Novel experimental evidence in favor of Argument Ellipsis in Russian

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In some languages, objects following the lexical verb can be absent. In other words, if ellipsis is involved, such strings are instances of VPE which does not target (= strands) the lexical verb. The result is the elision of internal arguments (and adjuncts, if present) alone. Object gap constructions (OGs; also called V-stranding constructions) have been robustly attested in Chinese, Japanese, Korean, Hebrew, Irish, Russian (1) (Gribanova 2013: (39)) and Portuguese (2) (Aelbrecht & Harwood 2018: (48)). Crucially, this option remains unavailable in English (3) (cf. (2)):

(1) RUSSIAN
A: Меня волнует, что никто не зашил [джинсы]$_i$.
B: Не волнуйся, сейчас придёт человек, который зашьёт __$_i$.

(2) PORTUGUESE
O João leu [esse livro]$_i$ e a Ana também leu __$_i$.
the João read that book and the Ana too read
'João read that book and Ana did too.'

(3) ENGLISH
*João read [that book]$_i$ and Ana read __$_i$ too.

The fiercest debate in the literature has been on the exact type of ellipsis deriving OGs (if it is an elliptical mechanism that is at work). Under the V-stranding VPE (VSVPE) approach (Doron 1990; McCloskey 1991; Doron 1999; Goldberg 2005; Gribanova 2013, 2017), V vacates the *v*P by moving to a higher projection like TP or AspP, and the entire *v*P with all internal arguments and adjuncts is elided thereafter. The following prerequisite arises: the V-to-T/Asp movement should be available. The theory has many empirical implications, one of which is a Verb/Valence Identity Requirement (VIR) that, apparently, does not hold for languages with an attested V-stranding (i.a., Lipták 2012; Rouveret 2012). On the alternative view called Argument Ellipsis (AE) (Park 1997; Oku 1999; Xu 2003; Landau 2018), only (an) argument(s) is/are the only target of ellipsis, and therefore, no such constraints emerge. The corresponding structures are shown in (4):

(4) a. VSVPE in Russian
[$_{TP}$ T [$_{AspP}$ Asp-V-*v* ~~[$_{vP}$ t$_v$ [$_{VP}$ t$_V$ [XP]]]~~]]
b. AE in Russian
[$_{TP}$ T [$_{AspP}$ Asp-V-*v* [$_{vP}$ t$_v$ [$_{VP}$ t$_V$ ~~[XP]~~]]]]

Another option that might coexist with any kind of ellipsis described above and potentially cover more cases of possible OGs is a discourse-motivated Object Drop (OD). Following Gribanova (2013), we assume that OD is island-sensitive, e.g. because it involves a moved null topic operator (Huang 1984); but see Erteschik-Shir et al. (2013) for a view that Topic Drop (TD) does not show island-sensitivity.

Based on the above literature, we have chosen two predictions, which would allow us to adjudicate between the two competing approaches to OGs in Russian, namely VSVPE and AE:

1. Under the VSVPE approach, OGs without an antecedent adhering to (any) VIR cannot be embedded in an island (Experiment I). The prediction arises because on the VSVPE (but not the AE) approach, OGs that violate VIR are instances of Object/Topic Drop and hence must be island-sensitive;

2. Under the AE approach, adjuncts are not recoverable under negation (Experiment II). The prediction arises because on the AE analysis only arguments are elided, as opposed to the VSVPE analysis, where the entire *v*P, potentially including adjuncts, gets elided.

Both experiments were implemented via the web-based software PCIbex (Schwarz & Zehr 2021). Before the stimuli were presented, each participant had fulfilled an informed consent form providing information about their age, gender and language background. Additionally, to anchor the response scale and familiarize participants with the task, 3 instruction items containing an expected judgment specification were shown to them. Participants judged the acceptability of items one at a time, following the standard 1-to-7 Likert scale. A screening procedure was conducted for both experiments, the exclusion threshold being a rating below/above 4 points for ungrammatical/grammatical fillers, resulting in 111 and 72 participants respectively. Participants' answers were transformed into z-scores, as standard.

The first experiment employs a 2*4 factorial design to test whether OGs exhibit the VIR and island-sensitivity predicted by VSVPE but not AE. We crossed {island; non-island} with {situational antecedent; verb identity, valence identity; no identity}. The main idea is that OGs embedded in islands should be unacceptable if there is no linguistic antecedent adhering to (any) VIR. The overall results are presented in Figure 1. As one can see, OGs with any antecedent (including a non-linguistic one) are acceptable, although island-embedding is indeed significant ($p < 0.001$).

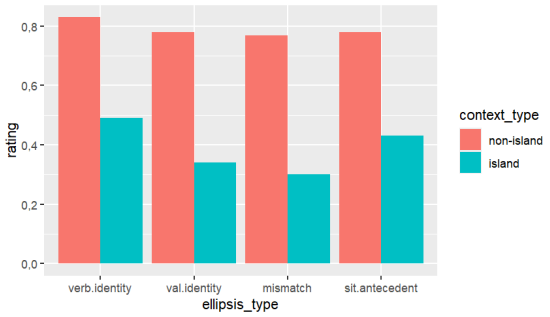

Figure 1. Mean z-scores in Experiment I.

The second experiment employs a 2*2 design to evaluate adjunct recoverability in OGs impossible under the AE approach. We crossed {adjunct; no adjunct} with {TP-ellipsis; OG}. The main idea is that if OGs are instances of *v*P-ellipsis, they should allow adjunct-including readings under negation as much as other instances of *v*P/TP-ellipsis allow them. If they are instances of AE, such readings should be highly degraded. The overall results are presented in Figure 2. Adjunct-including readings are indeed almost unacceptable for OGs (mean z-score = -0.87), whereas they are relatively good in the case of TP-ellipsis (mean z-score = 0.48). With OGs without adjunct as the baseline, the statistical analysis reveals that the effect of adjunct is insignificant, whereas the interaction of both factors is ($p < 0.001$). It means that adding an adjunct to OGs does not ameliorate their acceptability, i.e. adjuncts are not recovered.

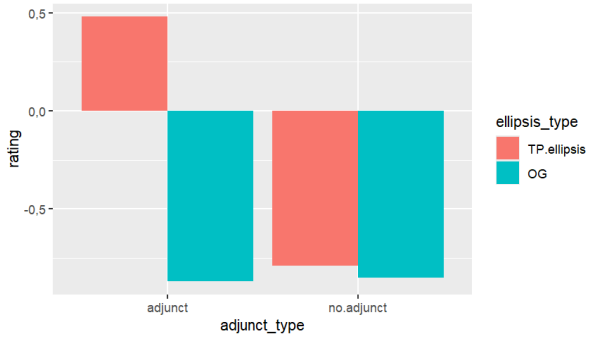

Figure 2. Mean z-scores in Experiment II.

One condition from each experiment is provided in (6) and (7) respectively:

(5) (situational antecedent; island)
В офисе сломался принтер.
Не волнуйся, сейчас позвоним специалисту, который починит __.

(6) (TP-ellipsis; no adjunct)
Петя приготовил торт, а Маша нет. Её торт получился невкусным.

The results of both experiments combined allow us to refute the VSVPE (more precisely, Gribanova's version of it) and opt for the AE analysis of Russian OGs. However, the matter is far from closed. First, if there is V-to-Asp movement in Russian, why cannot the VSVPE be deployed, given that there is "canonical" *v*P-ellipsis in Russian? Also, the results of Experiment I imply that ellipsis should allow situational/pragmatic antecedents, which is a controversial assumption in the literature. Finally, if Topic Drop is island-insensitive (cf.

Erteschik-Shir et. al. 2013), the results of Experiment I do not directly argue for the AE analysis as they can also be derived by TD. An important question thus remains, namely, how to tell TD and ellipsis apart.

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