# Experimental evidence for argument ellipsis as the only derivation of Russian verb-stranding constructions[*]

Daniar Kasenov

dk4981@nyu.edu

NYU

Pavel Rudnev

pasha.rudnev@gmail.com

HSE University, Laboratory of Formal Models in Linguistics

**Abstract**

Russian verb-stranding constructions have been argued to constitute either verb-stranding VP ellipsis (VVPE; Gribanova 2013b) or argument ellipsis (AE; Bailyn 2017; Landau 2020b). As recent work shows, the debate between VVPE and AE is murky due to various confounds in employed diagnostcs (Simpson 2023; Landau 2023b). One of such confounds is the alleged possibility of polarity verb-stranding TP ellipsis (Landau 2023b; see Gribanova 2017 for arguments that it is present in Russian). This paper reports on an experiment that applies Landau's (2018) investigation of semantic type of silent arguments on acceptability of verb-stranding constructions to Russian, while controlling for the TP ellipsis parse. The results suggest that Russian verb-stranding constructions are sensitive to the semantic type of the elided argument, supporting the AE approach. The putative polarity parse, however, has no effect on acceptability, casting doubt on its availability. The reported experiment, then, supports the view that argument ellipsis is the only available structure for Russian verb-stranding constructions.

**Keywords:** argument ellipsis, verb stranding VP ellipsis, Russian, acceptability judgement study

# 1 Introduction

Many languages, including Russian, seem to lack VP ellipsis in sentences with only one verbal form. Where English has VP ellipsis with do-support (see 1a), Russian shows a clause with every subconstituent of the verbal phrase absent, except the verb itself (see 1b). In this work, we refer to such sentences as verb-stranding constructions.

(1) a. John likes beer and Ben does $\Delta$ too. ($\Delta =$ $_{VP}$[like beer])

b. *Vasja očen'   ljubit pivo, a   Maša ne   ljubit $\Delta$.*
   V.    very.much loves  beer but M.    not loves
   'Vasja loves beer very much, but Masha doesn't.'

Two main theoretical approaches to verb-stranding constructions are the verb-stranding VP ellipsis approach (VVPE; see Goldberg 2005; Gribanova 2013b; Portelance 2020; Gribanova 2020 a.o.) and the argument ellipsis approach (AE; see Saito 2007; Sato 2019; Landau 2020b a.o.). Both are schematized in (2-3). The idea behind the VVPE approach is that the verb-stranding constructions constitute VP ellipsis that is obscured by head movement of the verb out of the ellipsis site (2). The idea behind the argument ellipsis approach is that only the verbal arguments undergo ellipsis and, thus, there is no ellipsis of a verbal projection involved in verb-stranding constructions (3).

(2) Two approaches to the stranded verb constructions, schematized.

a. VPE + head movement
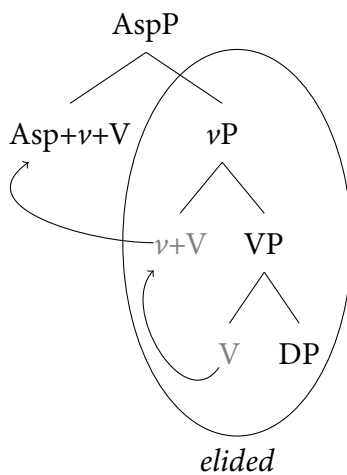
b. Argument Ellipsis
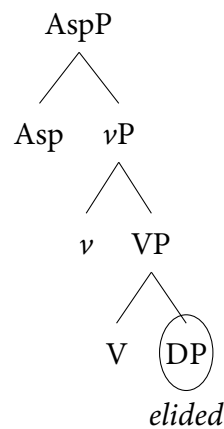


Recent cross-linguistics work on verb stranding constructions has established various complications

for a family of diagnostics which test the prediction of the AE analysis that there are no adjuncts in the clause (the adjunct test: Park 1997; Oku 1998; Landau 2020b; see Simpson 2023;Landau 2023b; Kobayashi, Tanabe & Yosuke 2024 for the problems with it). While some issues are diagnostic-specific, a major problem comes from the claim that verb stranding constructions have a derivation that involves TP ellipsis under polarity focus (Gribanova 2017). Given that TP ellipsis involves VP ellipsis as well, the TP ellipsis derivation is a confound for any diagnostic employed to decide between VVPE and AE analyses.

This paper reports an acceptability judgement study that aims to establish which analysis is correct, while avoiding the adjunct test and controlling for the possibility of a TP ellipsis parse. The diagnostic we employ comes from Landau (2018) who establishes that Hebrew verb-stranding constructions are sensitive to the semantic type of silent verbal arguments, which is unexpected under a VVPE approach, given the dominating deletion-at-PF view of VP ellipsis. To control for the TP ellipsis parse, we investigate both matrix and embedded verb stranding constructions (the assumption is that certain embedded clauses are too small to host a TP and to undergo TP ellipsis).

Our core result is that Russian verb-stranding construction are sensitive to the semantic type of silent arguments, supporting an AE approach. Our secondary result is that there is no difference in acceptability between matrix and embedded contexts, which suggests that TP ellipsis is unavailable as a derivational path to a verb-stranding construction in Russian. This paper thus casts doubt on availability of any head-stranding XP ellipsis in Russian, not just verb-stranding VP ellipsis.

The paper is structured as follows. Section 2 presents more background on the topic of verb-stranding constructions and its theoretical significance. Section 3 presents the experimental study. Section 4 discusses the implications of the results. Section 5 concludes.


## 2   Background on verb stranding constructions

Verb stranding constructions are configurations where no subconstituent of the verbal phrase, except for the verb itself, is overt in the sentence. In 3 the verb *ljubit* 'loves' is overt but the direct object *pivo* 'beer', present in the antecedent clause, is missing.

(3)  *Vasja očen'      ljubit pivo, a   Maša ne  ljubit.*
     V.    very.much loves  beer  but M.    not loves

     'Vasja loves beer very much, but Masha doesn't.'

Verb-stranding constructions are widely believed to exemplify a prediction of the view that syntactic movement is possible from ellipsis sites. After all, if phrasal movement is possible from ellipsis sites, why not head movement? As noted by Landau (2020a), many languages which exhibit verb-stranding constructions seem to exhibit both verbal head movement and VP ellipsis in presence of auxiliaries independently, making the VVPE account an attractive theoretical option.

(4)  Head-movement + VP ellipsis account for verb stranding
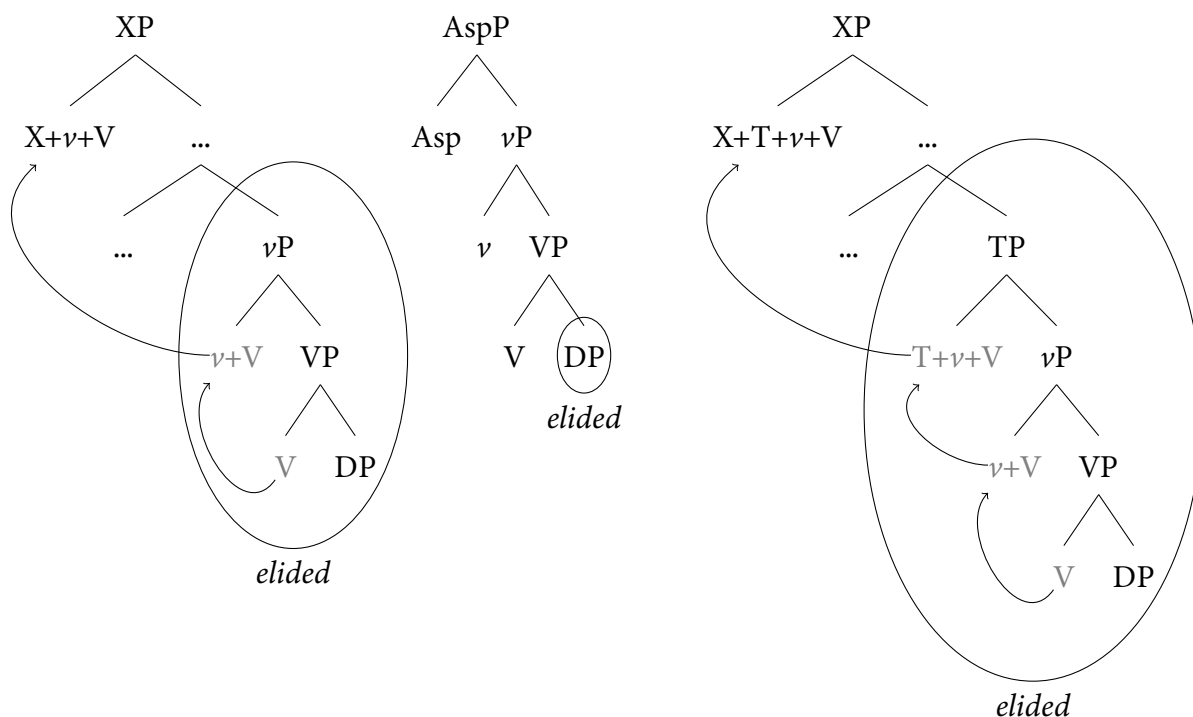


*elided*
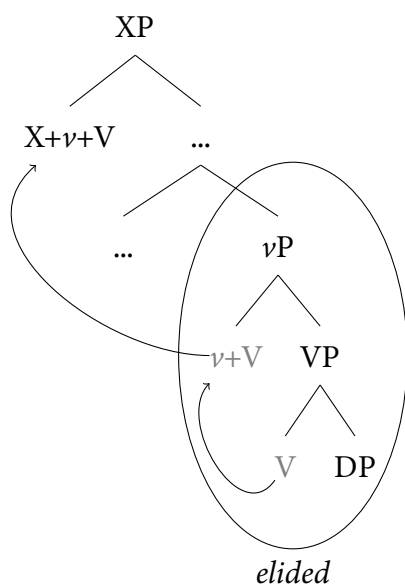
However, any analysis deserves further scrutiny, and there is plenty of debate for some verb stranding constructions. The major analytical alternative for verb stranding constructions is argument ellipsis. The idea is that the arguments themselves undergo ellipsis and, thus, VP ellipsis is not involved in the derivation for verb stranding constructions. Recently, this view has been most thoroughly argued for by Landau 2018; Landau 2020b; Benbaji 2022 for Hebrew verb-stranding constructions. Crucially, their conclusion is that argument ellipsis is the only derivational pathway to a verb-stranding construction.

The evidence in Landau (2020b) is of particular interest because Landau presents evidence from multiple languages, including Russian, employing the so-called adjunct test (with antecedents in

Park 1997; Oku 1998). The adjunct test is a family of diagnostics aimed at detecting presence of a silent adjunct in the clause. Presence of silent adjuncts is only predicted by the VVPE account of verb stranding constructions, making such diagnostics core evidence in existing works examining the structure of verb-stranding constructions.

Unfortunately, existing adjunct tests are far from perfect. Landau (2023b), in a response to Simpson (2023), argues that adjunct test can result in false positives via a process of 'pragmatic enrichment'. This concession means that application of the adjunct test is rather hard to evaluate theoretically either in favor VVPE, or against it. Another issue, a rather general one, stems from the fact that Landau (2023b) concedes that adjunct test only applies insofar as verb-stranding XP ellipsis is ruled out where XP is a larger phrase that contains VP, for example TP (which gets elided in polarity focus TP ellipsis). If that is the case, any diagnostic devised to distinguish between argument ellipsis and VVPE should control for the verb-stranding TP ellipsis parse.

(5)  Three possible ways for verb-stranding to occur (VPE, AE, TPE)

*Tree 1 (VPE):* XP → [ X+*v*+V , ... ]; ... → [ ... , *v*P ]; *v*P → [ *v*+V , VP ]; VP → [ V , DP ]. The *v*P is *elided*.

*Tree 2 (AE):* AspP → [ Asp , *v*P ]; *v*P → [ *v* , VP ]; VP → [ V , DP ]. The DP is *elided*.

*Tree 3 (TPE):* XP → [ X+T+*v*+V , ... ]; ... → [ ... , TP ]; TP → [ T+*v*+V , *v*P ]; *v*P → [ *v*+V , VP ]; VP → [ V , DP ]. The TP is *elided*.

Given that existing arguments against VVPE in Russian are based on the adjunct test (Bailyn 2017; Landau 2020b), other diagnostics are required. Note also that existing arguments in favor of VVPE in Russian, put forth by Gribanova (Gribanova 2013b; Gribanova 2013a) have been given strong

objections by Bailyn (2017) and Landau (2021), leaving the status of Russian verb stranding constructions as unclear as ever.

Work on Hebrew constructions, however, presents another possible diagnostic. As argued by Landau 2018, Hebrew verb stranding constructions are sensitive to the semantic type of silent arguments: if the argument is not of type $e$, Hebrew verb stranding constructions are ungrammatical.

(6) Semantic restrictions on Hebrew verb stranding constructions.

    a. Predicate nominals and Hebrew verb stranding (Landau 2023b: ex. 55a)

       *hi hafxa le-menahelet axarey še-ha-bat šela hafxa \*(le-menahelet)*

       she turned to-manager after that-the-daughter her turned to-manager

       'She turned into a manager after her daughter had.'

    b. Argumental adverbs and Hebrew verb stranding (Landau 2023b: ex. 46a)

       *Yosi hitnaheg yafe aval axiv lo hitnaheg \*(yafe)*

       Yosi behaved.3MSG well but brother.his not behaved.3MSG well

       'Yosi behaved well but his brother didn't.'

No such restrictions have been reported for VP ellipsis in any language, to our knowledge. In fact, the dominant PF-deletion theory of VP ellipsis leaves no room for accommodating such results. In Russian, for example, VP ellipsis in the presence of an auxiliary verb shows no sensitivity to the semantic type of the verbal argument.

(7) Russian Aux-VPE: no semantic restrictions

    a. Predicate nominals are allowed

       *Katja budet sčitat' menja durakom. I Maša budet.*

       K. AUX.FUT.3SG consider me fool and M. AUX.FUT.3SG

       'Katja will consider me a fool. Masha will do so as well.'

b. Argumental adverbs are allowed

*Katja budet vesti sebja normaľno. I Maša budet.*

K. AUX.FUT.3SG behave self normally and M. AUX.FUT.3SG

'Katja will behave in a normal way. Masha will do so as well.'

Regardless of the account such restrictions are to be given (see Landau 2023a for a proposal), they can be used as a diagnostic for argument ellipsis in other languages as well. For example, even if the semantic contrasts are to be given a non-grammatical explanation, insofar as they are dependent on argument ellipsis, they can be used as a diagnostic. For Russian, whilst the authors' judgements seem to support the presence of semantic restrictions on verb-stranding constructions, informal elicitation provides less clear results which are harder to draw safe conclusions from.

(8) Semantic restrictions on Russian verb-stranding constructions.

a. Predicate nominals are allowed

?*Katja sčitaet menja durakom. I Maša sčitaet.*

K. considers me fool and M. considers

Int.: 'Katja considers me a fool. Masha does so as well.'

b. Argumental adverbs are allowed

?*Katja vedet sebja normaľno. I Maša vedet.*

K. behaves self normally and M. behaves

Int.: 'Katja behaves in a normal way. Masha does so as well.'

In accordance with practices advocated for by Sprouse, Schütze & Almeida (2013) and Linzen & Oseki (2018), unclear informal judgements motivate a larger scale acceptability judgement study, which is described in the next section. Its goal is to establish whether Landau's contrast is observed in Russian, while controlling for the verb-stranding TP ellipsis parse, argued to complicate the picture by Landau 2023b.

# 3 Experimental study

## 3.1 The design

As stated in the last section, the goal of our study is to test the sensitivity to semantic type of the verbal arguments reported by Landau for Hebrew verb-stranding constructions while controlling for the possibility of a TP ellipsis parse. The experiment presents an acceptability judgement task. The dependent variable is thus the acceptability score of presented sentences, ranging from 1 to 7, following the standard (a Likert scale). Our experimental lists conform to the 2:1 filler-stimulus ratio, each containing 16 fillers and 8 stimuli drawn from 24 groups of sentences.

The two independent variables in our study are the following: whether the elided arguments have the semantic type $e$ and whether ellipsis is embedded under a verb that blocks polarity TP ellipsis. The verbs in (5) have been chosen as verbs with arguments that are not of $e$ semantic type have been chosen.

(9)  Verbs with arguments that are not type $e$

| Verb | Gloss | Argument type |
|---|---|---|
| *vesti sebja* ___ | 'behave' | adverbial; $\langle v, t \rangle$ |
| *byt* ___ | 'be' | predicate nominal; $\langle e, t \rangle$ |
| *nazvat'* ___ | 'call' | predicate nominal; $\langle e, t \rangle$ |
| *postupit'* ___ | 'act' | adverbial; $\langle v, t \rangle$ |
| *stat'* ___ | 'become' | predicate nominal; $\langle e, t \rangle$ |
| *sčitat'* ___ | 'consider' | predicate nominal; $\langle e, t \rangle$ |
| *otnosit'sja* ___ | 'treat' | adverbial; $\langle v, t \rangle$ |
| *pobyt'* ___ | 'be for a while' | predicate nominal; $\langle e, t \rangle$ |
| *naznačit'* ___ | 'appoint' | predicate nominal; $\langle e, t \rangle$ |
| *obraščat'sja* ___ | 'treat' | adverbial; $\langle v, t \rangle$ |
| *vybrat'* ___ | 'choose' | predicate nominal; $\langle e, t \rangle$ |
| *objavit'* ___ | 'proclaim' | predicate nominal; $\langle e, t \rangle$ |

For the purposes of embedding, the verbs in *soglasit'sja* 'agree to do X' and *otkazat'sja* 'refuse to do X'

have been chosen. As the examples in (ii) show, all of them do not allow embedded polarity particles (which involve TP ellipsis under polarity focus; Gribanova 2017). That suggests that polairty focus-driven TP ellipsis is not an option for embedded clauses of those sentences.[1]

(10)   Both verbs do not allow embedded polarity particles

Context: I asked Vasja not to do it and asked Masha to do it.

*Vasja soglasilsja net i    Masha otkazalas' da
V.    agreed       not and M.    refused   yes

Int.: 'Vasja agreed not to do it and Masha refused to do it.'

We thus work with a 2x2 design: whether the verb-stranding construction is embedded ($\pm$EMBEDDED) and whether the verb has an argument of semantic type other than $e$ ($\pm$E-TYPE). Examples of all four types of stimuli are provided below.

(11)   a. A ($+$E-TYPE; $+$EMBEDDED) example

Vasja soglasilsja narugat' Mašu, a    Petja narugat' otkazalsja.
Vasja agreed      scold    Masha but Petja scold    refused

'Vasja agreed to scold Masha, but Petja refusedd to

---

[1]In fact, it seems that no embedded non-finite clauses allow embedded polarity particles. If the effect is not due to non-finite morphology, its precise nature is of no consequence to the current work: it is only necessary that polarity focus-driven TP ellipsis be unavailable in embedded clauses of the chosen verbs. One reason to suspect that the effect is not morphological comes from matrix uses of non-finite clauses, as in (i).

(i)   No morphological ban on polarity particles in non-finite clauses

Mne     zavtra   idti v školu, a   tebe net.
me.DAT tomorrow go   to school but you  not

'I have to go to school tomorrow and you don't.'

b. A (−E-TYPE; +EMBEDDED) example

*Vasja soglasilsja vesti    sebja    xorošo, a    Petja vesti    otkazalsja.*
Vasja agreed      behave himself well      but Petja behave refused
'Vasja agreed to himself well, but Petja refused to.'

c. A (+E-TYPE; −EMBEDDED) example

*Vasja narugal Mašu.  A    Petja ne    narugal.*
Vasja scolded Masha but Petja not scold
Vasja scolded Masha, but Petja did not.

d. A (−E-TYPE; −EMBEDDED) example

*Vasja vel      sebja    xorošo. A    Petja ne    vel.*
Vasja behaved himself well.    But Petja not behaved
'Vasja behaved well, but Petja did not.'

The fillers are constructed from core examples by getting rid of ellipsis and introducing some grammatical mistakes (for ungrammatical fillers). The goal of the fillers is mostly to establish a baseline for every participant (since some may be conservative regarding the scores they give to the sentences). An example of a filler pair is given below, both sentences a modification of (11b). Since there are 4 types of stimuli and (thus) 8 types of fillers, there are 12 members in each group of sentences. The experiment is set up in such a way as for each participant to encounter each type of sentence twice, resulting in 24 experimental lists.

(12)   Fillers (based on 11b)

a. A grammatical filler

*Vasja soglasilsja vesti    sebja    xorošo, a    Petja vesti    sebja    xorošo otkazalsja.*
Vasja agreed      behave himself well      but Petja behave himself well     refused
'Vasja agreed to behave well, but Petja refused to behave well.'

b. An ungrammatical filler

   \*_Vasja soglasilsja vesti soboj xorošo, a Petja vesti soboj xorošo_
   Vasja agreed   behave himself.ɪɴs well   but Petja behave himself.ɪɴs well

   _otkazalsja._
   refused

   'Vasja agreed to behave well, but Petja refused to behave well.'

In the next subsection, we present the hypotheses available in the described experiment design and elaborate upon which results (dis)confirm which hypotheses.

## 3.2   Hypotheses and expected results

The core hypothesis is as follows. Does the semantic type of the argument have a significant effect on the acceptability of verb-stranding constructions? There are two versions of this hypothesis, a weak one and a strong one. The strong version requires that the semantic type of the argument have a significant effect regardless of whether the verb-stranding construction is embedded (as reported for Hebrew by Landau 2023a). It implies that both the VP ellipsis parse and the TP ellipsis parse are unavailable or not chosen by the participants. The weak version requires the semantic type of the argument have a significant effect if the verb-stranding construction is embedded, implying that the TP ellipsis parse is available and has an ameliorating effect on acceptability.

If no effects of the semantic type of the argument are found, two theoretical possibilities emerge. Either the argument ellipsis approach is not the right analysis for Russian verb-stranding construction, or the derivation of Russian argument ellipsis differs from the derivation proposed by Landau (2023a). In the absence of independent evidence, however, the second option should be disregarded. Any other effect, if present, is irrelevant to the verb-stranding VP ellipsis vs. argument ellipsis debate and thus will be ignored.

## 3.3   Procedure and participants

The experiment was implemented via the web-based software PCIbex (Schwarz & Zehr 2021). Stimuli were presented one at a time. An example of the presentation of stimuli is provided in

Figure 1. Before the stimuli were presented, each participant had been given three training items with commentary specifying which judgement the item should get.



*progress*

Сережа поцеловал Машу. А Кирилл Машу не поцеловал.

Плохо  | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Хорошо

Figure 1: Presentation of stimuli in Experiment 2.

182 participants (all native speakers of Russian) were recruited online using the Yandex.Tasks crowd-sourcing platform, resulting in 14 participants on average for each list. All participants provided their informed written consent to take part in the study.

## 3.4   Results

The results of each participant were z-score transformed to eliminate potential scale bias. The grammatical fillers have the mean z-score of $z = .552$, while the ungrammatical fillers have the mean z-score of $z = -.907$. Looking at the mean z-scores for all four subgroups (Figure 2), it appears that there is an effect of both the syntactic contexts (embedded vs. matrix) and the semantic type of the argument.
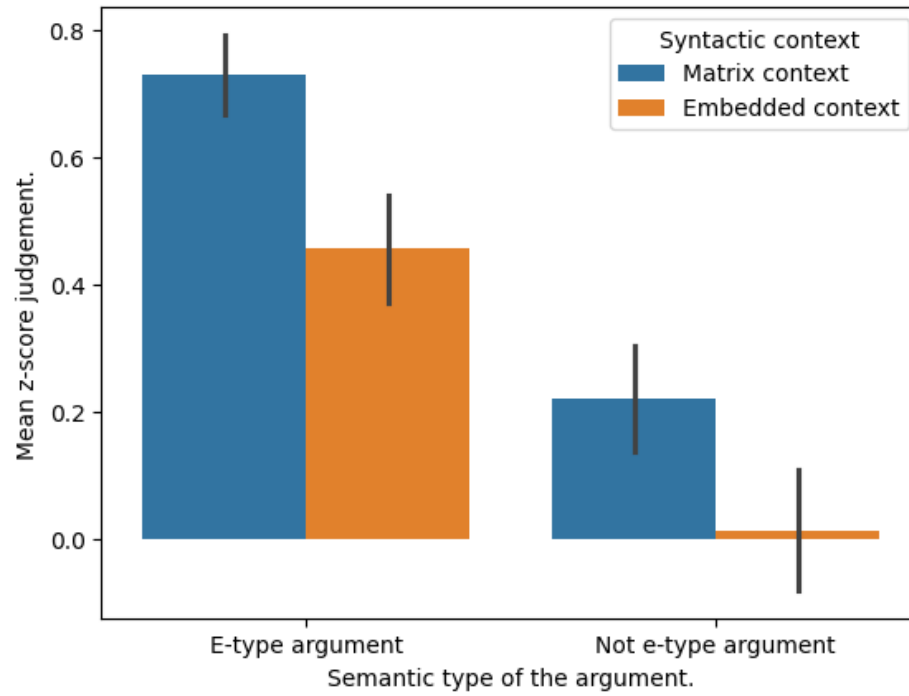
Figure 2: Mean z-score of four subgroups of stimuli.

The interaction plot in figure 3 suggests that while there is an effect of both factors, no cumulative effect is to be found: the (−E-TYPE; +EMBEDDED) subgroup shows no emergent effect of the combination of two conditions.
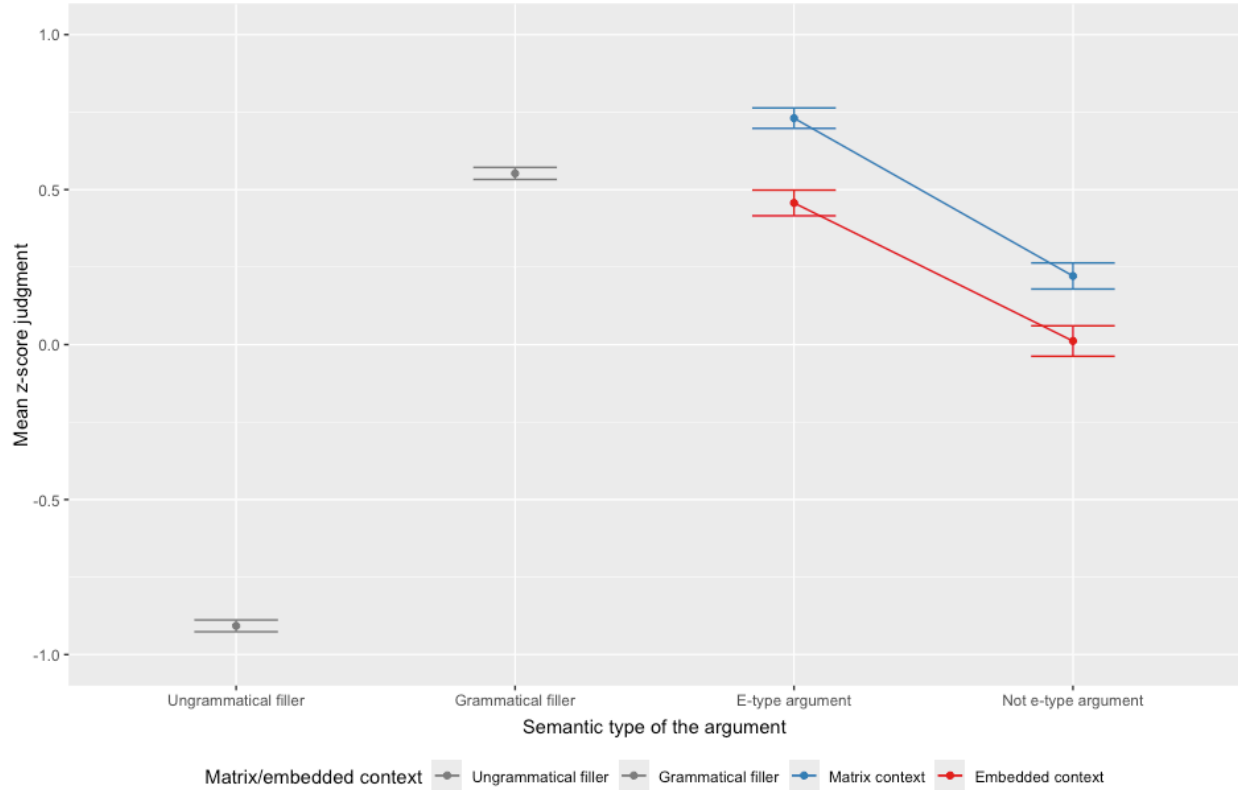
Figure 3: Interaction plot for the factors.

This conclusion is partially supported by a generalized linear mixed-effects model (via the lmerTest package for R, see Kuznetsova, Brockhoff & Christensen 2017) fitted to the data with the two factors as fixed effects and participant and sentence as random effects. The effect of the semantic type of the argument is significant (coefficient estimate $= .510$, standard error $= .088$, $p < .001$). The effect of the syntactic context has not been found to be as significant (coefficient estimate $= -.217$, standard error $= .092$, $.01 < p < .05$,) and is likely due to general dislike of embedded structures by the participants. The effect of the combination of syntactic context and semantic type of the argument has been found to be insignificant (coefficient estimate $= -.057$, standard error $= .126$, $p > 0.05$).

Post hoc application of Tukey's HSD test (Table 1) leads to the same conclusion: the least significant difference (and the only one with $p > .001$) is the one between the ($-$E-TYPE; $-$EMBEDDED) group and the ($-$E-TYPE; $+$EMBEDDED) group, which is likely to be due to the general ban on eliding non $e$-type arguments in a verb-stranding construction.

| Group 1 | Group 2 | Statistic | $p$-value |
|---|---|---|---|
| −E-TYPE; −EMBEDDED | −E-TYPE; +EMBEDDED | .210 | $.001 < p < .01$ |
| −E-TYPE; −EMBEDDED | +E-TYPE; −EMBEDDED | −.509 | $p < .001$ |
| +E-TYPE; +EMBEDDED | −E-TYPE; +EMBEDDED | .446 | $p < .001$ |
| +E-TYPE; +EMBEDDED | +E-TYPE; −EMBEDDED | −.273 | $p < .001$ |

Table 1: Results of Tukey's HSD test applied to the four subgroups.

The only worry that is raised by the results is that the plots in Figure 2 and Figure 3 show the near-zero z-score of the worst-rated subgroup (−E-TYPE; +EMBEDDED). Overall, one sees that the mean scores of all subgroups are closer to grammatical fillers than ungrammatical fillers. It may be thus concluded that while relative acceptability does motivate an effect of the semantic type, all sentences are nevertheless quite acceptable. We take the relative acceptability of the stimuli to arise due to factors orthogonal to the contrast studied in this work. Such a move is not without a precedent: previous studies have argued that a significant effect found in experimental results should be taken as evidence for the initial hypotheses regardless of absolute acceptability (see Featherston 2005; Almeida 2014; Kush, Lohndal & Sprouse 2018 on island effects; see Sprouse 2018 on general discussion of mismatches between statistically significant differences and absolute acceptability). For now, we hypothesize that a naive speaker distinguishes between silent violations of grammar (ungramamtical ellipsis) and overt violations of grammar (violations of subcategorization frames, on which the ungrammatical fillers are based). Summing up the results, the experiment shows a significant effect of the semantic type of elided arguments of the verb on the acceptability of the verb-stranding construction.

Summing up, it appears that the strongest version of our hypothesis has been confirmed: if the verb has an argument of semantic type other than $e$, Russian verb-stranding construction are judged significantly less acceptable, regardless of embedding. That suggests that argument ellipsis is the only derivational way to get a verb-stranding construction in Russian, *contra* most existing work. Next section addresses some wrinkles in the claim and puts forth potential explanations and direction for future work.

# 4 Theoretical implications

The experimental study discussed in the last section has established that verb-stranding constructions seem to lack both a VP ellipsis parse and a polarity-driven TP ellipsis parse: the working assumption is that an available grammatical parse that leads to acceptability must be chosen by the participant.[2] For the VP ellipsis parse, the natural conclusion is that, like Hebrew, Russian does not allow verb-stranding VP ellipsis. As recognized by Landau (2020a), this ban is puzzling, given that Russian has both VP ellipsis in the presence of auxiliaries and verbal head movement. Landau's account for the ban on verb-stranding VP ellipsis is tailored to completely rule out verb-stranding VP ellipsis while allowing verb-stranding TP ellipsis.

Our results, however, seem to suggest that verb-stranding TP ellipsis is an unavailable parse for Russian verb-stranding constructions as well: otherwise, the available TP ellipsis parse would 'save' the stimuli from degraded acceptability. If this conclusion is true, our results are then in contradiction with Landau's account on lack of verb-stranding VP ellipsis. On top of that, some recent work has argued that verb-stranding VP ellipsis is attested while addressing Landau's arguments against it (Uzbek: Gribanova 2020; Lithuanian: Portelance 2020; Polish: Ruda 2022; Uyghur: Jenkins 2025). Therefore, it seems that there is cross-linguistic variation in availability of any given verb-stranding XP ellipsis, a fact that requires an explanation. We provide some ideas in the second subsection.

## 4.1 A caveat regarding the TP ellipsis parse

All our stimuli sentences had subject-initial clauses, as repeated in (13) below. One might expect that the reason why the TP ellipsis parse is unavailable for these sentences is due to the overt subject occupying Spec, TP. In fact, Gribanova (2017) argues that a sentence with the SV order cannot involve TP ellipsis.

---

[2]It appears to us that the results could also be explained by a *bias* in favor of an argument ellipsis parse. However, the precise mechanism of such bias is unclear to us. Therefore, we stand by our working assumption. If proven wrong, however, our theoretical conclusions would be severely undermined.

(13)   A (−E-TYPE; +EMBEDDED) example

   *Vasja soglasilsja vesti    sebja    xorošo, a    Petja vesti    otkazalsja.*
   Vasja agreed      behave himself well     but Petja behave refused
   'Vasja agreed to himself well, but Petja refused to.'

A required clarification is that it is, in fact, inconsequential for this section whether the polarity-driven ellipsis involves TP. All that is required is that the elided phrase is larger than the verbal phrase. However, even that is not guaranteed: Ruda (2022) argues that Polish verb-echo answers (which involve polarity-driven ellipsis) only involve ellipsis of a verbal phrase (*v*P/VoiceP). Therefore, we need to make sure that (i) the polarity-driven ellipsis involves ellipsis of a constituent larger than *v*P; and (ii) this type of ellipsis is compatible with a subject-initial word order.

To establish both, we employ polar particles, which we assume involve clausal ellipsis, following Gribanova 2017. As the examples in (14) show, polar particles are fully compatible with a preceding subject (which, likely, occupies a position above Spec,TP).

(14)   Context: asking Katja and Masha whether they opened their windows.

   a. *Maša otkryla okno    a    Katja net*
      M.    opened window but K.     not
      'Masha opened the window, but Katja didn't'.

   b. *Maša da  a vot Katja ne    otkryla  okno*
      M.   yes but  K.    not opened  window
      'Masha did, but Katja didn't open the window.'

The evidence that the polar particles involve ellipsis of TP or a similar projection comes from the fact that no clause-internal material, even the subject, can come after the polarity particle (Gribanova 2017; with the exception of some other particles like *eščë* 'yet' and *uže* 'already').

(15)   Context: asking Masha whether she opened the window yesterday.

   a. *Net*                          b. * *Net {ja /okno    /včera}*
      no                                   no  I    window  yesterday
      'No.'                                Int. "No, I didn't open a window yesterday."

18

To sum up, we have shown that the clausal ellipsis involved in polar particles both contains a verbal constituent larger than *v*P/VoiceP (we continue to refer to this constituent as TP for clarity) and is available with a subject-initial word order. As argued by Gribanova (2017), Russian verbal complex can move into the Polarity head (which hosts polar particles). Therefore, we expect the word order present in our stimuli to have a TP ellipsis parse, if verb stranding TP ellipsis is not ruled out for independent reasons. A possible independent reason is presented in the next subsection.

## 4.2 Head-stranding ellipsis in Russian and elsewhere

It appears that the results of the study reported in this paper imply absence of both verb-stranding VP ellipsis and verb-stranding TP ellipsis in Russian. The presence or absence of both types of ellipsis seems to be a point of cross-linguistic variation. As already mentioned, recent work presents novel evidence in favor of verb-stranding VP ellipsis in some languages (Uzbek: Gribanova 2020; Lithuanian: Portelance 2020; Polish: Ruda 2022; Uyghur: Jenkins 2025). The case for verb stranding TP ellipsis (or ellipsis of a verbal constituent that is larger than vP/VoiceP) has been made, among others, for Finnish (Holmberg 2016), Irish (McCloskey 2017), Scottish Gaelic (Thoms 2016), and Spanish (Villa-García 2016).

Why does Russian lack both verb-stranding VP ellipsis and verb-stranding TP ellipsis, then? Given cross-linguistic variation, the pattern cannot follow from a principled ban on some types of head-stranding XP ellipsis (as argued by Landau 2020a, for example). An alternative view comes from work like Hein (2018), which argues that head movement can either precede or follow ellipsis in the derivation. If head movement happens before ellipsis, head-stranding XP ellipsis is predicted. If after, no head-stranding XP ellipsis occurs. In the light of cross-linguistic variation in the availability of verb-stranding VP and TP ellipsis, then, accounts like Hein's are given additional support.

However, we abstain from discussion of Gribanova's (2018; 2021) account that proposes that syntactic head movement is responsible for verb-stranding ellipsis that allows verb mismatches while post-syntactic head movement is responsible for verb-stranding ellipsis that blocks verb mismatches. Hein's account is compatible with that line of reasoning: one can imagine that there is both the distinction between syntactic head movement and post-syntactic head movement and a parametrized order of operations in the post-syntactic module(s). We leave further discussion for later work.

# 5  Conclusion

In this work, we have presented novel evidence that Russian allows neither verb-stranding VP ellipsis (Bailyn 2017; Landau 2020b; *contra* Gribanova 2013b) nor verb-stranding TP ellipsis (*contra* Gribanova 2017). The evidence comes from an experimental study which shows that the semantic type of the verbal arguments significantly affects acceptability of Russian verb-stranding construction, regardless of other factors, supporting an argument ellipsis derivation as the only pathway to verb-stranding constructions in Russian.

However, we wish to emphasize that our results only suggest that verb-stranding VP ellipsis and verb-stranding TP ellipsis were unavailable as parses for the particular stimuli. That alone is insufficient to establish that such ellipsis constructions are completely banned by the grammar of Russian. However, a plausible explanation of inactivity of the parses that would make the sentence acceptable is required to challenge our conclusions.

Finally, our results do not depend on any particular account of the effects discovered by Landau (2018). Even if the effect of the semantic type is not grammatical in nature, the results stand insofar as the effect makes the right cut between argument ellipsis and VP/TP ellipsis.

# References

Almeida, Diogo. 2014. Subliminal wh-islands in Brazilian Portuguese and the consequences for syntactic theory. *Revista da ABRALIN*.

Bailyn, John Frederick. 2017. Against a VP ellipsis account of Russian verb-stranding constructions. In *Studies in Japanese and Korean historical and theoretical linguistics and beyond*, 93–109. Brill.

Benbaji, Ido. 2022. Focus particles in verb-echo answers: An argument for argument ellipsis. In *North east linguistic society (nels)*, vol. 52, 67–80.

Featherston, Sam. 2005. Universals and grammaticality: Wh-constraints in German and English.

Goldberg, Lotus Madelyn. 2005. *Verb-stranding VP ellipsis: A cross-linguistic study*. McGill University dissertation.

Gribanova, Vera. 2013a. A new argument for verb-stranding verb phrase ellipsis. *Linguistic Inquiry* 44(1). 145–157.

Gribanova, Vera. 2013b. Verb-stranding verb phrase ellipsis and the structure of the Russian verbal complex. *Natural Language & Linguistic Theory* 31. 91–136.

Gribanova, Vera. 2017. Head movement and ellipsis in the expression of Russian polarity focus. *Natural Language & Linguistic Theory* 35. 1079–1121.

Gribanova, Vera. 2018. *Head movement, ellipsis, and identity*. Ms.

Gribanova, Vera. 2020. Predicate formation and verb-stranding ellipsis in Uzbek. *Glossa: a journal of general linguistics* 5(1).

Gribanova, Vera. 2021. On the typology of verb-stranding ellipsis: focus, identity, and movement. In *Brussels conference on generative linguistics*.

Hein, Johannes. 2018. *On the interaction of head movement, ellipsis, and copy deletion: The case of Mainland Scandinavian*. https://johannes-hein.de/handouts/CGSW33_handout.pdf.

Holmberg, Anders. 2016. *The syntax of yes and no*. Oxford University Press.

Jenkins, Robin. 2025. Timing the escape: Verbal identity in Uyghur verb-stranding ellipsis. In *41st west coast conference on formal linguistics*, 242–251.

Kobayashi, Ryoichiro, Tomoya Tanabe & Sato Yosuke. 2024. The Adjunct Test in Japanese Ellipsis at the Prosody-Information Structure Interface. https://ling.auf.net/lingbuzz/008005.

Kush, Dave, Terje Lohndal & Jon Sprouse. 2018. Investigating variation in island effects: A case study of Norwegian wh-extraction. *Natural language & linguistic theory* 36. 743–779.

Kuznetsova, Alexandra, Per B Brockhoff & Rune Haubo Bojesen Christensen. 2017. LmerTest package: tests in linear mixed effects models. *Journal of statistical software* 82(13).

Landau, Idan. 2018. Missing objects in Hebrew: Argument ellipsis, not VP ellipsis. *Glossa: a journal of general linguistics* 3(1).

Landau, Idan. 2020a. Constraining head-stranding ellipsis. *Linguistic Inquiry* 51(2). 281–318.

Landau, Idan. 2020b. On the nonexistence of verb-stranding VP-ellipsis. *Linguistic Inquiry* 51(2). 341–365.

Landau, Idan. 2021. Ellipsis with a Coordinated Antecedent: An Alternative to V-stranding VP-ellipsis. *Studia Linguistica* 75(1). 1–23.

Landau, Idan. 2023a. Argument ellipsis as external merge after transfer. *Natural Language & Linguistic Theory* 41(2). 793–845.

Landau, Idan. 2023b. More doubts on verb-stranding VP ellipsis: Reply to Simpson 2023. *Syntax* 26(4). 449–470.

Linzen, Tal & Yohei Oseki. 2018. The reliability of acceptability judgments across languages. *Glossa: a journal of general linguistics* 3(1).

McCloskey, James. 2017. Ellipsis, polarity, and the cartography of verb-initial orders in irish. In Enoch Aboh & Eric Haeberli (eds.), *Elements of comparative syntax: theory and description*, 99–151. De Gruyter Mouton Berlin.

Oku, Satoshi. 1998. *A theory of selection and reconstruction in the minimalist perspective*. University of Connecticut dissertation.

Park, Myung-Kwan. 1997. The syntax of VP ellipsis in korean. *Language research* 33(4). 629–648.

Portelance, Eva. 2020. Genuine verb stranding VP-ellipsis in Lithuanian. In *Proceedings of the 50th Annual Meeting of the North East Linguistic Society*, vol. 3, 59–72.

Ruda, Marta. 2022. Verb-echo answers in polish as v-stranding voicep/vp ellipsis. In *Nels52 proceedings*.

Saito, Mamoru. 2007. Notes on East Asian argument ellipsis. *Language Research*.

Sato, Yosuke. 2019. Comparative syntax of argument ellipsis in languages without agreement: A case study with Mandarin Chinese. *Journal of Linguistics* 55(3). 643–669.

Schwarz, Florian & Jeremy Zehr. 2021. Tutorial: Introduction to PCIbex–an open-science platform for online experiments: Design, data-collection and code-sharing. In *Proceedings of the annual meeting of the cognitive science society*, vol. 43.

Simpson, Andrew. 2023. In defense of verb-stranding VP ellipsis. *Syntax* 26(4). 431–448.

Sprouse, Jon. 2018. Acceptability judgments and grammaticality, prospects and challenges. *Syntactic structures after* 60. 195–224.

Sprouse, Jon, Carson Schütze & Diogo Almeida. 2013. Assessing the reliability of journal data in syntax: Linguistic Inquiry 2001–2010. *Lingua* 134. 219–248.

Thoms, Gary. 2016. Short answers in scottish gaelic and their theoretical implications. *Natural Language & Linguistic Theory* 34(1). 351–391.

Villa-García, Julio. 2016. Tp-ellipsis with a polarity particle in multiple-complementizer contexts in spanish: on topical remnants and focal licensors. *Borealis–An International Journal of Hispanic Linguistics* 5(2). 135–172.