

# Predicate formation and verb-stranding ellipsis in Uzbek

## Appendix B: Adjuncts and negation in Uzbek VSE

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A diagnostic that has been very productive in arguments against the availability of a VSE derivation in languages with an independently available AE operation involves the interaction of negation with VP-adjuncts putatively inside the ellipsis site in verb-stranding configurations (Park 1997; Oku 1998; Bailyn 2014; Landau 2020b; 2018). In the configurations of interest, the antecedent is positive while the stranded verb bears negation. The verb has to be a “creation” verb, meaning that when it is negated, the existence of any direct object is denied. This diagnostic is valuable for its capacity to make a convincing case for an AE analysis being the correct and sole analysis in certain languages with verb-stranding constructions. It is therefore important to understand what this diagnostic can tell us about Uzbek, which I have argued can make use both of VSE and AE operations.

In what follows, I first present the diagnostic and discuss its logic; I then discuss how Uzbek fares with respect to this kind of test. The results are somewhat mixed, but the main argument I try to make here is that we do not understand the source of these effects to begin with. This is because indisputably large ellipses in Uzbek, which subsume at least one lexical verb, also give rise to mixed effects with respect to the diagnostic at hand — a pattern we see repeated for Lithuanian (*Portelance To appear*) and Polish (Asia Pietraszcko, p.c.). These patterns therefore require further scrutiny before we conclude much on their basis about whether a language permits VSE, AE, or both.

Unlike in VSE derivations, AE — as defined in the literature that calls on this diagnostic — can elide only arguments; the standard assumption in the literature is that adverbial or PP modifiers and predicates may not undergo AE. What we expect, then, is that when such material is in an antecedent, its interpretation in an ellipsis site can only be due to the application of VSE. This much was already shown for Uzbek in §4 of the body of the paper, where we find adverb- and predicate-inclusive interpretations of verb-stranding configurations. The debate about AE vs. VSE analyses of verb-stranding constructions first arose in the literature on Japanese and Korean; a point that was made early on in those discussions (Park 1997; Oku 1998) is that the VSE analysis makes a prediction about the interpretation of adverbial/PP modifiers and (secondary) predicates under negation: negation scoping over any of these modifiers should give rise to a reading in which the adverb/modifier/predicate is interpreted in the ellipsis site, in the scope of that negation. This is borne out, for example, in English VP ellipsis (1).

- (1) I baked the cake according to the recipe, but John didn't. It came out quite disgusting.

The VSE analysis predicts non-argument material should be interpreted in the ellipsis site under the scope of negation, if the stranded verb is negated (in parallel with the English example in (1)). However, in a subset of relevant languages, the prediction is not borne out: the reading in (1) is not available.<sup>1</sup> Instead, the only reading native speakers report being available is one in which the event is negated. An example from Hebrew, where both AE and VSE have been argued to obtain (Doron 1991; 1999; Goldberg 2005; Landau 2018), is given below.

(2) *Hebrew* (Landau 2018)

Yosi afa et ha-uga lefi ha-matkon. hi kayta me'ula. Gil lo afa. #hi  
 Yosi baked ACC the-cake according the-recipe it was fabulous Gil NEG baked it  
 hayta ma'ila.  
 was disgusting

'Yosi baked the cake according to the recipe. It was fabulous. Gil didn't bake the cake. #It was gross.'

The follow up in the above Hebrew example, which speakers find nonsensical, would only make sense if the PP modifier *according to the recipe* were interpretable inside the ellipsis site. In Hebrew, the PP is not interpreted in the ellipsis site, and the result is a follow-up sentence that contradicts the sentence that came before it: for example, if Gil didn't bake the cake, the cake does not exist and cannot have any properties attributed to it.

This result sets up an analytical tension: on the one hand, there is good evidence in many languages for a VSE operation. On the other, if VSE were systematically available, we would expect an interpretation to readily obtain that sometimes does not obtain. Two ways to resolve this tension present themselves. One approach, taken recently by Bailyn (2014), Landau (2018), Landau (2020a), Landau (2020b), and others, is to argue that VSE is after all not available in these languages, and to reanalyze all of the arguments in favor of VSE and/or show that they do not genuinely hold up. A second approach is to consider what factors may be getting in the way of VSE applying in these specific configurations in some languages, even if it is generally available in those languages. The idea is that some independent constraints may militate against the application of VSE in these environments, leaving only AE as a possible parse of these strings. Such explanations have been proposed recently for Greek by Merchant (2018) and Hindi-Urdu by Manetta (2018).

I have argued so far that both AE and VSE are available in Uzbek, and in this context the diagnostic described just above is relevant to Uzbek, too. The results are not as clear as one might like. The set of Uzbek examples presented in this Appendix is the set with by far the greatest degree of disagreement among native Uzbek speaker consultants with respect to the interpretations that may or may not arise. The Uzbek examples in this section are structured as follows. Each Uzbek example represents a dialogue. The (a) examples are uttered by speaker 1, and are always grammatical; the (b) examples are the first part of a response by a second speaker (2), and are also grammatical. What we are assessing in these examples is the extent to which the (c) examples — spoken by speaker 2 — are acceptable as a follow-up to the (b) examples. If they are acceptable, this should serve as a strong indication that an adjunct-inclusive interpretation for the (b) examples is available (indicating a VSE analysis). If the follow-ups in (c) are not acceptable, then that will be

<sup>1</sup> This is true in Greek (Merchant 2018), Hindi-Urdu (Manetta 2018), Turkish (Şener & Takahashi 2010), Hebrew (Landau 2018), Persian (Sato & Karimi 2016), American Sign Language (Koulidobrova 2017), Russian (Bailyn 2014), and others.

taken as an indication that the verb-stranding strings in (b) are not able to give rise to an adjunct-inclusive interpretation (indicating — according to the logic of the diagnostic — that a VSE analysis is not available).

We can begin by observing that the interpretation that is predicted to obtain if VSE applies — in which the non-argument material may be interpreted in the scope of sentential negation, which is morphologically expressed on the stranded verb — does obtain stably in certain cases.

- (3) a. Zamira musqaymoq ye-gan-i-da doim hursand bo'l-a-di-mi?  
 Zamira ice.cream eat-PTCP-3.POSS-LOC always happy become-PRS-3-Q  
 'Does Zamira always become happy when eating ice cream?' (SPEAKER 1)
- b. Yo'q, bo'l-ma-y-di.  
 no become-NEG-PRS-3  
 'No, [she] doesn't [always] become [happy while eating ice cream].' (SPEAKER 2)
- c. Go'sht ye-gan-i-da hursand bo'l-a-di.  
 meat eat-PTCP-3.POSS-LOC happy become-PRS-3  
 '[She] becomes happy when eating meat.' [✓ for 4/5 speakers]
- (4) a. Bu yil kitob yoz-d-ingiz-mi?  
 this year book write-PST-2-Q  
 'Did [you] write a book this year?' (SPEAKER 1)
- b. Yo'q, yoz-ma-d-im.  
 no write-NEG-PST-1SG  
 'No, [I] didn't write [a book this year].' (SPEAKER 2)
- c. O'tgan yili yoz-gan-d-im.  
 last year write-PTCP-PST-1SG  
 '[I] had written [it] last year.' [✓ for 4/5 speakers]

Examples of this kind were judged to give rise to the relevant interpretation by the majority of speakers I consulted,<sup>2</sup> as evidenced by the naturalness of the follow-up sentence in each example (e.g. *Go'sht yeganida hursand bo'ladi* in (3)). This much supports the claim that VSE is generally available in Uzbek, as argued in the body of this paper. This position is further supported by the observation that if the ellipsis applies to AP predicates of verbs, adjuncts are interpreted in the scope of negation, inside the ellipsis site (3).

It is also the case, however, that the relevant interpretation is not as regularly or stably available in structurally similar environments.

- (5) a. Farhod non-ni retsept-ga asoslanib qil-d-i-mi?  
 Farhod bread-ACC recipe-DAT according do-PST-3-Q  
 'Did Farhod bake the bread according to the recipe?' (SPEAKER 1)
- b. Yo'q, qil-ma-d-i.  
 no do-NEG-PST-3  
 'No, [he] didn't bake [it] [?according to the recipe].' (SPEAKER 2)
- c. Non dabdala chiq-d-i.  
 bread destroyed rise-PST-3  
 'The bread came out ruined.' [✓ for 2/5 speakers]

<sup>2</sup> For a specific report on judgments provided for these and other examples, see <https://purl.stanford.edu/zy925pp8644>.

- (6) a. Farhod Zamira-ni xafaligida ko'r-d-i-mi?  
Farhod Zamira-ACC sad see-PST-3-Q  
'Did Farhod see Zamira sad?' (SPEAKER 1)
- b. Yo'q, ko'r-ma-d-i.  
no see-NEG-PST-3  
'No, [he] didn't see [her] [?sad].' (SPEAKER 2)
- c. Hursandligida ko'r-d-i.  
happy see-PST-3  
'[He] saw [her] happy.' [✓ for 3/5 speakers]
- (7) a. Farhod to'siq-ni qizil-ga bo'ya-d-i-mi?  
Farhod fence-ACC red-DAT paint-PST-3-Q  
'Did Farhod paint the fence red?' (SPEAKER 1)
- b. Yo'q, bo'ya-ma-d-i.  
no paint-NEG-PST-3  
'No, [he] didn't paint [the fence] [?red].' (SPEAKER 2)
- c. Qora-ga bo'ya-d-i.  
black-DAT paint-PST-3  
'[He] painted [it] black.' [✓ for 3/5 speakers]

It is difficult to formulate any concrete hypotheses about what differentiates between the examples in (3–4) vs. (5–7). It may be that, in the absence of definitive factors that would favor VSE over AE (or vice versa), speakers simply choose the analysis that is more accessible to them, or is their default. Further investigation, involving more examples of this type and more speaker judgment collection, would be necessary to begin hypothesis construction and testing.

A perhaps even more vexing observation is that other types of ellipsis in Uzbek — those which would require ellipsis of a constituent containing a lexical verb and its complements, minimally — also do not systematically permit the adjunct-inclusive reading with creation verbs and negation.

- (8) a. Farhod ona-si uchun non-ni retsept-ga asoslanib yop-ib  
Farhod mother-3SG.POSS for bread-ACC recipe-DAT according close-CONV  
ber-ish-ga harakat qil-d-i.  
give-NMLZ-DAT effort do-PST-3  
'Farhod made an effort to bake the bread for his mother according to the recipe.'  
(SPEAKER 1)
- b. Ota-si uchun esa, qil-ma-d-i.  
father-3SG.POSS for EMPH do-NEG-PST-3  
'For his father, [he] didn't make [an effort to bake the bread according to the recipe].'  
(SPEAKER 2)
- c. Non dabdala chiq-d-i.  
bread destroyed rise-PST-3  
'The bread came out ruined.' [✓ for 3/5 speakers]

To understand the significance of this example, some unpacking is first required. The combination *harakat qilmoq* means literally “to make an effort”, and *harakat* in the example above selects

obligatorily for a complement in the dative case — this the dative marker on *berishga*. The combination *yopib berishmoq* is a complex predicate and can be literally translated as “closing give”; its idiomatic meaning is “to bake in an oven”.

What is elided in (8b), where there is a stranded negated verb *qilmadi*? To reconstruct any meaning at all from such a response, the elided material must minimally contain the Uzbek equivalent of *effort to bake the bread*. But if it contains this much, it must also contain the modifier, *retseptga asosanib* ‘according to the recipe’. Landau’s (2018; 2020b) argument is that AE can apply to individual arguments of a verb without applying to modifiers — but eliding individual arguments would not generate the string in (8b), since (nominalized) verbs must also be elided. AE could alternatively apply once to the entire complement of *qilmoq* ‘do’ — but if that were the case, that large ellipsis would also need to contain the modifier. In short, there is no way to yield a string like (8b) without applying ellipsis to the modifier. The mystifying thing is that some speakers *still* do not obtain an adjunct-inclusive reading for the response in (8b) — and that set of speakers correspondingly does not find (8c) an acceptable follow-up to (8b).

Although this effect is mystifying, it is not entirely surprising. A similar point has already been made by Portelance (To appear) for Lithuanian: although the adjunct-inclusive reading does not hold in Lithuanian VSE, it also doesn’t hold in Lithuanian auxiliary-stranding verb phrase ellipsis, in which it must be the case that ellipsis of a VP constituent — including the main verb and including any low-attaching modifiers — is elided.

(9) *Lithuanian* auxiliary-stranding VPE (Portelance To appear)

- a. Šis paršelis buvo pastatęs savo namą iš  
This piglet.NOM be.PST.3SG PERF.BUILD.PRT.M.SG self.GEN house.ACC from  
plytų, o šitas paršelis nebuvo \_.  
bricks.GEN, but that piglet.NOM NEG.BE.PST.3SG \_.  
‘This piglet was building his house with bricks, but the other one wasn’t.’
- b. # Vilkas nuvertė jo namą.  
wolf.NOM PERF.TOPPLE.PST.3SG 3SG.GEN house.ACC  
#‘The wolf blew his house down.’

(10) *Lithuanian* VSE (Portelance To appear)

- a. Šis paršelis pastatė savo namą iš plytų, o  
This piglet.NOM PERF.BUILD.PST.3SG self.GEN house.ACC from bricks.GEN, but  
šitas paršelis nepastatė \_.  
that piglet.NOM NEG.PERF.BUILD.PST.3SG \_.  
‘This piglet built his house with bricks, but that little piglet didn’t build [it].’
- b. # Vilkas nuvertė jo namą.  
wolf.NOM PERF.TOPPLE.PST.3SG 3SG.GEN house.ACC  
#‘The wolf blew his house down.’

Asia Pietraszko (p.c.) reports the same effect for Polish, which also has both a verb-stranding and an auxiliary-stranding type of ellipsis. The adjunct-inclusive reading is not generally available for either operation if the stranded verb or auxiliary is negated.

- (11) *Polish* Aux-stranding VPE (Asia Pietraszko, p.c.)
- a. Będziesz podgrzewała wodę na piecu?  
 aux.FUT.2SG heat water on stove  
 ‘Will you heat the water on the stove?’ (SPEAKER 1)
- b. Nie będę. #W mikrofalówce.  
 Not aux.FUT.1SG in microwave  
 ‘I won’t. #In the microwave.’ (SPEAKER 2)
- c. Nie. W mikrofalówce.  
 No in microwave  
 ‘No. In the microwave.’ (SPEAKER 2 – alternative response)
- (12) *Polish* VSE (or AE) (Asia Pietraszko, p.c.)
- a. Podgrzewałaś wodę na piecu?  
 heat.PST.2SG water on stove  
 ‘Did you heat the water on the stove?’ (SPEAKER 1)
- b. Nie podgrzewałam. #W mikrofalówce.  
 Not heat.PST.1SG in microwave.  
 ‘I didn’t heat [it]. #In the microwave.’ (SPEAKER 2)
- c. Nie. W mikrofalówce.  
 No in microwave.  
 ‘No, In the microwave.’ (SPEAKER 2 – alternative response)

Taken together, this evidence suggests, first, that more detailed investigation of these paradigms in each language with the relevant constellation of features — roughly, the languages discussed in Landau (2020b) or a superset thereof — is required. Such an investigation should also include a comparison with a type of ellipsis that would have to include the adjunct — i.e. the type that cannot be ellipsis of individual arguments of the verb, like auxiliary-stranding VPE.

Second, this is an appropriate stage to raise the question of what this evidence can tell us about AE vs. VSE analyses in any given language. The proposal by Landau (2018; 2020a) is that an AE account can explain why, in the relevant environments — a creation verb, positive antecedent, and negated stranded main verb — no adjunct-inclusive reading arises. The fact that in some subset of these languages, the adjunct-inclusive reading is also ruled out in cases of uncontroversial verb phrase ellipsis (or other larger constituent ellipsis) is a strong indication that some other explanation for the overall effect is required. Solving this very interesting puzzle is a job for a different paper. Here, I stop at pointing out that in the context of the evidence in this Appendix, it appears that the absence of an adjunct-inclusive reading in the relevant environments in Uzbek will, in any case, require a deeper explanation than an AE analysis could offer.

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