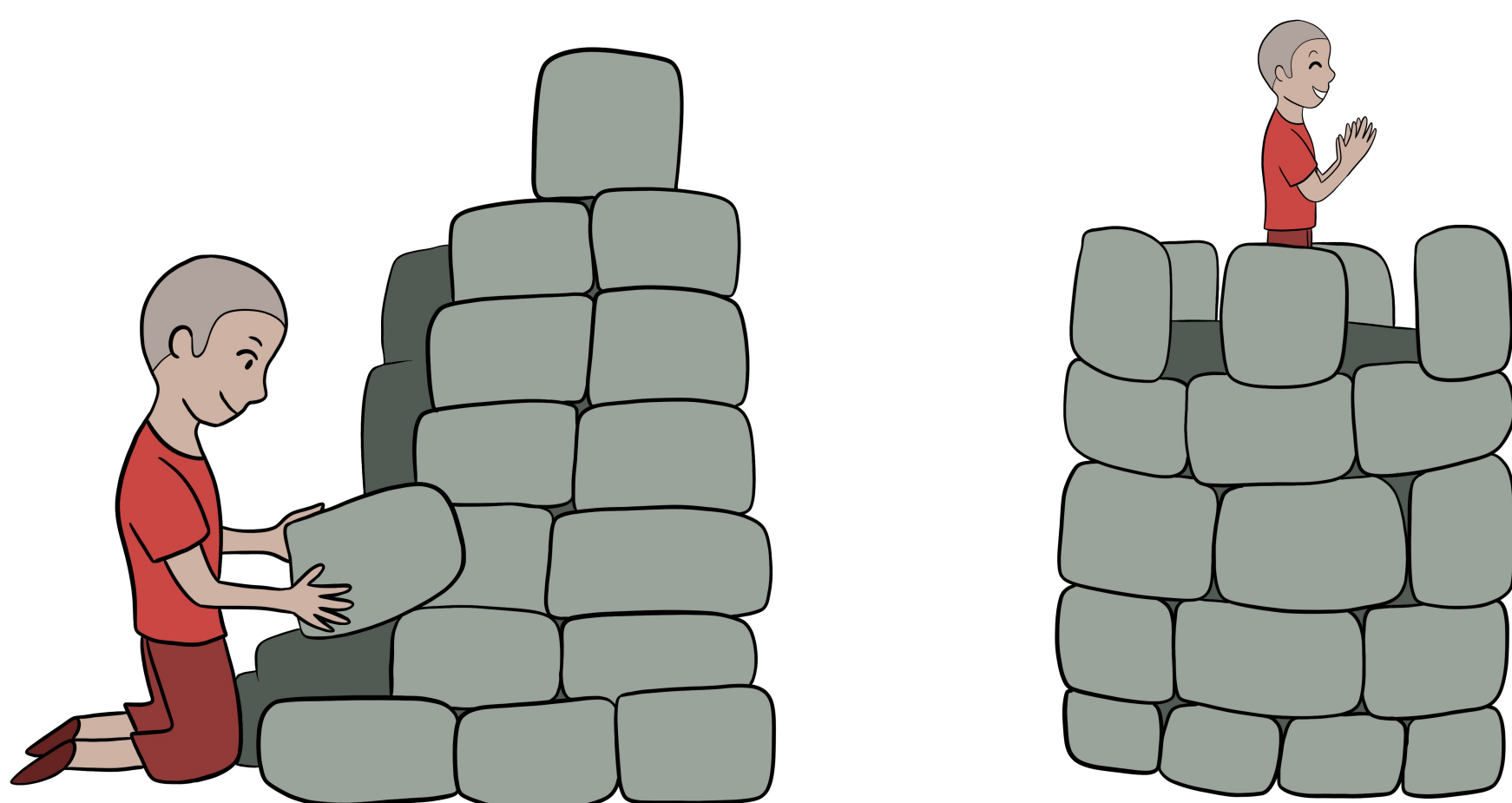
- Is Grønn’s 2004 account of factual imperfectives experimentally verifiable? Do context and word order condition the availability of these readings?
- Is Grønn’s 2004 account extendable outside of Russian to Polish?
- Do factual imperfectives display any ambiguity?

Methods

Participants
Forty native Russian speakers (mean age = 34.15, range 18–77) and fifty native Polish speakers (mean age = 30.46, range 19–50) participated. Russian speakers were recruited in Moscow via snowball sampling; Polish speakers were recruited via Prolific.

Design and Materials
A 2x2 design examined preceding context (PFV vs. IPFV) and word order (SVO vs. OVS) on the availability of factual IPFV readings.

Sample Visual Stimuli



Procedure
Participants read 20 test scenarios and were presented with an image of an event in progress and an image of a completed event. They were asked to select the image (or both) that best represented the situation immediately following the context they had read, adopting a retrospective viewpoint.

Selected References

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 [3] Marina Ja Glovinskaja. “Obščefaktičeskoe značenie nesoveršennoogo vida (formy prošedšego vremeni)”. In: *Problemy strukturalnoj lingvistiki 1978*. Moscow: Nauka, 1981, pp. 108–125.
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 [8] Elena Padučeva. “Semantika vremeni i vida v russkom jazyke”. In: *Jazyki ruskoj kul’ury, Moscow*. 1996.

Results

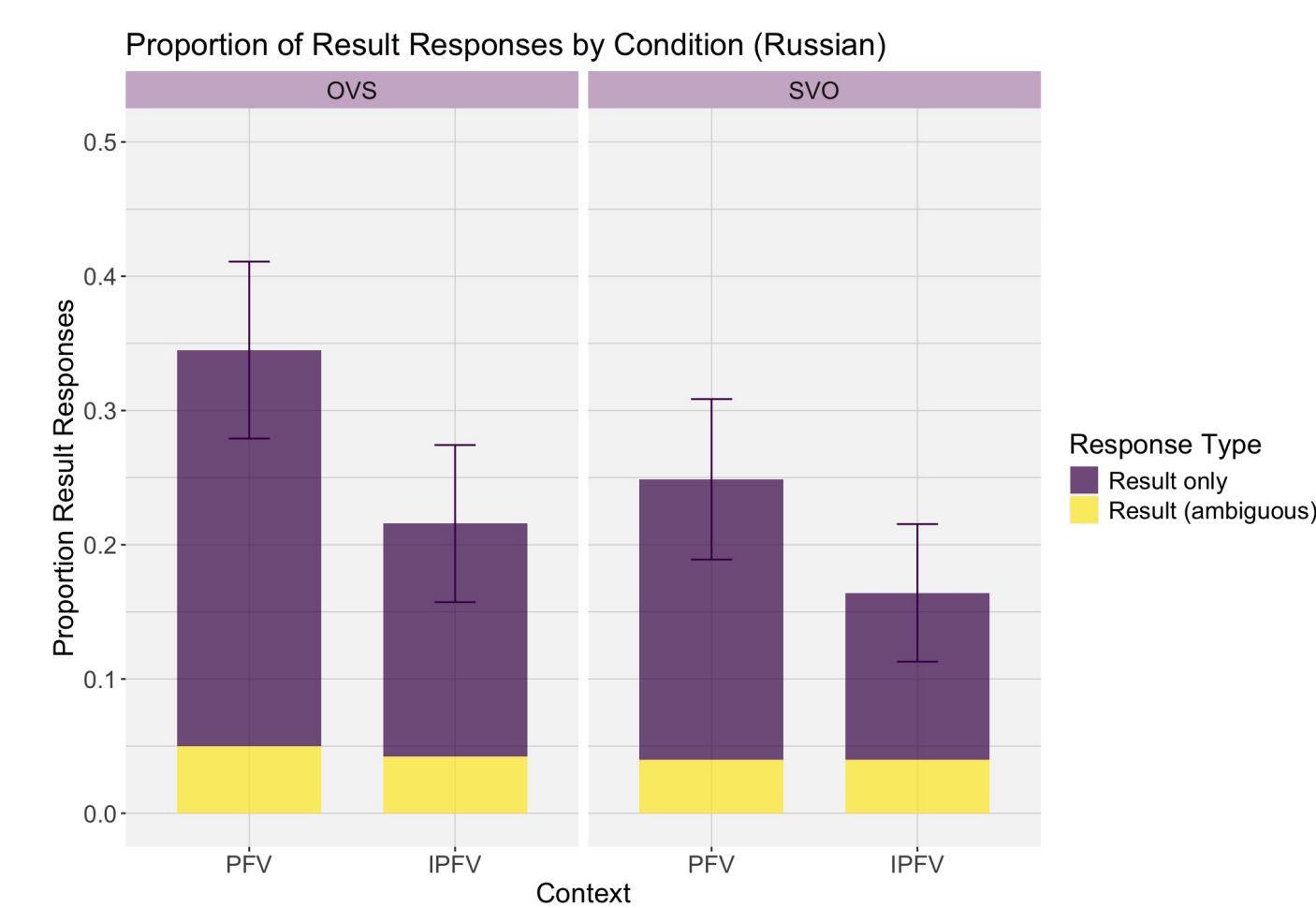


Table 1: Mixed-effects logistic regression: Russian result responses. OVS word order and perfective context both significantly increased result responses. $N = 824$ obs. * $p < .05$, ** $p < .01$, *** $p < .001$.

Predictor	Est.	SE	z	p
Intercept	-2.109	0.380	-5.556	< .001***
Word order	0.366	0.107	3.413	< .001***
Context	0.467	0.109	4.292	< .001***
Trial (scaled)	-0.266	0.108	-2.476	.013*
WOxCtx	-0.004	0.106	-0.041	.967

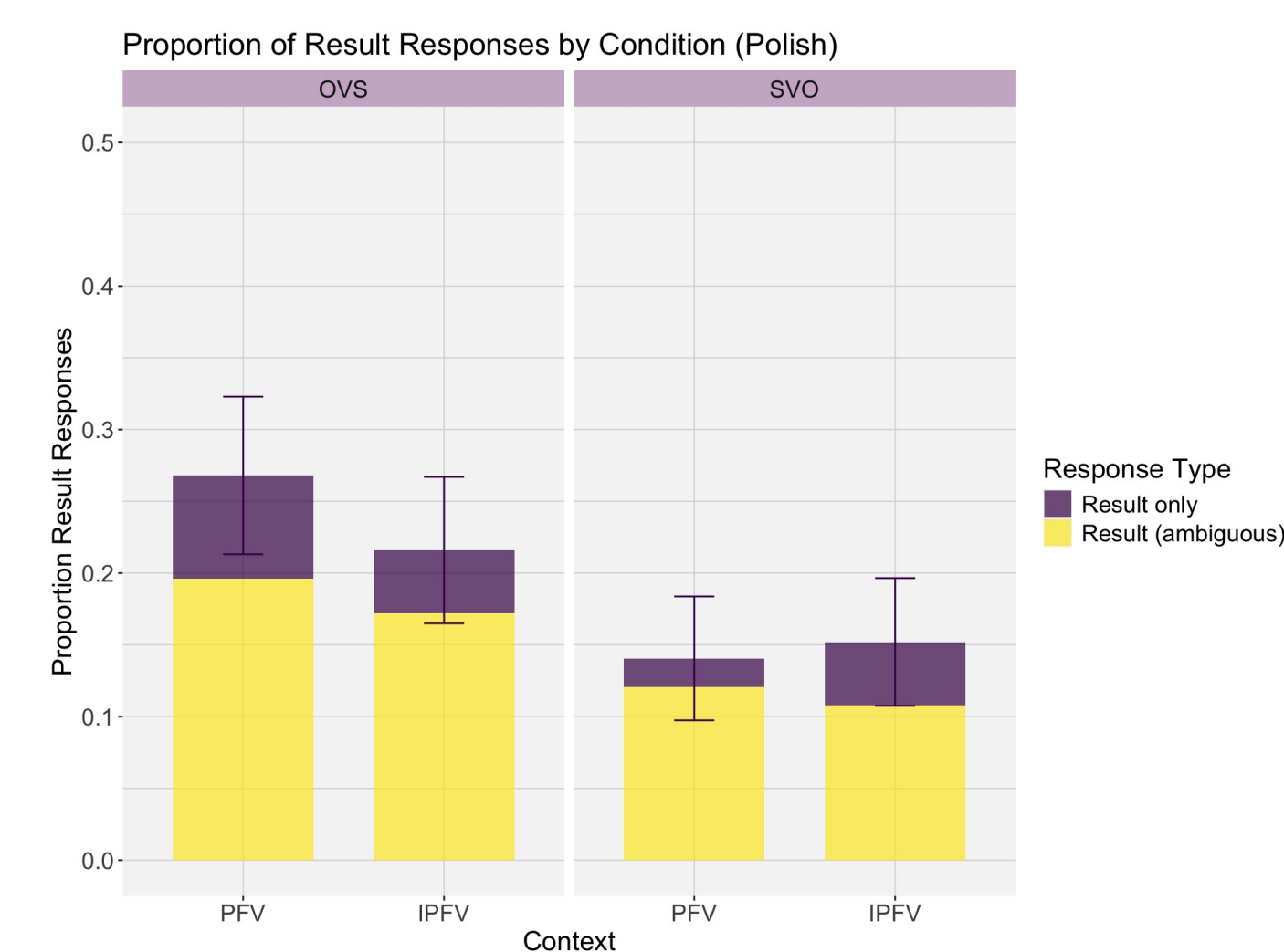


Table 2: Mixed-effects logistic regression: Polish result responses. OVS word order significantly increased result responses ($\beta = 0.265$, $p = .002$); context was not significant. $N = 1,150$ obs. * $p < .05$, ** $p < .01$, *** $p < .001$.

Predictor	Est.	SE	z	p
Intercept	-1.981	0.191	-10.351	< .001***
Word order	0.265	0.084	3.158	.002**
Context	0.048	0.084	0.565	.572
Trial (scaled)	0.011	0.084	0.127	.899
WOxCtx	0.095	0.084	1.132	.258

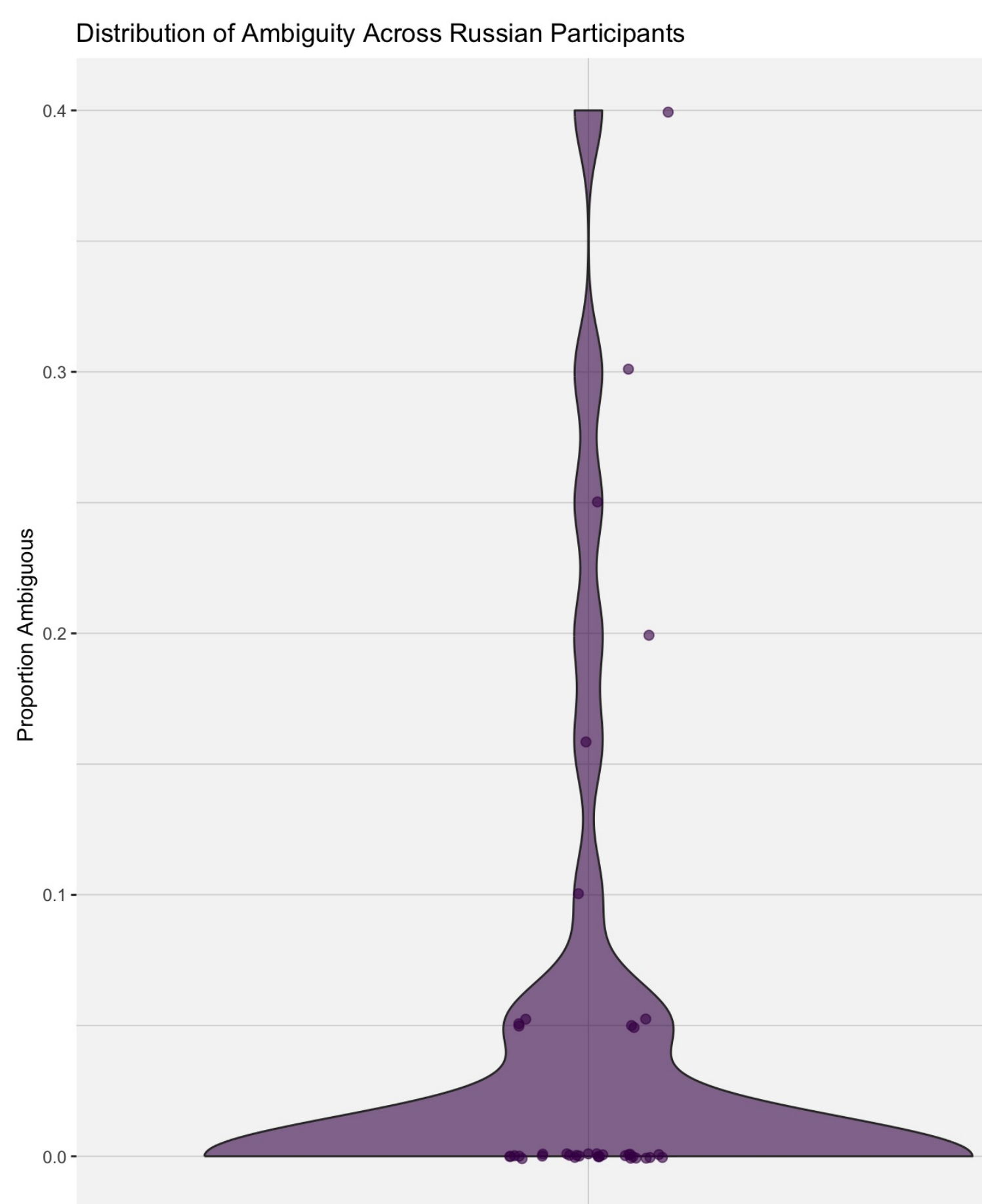


Figure 1: Distribution of ambiguity across Russian participants. Most gave zero ambiguous responses; a subset showed higher rates.

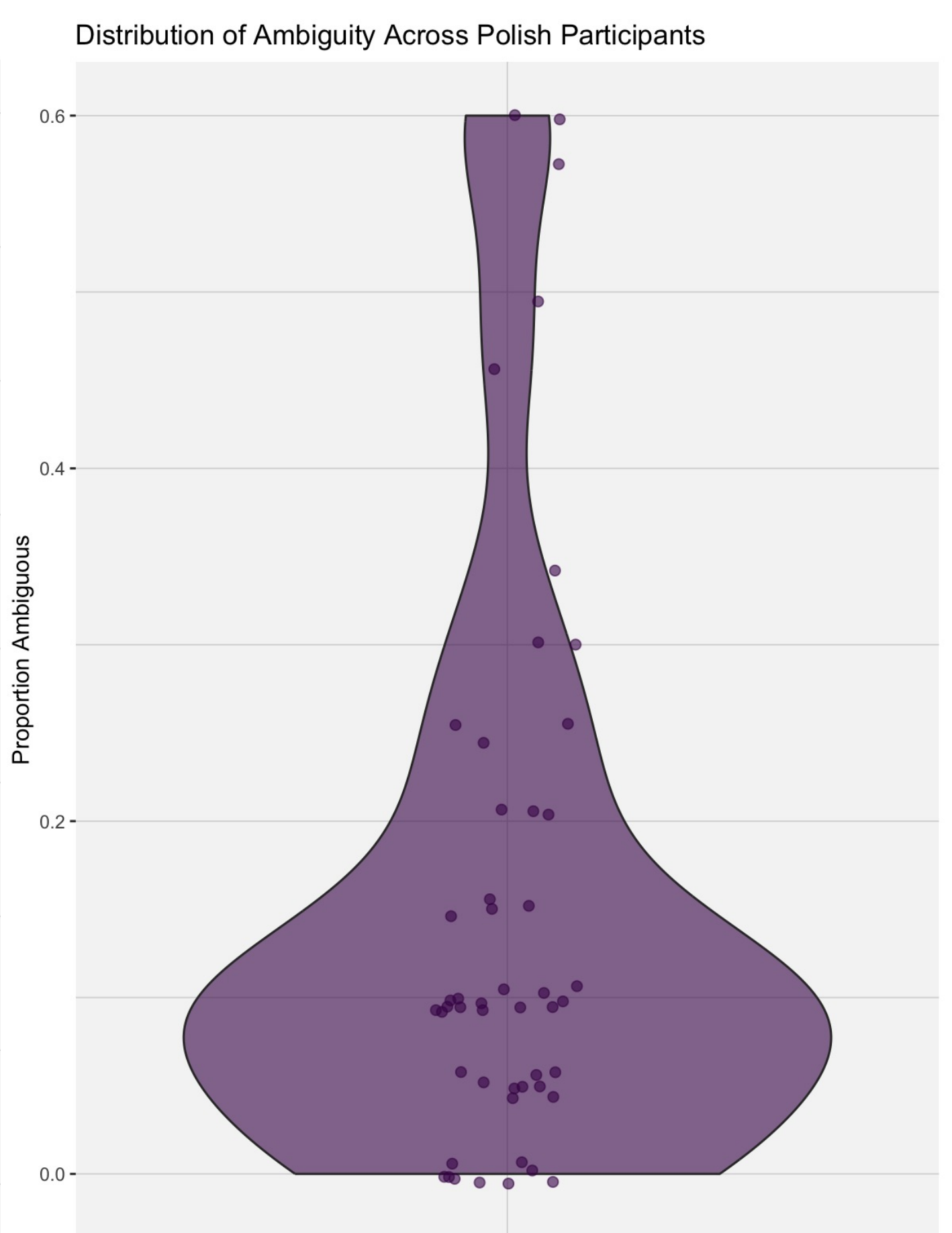


Figure 2: Distribution of ambiguity across Polish participants. Ambiguity was more widespread; most gave at least one ambiguous response.

Table 3: Mixed-effects logistic regression: Polish ambiguous responses. OVS word order significantly predicted ambiguity. $N = 999$ obs. * $p < .05$, ** $p < .01$, *** $p < .001$.

Predictor	Est.	p
Intercept	-2.345	< .001***
Word order	0.344	< .001***
Context	0.084	.398
Trial (scaled)	0.124	.213
WOxCtx	0.023	.819

Discussion

Word order Non-canonical OVS word order significantly increased factual imperfective readings in **both Russian and Polish**, supporting Grønn’s claim about information structure and extending it outside of Russian to Polish.

Context Preceding perfective context significantly increased result responses in **Russian but not Polish**, suggesting the role of context is language-specific, consistent with the broader East–West Slavic aspectual divide (Dickey 2000).

Ambiguity Contra Grønn, factual imperfectives **did display ambiguity** in both languages. In Russian, ambiguity was driven only by individual variation, while in Polish, ambiguity was more widespread and also predicted by word order, consistent with the claim that West Slavic aspect is more variable than East Slavic aspect.

Event completion Factual imperfectives are not associated with the result state to the same degree as perfectives—participants overwhelmingly preferred the process image across all test items. Factual imperfectives perhaps are not as strongly associated with the result state as perfectives.

