On the Non-existence of Verb-stranding VP-ellipsis

Idan Landau

Abstract

An increasingly popular analysis of object gap sentences in many languages derives them in two steps: (i) V-raising out of VP, and (ii) VP-ellipsis of the remnant, stranding the verb (Verb-stranding VP ellipsis, VSVPE). For Hebrew, Hindi, Russian and Portuguese, we show this analysis to be inadequate. First, it undergenerates elliptical objects in various environments, and second, it overgenerates non-existing adjunct-including readings. For all the problematic data, simple Argument Ellipsis provides a unified explanation. The absence of VSVPE in languages that do allow V-raising and Aux-stranding VP ellipsis raises an intriguing problem for theories addressing the interaction of head movement and ellipsis.

1 Introduction

Within the growing literature on movement out of ellipsis sites, the interaction of head movement and ellipsis has attracted much recent attention (van Craenenbroeck and Lipták 2008, Lipták and Saab 2014, Gribanova 2018, Sailor 2018, Hein 2018). A popular analysis of certain Object Gap (OG) sentences in many languages assumes an instance of this interaction – Verb-stranding VP-ellipsis (VSVPE). On this analysis, the lexical verb raises out of vP to some functional head (T or Asp), followed by ellipsis of the verbal projection. The ellipsis operation is, importantly, the same one found in English-type VP-ellipsis. The only difference is that the lexical verb escapes the elided constituent by prior head movement, hence spells out.

(1)
$$VSVPE$$
: [TP Subj_k [T' [V_i-v]_j-T [vP t_k [v' t_j [VP t_i Obj]]]]]

VSVPE has been proposed for quite a few languages. By now, the analysis has been "canonized" in all leading surveys of ellipsis (see van Craenenbroeck and Merchant 2013, van Craenenbroeck 2014, Lipták 2015, Merchant 2019). Nevertheless, I argue here that VSVPE is not the right analysis for elliptical OG sentences. Rather, the simpler analysis of Argument Ellipsis (AE) is the right one.

(2) AE: $\begin{bmatrix} TP & Subj_k & T' & V_i-V_j-T & V_i & V_i & V_i & V_i & V_j \end{bmatrix}$

¹ Among them: Hebrew (Doron 1990, 1999, Goldberg 2005), Basque (Laka 1994), Portuguese (Martins 1994, Cyrino and Matos 2005, Santos 2009, Rouveret 2012), Ndendeule and Swahili (Ngonyani 1996, 1998), Serbo-Croatian (Stjepanovic 1997), Finnish (Holmberg 2001, 2016), Russian, Polish and Czech (McShane 2000, Gribanova 2013a,b, Ruda 2014), Egyptian Arabic (Tucker 2011), Welsh (Rouveret 2012), Malayalam, Bangla and Hindi (Simpson, Choudhury and Menon 2013, Manetta 2018, to appear), Hungarian (Lipták 2013, 2019), Greek (Merchant 2018) and Persian (Sato and Karimi 2016, Rasekhi 2018).

The argument proceeds in two steps. First, I show that VSVPE is not *needed*, as AE can generate all the strings and interpretations that VSVPE allegedly does. Second, I show that VSVPE is not *available*, as it overgenerates non-existing interpretations. This argument has been recently made for Hebrew (Landau 2018), and I will extend it to the three languages for which VSVPE has been most extensively applied – Hindi, Portuguese, and Russian. Obviously, one would like to subject the other languages mentioned in fn. 1 to similar testing, but this will have to wait for future work.

That VSVPE should be met with skepticism is, in fact, old news from the perspective of East Asian languages. Mandarin Chinese was the first language for which VSVPE was proposed (Huang 1987, 1991). This analysis was criticized in a series of studies (Xu 2003, Aoun and Li 2008, Cheng 2013). Otani & Whitman 1991, which extended VSVPE to Japanese and Korean, has been extensively criticized in Park 1997 and Kim 1999 for Korean, and in Hoji 1998, Oku 1998, Tomioka 1998, Saito 2007, Takahashi 2008, Abe 2009, Sakamoto 2017 for Japanese. All these authors demonstrate that the AE analysis is much more adequate for these three languages, and this appears to represent the current consensus (for recent overviews, see Saito 2017, Sato to appear).

Among the problems that the VSVPE analysis faces in Chinese, Korean and Japanese, are that: (i) the antecedent for the OG can be a subject; (ii) subject gaps (in Japanese and Korean) display sloppy readings just like object gaps; (iii) OGs with sloppy readings can co-occur with a second object in ditransitive VPs; (iv) gaps corresponding to PPs are attested; (v) adverbs (VP-adjuncts) are excluded from the ellipsis site; and (vi) verb-identity is not imposed between the antecedent and the target clauses. Indeed, most of these properties are found in other languages, as we will see shortly.

While V-stranding VP-ellipsis is arguably unattested, other types of V-stranding ellipsis are real. In particular, Aux-stranding AuxP ellipsis and V-stranding TP ellipsis in polar responses are common constructions. In Landau (to appear) I discuss the theoretical underpinning of the distinction between possible and impossible head-stranding ellipsis derivations.

The absence of VSVPE derivations is all the more striking in languages possessing the two ingredients that seem individually necessary and jointly sufficient to produce such derivations: V-raising and Aux-stranding VP ellipsis. Call these *type H* languages.

- (3) Profile of type H languages
 - a. V-raising: ✓
 - b. Aux-stranding VP ellipsis: ✓

- c. V-stranding VP ellipsis: *
- d. Argument Ellipsis (AE): ✓

Type H languages lie at the intersection of VP-ellipsis languages and AE languages; they employ both types of ellipsis. Curiously, though, in these languages VP-ellipsis is constrained not to generate strings that AE can generate, namely, sentences with an overt lexical verb and an object gap. This cannot result from some economy-based competition, for the only conceivable principle that might adjudicate between the two options, MaxElide (Takahashi and Fox 2005, Merchant 2008, Hartman 2011), has the *opposite* effect from the one desired here; namely, it favors a bigger ellipsis over a smaller one (all being equal), whereas type H languages choose the *smaller* AE over the bigger VSVPE.² The latter derivation, therefore, seems to be banned for some independent reason.

As I show in Landau (2018), Hebrew is a type H language. Chinese may well be too, if it has V-raising out of vP, at least over a certain range of constructions (Paul 2000). A number of studies have shown conclusively that Chinese employs AE to generate OG sentences (maybe alongside other null object strategies), but not VSVPE (Xu 2003, Aoun & Li 2008 and Cheng 2013). Below I will argue that Portuguese and Russian are also type H languages. Once again, type H languages are not currently acknowledged in the literature, so establishing their reality is the main focus of this article. The puzzle they raise for syntactic theory (how to rule out the particular interaction of head movement and ellipsis in VSVPE, but not elsewhere) is fully addressed in Landau (to appear).

The structure of this article is as follows. In section 2, I present the main empirical test to be used here – the inclusion or exclusion of adjuncts in the ellipsis site, discussing both its force and potential pitfalls. In section 3, I argue against VSVPE in Hebrew, Hindi, Portuguese, and Russian, noting as well that it is not clearly motivated for Ndendeule and Swahili. Particular attention will be given to alleged positive evidence for VSVPE in these languages. I will argue that this evidence has been inconclusive at best or uninformative at worst regarding the proper analysis of OG constructions. Once properly tested, they reveal the hallmarks of AE rather than VSVPE. Section 4 concludes the article.

2 How to use the adjunct test

As often noted in the literature, it is not easy to find empirical properties consistent *only* with AE and not with VSVPE. The best test so far, due to Park 1997 and Oku

-

² Assuming that all is indeed equal. This is far from obvious, given that VP-ellipsis and AE may well serve distinct discourse functions and so would never be members of the same reference set for economy comparisons. In this case, MaxElide or economy in general would be irrelevant.

1998, concerns the inclusion/exclusion of adjuncts in the ellipsis site. This test has been successfully applied to East Asian languages (as well as to Turkish; Şener and Takahashi 2010), but has yielded inconclusive results in some other languages – in my view, for reasons of implementation. So before we turn to the crosslinguistic data, let us review the logic of the test.

Consider first an example like (4), where English words are used for convenience only.

- (4) a. He read the sign loudly, but I didn't read ____.
 - b. He didn't read the sign loudly, but I read ____.

If the gap in (4a) corresponds to a full VP, it ought to allow (though not force) the inclusion of the adjunct *loudly* (present in the antecedent VP). This should give rise to the reading "I didn't read the sign loudly", which in turn allows the interpretation "I read the sign but not loudly". If, on the other hand, the gap corresponds to a bare argument, the reading of the target clause should be "I didn't read the sign". These two readings are different enough to tease apart the two analyses.

The test should be used with caution, however. Notice that the VSVPE analysis does not *have* to produce a reading distinct from that of the AE analysis. First, the adjunct need not be included (as already shown in Sag 1976). Second, even if the adjunct is included, there are two ways to make the negative conjunct in (4a) true: by denying the manner or by denying the very event (*I didn't wash the car carefully* could be true because I didn't wash the car at all).

To compound the problem, we must beware of the polar inverse of (4a), namely, (4b). In this sentence, the AE analysis yields "but I read the sign". This interpretation is consistent with my reading the sign loudly; in fact, the contrastive coordinator *but* facilitates this reading (and similarly for the frame "... and I read ____ too"). Thus, this sentence makes a very poor test for the present purposes because the mere *pragmatics* of the construction, combined with AE, generates the same reading that the *syntax* of VSVPE is supposed to generate. This point is relevant for the discussion below; examples parallel to (4b) were occasionally cited by VSVPE proponents to "refute" the AE alternative – a fallacious move, as just explained.

In order to sharpen the Park-Oku test, let us test examples with creation verbs. The advantage of these predicates is that under negation, the existence of their object is denied; subsequent reference to this object is then perceived as anomalous. Consider the following format, again using English words for convenience.

(5) He baked a cake with baking powder, but I didn't bake ____. It came out flat.

Once again, a VSVPE analysis of the gap should recover the sentence "I didn't bake a cake with baking powder", which allows the reading "I baked a cake but not with baking powder". Further reference to the cake in the last clause should be both possible and natural. In contrast, on the AE analysis the gapped clause recovers as "I didn't bake a cake". Since my cake was never baked, the continuation "It came out flat" should be anomalous. This test uses the same logic as the original Park-Oku test, but produces stronger judgments, as we will see.

3 Empirical results of the adjunct test

I sections 3.2-3.5 I apply the adjunct test to Hebrew, Hindi, Portuguese and Russian, concluding that these languages do not employ VSVPE in their grammars. While I have not been able to test Ndendeule and Swahili, section 3.1 shows that these languages too do not offer conclusive evidence for VSVPE.

3.1 Ndendeule and Swahili

It has been argued that certain Bantu languages, like Ndendeule and Swahili, employ VSVPE (Ngonyani 1996). However, a closer look reveals that the alternative analysis of AE was not ruled out. For example, Ngonyani shows that OG sentences with a VP antecedent need not contain an object clitic, unlike OG sentences without a VP antecedent. Yet the clitic in the latter is associated with a null object *pronoun*, according to Ngonyani. Hence, it is still possible that elided objects do not require an object clitic, and merely need a proper antecedent (which very often occurs inside a VP). Other properties, like omission of two objects or sloppy readings, do not favor VSVPE over AE (possibly applying twice). Finally, Ngonyani (1998) cites a grammatical OG sentence in which the antecedent and target clauses contain different verbs; thus, the Verb Identity Requirement (Goldberg 2005:171), normally taken to be a hallmark of VSVPE, appears not to hold in Swahili.⁴

3.2 Hebrew

The VSVPE analysis of OG sentences in Hebrew has been defended and elaborated in a series of works (Doron 1990, 1999, Sherman 1998, Goldberg 2005). The analysis has gained much currency in the field and is regularly cited as a cornerstone in all authoritative survey articles on ellipsis (van Craenenbroeck and Merchant 2013, van Craenenbroeck 2014, Merchant to appear). At around the same time that VSVPE has

_

³ A hallmark of surface anaphora is that it allows overt pronouns to refer to "missing antecedents" inside the ellipsis site (Grinder and Postal 1971, Hankamer & Sag 1976).

⁴ One challenging property discussed by Ngonyani is that applied objects (benefactive, locative, and instrumental) cannot go missing when the theme is overt, but the theme can go missing when the applied object is overt. This follows from a VSVPE analysis on the assumption that the Applicative projection dominates the basic VP. On the AE analysis, one would need to develop a licensing account of AE (needed anyway) that would distinguish basic from applied objects.

been developed for Hebrew, it was also developed for Chinese (Huang 1987, 1991), Japanese and Korean (Otani and Whitman 1991), and Irish (McCloskey 1991).

Significantly, the VSVPE analysis has been retracted and superseded in all these languages. In Chinese, Japanese and Korean, the current consensus takes OG sentences to involve AE. In Irish, the latest proposal is *TP ellipsis* under a polarity head (McCloskey 2012, 2017). The analysis has survived the longest for Hebrew, Landau 2018 being the first systematic effort to demonstrate the inadequacy of VSVPE for that language.⁵ In this section I the main findings of that article.

To begin with, Hebrew OG sentences allow a range of interpretations that are not derivable from a pronominal source (*pro*) or a topic-oriented variable. Thus, we find OGs with sloppy, nonspecific, and quantificational readings, as well as obligatory bound readings with reflexives, showing remarkable similarity to the East Asian OG sentences (Takahashi 2014). These data (presented in Landau 2018 but omitted here for space reasons) are not problematic for the VSVPE analysis. Yet I also show there that none of the constraints that are supposed to distinguish between straight null objects and VSVPE (on Doron's and Goldberg's accounts) really hold. Such objects are not island-sensitive, not necessarily inanimate and not necessarily nominal. In fact, every sentence for which VSVPE has been proposed can easily be derived by AE.

But not vice versa. The crucial data that only AE but not VSVPE can generate involve adjuncts. Consider (6). The first sentence in response (6B) cannot be used to negate the adverb alone, namely, the source of acquaintance. Rather, the negation scopes over the event itself, with the entailment that B is not acquainted with the relevant woman. Hence, the corrective continuation is infelicitous. In contrast, bare negation, as in response (6B'), can easily be used to convey the intended meaning.

(6) A: ata makir ota me-ha-tixon?

you know her from-the-high.school
'Do you know her from high school?'

B: # lo makir ____. me-ha-cava.

not know from-the-army
'I don't know her. From the army.'

⁶ In Landau (2018) I present a second argument to show that VSVPE overgenerates OG sentences with raising verbs. I do not reproduce it here.

⁵ See Taube 2013 and Erteschik-Shir, Ibnbari and Taube 2013 for earlier challenges. These works take the OG to be a bundle of unvalued φ-features. See Landau 2018 for arguments against this view and in favor of a fully fledged AE analysis.

```
B': lo, me-ha-cava.

not from-the-army
'No, from the army' / 'I don't. From the army.'
```

The combination of negation and a creation verb offers another opportunity for testing the VSVPE analysis. The negated OG sentence in (7a) entails that there is no cake baked by Gil. It is therefore infelicitous to refer to this empty set by a pronoun in the following sentence. Crucially, to obtain the reading that the cake was baked but not according to the recipe, Hebrew must resort to stripping (7b), where the entire TP is missing and the remnant is a displaced contrastive focus, not necessarily the subject (see Doron 1999, Depiante 2000, Merchant 2004). Note that the grammaticality of (7b) confirms that the problem in (7a) is not due to the occurrence of the antecedent inside an ellipsis site.

- (7) a. Yosi afa et ha-uga lefi ha-matkon.

 Yosi baked ACC the-cake according the-recipe
 hi hayta me'ula. Gil lo afa ____. # hi hayta mag'ila.
 it was fabulous Gil not baked it was gross
 'Yosi baked the cake according to the recipe. It was fabulous.
 Gil didn't bake the cake. # It was gross.'
 - b. GIL, LO ___. hi hayta mag'ila.
 Gil not it was gross
 'Gil didn't. It was gross.'

Even if VP-ellipsis (and by extension, VSVPE) supports adjunct-excluding readings, it does not force them. The fact that Hebrew OG sentences do force them, then, suggests that they involve not ellipsis of VP but ellipsis of the internal argument alone.

Recall that in addition to having AE and lacking VSVPE, type H languages, as characterized in (3), should harbor the syntactic machinery required for VSVPE: V-raising and Aux-stranding VP-ellipsis. Indeed, Hebrew has V-to-T raising (at least optionally) (8a) (Doron 1983, 1990, Shlonsky 1987, Borer 1995), and exhibits canonical VP-ellipsis in periphrastic constructions (8b).

- (8) a. Gil $[V \times axax]$ [Adv le-itim krovot] V et ha-maftexot ba-oto. Gil forgot to-times frequent ACC the-keys in.the-car 'Gil often forgot the keys in the car.'
 - b. A: Gil haya maskim la'azor lanu?

 Gil was agree.PRTC to.help to.us

 'Would Gil have agreed to help us?'

B: Batuax hu haya __.
surely he was
'Surely he would have.'

Therefore, the absence of VSVPE in Hebrew cannot be blamed on any obvious language-internal factor. It represents a genuine puzzle.

3.3 Hindi

Simpson, Choudhury and Menon (2013) have argued that alongside AE, Malayalam, Bangla and Hindi display genuine VSVPE; similarly, Manetta (2018, to appear) has argued for VSVPE in Hindi. Following Kumar 2006 and Bhatt and Dayal 2007, Manetta assumes that the verb in Hindi raises to a vP-external head position, specifically Asp⁰, escaping vP-ellipsis. Because V-to-Asp movement is obligatory in Hindi, Aux-stranding vP-ellipsis never materializes, as the aspectual auxiliary never surfaces without a lexical verb. Strictly speaking, then, Hindi is not a type H language. Nevertheless, the VSVPE analysis for this language is quite popular, so it merits close examination.

The purported evidence for VSVPE presented by Simpson et al. (2013) consists in sentences that allegedly pass the Park-Oku test for adjunct inclusion in the ellipsis site. The Hindi example below is analyzed with V-raising followed by ellipsis of the VP, which contains both an object and an adjunct.

```
(9) Amit-ne dheere-dheere ek vritt banaya.
Amit-ERG slowly one circle draw.PRES.M.SG
Gita-ne bhi ____ banaya.
Gita-ERG also draw.PRES.M.SG
'Amit drew a circle slowly. Gita also drew (a circle slowly).'
```

The second conjunct is indeed compatible with the adjunct (Gita may have drawn the circle slowly), but given the discussion of (4b), this does not demonstrate that the adjunct was copied together with the object. Adjuncts are optional to begin with. This is evident in (10), in which the presence of an overt object in the second sentence rules out a VSVPE derivation. Nonetheless, the adjunct reading is no less accessible

-

than it is in (9).

⁷ The data in (10)-(12) and (15) are due to Rajesh Bhatt (p.c.). Simpson et al. note examples similar to (10) with other types of adjuncts. When the objects in the two conjuncts are identical, an antecedent adjunct cannot be construed by itself in the second conjunct. The authors take this as evidence of the need for VSVPE independently of AE in Asian languages, but in fact a simpler focus-sensitive analysis captures all the facts under the AE analysis (see Oku 2016).

(10) Amit-ne dhiire-dhiire ek vritt banaayaa.

Amit-ERG slowly one circle draw.PRES.M.SG
Gita-ne chaukor banaayaa.

Gita-ERG square draw.PRES.M.SG
'Amit drew a circle slowly. Gita drew a square (slowly).'

More revealingly, just as in Japanese, Chinese, Turkish and Hebrew, and unlike in English, negation in the second conjunct necessarily negates the event and cannot solely target the hypothetical, elided adjunct.

```
(11) Amit-ne dhiire-dhiire ek vritt banaayaa,.

Amit-ERG slowly one circle draw.PRES.M.SG
lekin Gita-ne nahiiN ____ banaayaa.

but Gita-ERG NEG draw.PRES.M.SG

'Amit drew a circle slowly, but Gita didn't draw a circle.'
```

The second conjunct in (11) can only mean that Gita did not draw any circle; it cannot mean that she drew a circle but not slowly. Finally, the combination of negation and a creation verb in the second conjunct implies that no object came into being, making subsequent reference to the object infelicitous (parallel to Hebrew (7a)).

```
(12) John-ne
                        cake recipe-ke anusaar banaayaa. vo bahut tasty thaa.
                apnaa
     John-ERG self
                        cake recipe-GEN according made
                                                                very
                                                                      tasty was
     'John baked his cake according to the recipe. It was very tasty.'
                nahiiN ___ banaayaa. # vo bahut bekaar thaa.
     Bill-ne
     Bill-ERG
                NEG
                                               very bad
                              made
                                          it
                                                             was
     'Bill didn't make a cake. # It was very bad.'
```

Careful application of the adjunct test, then, indicates that Simpson et al.'s (2013) conclusion from (9) was premature. There is no evidence that Hindi employs VSVPE in its grammar and there is, in fact, strong evidence that it does not. While Malayalam and Bangla should be subjected to parallel scrutiny, I will assume, in the absence of counterevidence, that they are no different from Hindi in this respect (Simpson et al.'s examples from these two languages are analogous to (9)). Of course, evidence for the existence of AE in these languages that these authors cite is unaffected and remains conclusive, in fact convergent with what we learn from (10)-(12).

The absence of the adjunct-including reading is explicitly addressed in Manetta to appear and especially in Manetta 2018, and recognized as a challenge to the VSVPE analysis. Manetta then proceeds to discuss special circumstances in which this reading becomes available. Crucially, she analyzes these circumstances as involving contrastive polarity ellipsis, where a remnant TP (from which a contrastive XP has been extracted) is deleted under a Pol head, which hosts the stranded verb. Such

derivations are indeed possible (and sanctioned on the analysis proposed in Landau to appear), and may be realized in Portuguese, too, for some speakers (see section 3.4). However, Manetta's account for the absence of adjunct-including VSVPE derivations in Hindi contains a lacuna. She presents the following example.

(13) a. Sita-ne kah-aa ki Ram Chomsky-ka naya lekh dhyaan-se paR-eega.

Sita-ERG say-PST.M.SG that Ram Chomsky-GEN new article carefully read-FUT.M.SG

b. Raj nahiiN ____ paRh-eega.

Raj NEG read.FUT.M.SG

'Sita said that Ram will read the new article by Chomsky carefully.

Raj will not read the new article by Chomsky (?*carefully).'

(13b) cannot involve any ellipsis, Manetta argues. The missing object is *pro*, and therefore there is no silent copy of the antecedent manner adverb. The reasoning is as follows. Normal polarity ellipsis deletes the subject along with the TP, so it cannot underlie (13b), where the subject survives. Because of V-to-Asp-to-T-to-Pol raising, however, the parallelism domain for evaluating ellipsis is Pol' (the minimal projection containing the binder of the verbal trace). MaxElide then dictates that TP rather than vP be deleted. Consequently, TP-ellipsis is unavailable (generating a string without the subject), and vP-ellipsis is unavailable (due to MaxElide), leaving only the *pro*-analysis, which correctly does not support the adjunct-including reading.

This account is problematic in several respects, internally and also externally to the MaxElide system. Note first that the notion of blocking invoked here is rather curious. Unlike the original cases of MaxElide, where a *grammatical* bigger ellipsis blocks an *ungrammatical* smaller one, here the bigger ellipsis is, in fact, not available, for it generates a different string (namely, "Neg-V ____"). How, then, can it block the smaller ellipsis? Second, (13a-b) offer just the right opportunity for bypassing MaxElide, namely, by including a contrastive subject in the elliptical clause. The presence of such contrastive elements is known to bypass MaxElide, as in the following pair.

- (14) a. I know what books Bill likes and I know what movies (*he does).
 - b. I know what books Bill likes and I know what movies MIKE does.

Therefore, even the MaxElide account predicts vP-ellipsis to be possible in (13b), leaving Manetta's account with the puzzle of why the adjunct-including reading is absent.

Furthermore, *some* elliptical parse of (13b) must be available. Evidence for this comes from the familiar sloppy reading test. (15) is modeled on Manetta's (13), only now the

elided object supports a sloppy reading (15b), in contrast to an overt pronoun (15c). Importantly, the adjunct-including reading is still unavailable throughout.

- (15) a. Ram_i apnaa lekh dhyaan-se paRh-egaa.

 Ram self.M.SG article carefully read. FUT.M.SG 'Ram_i will read his article carefully.'
 - Raj_j nahiiN ____ paRh-egaa.
 Raj NEG read.FUT.M.SG.
 'Raj_i will not read his_{i/i} article (*carefully).'
 - c. Raj_j use nahiiN paRh-egaa. Raj it.DAT NEG read.FUT.M.SG. 'Raj $_j$ will not read it (=his $_{i/*j}$ article) (*carefully).'

Given the sloppy reading, (15b) must be elliptical. However, it cannot be elliptical on Manetta's approach, which analyzes it with *pro*, predicting only a strict reading, contrary to fact. Even worse, the MaxElide explanation *favors* vP-ellipsis here. TP-ellipsis is not a "competitor" because of the contrastive subject that should not be elided. Therefore, vP-ellipsis solely competes with AE, both sparing the subject and yielding equivalent interpetations. The bigger vP-ellipsis should win over the smaller AE, yet the absence of the adjunct-including reading, once again, proves that vP-ellipsis is not an option.⁸

3.4 Portuguese

Portuguese evidences both V-raising (16a) (see, e.g., Galves 1994) and Aux-stranding ellipsis (16b) (Cyrino and Matos 2005), thus qualifying as a type H language.⁹

- (16) a. O João [$_{V}$ acabou] [$_{Adv}$ completamente] t_{V} seu trabalho. the John finished completely his work 'John completely finished his work.'
 - b. Ele tinha saído, mas ela não tinha ____ .

 he had left but she not had

 'He has left, but she has not.'

Hence, Portuguese is expected to display VSVPE, and indeed, the literature is unanimous in analyzing OG sentences like (17) as involving VSVPE (see Martins 1994, 2016, Kato 2003, Cyrino and Matos 2005, Santos 2009, Rouveret 2012). Different analyses posit different landing sites for V-raising in VSVPE (Asp, T or Σ), but they all share the core idea that the stranded V originates within the VP projection undergoing

-

⁸ For growing recent criticism of MaxElide, see Messick and Thoms 2016 and Griffiths to appear.

⁹ Unless otherwise indicated, the data obtain both in European and in Brazilian Portuguese.

ellipsis. 10 A single recent paper (Cyrino & Lopes 2016) acknowledges that Brazilian Portuguese permits AE alongside VSVPE.

(17) Ela está lendo livros ás crianças, mas ele lendo não está she is reading books to.the children he is reading but not 'She is reading books to the children, but he is not.'

I will argue that while (16b) is indeed a standard case of VP-ellipsis, (17) involves not VSVPE but AE. Just like in the East Asian languages, Hebrew, and Hindi, once the proper tests are applied, it will be seen that (possibly multiple) AE provides a superior account of the data. The strength of this alternative has not previously been appreciated because most studies have counterposed the VSVPE analysis not to AE but to pro or A-variable analyses. Indeed, Portuguese OGs display a wider distribution than what the latter analyses would predict (e.g., nonpronominal reference, island-insensitivity), but these properties are no more problematic to the AE analysis than to the VSVPE one.

First, it has been suggested that Portuguese has no process of PP-ellipsis, so that ditransitive VPs missing both objects, like (17), can only arise from VPE (Matos 1992, Rouveret 2012). But in fact, this is false, and PPs can undergo independent ellipsis in Portuguese just as they can in Japanese and Hebrew (see Santos 2009: 29, 39). Santos claims that PP-drop is island-insensitive but DP-drop is island-sensitive because only the latter is derived by A-movement (similarly to the claims made by Doron and Goldberg for Hebrew). However, alongside Santos's examples (18a-b) (where obligatory PPs undergo ellipsis), we find (19a-b), which indicate that even direct object gaps may occur inside islands.¹¹

Teresa entregou (18) a. A as chaves ao porteiro the Teresa gave the keys to.the porter eu conheço a senhora que entregou carro_ and I know the lady that gave the car 'Teresa gave the keys to the porter and I know the lady who gave him the car.'

¹⁰ Martins (1994) argues that V raises to Σ , which projects above Agr_SP and TP. Ellipsis, however, targets VP and not Σ 's sister. I return below to this possibility.

¹¹ The judgments reported in this section were collected from 5-7 native speakers, Examples (19a-b) were found acceptable by all those consulted, except one, who rejected object gaps everywhere. The A-movement analysis of null objects in Portuguese is originally due to Raposo 1986. It remains to be seen how to reconcile his data with these data. Note that counterexamples to Raposo's claim (involving island-insensitive nominal OGs) are also documented in Cyrino and Lopes 2016.

- b. Pus os meus filhos nesta escola put.1SG the my children in.this scool and uma senhora que pôs conheco os nestos ____. lady know.1sg a that put.3sG the grandchildren 'I put my children in this school and I know a lady who put her grandchildren there.'
- (19) a. Teresa deu o seu lugar amigo Α a um the Teresa gave the her space to a friend eu vi uma senhora que deu ___ a um desconhecido. e and I saw a woman that gave to a stranger 'Teresa gave her space to a friend and I saw a woman who gave her space to a stranger.'
 - Pus b. os meus móveis antigos na cave put.1sg the my furniture old in.the basement mas conheço vizinho que pôs ___ na um sala. but know.1sg neighbor that put.3SG. in.the living.room a 'I put my old furniture in the basement but I know a neighbor who put his old furniture in the living room.'

That multiple AE, including PP-ellipsis, must be available in Portuguese, can also be established on the basis of object oriented secondary predicates (OOSPs). As Rouveret (2012) points out, VPE cannot strand an OOSP, which merges too low to escape deletion.

(20) * Lucy submitted the manuscript unfinished and Jan did badly typed.

Rouveret then notes (his ex. (69c)) that in Portuguese, a ditransitive VP with a missing direct object and an overt indirect object accepts an OOSP, concluding that this option arises from a null object. However, grammaticality is unharmed if the PP goes missing too.

- (21) O João devolveu livro à Maria em bom estado João returned book to.the Maria in good condition the the Pedro mais estragado. e devolveu ____ Pedro returned more damaged and the 'João returned the book to Maria in good condition and Pedro returned it to her more damaged.'
- (21) can only be derived by multiple AE of the direct and indirect objects; VSVPE is not possible given its inability to strand an OOSP. Hence, AE in Portuguese, as in the

other languages discussed above, does not distinguish DPs from PPs (the null hypothesis, it would seem).

Let us now consider another salient feature of the VSVPE analysis, the Verb identity Requirement. This condition was taken to hold in Portuguese in Kato 2003 and Cyrino & Matos 2005, but Santos (2009:56-58) and Cyrino & Lopes (2016) convincingly refute it with examples that either lack both objects or permit a sloppy reading for the OG (hence, must involve VSVPE on the standard account).

- (22) a. O João venedeu livros à Teresa ontem the João sold books to.the Teresa yesterday e a Ana ofereceu ____. and the Ana offered.

 'João sold books to Teresa yesterday and Ana offered them.'
 - b. o João pôs o dinheiro na Ontem gaveta, yesterday the João put the money in.the drawer mas Pedro guardou ____ cofre. na but Pedro kept in.the safe 'Yesterday, João_i put his_i money in the drawer, but Pedroi kept hisi money in the safe.'

It is sometimes claimed that Verb Identity still holds in this type of construction but that "focalized or weakly contrasted material is exempted from this requirement" (Rouveret 2012:933; see also Lipták 2012, Gribanova 2013a). However, the fact that the unshared material in the target clause must be at least contrastive if not focused is a hallmark of ellipsis in general, so it is not clear what is gained by duplicating this condition just for deviations from Verb Identity. Indeed, if VSVPE does not exist and these are all AE cases, then the peculiar condition of V-identity can simply be dispensed with, and the pattern of verb (non)identity can be made to follow from the general felicity conditions on the residue of ellipsis (Rooth 1992, Merchant 2001).

So far, the data suggest that nothing rules out an AE analysis of Portuguese OG sentences, either with ditransitive VPs or inside islands. I now turn to data that pose serious difficulties for the accepted VSVPE analysis.

Consider adjunct inclusion. In the following example, it is claimed that the adjunct in the antecedent clause is also construed in the target clause (Santos 2009:28).

(23) A Raquel não limpou o carro cuidadosamente. Mas a Ana limpou ____. the Raquel not cleaned the car carefully but the Ana cleaned Preferred: 'Raquel didn't clean the car carefully, but Ana did.'

Dispreferred: 'Raquel didn't clean the car carefully, but Ana cleaned it.'

Santos (2009) claims that the antecedent adjunct is obligatorily copied to the ellipsis site, but Rouveret (2012) claims that this is only the preferred, default reading. Indeed, given the optionality of adjuncts, even VP ellipsis is not forced to apply to them. In this sense, Portuguese is like English, where VPE only optionally copies adjuncts (Sag 1976). However, as pointed out above for Hindi (9) (see also the comments on (4b)), OG sentences constructed with *too* or *also* are not informative with regard to the *syntactic* issue of adjunct-inclusion, because they very easily facilitate and even favor that reading solely for *pragmatic* reasons. To probe the syntactic question, one needs a different setup. Two useful setups that were demonstrated above involve either a negated target clause or attempted reference to the missing object of a negated creation event.

Applying these adjunct tests to Portuguese, we obtain a pattern similar to that found in Japanese, Chinese, Korean, Turkish, Hebrew, and Hindi, although it is less robust.

- (24) A Raquel limpou o carro dela cuidadosamente, mas a Ana não limpou ____. the Raquel cleaned the car her carefully but the Ana not cleaned
 - (i) 'Raquel cleaned her car carefully, but Ana didn't clean it/hers.'
 - (ii) 'Raquel cleaned her car carefully, but Ana cleaned it/hers not carefully.'

Out of seven speakers consulted, two rejected the OG sentence altogether. Of the remaining five, three only accepted reading (i), that is, the one generated by AE. Two speakers, however, reported an ambiguity, accepting both readings. One could attribute reading (ii) to VSVPE, but this is not necessary; it could also arise from "adjunct ellipsis" applying in tandem with AE (similarly to DP and PP ellipsis cooccurring in ditransitive PPs), and placing the silent adjunct under the scope of the overt negation. This should be a marginally available option, explaining why only a minority of speakers employ it (below I consider an alternative explanation for the adjunct-including judgments).

Consider next the following question-answer pair from Santos 2009:64.

The two ellipsis sites place conflicting constituency requirements on the antecedent vP.

¹² Rouveret's broader claim is that ellipsis always targets the complement of a phase head (e.g., the VP complement of v). To accommodate the optionality of adjunct inclusion, he proposes that adjuncts may attach to VP (captured by ellipsis) or to vP (spared by ellipsis). This account is challenged by examples in which the *same* VP antecedent licenses one adjunct-including VPE and another adjunct-excluding VPE (as in Sag 1976). Portuguese allows this too.

i. O Pedro foi a Paris antes do Natal, a Ana também foi _ the Pedro went to Paris before of the Christmas. the Ana also went mas a Maria só foi depois do Natal. after of.the Christmas the Maria only went 'Pedro went to Paris before Christmas, Ana did too, but Maria did only after Christmas.'

```
(25) Q: Entregaste o artigo à Maria na biblioteca?
gave.2SG the paper to.the Maria at.the library
'Did you give the paper to Maria at the library?'
A: Entreguei.
gave.1SG
'Yes.'
```

Santos claims that the locative adjunct must be understood as part of the confirmation ("Yes, I gave the paper to Mary at the library"). However, this again may be a reflection of a default reading (i.e., unless specified otherwise, a positive answer confirms all parts of the question). If we just switch the polarity of the answer, a different result emerges.

```
(26) Q: Entregaste o
                            artigo
                                     à
                                            Maria
                                                     na
                                                           biblioteca?
                                                     at.the library
                                     to.the Maria
         gave.2sg the
                            paper
         'Did you give the paper to Maria at the library?'
      A: Não entreguei ____ ... # Entreguei-lho
                                                                        bar.
                                                              no
         not gave.1sg
                                     gave.1SG-CL<sub>Dat</sub>+CL<sub>Acc</sub> at.the
                                                                        cafeteria
         'I didn't give it to her. # I gave it to her at the cafeteria.'
```

Out of seven speakers consulted, six rejected the continuation of the negative reply, suggesting that the missing material in it consists of the two arguments *without* the adjunct. Only one speaker allowed the answer to be understood as "I gave it to her not at the library". The majority of speakers, then, employ multiple AE, while a minority further allow adjunct ellipsis (see below, though, for an alternative explanation).

As a final confirmation that VSVPE is not part of Portuguese grammar, consider the attempted reference to the object of a creation verb under negation.

```
(27) O João escreve poemas por desespero.

the João writes poems out.of despair.

O Pedro não escreve ____. # Os dele são alegres.

the Pedro not writes those of.him are cheerful

'João writes poems out of despair. Pedro doesn't write (poems).

His are cheerful.'
```

Out of five speakers consulted, four rejected the continuation of the negative reply, implying that they only allowed it to be understood as "Pedro doesn't write poems", i.e., the outcome of AE. The single speaker who accepted the interpretation "Pedro writes poems not out of despair" (which allows further reference to the poems) appeared to apply adjunct ellipsis in addition to AE.

-

¹³ At the same time, speakers readily accept that reading with a bare negative answer ("Não!").

To repeat the argument: If VSVPE had been a productive option in Portuguese grammar as Aux-stranding VP-ellipsis is (see (16b)), one would have expected a much higher rate of acceptance of adjunct-including interpretations in OG sentences, similarly to the status of (4a) in English. The fact that the pervasive pattern excludes the adjunct thus strongly supports the view that such sentences result from AE and not VSVPE. On this analysis, Portuguese is another type H language.

A legitimate question is why the Portuguese data are not as clear-cut as the data reported above from other languages. Trivially, this may be due to insufficient data; perhaps a more careful investigation will reveal that OG constructions in other languages *are* just as noisy. A marginal strategy of adjunct ellipsis is also a possibility, as noted above. There is, however, a potential theoretical explanation. In Landau (to appear) I discuss a construction (in Irish, Finnish, and Hungarian), in which V-stranding ellipsis does occur. Crucially, though, the stranded V raises to a polarity head (Σ /Pol) at the left periphery and the elided category is bigger than VP, probably a TP. This type of ellipsis is expected to be adjunct-inclusive just like simple "Yes!" or "No!" responses are (the polarity particle realizing the Σ /Pol head, as is standardly assumed).

In fact, just this sort of analysis has long been advocated for Portuguese OG constructions (Martins 1994, 2016, Costa, Martins and Pratas 2012). It may well be the case, then, that Portuguese speakers generate OG sentences either via AE or via V-stranding TP-ellipsis (under some polarity focus). This would account for the non-uniform distribution of judgments seen above. In any event, the fact that some (maybe most) speakers *exclude* adjuncts in properly constructed OG sentences like (24)-(27) indicates that AE is the only elliptical strategy available to them.

As a final consequence, the proposal that Portuguese employs V-stranding AE alongside Aux-stranding VPE allows a simple account of certain "parallelism" puzzles that have been debated in the literature (see Matos 1992, Cyrino & Matos 2005, Rouvert 2012). The following contrast holds in European Portuguese.

(28) a. 0 João não tinha [vP dado [DP o mãe]], presente] [PP à had given gift to.the mother the João not the tinha ____ / dado ____ ___. mas a prima given but the aunt had 'João had not given the present to his mother, but his aunt had.'

¹⁴ When more than just the verb is stranded (e.g., the subject), it is necessary to assume an evacuating movement – usually motivated by contrastive topicality - prior to TP ellipsis.

```
b. O João deve ter lido esse livro esta tarde
the João must have read this book this afternoon
e o Luis deve também ter *(lido) ______.
and the Luis must too have (read)
'João must have read this book this afternoon and Luis must have also.'
```

The generalization is that ellipsis *may* strand a perfect participle that follows an inflected auxiliary but *must* strand it after an uninflected auxiliary. Since all of these elliptical sentences represent VPE for the above-mentioned authors, this contrast is a puzzle. Matos (1992) states that *ter* 'have' is a proper governor (for ellipsis purposes) only when in T. Cyrino & Matos (2005) assume that VSVPE in (28a) depends on incorporation of the participle into Aux, but there is evidence against it from (lack of) adjacency effects. Rouveret (2012) advances a phase-based approach, where only phase heads license ellipsis (of their complement). By assumption, Part⁰ (to which the verbal root raises to form a participle) is a phase head, but Perf⁰ (the base position of *ter*) is not. An inflected *ter* licenses ellipsis not from its surface position (in T) but from a v position above PerfP, which is another phase head.

The present approach, I believe, offers a simpler solution. To understand the contrast in (28), we only need to assume, with Cyrino & Matos 2005, that the relevant licensor of VP-ellipsis in European Portuguese is T. Thus, (28a) without the participle represents a simple case of VP-ellipsis. (28b) without the participle is not possible because the elided constituent is a sister of Aux, a non-licensor. Crucially, the versions of (28a) and (28b) with the participle do not involve VSVPE – which is impossible on the current proposal – but rather they involve multiple AE, as in (21), (22a), (25), and (26). No further assumptions about the variable scope of ellipsis or incorporation need to be invoked.

3.5 Russian

The status of verb movement in Russian has been under dispute for more than two decades (King 1995, Bailyn 1995, Slioussar 2011, Gribanova 2013a). It is generally agreed that V does not raise to T in SVO clauses (although it might under "inversion", in XP-V-S clauses; see Bailyn 2004). However, Gribanova and Bailyn argue that V does raise to some low aspectual projection. Indirect evidence comes from ATB-movement of V to a position below the Aux-filled T (29a). In addition, Russian displays Aux-stranding vP-ellipsis (29b) (Kazenin 2006), so we may take it to be another type H language.

- (29) a. Petja budet priglašat' Mašu v muzej segodnja,
 Peter.NOM will invite.INF Masha.ACC in museum today
 a Dinu v kino zavtra.
 and Dina.ACC in movie tomorrow.

 'Petya will invite Masha to the museum today, and Dina to a movie tomorrow.'
 - b. Petja budet pomogat' sebe a Kolja ne budet ____.
 Peter will help.INF self but Kolya not will
 'Peter will help himself but Kolya won't.'

Gribanova (2013a) claims that OG sentences in Russian can arise either by some island-sensitive Ā-dependency or by VSVPE. Similarly to Doron's (1990, 1999) and Goldberg's (2005) approach to Hebrew OG sentences, she then uses island environments to isolate the VSVPE construction. As in Rouveret's (2012) analysis of Portuguese, Gribanova suggests that VSVPE in Russian strands the verb in Asp. Consequently, elements of the verbal complex that originate within the vP are predicted to fall under the Verb Identity Requirement whereas those originating in Asp are predicted to allow a mismatch between the antecedent verb and the stranded verb in the target clause.

(30) Včera ja ne poznakomila Mašu s Sašej, yesterday I NEG introduced.1SG.F Maša.ACC with Saša.INSTR i poka ne poznakomlju _____, ne uedu. and until NEG introduce.1SG.FUT _____ NEG leave.1SG.FUT 'I didn't introduce Masha to Sasha yesterday, and I won't leave until I do.'

Gribanova notes that PPs can be independently dropped, hence the choice of a ditransitive verb in OG sentences in itself cannot rule out a multiple AE analysis. In fact, Gribanova explicitly sets aside the AE alternative (see her fn. 3). Importantly, a key identifier of VSVPE in her account – the obligatory presence of a linguistic antecedent – holds equally of AE, both being instances of ellipsis. Gribanova only remarks that "the strong requirement for verb matching" should serve as evidence against AE. However, this requirement is easily defeasible, even by Gribanova's own account (see below), and is perfectly consistent with the AE analysis: Non-elided constituents in the target clause should be in some contrast with the corresponding constituents in the antecedent clause.

These empirical considerations indicate that VSVPE has no advantage over AE in accounting for the properties of Russian OG sentences. ¹⁵ In fact, it faces some

_

¹⁵ Gribanova (2013b) argues that VSVPE can be further distinguished from AE by its greater discourse selectivity: the remnant of VSVPE must be a contrastive topic but the remnant of AE admits other functions (contrastive, backgrounded or presentational focus). However, her purported AE

problems that the AE analysis does not, as pointed out in Erteschik-Shir, Ibnbari and Taube 2013 and Bailyn 2014. I will mention some of these objections and add others to them.¹⁶

First, Erteschik-Shir et al. point out that there is no clear evidence for any islandsensitive OG strategy in Russian. Allegedly ungrammatical examples involve insufficient prominence, in the deictic context, of the "continued" topic that is the required antecedent for the OG. Once this prominence is ensured, OGs inside islands are acceptable even without any linguistic antecedent.

More relevantly to our concerns, Bailyn shows that there is no formal identity requirement holding between the antecedent and the target verbs. While Gribanova goes to considerable lengths to demonstrate that lexical prefixes (being VP-internal) have to match and that superlexical prefixes and aspectual suffixes do not, Bailyn cites counterexamples of every type. What seems to be involved is a general constraint (familiar from other AE languages) on the range of permissible contrastive semantic relations between the two verbs (e.g., antonymy, intensification). Lexical prefixes may or may not express contrasts of that sort, which leads to variable results in verb mismatch situations. Crucially, different verb stems are possible too.¹⁷

(31) Kto-to skazal, čto vse nenavidjat Ivana, said that everyone Someone hates tak čto menja udivil fakt, čto Nadja ljubit . fact that Nadya loves SO that me surprised 'Someone said that everyone hates Ivan, so the fact that Nadya loves him surprised me.'

examples (of the form V-[DP e]-PP) do not rule out the option of a *pro* object, hence cannot reliably distinguish VSVPE from AE.

ii. Mary cleaned her room quickly and John did slowly/*quickly.

¹⁶ McShane (2005) and Baylin (2014) analyze Russian OG sentences as instances of AE while Erteschik-Shir et al. (2013) take the gap to be a bundle of unvalued features, linked to the topic.

¹⁷ While Gribanova (2013a) downplays deviations from V-identity (suggesting they occur only under special circumstances, for certain speakers), in Gribanova (2017, 2018) she fully acknowledges that a contrastively focused verb in a verbal answer to a polar question need not match its antecedent (apparently, for all speakers). These recent works also retract the earlier claim that lexical prefixes must match in the antecedent and the target verbs. However, Gribanova continues to link the focus condition on verbal mismatch to *extraction* out of an ellipsis site (hence, indirectly supporting the VSVPE analysis); for vP-ellipsis sentences, this has the result of requiring verb-extraposition in both the antecedent and the target clause, yielding SOV order in the former. This expectation is contradicted by Baylin's (2017) data, which evidence verbal mismatches in standard SVO configurations. More generally, the assumption that only extracted material is subject to the focus condition is incorrect. Nonelided material in the target clause must also stand in some contrastive relation to its counterpart in the antecedent clause, including polarity particles and adverbs, which are clearly generated outside the elided VP (i-ii); consequently, the interaction between verbal mismatch and focus does not favor the VSVPE over the AE analysis.

i. Mary cleaned her room and John did *(not).

Russian thus joins all the other V-stranding languages in which identity is but *one* possible relation between the antecedent and target verbs. One can go further and show that OG constructions in Russian do not even respect the weaker condition of "valence identity" (i.e., parallel argument structures) that *is* an absolute pre-requisite for VSVPE (see Landau 2018 for parallel facts in Hebrew). An OG in a ditransitive VP can take the object of a monotransitive VP as antecedent, and vice versa; note that the OGs in (32) occur inside islands, so under Gribanova's approach, they would have to be analyzed as cases of VSVPE.

- (32) a. Ivan sfotografiroval čašku pered tem
 Ivan.NOM photographed.3SG cup.ACC before
 kak postavit'___ na polku.
 as put.INF on shelf.ACC
 'Ivan photographed the cup before putting it on the shelf.'
 - b. Ivan postavil čašku na polku posle togo Ivan.NOM put.3SG cup.ACC on shelf.ACC after kak sfotografiroval ____.
 as photograph.3SG
 'Ivan put the cup on the shelf after photographing it.'

Next, consider adjunct inclusion. Contrary to Gribanova's (2013a:102) claim that all adjuncts are included in the ellipsis site, a closer inspection reveals that Park's (1997) and Oku's (1998) discovery for Korean and Japanese carries over to Russian too: Adjuncts are *not* included. According to Bailyn (2014), the target clause in (33) cannot be understood as "I recorded Vasiliev but not often".

(33) Ty snimal Vasil'eva často, a ja ne snimal ____ you recorded Vasiliev often but I NEG recorded 'You recorded Vasiliev often but I didn't record him.'

The test with creation verbs yields consonant results.

(34) Ivan pišet stixi ot otčajanija. Ja uveren čto Sergej Ivan writes.3SG poems from despair. I sure that Sergei ne pišet ____. # Oni vsegda radostnyje.
not writes.3SG they always cheerful.

'Ivan writes poems out of despair. I am sure that Sergei does not write (poems). # They are always cheerful.'

Because the OG in the second sentence of (34) results from AE and not VSVPE, no copy of the antecedent adverb is present under the scope of negation. The sentence thus means that Sergei does not write poems and cannot mean that he writes poems

but not out of despair. The continuation, referring to non-existing poems, is infelicitous. Importantly, felicity is obtained when ellipsis genuinely targets a larger constituent, for example the complement of Neg, which obviously includes the adverb (...čto Sergei net ____ 'that Sergei not'), mirroring the Hebrew contrast in (7a-b).

As noted, Gribanova uses antecedentless OG sentences to show that Russian null objects are Ā-variables constrained by islands. The following example is intended to show their sensitivity to the indicative island constraint in Russian.

```
(35) [Something is lying on the floor]
# Ja byl uveren, čto kto-to uže podnjal ____.
I was sure.SG.M that someone.NOM already under-held.SG.M Intended: 'I was sure that someone already picked it up.'
```

This example, however, cannot be taken as conclusive evidence that indicative complements with an OG must be derived by VSVPE. The reason is that AE requires a linguistic antecedent no less than VSVPE does. The way to distinguish the two is to introduce a DP antecedent (for AE) without introducing a VP antecedent (strictly speaking, a *lexical* VP, as (36A) may involve a null copula).

```
(36) A: Smotri, košeljok ješčo zdes'!
look wallet.NOM still here
'Look, the wallet is still here!'
B: Ja byl uveren, čto kto-to uže podnjal ____.

I was sure.SG.M that someone.NOM already under-held.SG.M
'I was sure that someone already picked it up.'
```

B's response is much more acceptable than utterance (35), although they are identical in form, thanks to the DP antecedent *kašeljok* 'wallet'. But it is not derivable on Gribanova's assumptions. A null object is not licensed inside indicative complements and VSVPE cannot apply without a proper VP antecedent. The AE analysis, in turn, provides a principled explanation for the contrast between (35) and (36): Only in the latter is the OG preceded by an explicit DP antecedent. ¹⁸

In conclusion, once considered in its entirety, the range of OG sentences in Russian can be fully accounted for by AE and possibly some null object strategy, with no recourse to VSVPE. Moreover, VSVPE overgenerates non-existing readings, hence must be blocked. Given that Russian has both V-raising and Aux-stranding vP-

¹⁸ Gribanova (2013b) presents a novel argument in favor of VSVPE in Russian, which draws on the interpretation of OGs in the context of coordinated ditransitive VPs. I tackle this argument separately in Landau 2019. Gribanova (2017) extends the V-stranding analysis to TP ellipsis under polarity focus, however, still maintaining the VSVPE analysis for non-polar contexts.

ellipsis, the absence of VSVPE goes beyond any language-specific constraints and calls for some principled explanation.

Conclusion

VSVPE is not an adequate analysis for OG sentences in a number of languages for which it has been proposed (Hebrew, Hindi, Russian, and Portuguese). The dethroning of VSVPE in these languages joins and reinforces the abandonment of this analysis for East Asian languages. Establishing this result requires careful application of the adjunct inclusion/exclusion test, which had been neglected or misinterpreted in previous works. While it is still possible that VSVPE is adequate for languages not examined here, skepticism is fully warranted: if the analysis does not withstand scrutiny where it has been defended most vigorously, perhaps it is inherently misconceived.

The absence of VSVPE even in languages that contain both V-raising out of VP and VP-ellipsis (so-called type H languages) generates a puzzle for Universal Grammar: What principles are responsible for barring this derivation? The puzzle is especially poignant, for other types of extraction out of elided VPs are possible, and V-movement out of *different* ellipsis sites is also possible. In Landau (to appear) I address this puzzle and develop a solution in the context of a derivational view of ellipsis, coupled with a PF-visibility condition that applies to the *head* of any constituent undergoing PF deletion. A general methodological lesson from this investigation is that claims for head-stranding ellipsis should be scrutinized more critically and always be evaluated against the simpler alternative of ellipsis without head stranding.

Finally, I have skirted throughout the question of what the AE parameter is. This topic is hotly debated in the literature (see Sato to appear for a recent discussion). Proposals include the "Anti-Agreement Parameter" (ellipsis of an argument is allowed iff no functional head agrees with that argument; Saito 2007, Takahashi 2008, 2013, 2014, Şener and Takahashi 2010); the presence/absence of scrambling (Oku 2018), the absence of a DP layer in the nominal projection (Cheng 2013), the agglutinative nature of the nominal φ-morphology (Simpson, Choudhury & Menon 2013, Otaki 2014), or the property of radical *pro*-drop (Sakamoto 2017). Clearly, the finding that languages like Hebrew, Russian, and Portuguese fall together with AE languages throws a new wrench into these discussions. Currently, no existing proposal can do justice to the typological diversity of AE languages.

Because AE languages do not – at least the documented cases do not – seem to distinguish between DP, PP and CP arguments (all are elidable), the licensing mechanism may be quite different from what it is for VP- and NP-ellipsis. Null Complement Anaphora (NCA) may turn out to fall under AE in certain languages,

producing another typological split between "surface" and "deep" NCA (Cheng 2013); and within the former group, there may be another split between NCA permitting all extraction and NCA permitting only covert extraction (on Japanese as a language of the latter kind, see Sakamoto 2017). All these matters are well worth investigating if we are to gain a deeper understanding of the workings of ellipsis in natural language.

References

- Abe, Jun. 2009. Identification of Null Arguments in Japanese. In *The Dynamics of the Language Faculty: Perspectives from Linguistics and Cognitive Neuroscience*, ed. by Hiroto Hoshi, 135-162. Tokyo: Kuroshio Publishers.
- Aoun, Joseph, and Yen-hui Audrey Li. 2008. Ellipsis and Missing Objects. In *Foundational Isues in Generative Grammar*, ed. by Robert Freidin, Carlos Peregrín Otero and Maria Luisa Zubizarreta, 251-274. Cambridge, MA: MIT Press.
- Bailyn, John F. 1995. Underlying Phrase Structue and "Short" Verb Movement in Russian. *Journal of Slavic Linguistics* 3, 13-58.
- Bailyn, John F. 2004. Generalized Inversion. *Natural Language and Linguistic Theory* 22, 1-49.
- Bhatt, Rajesh, and Veneeta Dayal. 2007. Rightward Scrambling as Rightward Remnant Movement. *Linguistic Inquiry* 38, 287-301.
- Borer, Hagit. 1995. The Ups and Downs of Hebrew Verb Movement. *Natural Language & Linguistic Theory* 13, 527–606.
- Cheng, Hsu-Te. 2013. Argument Ellipsis, Classifier Phrases, and the DP Parameter.

 PhD dissertation, UCONN.
- Costa, João, Ana-Maria Martins, and Fernanda Pratas. 2012. VP Ellipsis: New Evidence from Capeverdean. In *Romance Languages and Linguistic Theory Vol. 4*, ed. by Irene Franco, Sara Lusini and Andrès Saab, 155-175. Amsterdam: John Benjamins.
- Cyrino, Sonia, and Gabriela Matos. 2005. Local Licensors and Recovering in VP-ellipsis. *Journal of Portuguese Linguistics* 4, 79-112.

- Cyrino, Sonia, and Ruth Lopes. 2016. Null Objects and Ellipsis in Brazilian Portuguese. *The Linguistic Review* 33, 483-502.
- Depiante, Marcela A. 2000. The Syntax of Deep and Surface Anaphora: A Study of Null Complement Anaphora and Stripping/Bare Argument Ellipsis. PhD dissertation, University of Connecticut.
- Doron, Edit. 1983. Verbless Predicates in Hebrew. PhD dissertation, University of Texas, Austin.
- Doron, Edit. 1990. V-Movement and VP-Ellipsis. Ms., Department of English, The Hebrew University of Jerusalem.
- Doron, Edit. 1999. V-movement and VP-ellipsis. In *Fragments: Studies in Ellipsis* and Gapping, ed. by Elabbas Benmamoun and Shalom Lappin, 124-140.

 Oxford: Oxford University Press.
- Erteschik-Shir, Nomi, Lena Ibnbari, and Sharon Taube. 2013. Missing Objects as Topic Drop. *Lingua* 136, 145-169.
- Galves, Charlotte C. 1994. V-movement, Levels of Representation and the Structure of S. *Letras de Hoje* 29, 35-58.
- Goldberg, Lotus M. 2005. *Verb-stranding VP Ellipsis: A Cross-linguistic Study*. Phd dissertation, McGill University.
- Gribanova, Vera. 2013a. Verb-stranding Verb Phrase Ellipsis and the Structure of the Russian Verbal Complex. *Natural Language & Linguistic Theory* 31, 91-136.
- Gribanova, Vera. 2013b. A New Argument for Verb-stranding Verb Phrase Ellipsis

 Linguistic Inquiry 44, 145-157.
- 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., Stanford University.
- Griffiths, James. Beyond MaxElide: An investigation of Ā-movement from Elided Phrases. To appear in *Linguistic Inquiry*.
- Grinder, John T., and Paul Postal. 1971. Missing Antecedents. *Linguistic Inquiry* 2, 269-312.
- Hartman, Jeremy. 2011. The Semantic Uniformity of Traces: Evidence from Ellipsis Prallelism. *Linguistic Inquiry* 42, 367-388.
- Hein, Johannes. 2018. On the Interaction of Head Movement, Ellipsis and Copy eletion: The Case of Mainland Scandinavian. Handout of a talk given at the 33rd meeting of the Comparative Germanic Syntax Workshop, Georg-August Universität Göttingen.
- Hoji, Hajime. 1998. Null Object and Sloppy Identity in Japanese. *Linguistic Inquiry* 29, 127-152.
- Holmberg, Anders. 2001. The Syntax of Yes and No in Finnish. *Studia Linguistica* 55, 141-174.
- Holmberg, Anders. 2016. The Syntax of Yes and No. Oxford: Oxford University Press.
- Huang, C. –T. James. 1987. Verb-Second in German and Some AUX Phenomena. In Chinese-Western Encounter: Studies in Linguistics and Literature: Festschrift for Franz Giet, SVD on his 85th birthday. Taipei, Taiwan: Asian Library Series no. 44, Chinese Materials Center Publications.
- Huang, C. –T. James. 1991. Remarks on the Status of the Null Object. In *Principles* and *Parameters in Comparative Grammar*, ed. by Robert Freidin, 56-76. Cambridge, MA: MIT Press.

- Kato, Mary A. 2003. Null Objects and VP Ellipsis in European and Brazilian
 Portuguese. In *Romance Languages and Linguistic Theory 2001*, ed. by Josep
 Quer, Jan Schroten, Mauro Scorretti, Petra Sleeman and Els Verheugd, 131-153. Amsterdam: John Benjamins.
- Kazenin, Konstantin. 2006. Polarity in Russian and Typology of Predicate Ellipsis.Ms., Moscow State University.
- Kim, Soowon. 1999. Sloppy/Strict Identity, Empty Objects, and NP Ellipsis. *Journal of East Asian Linguistics* 8, 255-284.
- King, Tracy H. 1995. *Configuring Topic and Focus in Russian*. Stanford: CSLI Publicaitons.
- Kumar, Rajesh. 2006. Negation and Licensing of Negative Polarity Items in Hindi Syntax. New York: Routledge.
- Laka, Itziar. 1994. On the Syntax of Negation. New York: Garland.
- Landau, Idan. 2018. Missing Objects in Hebrew: Argument Ellipsis, not VP Ellipsis. *Glossa* 3(1), 76, 1-37.
- Landau, Idan. 2019. Object Gaps with Coordinated VP Antecedents Do Not Support

 V-stranding VP-ellipsis: A Reply to Gribanova (2013). Ms., Ben Gurion

 University.
- Lipták, Anikó. 2012. Verb-stranding Ellipsis and Verbal Identity: The Role of Polarity Focus. *Linguistics in the Netherlands* 29, 82-96.
- Lipták, Anikó. 2013. The Syntax of Emphatic Positive Polarity in Hungarian: Evidence from Ellipsis. *Lingua* 128, 72-94.
- Lipták, Anikó. 2015. Identity in ellipsis: An introduction. Lingua 166, 155-171.

- Lipták, Anikó. 2019. Hungarian. In *The Oxford Handbook of Ellipsis*, ed. by Jeroen van Craenenbroeck and Tanja Temmerman, 815-840. Oxford: Oxford University Press.
- Lipták, Anikó, and Andrès Saab. 2014. No N-raising out of NPs in Spanish: Ellipsis as a Diagnostic of Head Movement *Natural Language & Linguistic Theory* 32, 1247-1271.
- Manetta, Emily. Verb-Phrase Ellipsis and Complex Predicates in Hindi-Urdu. To appear in *Natural Language and Linguistic Theory*.
- Manetta, Emily. 2018. Reading Carefully: Adverbs, Negation and Verb Movement in a Verb-final Language. Paper presented in FASAL 8, Wichita State University, KS.
- Martins, Ana-Maria. 1994. Enclisis, VP-Deletion and the Nature of Sigma. *Probus* 6, 173-205.
- Martins, Ana-Maria. 2016. VP and TP Ellipsis: Sentential Polarity and Information Structure. In *Manual of Grammatical Interfaces in Romance*, ed. by Susann Fischer and Christoph Gabriel, 457-486. Berlin: De Gruyter.
- Matos, Gabriela. 1992. *Construções de Elipse do Predicado em Português: SV Nulo e Despojamento*. PhD dissertation, Universidade de Lisboa, Lisbon.
- McCloskey, James. 1991. Clause Structure, Ellipsis and Proper Government. *Lingua* 85, 259-302.
- McCloskey, James. 2012. Polarity, Ellipsis, and the Limits of Identity in Irish:

 Handout of a talk given in the "Workshop on Ellipsis" Nanzan University,

 Japan.
- McCloskey, James. 2017. Ellipsis, Polarity and the Cartography of Verb-Initial Orders in Irish. In *Elements of Comparative Syntax: Theory and Description*,

- ed. by Enoch Aboh, Eric Haeberli, Genoveva Puskás and Manuela Schönenberger, 99-151. Berlin: De Gruyter Mouton.
- McShane, Marjorie J. 2000. Verbal Ellipsis in Russian, Polish and Czech. *Slavic and Eastern European Journal* 44, 195-233.
- Merchant, Jason. 2001. *The Syntax of Silence: Sluicing, Islands and the Theory of Ellipsis*. Oxford: Oxford University Press.
- Merchant, Jason. 2004. Fragments and Ellipsis. *Linguistics and Philosophy* 27, 661-738.
- Merchant, Jason. 2008. Variable Island Repair Under Ellipsis. In *Topics in Ellipsis*, ed. by Kyle Johnson, 132-153. Cambridge: Cambridge University Press.
- Merchant, Jason. 2018. Verb-stranding Predicate Ellipsis in Greek, Implicit Arguments, and Ellipsis-internal Focus. In *A Reasonable Way to Proceed:*Essays in Honor of Jim McCloskey, ed. by Jason Merchant, Line Mikkelsen,
 Deniz Rudin and Kelsei Sasaki, 229-270. Santa Cruz, CA: University of Santa Cruz.
- Merchant, Jason. 2019. Ellipsis: A Survey of Analytical Approaches. In *Handbook of Ellipsis*, ed. by Jeroen van Craenenbroeck and Tanja Temmerman, 19-45.

 Oxford: Oxford University Press.
- Messick, Troy, and Gary Thoms. 2016. Ellipsis, Economy, and the (Non)uniformity of Traces. *Linguistic Inquiry* 47, 306-332.
- Ngonyani, Deo. 1996. VP-Ellipsis in Ndendeule and Swahili Applicatives. In *Syntax* at Sunset: UCLA Working Papers in Syntax and Semantics 1, ed. by Edward Garrett and Felicia Lee, 109-128. Los Angeles, CA: Department of Linguistics, UCLA.

- Ngonyani, Deo. 1998. V-to-I Movement in Kiswahili. In *Afrikanistische Arbeitspapiere 55, Swahili Forum V*, ed. by Rose Marie Beck, Thomas Geider and Werner Graebner, 129-144. Köln, Germany: Institut für Afrikanistik, Universität zu Köln.
- Oku, Satoshi. 1998. A Theory of Selection and Reconstruction in the Minimalist Perspective. PhD dissertation, UCONN.
- Oku, Satoshi. 2016. A Note on Ellipsis-Resistant Constituents. *Nanzan Linguistics* 11, 56-70.
- Otaki, Koichi. 2014. Ellipsis of Arguments: Its Acquisition and Theoretical Implications. PhD dissertation, UCONN.
- Otani, Kazuyo, and John Whitman. 1991. V-Raising and VP-Ellipsis. *Linguistic Inquiry* 22, 345-358.
- Park, Myung-Kwan. 1997. The Syntax of VP Ellipsis in Korean. *Language Research* 33, 629-648.
- Paul, Waltraud. 2000. Verb-movement and the VP-shell in Chinese: Some Critical Remarks. *Cahiers de Linguistique Asie Orientale* 29, 255-269.
- Raposo, Eduardo. 1986. On the Null Object in European Portuguese. In *Studies in Romance Linguistics*, ed. by Osvaldo Jaeggli and Carmen Silva-Corvalan, 373-390. Dordrecht: Foris Publications.
- Rasekhi, Vahideh. 2018. *Ellipsis and Information Structure: Evidence from Persian*.

 PhD dissertation, Stony Brook University.
- Rooth, Mats. 1992. Ellipsis Redundancy and Reduction Redundancy. In *Proceedings* of the Stuttgart Elipsis Workshop, Arbeitspapiere des Sonderforschungsbereichs 340, No. 29, ed. by Steve Berman and Arild Hestvik, 1–26. Heidelberg: SFB 340 and IBM.

- Rouveret, Alain. 2012. VP ellipsis, Phases and the Syntax of Morphology. *Natural Laguage and Linguistic Theory* 30, 897–963.
- Ruda, Marta. 2014. On the V-stranding VP ellipsis Analysis of Missing Objects in Polish. In *Proceedings of the Third Central European Conference in Linguistics for Postgraduate Students*, ed. by Surányi Balázs and Turi Gergő, 60-85. Budapeszt: Pázmány Péter Catholic University.
- Sag, Ivan. 1976. A Note on Verb Phrase Deletion. *Linguistic Inquiry* 7, 664-670.
- Sailor, Craig. 2018. The Typology of Head Movement and Ellipsis: A Reply to Lipták and Saab (2014). *Natural Language and Linguistic Theory* 36, 851-875.
- Saito, Mamoru. 2007. Notes on East Asian Argument Ellipsis. *Language Rsearch* 43, 203-227.
- Saito, Mamoru. 2017. Ellipsis. In *Handbook of Japanese Syntax*, ed. by Masayoshi Shibatani, Shigeru Miyagawa and Hisashi Noda, 701-750. Berlin: De Gruyter Mouton.
- Sakamoto, Yuta. 2017. Escape from Silent Syntax. PhD dissertation, UCONN.
- Santos, Ana Lúcia. 2009. Minimal Answers: Ellipsis, Syntax and Discourse in the Acquisition of European Portuguese. Amsterdam: John Benjamins.
- Sato, Yosuke. Comparative Syntax of Argument Ellipsis in Languages without

 Agreement: A Case Study with Mandarin Chinese. To appear in *Journal of Linguistics*.
- Sato, Yosuke, and Simin Karimi. 2016. Subject-object Asymmetries in Persian Argumenr Ellipsis and the Anti-Agreement Theory. *Glossa* 1, 1-31.
- Şener, Serkan, and Daiko Takahashi. 2010. Ellipsis of Arguments in Japanese and Turkish. *Nanzan Linguistics* 6, 79-99.

- Shlonsky, Ur. 1987. *Null and Displaced Subjects*. PhD dissertation, MIT, Cambridge, MA.
- Simpson, Andrew, Arumina Choudhury, and Mythili Menon. 2013. Argument Ellipsis and the Licensing of Covert Nominals in Bangla, Hindi and Malayalam. *Lingua* 134, 103–128.
- Slioussar, Natalia. 2011. Russian and the EPP Requirement in the Tense Domain. Lingua 121, 2048-2068.
- Stjepanovic, Sandra. 1997. VP-Ellipsis in a Verb Raising Language and Implications for the Condition on Formal Identity of Verbs. In 'Is the Logic Clear?': Papers in Honor of Howard Lasnik, UCONN Working Papers in Linguistics 8 ed. by Jeong-Seok Kim, Satoshi Oku and Sandra Stjepanovic, 287-306. Cambridge, MA: University of Connecticut.
- Takahashi, Daiko. 2008. Quantificational Null Objects and Argument Ellipsis. Linguistic Inquiry 39, 307-326.
- Takahashi, Daiko. 2014. Argument Ellipsis, Anti-Agreement and Scrambling. In *Japanese Syntax in Comparative Perspective*, ed. by Mamuro Saito, 88–116.Oxford: Oxford University Press
- Takahashi, Shoichi, and Danny Fox. 2005. MaxElide and the Re-binding Problem. In *Proceedings of SALT 15*, ed. by Effi Georgala and Jonathan Howell, 223-240.Ithaca, NY: Cornell University, CLC Publications.
- Taube, Sharon. 2013. Hebrew Object Gaps. MA thesis, Ben Gurion University.
- Tomioka, Satoshi. 1998. The Laziest Pronouns. In *Japanese/Korean Linguistics 7*, ed. by Noriko Akatsuka, Hajime Hoji, Shoichi Iwasaki, Sung-Ock Sohn and Susan Strauss, 515-531. Stanford, CA: CSLI Publications.

- Tucker, Matthew A. 2011. Verb-stranding Verb-Phrase Ellipsis in Egyptian Arabic.

 Paper presented at '25th Arabic Linguistics Symposium/UCSC Structure of Arabic', Tucson, Santa Cruz. March 5th-7th, 2011.
- van Craenenbroeck, Jeoren, and Anikó Lipták. 2008. On the Ineraction Between Verb Movement and Ellipsis: New Evidence from Hungarian. In *Proceddings* of WCCFL 26, ed. by Charles B. Chang and Hannah J. Haynie, 138-146. Somerville, MA: Cascadilla Press.
- van Craenenbroeck, Jeroen. 2014. VP-ellipsis. Revised Chapter for *The Blackwell Companion to Syntax*, ed. by Martin Everaert, Henk Van Riemsdijk, Rob Goedemans and Bart Hollebrandse. Wiley-Blackwell: Oxford
- van Craenenbroeck, Jeroen, and Jason Merchant. 2013. Ellipsis Phenomena. In *The Cambridge Handbook of Generative Syntax*, ed. by Marcel den Dikken, 701-745. Cambridge: Cambridge University Press.
- Xu, Leijiong. 2003. Remarks on VP-Ellipsis in Disguise. *Linguistic Inquiry* 34, 163-171.