In defense of Verb-Stranding VP-Ellipsis

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Abstract: This remark offers arguments against recent challenges to analyses of verb-stranding VP ellipsis/VSVPE presented in Landau (2020b) and Oku (2016). The paper defends the VSVPE hypothesis, arguing that it remains the strongest hypothesis available to account for many instances of ellipsis with null objects in language such as Hindi, Bangla and Japanese.

Keywords: verb-stranding VP ellipsis, argument ellipsis, null objects

1. Introduction

The derivation of null objects permitting variable, sloppy interpretations, as in (1) and (2) continues to be the subject of considerable debate in the literature One line of analysis, initiated in Otani and Whitman (1991) and developed further in other works such as Goldberg (2005), Funakoshi (2016), Gribanova (2013), and Manetta (2019) pursues the idea that the ellipsis in such examples may involve the deletion of a VP constituent, following the raising of the verb to a higher, VP-external position – so-called 'verb-stranding verb phrase ellipsis'/VSVPE, while a second analysis of such object gaps argued for in Oku (1998) and adopted in other works (Takahashi 2008a/b, Cheng 2013, Sato 2019, Landau 2020b) is that they result from ellipsis of simply the object, rather than any larger, VP constituent – 'argument ellipsis'/AE.

(1) a. John-wa [zibun-no tegami-o] suteta.
   John-TOP self-GEN letter-ACC discarded
   'John$_i$ threw out his$_i$ own letters.'

   b. Mary-mo [e] suteta.
   Mary-too   discarded
   'Mary did too.'
   i. Mary also threw out John's letters (strict)
   ii. Mary also threw out her own letters (sloppy)
   (Oku 1998:162)

(2) a. Zhangsan bu xihuan [guanyu ziji de yaoyan].
   Zhangsan not like   about self GEN rumor
   'Zhangsan$_i$ doesn't like rumors about self$_i$.'

   b. Mali ye bu xihuan [e].
   Mali also not like
   i. 'Mali doesn't like rumors about Zhangsan either.' (strict)
   ii. 'Mali$_j$ doesn't like rumors about self$_j$ either.' (sloppy)
   (Otani and Whitman 1991: 346)

While advocates of the VSVPE approach have sometimes suggested that AE may be a syntactic possibility in addition to VSVPE within individual languages (e.g. Simpson, Choudhury and Menon 2013, Funakoshi 2016), strong advocates for AE such as Oku (1998, 2016) and Landau (2020b) have vigorously argued that AE is the only way that object gaps of the type illustrated in (1) and (2) can be created, and VSVPE does not occur, for Landau (2020b) in any language. In the latter work, the (assumed) impossibility of VSVPE is furthermore presented as a major argument for a general analysis of restrictions on head-stranding constituent ellipsis.

The aim of the current short paper is to present arguments against the recent prominent challenge to VSVPE analyses made in Landau (2020b), which draws on Oku (2016) for additional support, and, in so doing, defend the VSVPE hypothesis, arguing that it remains the strongest hypothesis available to account for many instances of ellipsis with null objects. Section 2 presents background to the AE vs. VSVPE debate and the primary evidence in favor of the VSVPE hypothesis. Section 3 focuses on Landau's (2020b) forceful rebuttal of VSVPE and argues that the testing methodology made use of in Landau (2020b) critically fails to establish his conclusion that VSVPE must be cross-linguistically impossible. Section 4 re-presents certain argument/adjunct asymmetries which offer strong support for VSVPE and shows how Oku's (2016) pragmatic account of ellipsis is unable to explain these asymmetries, leaving them as highly problematic for a simple AE approach (but not VSVPE). Section 5 summarizes the conclusions drawn in the paper.

2. VSVPE and the interpretation of adjuncts

While both AE and VSVPE offer accounts of the derivation of null objects with variable, potentially sloppy interpretations, as in (1) and (2), at the heart of the VSVPE vs. AE dispute is actually the behavior of *adjuncts* in contexts of ellipsis, rather than arguments, and whether or not VP adverbial elements can be interpreted as a result of a syntactic process of ellipsis applying to VPs in sentences such as (3-5), where both the object and the adverbial present in the first sentence are interpretable in the reduced subject+verb sentence which follows.

(3) a. Amit-ne dheere-dheere ek vritt banaya.   *Hindi*
        Amit-ERG slowly   one circle draw-PRES.M.SG
        'Amit drew a circle slowly.'
     b. Gita-ne bhi _ banaya
        Gita-ERG also draw-PRES.M.SG
        'Gita also drew a circle slowly.'
        (Simpson et al 2013:110)

(4) a. Ram Dilli du bar   giyecche.   *Bangla*
        Ram Dill two time go-PAST
        'Ram has visited Delhi twice.'
     b. Raj-o _ giyecche.
        Raj-also go-PAST
        'Raj has also visited Delhi twice.'
        (Simpson et al 2013:110)

(5) a. anil Chomsky-ute putiya paper rantu manikuur   neram vayicc-u.   *Malayalam*
     anil Chomsky-GEN new   paper two   hours   time   read- PAST
     'Ram read the new paper by Chomsky for two hours.'

   b. ravi-yum   vayicc-u
      ravi-UM   read- PAST
      'Ravi also read the new paper by Chomsky for two hours.'
      (Simpson et al 2013:110)

VSVPE analyses argue that low adjuncts may be elided and interpreted as components of VPs which undergo ellipsis after the verb has raised to some higher position, as schematized in (6). It is regularly suggested that the interpretation of missing adjuncts is indeed strong evidence in favor of VSVPE and unaccounted for in other approaches which assume that there is simply ellipsis of the object in examples such as (3b/4b/5b).

(6)   *The derivation of VSVPE (in an SOV language)*
   a. [Subject [$_{VP}$ Adverb Object Verb]]
   b. [Subject [$_{VP}$ Adverb Object t_k] Verb$_k$]   *verb-raising*
   c. [Subject [$_{VP}$ ~~Adverb Object~~ t_k] Verb$_k$]   *ellipsis of VP remnant*

        Against such a view, Oku (1998, 2016), has suggested that the interpretation of adjuncts in cases such as (3-5) is actually not mediated by ellipsis and syntax but rather pragmatics, on the grounds that missing adjuncts seem to be uninterpretable in certain other similar instances involving *negation*. Oku (1998) presents examples such as (7) as evidence that full VP ellipsis is not involved in the derivation of null objects, because it is difficult for speakers to give (7b) an interpretation with the adverb which occurs in (7a). Such an interpretation should be possible if (7b) involved VSVPE, it is argued, but when negation is present in examples such as (7b), the missing adjunct interpretation is not readily available, and only the null object is interpreted, due to AE, it is suggested.

(7) a. Bill-wa   kuruma-o teineini   aratta.   *Japanese*
        Bill-TOP car-ACC   carefully washed
        'Bill washed the car carefully.'
   b. John-wa arawanakatta.
        John-WA wash.NEG.PAST
        'John didn't wash it.'
        (Oku 1998:171)

Oku's observations about the interfering effect of negation on the interpretation of missing adjuncts have been highly influential in discussions of AE vs. VSVPE and pose a clear challenge to the VSVPE hypothesis, suggesting that VP ellipsis is not responsible for the creation of null objects with variable interpretations in languages such as Japanese. However, more recently, a number of investigations have shown that Oku's initial generalizations are not well-founded and there are many instances in which missing adjuncts can in fact be interpreted in the presence of negation. Funakoshi (2016) demonstrates this well with Japanese, and Manetta (2019) shows parallel patterns in Hindi. In both languages, when certain slight adjustments are made to pairs such as (7a/b), the missing adjunct interpretation becomes available. For example, the use of discourse connectives such as 'but', the addition of 'also' in the follow-on sentence, the presence

of negation in the antecedent sentence, and/or the use of rich context are all noted to enable the null adjunct interpretation, as shown in (8-11).

(8)   Bill-wa   teineini   kuruma-o aratta   kedo,   *Japanese*
        Bill-TOP carefully car-ACC   wash.PAST but
        John-wa   araw-anak-atta.
        John-TOP wash.NEG.PAST
        'Bill washed the car carefully, but John didn't wash the car carefully.'
        (Funakoshi 2016:119)

(9) a. Bill-wa   teineini   kuruma-o arawanakatta.   *Japanese*
        Bill-TOP carefully car-ACC   wash.NEG.PAST
        'Bill didn't wash the car carefully.'
   b.   John-mo   arawanakatta.
        John-also wash.NEG.PAST
        'John didn't wash the car carefully either.'
        (Funakoshi 2016:118)

(10)   Ram-ne   Chomsky-ka   naya lekh   dhyaanse parHa. magar   *Hindi*
        Ram-ERG Chomsky-GEN new writing carefully read   but
        Raj-ne   nahiiN parha.
        Raj-ERG NEG   read
        'Ram read the new paper by Chomsky carefully, but Raj did not read the new paper by
        Chomsky carefully.'
        (Manetta 2019:924)

(11) a. Ram-ne   Chomsky-ka   naya lekh   dhyaanse nahiiN parHa.   *Hindi*
        Ram-ERG Chomsky-GEN new writing carefully NEG   read
        'Ram did not read the new paper by Chomsky carefully.'
   b.   Raj-ne   bhii nahiiN parha.
        Raj-ERG also NEG   read
        'Raj also did not read the new paper by Chomsky carefully.'
        (Manetta 2019:924)

From this, it can be concluded that the argument against VSVPE based on the interaction of negation with adverbial elements, as first presented in Oku (1998) and subsequently referenced by others, is not convincing, when examined against a broader set of data. A second, more focused consideration of negation and the interpretation of missing adjuncts has now been undertaken in Landau (2020b), building on ideas from Oku (1998). Landau asserts that a more rigorous application of Oku-type tests is able to provide stronger results than in Oku's original study and renders the VSVPE hypothesis untenable, as described in section 3.

3.0 Landau (2020b) and the scope of negation in contexts of ellipsis

Landau (2020b) discusses different interpretations that might be expected to occur in sentences which feature both negation and ellipsis, such as (12) (his 4a), where English words are used to

represent structures with missing objects and hypothetically missing adjuncts in languages such as Hindi, Hebrew, Russian and Portuguese.

(12)   He read the sign loudly, but I didn't read _.

Landau (2020b: 343-344) suggests that:

> If the gap in (4a) [12] 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'.

Landau thus distinguishes a potential reading with narrow scope of negation on just an adverbial in the VP (here conveying: 'I read the sign but not loudly.') from interpretations in which negation applies its force to a VP containing the verb and its object and negates the occurrence of the event, a broad scope reading (here: 'I didn't read the sign.'). The Oku-type test is consequently applied in a more nuanced way than originally in Oku (1998) and Landau maintains that *only* the possibility of a narrow scope reading of negation on a missing adjunct would constitute evidence that full VPs (containing adverbial elements) are elided in languages characterized as having VSVPE, rather than such languages simply exhibiting object ellipsis/AE (with no accompanying syntactic representation of any adverbials present in antecedent sentences). Landau then suggests that the critical narrow scope reading of negation over missing VP adjuncts is categorically NOT available in Hindi, Hebrew, and Russian, indicating that these languages do not permit verb-stranding VP ellipsis and generate object gaps simply via the occurrence of argument ellipsis. The broader proposal is also made that *no* languages create object gaps through VSVPE, and VSVPE is ruled out cross-linguistically by a very general restriction on head-stranding constituent ellipsis described in Landau (2020a).

Considering such far-reaching claims and their basis in the re-direction of Oku's negation tests, two questions need to be asked. First, one might seek to confirm that the empirical generalizations are correct, and establish that the narrow scope reading of negation over omitted adjuncts is truly not available (especially given the fact that previous claims about the absence of null adjunct readings made in Oku (1998) have subsequently been disproved). Second, one might also ask whether the design of Landau's more focused test is really likely to result in such readings being available, given the potentially complex interaction of focus and the scope of negation present in the sentence pairs examined. In other words, are the relevant narrow scope readings expected to be as readily available as is assumed by Landau?

Concerning the first question and whether it is indeed correct that negation cannot take narrow scope over missing adverbial elements in sentences equivalent to (12), the characterization of examples in the existing literature actually suggest that such narrow scope readings are indeed possible, in both Japanese and Hindi. Consider (15) below, from Funakoshi (2016:118). Funakoshi notes that (15b) can be followed by a sentence like "he did wash the car but he did it in a sloppy fashion.", which corresponds to the narrow scope reading argued to be impossible by Landau. If (15b) were to have the AE interpretation claimed by Landau, it should mean "John didn't wash the car.", but (15b) can be interpreted as communicating that the subject did indeed wash the car, but the act of washing was not carried out carefully.

(15) a. Bill-wa teineini   kuruma-o arawanakatta.
Bill-TOP carefully car-ACC   wash.NEG.PAST
'Bill didn't wash the car carefully.'
   b. John-mo arawanakatta.
John-also wash.NEG.PAST
'John didn't wash the car carefully either.'
(Funakoshi 2016:118)

A similar example occurs in Manetta (2019:925). In (16), an explicit continuation in (16b) indicates that the negation in (16b) is understood to take narrow scope over the mission adverb *dhyaan-se* 'carefully' and the first part of (16b) means 'Raj washed the car, but not carefully', rather than 'Raj did not wash the car.', which is the only interpretation predicted by Landau to be possible.

(16)   Ram and Raj wash their parents' cars to get their allowance. Ram was thorough
         in his work, while Raj was not.
   a.   Ram-ne gaaRi dhyaanse dhoy-ii.
         Ram-ERG car   carefully wash-PFV.FSG
         'Ram washed the car carefully.'
   b.   Raj-ne   nahiiN dhoy-ii.   Yeh gaaRi jis-ko   Raj-ne
         Raj-ERG NEG   wash-PFV.FSG   that car.F REL-ACC Raj-ERG
         dhoy-aa   abhii bhii thooRi thooRi ganDi rah gay-ii.
         wash-PFV.MSG now also little   little   dirty.F stay go-PFV.FSG
         'Raj did not wash the car carefully. The car Raj washed still remained a bit dirty.'
         (Manetta 2019: 925)

It therefore seems that Landau's claim about the unavailability of narrow scope of negation with omitted adverbial elements is not accurate, and this is a possibility minimally in both Hindi and Japanese.
       If such readings are indeed possible, in principle, it should then be asked whether any properties of the test frames used by Landau might perhaps suppress these readings in other instances, and make them less easily available. Consider Landau's prototypical example in (12) repeated below, and an instantiation of this pattern in Hindi, where it is asserted that the narrow scope reading is not possible:

(12)   He read the sign loudly, but I didn't read _.

(17)   Amit-ne   dhiire-dhiire ek vritt   banaayaa,   lekin Gita-ne   nahiiN banaayaa.
         Amit-ERG slowly   one circle draw.PRES.M.SG but Gita-ERG NEG   make.PRES.M.SG
         'Amit drew a circle slowly, but Gita didn't draw a circle.'
         (Landau 2020b:348)

Landau critically makes the assumption that it should be straightforwardly possible for negation to take narrow scope over any syntactically-represented constituent c-commanded by negation, hence if a VP adverbial element is phonologically elided as part of the VP which contains its, as assumed in VSVPE analyses, it should be possible for negation to take narrow scope over such

an element, as schematized in (18), using English words again to represent Hindi, Hebrew, Russian etc, and (19) in which VP ellipsis actually occurs in English (with no verb raising out of the ellipsis site).

(18)   John baked a cake with baking powder,
         but I did$\underline{n}$'t bake$_k$ [$_{VP}$ t$_k$ a cake <u>with baking powder</u>].

(19)   John baked a cake with baking powder,
         but I did$\underline{n}$'t [$_{VP}$ bake a cake <u>with baking powder</u>].

Such an assumption, which is crucial to the generalizations reached by Landau, can be questioned on several accounts, seriously challenging the conclusions which Landau draws from his testing of data in Hindi, Russian etc.
         A first relevant observation that can be made is that if no VP ellipsis takes place, and the full contents of a VP including an adverbial element are pronounced, it is actually not at all easy and natural for negation to take narrow scope over an adverbial in the kinds of sentences made use of in Landau's tests. For example, the negation in (20) naturally scopes over the full VP, conveying that the event of baking a cake with baking powder (by the speaker) did not occur, and a narrow scope reading of the negation over just the adverbial 'loudly' is not readily available.

(20)   John baked a cake with baking powder, but I didn't bake a cake with baking powder.

Indeed, when Landau describes the narrow scope reading that he suggests should exist in example sentences such as (12), he restructures the sentence so that the negation occurs in a different syntactic position immediately preceding the adverbial, as 'I read the sign but not loudly'. If the original syntactic structure of the sentence is retained, it is very hard to construe the negation in the second part of the sentence as taking narrow scope over just one part of the following VP – and yet this is the structure that Landau assumes, without question, should straightforwardly allow for a narrow scope interpretation of negation when hypothetical ellipsis of the VP has taken place. Given the patterning of non-elided VPs and the natural scope of negation in sentences such as (20), it can be asked why VP ellipsis should permit scopal readings that are hard to get in non-elided VPs. As no explanation for this difference is obviously available, the validity of Landau's key assumption is arguably cast into doubt.
         Quite generally, in order to signal interpretations of narrow scope on a lower VP adverbial, the adverbial needs to be overtly encoded as the focus of negation in some way, indicating that it alone is the instantiation of the scope of negation, and the negation should not be understood to scope more broadly over the entire VP. This may often be achieved often via prosodic stress, as in (21):

(21)   I didn't bake a cake with BAKING POWDER.
         Natural interpretation: 'I baked a cake without using baking powder.'

Clearly, if an entire VP is elided, it will not be possible for any unpronounced sub-constituent of the VP such as an adverbial to signal overtly that it represents the narrow focus of negation. This consequently reduces the natural availability of any interpretations of narrow scope. Such a point can be illustrated again with a comparison of Hebrew data provided in Landau (2020b: 346) and equivalent sentences in English. Landau suggests that the paradigm in (22) can only be accounted for via AE and cannot be generated by VSVPE. In (22B), the negation takes scope over the entire event and cannot be construed as taking narrow scope over the adjunct 'from high school'. Consequently, the continuation in (22B) 'From the army', which would require a narrow scope interpretation of negation over the adjunct PP, is not possible. This contrasts with (22B') where the occurrence of bare negation in the reply form does (easily) allow for the continuation 'from the army'.

(22) 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.'
      B': lo, me-ha-cava.
             not from-the-army
           'No, from the army.'

Landau concludes that (22B) is unacceptable because such a verbal reply form does not result from VP ellipsis but from AE. The assumption is made that if VP ellipsis were to be involved in the generation of reply forms such as (22B), this should allow for negation to take narrow scope over the elided representation of the adjunct and the license the corrective continuation. However, the possibility of corrective fragment continuations in such examples appears to be independent of the occurrence of VP ellipsis. If a parallel paradigm is considered in English, the same patterns are found as in Hebrew. Whereas the use of bare negation allows for a continuation which is an adjunct modifier, as in (23B'), such a fragment continuation is not possible in (23B), *which is formed via VP ellipsis* in English.

(23) A: Did you see John in Paris?
     B: #I did not. In London
     B': No, in London

Hence even where VP ellipsis very clearly occurs, pre-verbal negation cannot easily be construed as taking narrow scope over adjuncts in the VP. The observation that such interpretations are in many instances not present/salient should therefore not be attributed to any absence of a *syntactic* representation of adverbials when VP ellipsis takes place, but relate instead to the non-pronunciation of such elements. The same considerations also hold for omitted *objects*, and readings of narrow (negative) scope with unpronounced objects are equally unavailable when VP ellipsis occurs. For example, it is not possible to construe (24) with narrow focus on the object, conveying that the speaker read something loudly, but not 'the sign'. (24) is instead naturally interpreted with negation scoping over the entire, elided VP, rather than any sub-constituent of the VP.

(24)   He read the sign loudly, but I didn't _.
        Natural interpretation: 'I didn't read the sign loudly.'
        Unavailable interpretation: 'It's not the sign that I read loudly, but something else.'

As examples such as (24) in English are again unquestionably taken to involve VP ellipsis, and it is very hard to construe negation as applying its scope to any constituent contained in the elided VP, it is difficult to see how similar tests can establish the non-occurrence of VP ellipsis in other languages – even languages with well-established VP ellipsis do not fare well with the application of narrow scope tests in contexts of ellipsis.

      A further, related issue concerning the common information structure of test examples such as (17) compounds the problems already highlighted above. Landau attempts to probe the availability of narrow scope of negation on (unpronounced) adverbials in sentences (or sentence pairs) in which only the verb is repeated from a previous clause/sentence, in combination with negation and a different subject, as represented in (25), and (12), repeated again below:

(25)   SUB$_1$ verb OB Adv, but SUB$_2$ NEG verb.

(12)   He read the sign loudly, but I didn't read _.
        Commonly unavailable interpretation: 'I read the sign, but not loudly.'
        Available interpretations: 'I didn't read the sign.' or: 'It's not the case that I read the sign loudly.'

This results in a natural contrast existing between the subject of the second clause and the subject of the first clause. The subject of the clause in which (some kind of) ellipsis occurs is therefore easily construed as constituting a *contrastive focus* in this clause. This makes it even more difficult for other unpronounced elements such as unrepeated adverbials to be construed as being in focus and being interpreted as the focus of the negation that is present. The availability of any narrow scope interpretation with null elided adverbials is negatively impacted by the information structure of test sentences such as (12), where the focus interpretation necessary for narrow scope readings is naturally placed elsewhere, on the contrastive subject in the second clause. The typical conflict in focus requirements existing in such cases can be illustrated with examples in which no ellipsis takes place, and prosodic stress is added to the adverb in order to (attempt to) encode it as the narrow focus of negation, as in (26). Despite the addition of focal stress to the adverbial 'with BAKING POWDER', (26) is quite unnatural and odd, due to a focus clash - the subject of the second clause is interpreted as the focus of this clause, contrasting with the subject of the preceding clause, but prosodic stress is being applied to the adverb, suggesting that this element should be interpreted as the focus rather than the subject. The result is a confusing mismatch between focus as conveyed by the structure and content of the clause, favoring the subject, and focus as encoded by intonational means, on the adverbial phrase.

(26)   ?John baked a cake with baking powder, but I didn't bake a cake with BAKING POWDER.

      The conclusions to be drawn from all of this are that Landau's crucial test involving negation and ellipsis has many ingredients which make narrow scope readings on adverbials (and other elements) very difficult to bring about, and the conditions which make such interpretations frequently inaccessible do not relate to the absence of underlying syntactic representations (such

as the existence of null adjuncts in an elided VP) but are due to other factors. The narrow scope test can therefore be argued not to have the potential to reveal the presence or absence of VP ellipsis vs. AE, and so does not support an effective challenge to VSVPE, contra the strong assertions made about this test in Landau (2020b).[1]

4.0 Argument/adjunct asymmetries supporting VSVPE

There is also a strong positive argument in favor of VSVPE in languages such as Hindi, Bangla, and Japanese which is not successfully argued against in Oku (2016) and Landau (2020b) and therefore remains significant justification of VSVPE analyses. The argument involves an asymmetry in the interpretation of missing VP-internal material, initially highlighted in Simpson et al (2013) for Hindi, Bangla and Malayalam, and then also observed for Japanese in Funakoshi (2016). The critical observation is the following. Adverbial elements present in an antecedent

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[1] A further way in which Landau seeks to substantiate his claims against the occurrence of VSVPE involves sentences with negated verbs of creation and pronouns which are intended to refer to the objects of such verbs, as in the Hindi example below from Landau (2020b: 348 ex.12). Landau suggests that if VSVPE were to derive such examples and allow for negation to scope narrowly over an elided adverbial *recipe-ke anusaar* 'according to the recipe', this should allow for the second pronoun *vo* 'it' to refer to the object of *banaayaa* 'made' in the preceding sentence. The fact that it is not natural to use an overt pronoun in such instances is argued to support an analysis of argument ellipsis over VSVPE – the negation necessarily scopes over the object, negating its existence, as there is no null adverbial for it to scope over.

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

However, if negation is removed, so that the existence of the object is not negated, as in (i), a similar follow-on sentence with a pronoun is still very unnatural, according to speakers of Hindi. Yet for Landau, (i) is expected to be good, with argument ellipsis setting up a referent for the following pronoun. The fact that (i) is not acceptable indicates that there is a general problem using overt pronouns in Hindi to refer back to null objects, regardless of how they might be formed, and, importatntly, the patterns do not distinguish VSVPE from argument ellipsis.

(iii)　　Ram-ne　ek cake recipe-ke　anusaar　banaayaa. vo bahut tasty thaa.
　　　　Ram-ERG one cake recipe-GEN according made　　it　very tasty was
　　　　Sita-bhii banaayaa.　??vo bekaar thaa.
　　　　Sita-also made　　　it bad　was
　　　　'Ram baked a cake according to the recipe. It was very tasty. Sita also did so. It was
　　　　bad.'

Additionally, in English, where VP ellipsis is widely assumed to occur, sentence pairs of the type that Landau presents as arguments against a VP ellipsis analysis in Hindi, Japanese etc are also not easy to interpret, as shown in (ii):

(ii)　　Mary gave birth to a baby girl in the hospital. It was 10 pounds. Susan didn't _. ??It was
　　　　7 pounds.

The use of such sentences to distinguish VSVPE from argument ellipsis is therefore not reliable, and the infelicity of pronouns in these cases must be accounted for independently of whether VP ellipsis or argument ellipsis occurs.

sentence/clause can be interpreted as modifying a following clause/sentence in which the object of the verb has been omitted, as in (27a/b and 28a/b) below, but such interpretations are *not* possible when the repeated object is not omitted, as seen in (27c/28c):

(27)   a. Ram du ghOnTa dhore Chomsky-r   notun lekha-Ta poRlo.   *Bangla*
         Ram two hour   taking Chomsky-GEN new paper-CL   read.PAST
        'Ram read Chomsky's new paper for two hours.'
        b. Raj-o _ poRlo
         Raj-also read.PAST
         'Raj also read the paper for two hours.'
        c. Raj-o _ lekha-Ta poRlo
         Raj-also paper-CL read-PAST
         'Raj also read the paper.' NOT communicated: 'for two hours'
         (Simpson et al 2013:112)

(28)   a. Ram-ne Chomsky-ka   naya lekh   do   baar padha.   *Hindi*
         Ram-ERG Chomsky-GEN new writing two time read.PAST
        'Ram read the new paper by Chomsky twice.'
        b. Raj-ne-bhi _ padha.
         Raj-ERG-also read.PAST
         'Raj also read the paper twice.'
        c. Raj-ne-bhi   vo   lekh _ padha.
         Raj-ERG-also that writing read.PAST
         'Raj also read the paper.' NOT communicated: 'twice'
         (Simpson et al 2013:112)

The VSVPE hypothesis has a straightforward explanation for such restrictions on the interpretation of missing adjuncts. Such elements can only be interpreted as syntactically present if the full VP constituent containing them has been elided. In instances where the object of the preceding sentence is repeated in the second sentence, this signals that the VP in the latter has not been elided and blocks any null adjunct interpretation. In AE-only approaches, such patterns are problematic, as null adverbial interpretations are not analyzed as being dependent on the null/overt status of objects in any syntactic way such as VP ellipsis. Landau (2020b: 348, fn7) attempts to dismiss such a challenge for AE-only analyses rather summarily in a footnote: 'The authors [Simpson et al 2013] 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 approach (see Oku 2016).' To see whether a 'focus-sensitive' pragmatic analysis can indeed explain away these interpretive restrictions, we therefore need to consider Oku (2016) and how he approaches such potentially problematic data for AE-only approaches.

      Oku (2016) draws heavily on Kuno (1982) and his 'Ban against partial discourse deletion' principle in (29):

(29)   *Ban against partial discourse deletion*
        If discourse deletion of recoverable constituents is to apply, apply it across the board to nonfocus constituents. Nonfocus constituents which are left behind by partial discourse deletion will be reinterpreted, if possible, as representing contrastive foci.
        (Kuno 1982, 84-85)

Kuno's pragmatic principle proposes that if old material is going to be elided, all of such old material should be deleted wherever possible. Applied to the putative VSVPE patterns in (27-28), Oku argues that this should enforce the non-repetition of the object if the adverbial is not repeated, i.e. *both* object and adverb should not be pronounced if either one of these is repeated, hence (27b/28b) are fine, with the null adjunct interpretation when the object is not pronounced, but (27c/28c) violate Kuno's *Ban against partial discourse deletion*. In the latter cases, because the object is pronounced, this is taken to block any interpretation in which the adverbial is also understood to be present and modify the meaning of (27b/28b). If such an interpretation had been intended by the speaker, she should have left both the adjunct and the object unpronounced, as in (27b/28b) (or alternatively pronounced both elements).

Does Kuno's intuition and Oku's application of (29) to VSVPE-type patterns effectively explain the absence of null adjunct readings when objects from preceding sentences are repeated? If they did, this would certainly remove one of the strongest arguments given for the occurrence of VSVPE. The answer is 'no', however - there are two reasons why the reliance on a pragmatic principle such as (29) fails to provide an account of the critical (and very robust) restriction on null adjunct interpretations found in examples such as (27c/28c).

First of all, such an approach makes a clear prediction which turns out to be false. If (29) enforces across-the-board deletion (non-pronunciation/non-repetition) of objects as well as adjuncts in order for the latter as well as the former to be interpreted in follow-on sentences (like (27b/28b), it is expected that repeated adjuncts would have to be deleted whenever objects are elided, but this is not the case. Manetta (2019:922) notes that the adjuncts in such examples can indeed be retained and pronounced *when objects are elided*, as illustrated in (30-31) (which are related to (27) and (28)):

(30) a. Ram du ghOnTa dhore Chomsky-r   notun lekha-Ta poRlo.   *Bangla*
         Ram two hour   taking Chomsky-GEN new paper-CL read.PAST
          'Ram read Chomsky's new paper for two hours.'
      b. Raj-o   du ghOnTa dhore _ poRlo
         Raj-also two hour   taking   read.PAST
         'Raj also read the paper for two hours.'

(31) a. Ram-ne Chomsky-ka   naya lekh   do baar padha.   *Hindi*
         Ram-ERG Chomsky-GEN new writing   two time read.PAST
         'Ram read the new paper by Chomsky twice.'
      b. Raj-ne-bhi   do baar   padha.
         Raj-ERG-also two time read.PAST
         'Raj also read the paper twice.'

There is consequently an important asymmetry in the non-pronunciation of objects and adverbials which is not anticipated in a broad pragmatic principle such as (29), which dictates that deletion/non-repetition should apply across-the-board to *all* informationally-old elements which can be left unpronounced. The argument vs. adjunct asymmetry can be simply explained by VSVPE approaches, in which the deletion of an element higher in the VP (adverbials) depends on deletion/ellipsis of all lower elements (objects) in the VP, so that VP ellipsis can take place. By way of contrast, if AE is taken to be possible in addition to VSVPE (as assumed in

approaches such as Simpson et al 2013), the ellipsis of objects does not necessarily require the deletion of adjuncts as AE applies to individual arguments and may occur without full VP ellipsis. AE-only lines of analysis, as in Oku (2016) and Landau (2020b) are left without any account of these patterns if they rely on Kuno's general pragmatic principle (29), which makes no distinction between arguments and adjuncts and the different syntactic positions of such elements within VPs.

        Second, Oku's (2016) claim about the application of (29) in sentences involving negation is that a repeated object will be re-interpreted as a contrastive focus and function as the focus of negation, giving rise to an interpretation in which the event depicted by a verb and its object does not take place. Making use of English words for convenience in (32), to represent putative VSVPE languages (such as the Bangla and Hindi patterns seen in (27c) and (28c)), the repeated object 'the sign' will, in such a view, be construed as a contrastive focus. If this consequently results in a negation of the event reading and no reading of the sign takes place, it is argued that there can be no interpretation of the adjunct in such contexts – if the subject does not read the sign, then there will be no 'loud' reading of the sign.

(32)   He read the sign loudly, but I didn't read the sign.

However, a non-trivial error occurs in the reasoning applied to such cases. If a repeated object is construed as a contrastive focus, this should not necessarily force a negated-event reading of a repeated verb + object pair. Instead, such sequences should allow interpretations in which the object is understood to be in contrast with other potential objects, licensing the interpretation of an event actually taking place with some other object from a contextually-available contrast set. And if such an event can be understood to take place with some other object, there is no reason why this event might not be construed as occurring in the manner depicted by an adverbial present in a preceding clause (licensing an interpretation: '..what I read loudly was not the sign but something else'). Yet speakers of Hindi, Bangla and Japanese are reported to consistently reject repeated-object sentences with null adjunct readings (as, for example, in (27c) and (28c)), suggesting that Oku's interpretation of (29) is not an effective way to rule out null adjunct readings in general, when an object is repeated from a preceding sentence. Furthermore, it can be noted that speakers of Hindi and Bangla (at least) do not automatically construe repeated objects as contrastive foci, a key assumption in the kind of pragmatic account proposed in Oku (2016).

        The conclusion to be drawn from all of the above is that the asymmetries in interpretation with arguments and adjuncts remain important pillars of support for the VSVPE hypothesis and cannot simply be side-lined by means of a general pragmatic principle such as (29), as assumed in Oku (2016) and Landau (2020b). These patterns continue to constitute strong evidence for VP ellipsis in the generation of sentences such as (27-28) and are ultimately *not* accounted for by AE-only approaches such as Oku (2016) and Landau (2020b).

        Finally, the assumption that VSVPE is licensed to occur in certain languages provides a principled syntactic analysis of important differences in interpretation that are found across languages with regard to the construal of VP adverbial elements in contexts of ellipsis. When frequency, duration, location, and manner adverbials present in antecedent sentences are interpreted in following elliptical sentences in languages such as Hindi, Bangla and Japanese, the VSVPE approach attributes this to their syntactic occurrence in underlying VPs whose phonetic content is not realized, following raising of the verb out of the VP. By way of contrast, in

Landau (2020b) such interpretations are attributed to processes of simple pragmatic enrichment, rather than syntactic VP ellipsis. It is suggested that examples such as (3) repeated below, where 'slowly' is present in (3a) but not (3b), though easily interpretable in (3b), are cases in which 'The second conjunct is … *compatible with the adjunct* (Gita may have drawn the circle slowly)' (Landau 202b:347; emphasis added).

(3) a. Amit-ne dheere-dheere ek vritt   banaya.   *Hindi*
        Amit-ERG slowly   one circle draw.PRES.M.SG
        'Amit drew a circle slowly.'
    b. Gita-ne bhi _ banaya
        Gita-ERG also draw.PRES.M.SG
        'Gita also drew a circle slowly.'
        (Simpson et al 2013:110)

The VSVPE vs. pragmatic enrichment approach can be usefully distinguished when object gap sentences are compared across different languages. Significantly, whereas Hindi, Bangla and Japanese all readily allow for frequency, duration, location, and manner adverbials to be interpreted in object gap sentences, as illustrated earlier in (3-5), such interpretations are *not at all possible* in object gap sentences in Chinese, as noted in Li (2002), and Aoun and Li (2008), and shown in (33-35) from Aoun and Li (2008):

(33)   wo jian-guo ta   san ci   le.   tamen ye jian-guo _le.   *Mandarin*
        I meet-ASP him 3 time ASP   they also meet-ASP ASP
        'I met him three times. They also met him.'
        No available interpretation: 'They also met him three times'

(34)   wo renshi ta   hen jiu   le. wo baba ye renshi _.   *Mandarin*
        I   know him very long ASP my father also know
        'I know him for a long time. My father also knows him.'
        No available interpretation: 'My father also knows him for a long time'

(35)   wo renzhende zuo gongke.   ta ye   zuo-le _.   *Mandarin*
        I diligently   do homework   he also do-ASP
        'I did my homework diligently. He also did his homework.'
        No available interpretation: He also did his homework diligently.[2]

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[2] The patterns in (33-35) contrast with instances of clear VP ellipsis in Chinese, where frequency, duration, location, and manner adverbials are interpreted (examples from Aoun and Li 2008):
(i)   wo yao tanwang ta   san ci;   tamen ye yao _.
        I want visit   him 3   time they also want
        'I want to visit him three times. They also want to visit him three times.'
(ii)   wo hui renzhende zuo gongke.   ta ye   hui _.
        I   will diligently do   homework   he also will
        'I will do my homework diligently. He also will do his homework diligently.'
Such contrasts suggest that Chinese does not have VSVPE and that sloppy readings of object gaps are derived via simple AE.

If null adverbial interpretations in Hindi, Bangla and Japanese arise as the result of a general process of pragmatic enrichment applying to object gap sentences in these languages, it is naturally expected that the same process of pragmatic enrichment should be available in other languages in parallel linguistic contexts. However, this is not the case, and the null adjunct interpretations which are easily possible in Hindi, Bangla and Japanese are simply not present in Chinese. This very telling contrast can be accounted for in a straightforward way in a syntactic approach but not via notions of general pragmatic compatibility. The difference between Hindi/Bangla/Japanese and Chinese can be reduced to the occurrence of VSVPE in the former languages but not the latter, with VSVPE being dependent on verb-raising to a certain height in the clause, a well-accepted area of syntactic variation across languages.[3] The pragmatic enrichment approach to null adverbial interpretations has no plausible way to account for the cross-linguistic variation found with such interpretations, as general processes of pragmatic enrichment can be assumed to be equally available to speakers of all languages and are not parametrizable in the way that specific syntactic phenomena such as verb movement may be.

5.0 The legitimacy of VSVPE

So, how does this leave the status of VSVPE? It can be concluded that the general case against VSVPE has *not* been well-made, despite recent attempts to argue against the derivation of object gaps via verb-raising and VP ellipsis. Initial claims in Oku (1998) based on the interaction of negation and adjuncts have now clearly been empirically disproved. Landau's (2020b) more focused narrow scope test involving negation similarly has important flaws, both empirically and methodologically, and does not allow for the strong conclusions drawn by its author.[4] And Oku's (2016) suggestion that a purely pragmatic principle can explain away important argument/adjunct asymmetries in ellipsis fails to give a convincing account of such patterns, as noted in section 4. The range of evidence which supports the VSVPE hypothesis, provided by the patterning of adjuncts, consequently remains as significant justification for VSVPE, leaving

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[3] In Simpson, Choudhury and Menon (2013), evidence is presented that Hindi, Bangla and Malayalam exhibit both VSVPE and argument ellipsis/AE. Here it has been concluded that Chinese has AE but not VSVPE. It will be interesting for future research to investigate the fuller cross-linguistic typology of AE and VSVPE and whether there are also languages with VSVPE but not AE, or whether there is some regular connection between the occurrence of these two forms of ellipsis.

[4] It can be noted that, in addition to the points made in section 3, there are other related objections which can be made to the principle line of reason presented in Landau (2020b). A key assumption made by Landau is that negation should be able to take narrow scope over a syntactically-represented adjunct if ellipsis of a containing constituent has taken place. Landau (2020b:355) explicitly takes Finnish to be a language in which TP may undergo ellipsis after the verb has raised out of TP to a higher polarity head. Landau comments that 'This type of ellipsis is expected to be adjunct-inclusive'. However, it is not. When the negation test is applied in such structures, negation takes broad scope over the event and cannot naturally take narrow scope over just the adjunct (Elsi Kaiser, p.c.). Even languages assumed to have larger constituent ellipsis thus may seem to disallow the narrow scope of negation over missing adjuncts, contra the prediction and expectation in Landau (2020b).

(i)   Q: Did you see Bill in London?

        A1: En nähnyt.

          NEG saw

          'No'.

        Interpretation: Negation scopes over the event and cannot naturally scope over just the adjunct.

such an approach as the strongest account still available for many instances of ellipsis involving null objects and missing-but-interpreted adjunct material.[5]

REFERENCES

Aoun, Joseph & Yen-Hui Audrey Li. 2008. Ellipsis and missing objects. **In** Robert Freidin, Carlos Otero & Maria Luisa Zubizarreta, editors. *Foundational Issues in Linguistic Theory*. Cambridge, Mass.: MIT Press. 251-274.

Cheng, Hsu-Te. 2013. *Argument ellipsis, classifier phrases, and the DP parameter.* Doctoral thesis. Storrs: University of Connecticut.

Funakoshi, Kenshi. 2016. Verb-stranding verb phrase ellipsis in Japanese. Verb-stranding verb phrase ellipsis in Japanese. *Journal of East Asian Linguistics* 25:113–142.

Goldberg, Lotus. 2005. *Verb-stranding VP ellipsis: a cross-linguistic study*. Doctoral thesis. Montreal: McGill University.

Gribanova, Vera. 2013. A new argument for verb-stranding verb phrase ellipsis. *Linguistic Inquiry* 44:145-157.

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.

Li, Hui-Ju Grace. 2002. *Ellipsis constructions in Chinese*. Doctoral thesis. Los Angeles: University of Southern California.

Manetta, Emily. 2019. Verb-phrase ellipsis and complex predicates in Hindi-Urdu. *Natural Language and Linguistic Theory* 37:915–953.

Otani, Kazuyo & John Whitman. 1991. V-raising and VP-ellipsis. *Linguistic Inquiry 345-58.*

Oku, Satoshi. 1998. *A theory of selection and reconstruction in the minimalist program*. Doctoral thesis, Storrs: University of Connecticut.

Oku, Satoshi. 2016. A note on ellipsis-resistant constituents. *Nanzan Linguistics* 11:56-70.

Sato, Yosuke. 2019. Comparative syntax of argument ellipsis in languages without agreement: a case study with Mandarin Chinese. *Journal of Linguistics* 55:643-669.

Simpson, Andrew, Arunima Choudhury, & Mythili Menon. 2013. Argument ellipsis and the licensing of covert nominals in Bangla, Hindi and Malayalam. *Lingua* 134:123-138.

Takahashi, Daiko. 2008a. Noun phrase ellipsis. **In** Shigeru Miyagawa & Mamoru Saito, editors. *The Oxford Handbook of Japanese Linguistics*. Oxford: Oxford University Press. 394-422.

Takahashi, Daiko. 2008b. Quantificational null objects and argument ellipsis. *Linguistic Inquiry* 39, 307-326.

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[5] There is also non-adjunct-related evidence strongly justifying VSVPE which Landau (2020b) does not attempt to confront or provide an alternative explanation for. Manetta (2019) and Gribanova (2013) show that a disjunction present in a preceding sentence can be understood in a following sentence where the object of a verb is missing, as in (1) below from Hindi. Assuming that there is no process of 'disjunction drop', this indicates that there must be ellipsis of the VP containing thee disjunction and the two objects linked by the disjunction, hence VSVPE. Manetta notes that an AE-only approach cannot explain such patterns.

(i) a. kyaa Ram-ne   Sita-ko   santaraa yaa Mina-ko   amruud diy-aa   thaa?
    Q   Ram-ERG Sita-DAT orange   or   Mina-DAT guava give-PERF.M AUX.PST.M
   'Had Ram given an orange to Sita or a guava to Mina?'
  b. HaaN, Ram-ne __ diy-aa   thaa.
   Yes, Ram-ERG   give-PFV.M AUX.PST.M
  'Yes, Ram had given (an orange to Sita or a guava to Mina).'
  [crucially true even if Ram only gave a guava to Mina] (Manetta 2019:921)