VERB-STRANDING VP ELLIPSIS IN TURKISH*

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1 Introduction

This paper is about verb-stranding VP ellipsis in Turkish. Turkish is one of the languages that, besides subject drop, also allows object drop. The phenomenon of omitting the object is called *null-object construction* and is illustrated in (1): in the second conjunct the transitive verb *eleştir* 'to criticize' appears with no overt object.

(1) Can [baba -s1] -nı öv -dü, Ali-yse eleştir -di. 'Can father-3SG-ACC praised-PAST, Ali however criticitized-PAST.' 'Can praised his father, Ali however criticized.'

Sentence (1), with the missing object in the second conjunct, has two possible readings:

2. a. Can praised his own father and Ali criticized Can's father too.

b. Can praised his own father and Ali criticized his own (Ali's) father.

Sloppy reading

The presence of the sloppy reading in (2.b) suggests that the null object construction in (1) involves ellipsis (Şener & Takahashi 2010; Gribanova 2020). However, there are two different analyses explaining the null object constructions with sloppy readings: the argument ellipsis analysis (AE) and the verb-stranding VP ellipsis analysis (VVPE). While the AE analysis proposes that the verb is generated outside the elided constituents and only the internal arguments are elided, the VVPE analysis proposes that the verb moves out of the verb phrase and the remnant VP undergoes ellipsis.

Argument Ellipsis analysis for Turkish has been put forward by Şener and Takahashi (2010). In this paper, I provide arguments to show that Turkish also has VVPE.

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2 Argument Ellipsis vs. Argument Drop

The null-object constructions can arise through two different mechanisms: argument drop and ellipsis. Turkish is known to drop subject and object arguments even in the absence of verbal agreement (Bošković & Şener 2014). However, apart from object drop, there is evidence that ellipsis is also necessary to derive the Turkish data. In particular, for a missing object to denote indefinite pronouns or refer to plural subjects, an ellipsis operation is required.

As shown in (3), indefinite pronouns cannot be dropped in Turkish, similar to Uzbek (Holmberg 2016). If an argument is dropped, it can only be interpreted as a pronoun, not as an indefinite.

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(3) pro Dün okul-a gel-di. (=he) (≠someone) yesterday school-DAT come-PAST. 'He came to school yesterday.'
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However, if there is an antecedent that contains an overt indefinite pronoun, the missing argument in the elliptical clause can be recovered and interpreted as an indefinite (4).

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(4) A: Birisi dün okul-a gel-di mi?
someone yesterday school-DAT come-PAST Q?
B: Gel-di. (=someone) (≠he)
Come-PAST.
'Someone came.'
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Also, the case of the optional plural agreement provides a similar case. If a plural animate subject is used overtly, the plural agreement becomes dispreferred, as in (5). However, in the absence of an overt antecedent, the subject of the verb without the 3rd person plural suffix can only be interpreted as singular, as shown in (6). This suggests that the third person plural *pro* in Turkish needs overt verbal agreement to be licensed (Kornfilt 1997).

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(5) Çocuklar dün okul-a gel-di /??gel-di-ler mi? children yesterday school-to come-PAST / come-PAST-3PL Q? 'Did children come to school yesterday?'
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(6) Gel-di. (=he/she/it) (≠they) come- PAST. 
'He/She/It came.'
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However, if the missing subject in a sentence with a singular-marked verb has an overt plural antecedent, as in (7), it can be interpreted as plural.

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(7) A: Çocuklar dün okul-a gel-di mi? children yesterday school-to come-PAST Q? 'Did children come to school yesterday?' B: Gel-di. (=they (≠he/she/it) come-PAST.
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'They came.'

In examples (4) and (7), B's answers show that null subjects in Turkish are not always dropped. To obtain the indefinite interpretation or refer to a plural subject, we need an antecedent. Without an overt antecedent, the omitted subject cannot be interpreted as an indefinite (6), or as plural in the absence of the plural suffix on the verb (7). Therefore, it seems that Turkish employs ellipsis operation in certain cases.

However, while this explains how certain null subjects are derived in Turkish, the case of null objects is more challenging as Turkish lacks object agreement but can still drop objects productively (Bošković & Şener 2014). In the following section, I show that, even though it is said that Turkish drops objects productively, in some cases an antecedent is still required for an object to go missing.

3 Argument Ellipsis vs. Verb-stranding VP Ellipsis

If a missing element allows both strict and sloppy readings, the sentence is argued to be an instance of ellipsis rather than dropped arguments (Şener & Takahashi 2010). If in sentences like (8) the null argument was always a pronominal and did not have any structure at all, only the strict reading would be available, and we could not account for the sloppy reading because the object position of the second conjunct would be an unpronounced version of the same object from the first conjunct. However, in sentence (8) the sloppy reading is available, which suggests that the second conjunct contains a noun phrase (annesini 'her mother'), which has been elided.

(8) Ayşe anne-si-ni öv-er, Fatma ise eleştir-ir. Ayşe her mother-3SG-ACC praise-AOR, Fatmer however criticitize-AOR. 'Ayşe praises her mother, however Fatma criticizes.'

(Strict **OK**, Sloppy **OK**)

Another piece of evidence for ellipsis comes from the quantificational and E-type readings. On the E-type reading, the missing element is interpreted as a pronoun, while on the quantificational reading, it is interpreted quantificationally. If the null objects are always pronominal, only the E-type reading is expected in sentences like (9), from Şener and Takahashi (2010, ex.26). However, we see that the second conjunct can have two interpretations. Firstly, it can mean that the burglars who Can caught are the same set of burglars that Filiz interrogated (E-type reading) or it means that the burglars who were caught by Can are different from the ones who were interrogated by Filiz (quantificational reading).

(9) Can. üç hırsız yakala-dı, Filiz ise *e* sorgula-dı. Can three burglar catch-PAST, Filiz however *e* interrogate-PAST. 'Can caught three burglars, however Filiz interrogated.'

(Quantificational **OK**, E-type **OK**)

As sentence (9) shows, the quantificational reading in Turkish is present, which suggests that the null object is not an empty pronominal but rather that the sentence involves ellipsis.

However, it is not certain which type of ellipsis is responsible for the ellipsis site here. It can be the result of either AE or VVPE. Şener and Takahashi (2010) argue that Turkish has Argument Ellipsis and does not have VVPE. They come to this conclusion by employing the "adverb-including reading" test, shown in English in (10). In (10), the adverb is interpreted in the elliptical sentence (*Bill didn't*), i.e., the sentence means that the car was not washed *carefully*. This provides a strong argument for VVPE (Manetta 2021).

(10) A: John washed the car carefully. B: Bill didn't.

=Bill didn't wash the car carefully. ≠Bill didn't wash the car at all.

Şener and Takahashi (2010) apply the test in Turkish and conclude that the adverb is not interpreted in the elliptical sentence. This suggests that the sentence is derived through AE. However, some speakers *can* interpret adverbs if additional context is provided (Manetta, 2021). Recent research has also shown that usage of certain connectives may facilitate the adverbincluding reading. For instance, Funakoshi (2014) argues that when the antecedent and the ellipsis sentences are conjoined with a disjunction connective (*but*), the interpretation of adverbs becomes more available in Japanese. This is also the case in Turkish. In sentences (11) and (12) *ise* 'however' and *ama* 'but' are used respectively. We see that the inclusion of the adverb in the interpretation is accessible in (12), with *ama* 'but', while it is not with *ise* 'however'.

Şener & Takahashi (2010):

- (11) Filiz sorun-u hızla çöz-dü, Ali-yse çöz-me-di. Filiz problem-ACC quickly solve-PAST, Ali, however, solve-NEG-PAST 'Filiz solved the problem quickly, Ali, however, did not solve it.'
- (12) Filiz sorun-u hızla çöz-dü, ama Ali [hızla] çöz-me-di. Filiz problem-ACC quickly solve-PAST, but Ali solve-NEG-PAST. 'Filiz solved the problem quickly, but Ali, did not solve it quickly.'

6/7= ✓

The adverb in sentence (12) is judged to be present by six out of seven native speakers of Turkish that I consulted. It might show that the adverb reading in Turkish can also be facilitated if a different connective is used. However, this also shows that "the adverb-including reading" is not a reliable diagnostic to test VVPE.

Landau (2018) also argues that in sentences like (13) adjunct meanings such as manner, place, and time, can easily be interpreted in the ellipsis sites due to pragmatics, so he comes up with another example to test whether AE or VVPE is present in Hebrew (13). This test involves a creation verb *bake* and negation.

(13) Yosi afa et ha-uga lefi ha-matkon. hi hayta me'ula. Gil lo afa ____. #hi hayta mag'ila. 'Yosi baked acc the-cake according the-recipe it was fabulous Gil not. it was gross.' Landau (2018, ex. 38) In (13), the elliptical sentence 'Gil not (baked)' cannot be followed by 'it was gross', because the combination of a creation verb and negation produces the entailment that there is no cake, suggesting that the PP modifier is not interpreted in the ellipsis site. This in turn suggests that it is the argument (cake) that is elided. To obtain the meaning that the cake was baked, the PP modifier must be interpreted in the ellipsis site. However, the fact that it is not interpreted suggests that the example does not involve VVPE. In contrast to Hebrew, in Turkish the continuation "it was gross" is felicitous and the PP modifier is interpreted in the elliptical sentence, as shown in (14). This suggests that VVPE is present in Turkish.

(14) Ayşe keki tarife göre pişir-di. Onunki oldukça lezzetli-ydi. Ama Aylin pişir-me-di. Onunki oldukça kötü-ydü.

Lit. 'Ayşe baked the cake according to the recipe. Hers was quite delicious. But Aylin didn't. Hers was quite bad.'

As these tests provide different results and reveal variability in judgements, other diagnostics are needed to argue for the presence or absence of VVPE in Turkish. One such test is used in Gribanova (2020), who relies on the reasoning that AE elides arguments independently, but not predicates. By using this diagnostic, we can show that predicates cannot be elided on their own, but as long as they are part of larger constituents, they can be elided. Sentences in (15a-b) illustrate object depictives in Turkish. While the NP predicate in (15a) cannot be elided, the predicate in (15b) can.

- (15) a. Ali Mehmet'i üzgün gör-dü. Elif de Cansu'yu gör-dü. Ali Mehmet-ACC sad see-PAST. Elif too Cansu-ACC see-PAST. 'Ali saw Mehmet sad. Elif saw Cansu too.' (≠ sad)
 - b. Elif Cansu'yu üzgün gör-dü. mü? Evet, gör-dü. Elif Cansu-ACC sad see-PAST Q? Yes, see-PAST. 'Did Elif see Cansu angry? Yes, saw.' (= she saw her angry)

Adjectival complements of verbs make the same point: the AP complement cannot be elided in (16a), where *Elif* is present, but it can go missing in (16b), where *Elif* is also absent. The contrast shows that predicates cannot be elided if other VP internal constituents are still pronounced. However, in sentences (15b and 16b), eliding predicates is possible as the other arguments of the verbs also go missing.

- (16) a. Yağmur bana mutlu görün-dü. Elif de Hasan'a görün-dü.
 Yağmur me happy seem-PAST. Elif too Hasan-DAT see-PAST.
 'Yağmur seemed happy to me. On the other hand, Elif seemed to Hasan.' (≠happy)
 - b. Yağmur bana mutlu görün-dü ama Hasan'a görün-me-di. Yağmur me happy seem-PAST but Hasan-DAT seem-NEG-PAST. 'Yağmur seemed happy to me, but to Hasan, she didn't seem happy.' (= happy)

The diagnostic shows that predicates can be elided only if other arguments in the verb phrase are also elided. This also provides evidence for the VVPE operation in Turkish as the predicates

are not targeted individually but rather elided as a part of a bigger constituent in the relevant examples.

Also, light verb constructions with ver- (give) and et- (make/do) can be used to check whether VP- internal constituents can be interpreted in sentences like (17b) and (18b). Sentences (17-18) show that VP internal constituents are not elided independently.

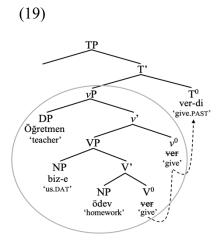
Interestingly, when the question clitic -mI appears in the sentence-final position, the most natural answer can be given when just the verb remains. If the subject and/or the object of the verb is not elided, the answer becomes degraded, as shown in (17c-d) and (18c-d).¹

- (17) A: Öğretmen bize ödev assignment give-PAST Q? Teacher us 'Did the teacher give us an assignment?'
 - B: Evet, ver-di. Yes, give-PAST. 'Yes, she did.'
 - C: *Evet, ödev ver-di. Yes, assignment give-PAST. 'Yes, she gave an assignment.
 - D: *Evet, bize ver-di. Yes, us give-PAST. 'Yes, she gave us.'
- (18) A: Ayse araba-yı park et-ti mi? Ayşe car-ACC park make-PAST Q? 'Did Ayse park the car?'
 - B: Evet, et-ti. Yes, made. 'Yes, she did.'
 - C: *Evet, araba-yı et-ti. Yes, car-ACC make-PAST. 'Yes, she parked the car.'
 - D: *Evet, park et-ti. Yes, park make-PAST. 'Yes, she parked.'

In order to make the answer felicitous, all VP-internal constituents must be elided, as in (17b) and (18b). AE is known to elide arguments independently but in sentences (15b-16b) and (17-18)

¹ It is probably because sentence final -mI has the widest scope and OuD is the whole event, so the VP can be elided in full. However, when -mI is on a different constituent, changing the QuD, inclusion of material other than only the verb becomes felicitous.

they are not elided independently. I propose that the VVPE strategy accounts for these sentences as only the verbs are stranded while all VP-internal arguments disappear. This is possible because the verb moves to T and escapes deletion, while internal arguments are elided in VP.



4 Verbal Identity Requirement

If Turkish allows VVPE, we would expect the Verbal Identity Requirement (Goldberg 2005), provided in (20), to hold as it is one of the characteristics of VVPE.

20. Verbal Identity Requirement

The antecedent- and target-clause main Vs of VPE must be identical, minimally, in their root and derivational morphology.

The requirement is argued to be present in Irish (McCloskey 2017) and Hebrew (Goldberg 2005; see Landau 2018 for discussion). However, there are also several languages (e.g., Greek, Persian and Hungarian) in which VIR does not hold but VVPE is argued to be present (Merchant 2018; Rasekhi 2018; Lipták 2013).

To check whether VIR holds in Turkish, we need to have an environment in which VVPE is the sole strategy to derive the sentence, i.e., AE and argument drop should not be possible. As discussed in the previous sections, predicates cannot be elided independently. Therefore, we need to check if mismatches in the verbs are allowed when the predicative adjective complement of verb is elided, as in (21) and (22). We find that mismatches in the verbs are not possible. Therefore, Turkish obeys Verbal Identity Requirement.

- (21) *Ben yemek güzel çık-ar san-dım ama (sadece) görün-müş. I food good turn out-PRS think-PAST but only appear-EVID. Intended: 'I thought the food would be tasty, but it only appeared [tasty].'
- (22) *İlk başta mutlu görün-me-di ama sonra hisset-ti. First happy appear-NEG-PAST but later feel-PAST.

Intended: 'First s/he did not seem happy but later she felt [happy].'

However, while declarative sentences clearly shows that mismatches are not allowed in VVPE environments, verbal mismatches seem to be allowed in the case of polar questions, as exemplified in (23).

(23) A: Ali yemeği sıcakken yedi mi?

Ali food while it was warm eat Q?

'Did Ali eat the food while it was warm?'

B: Yok, döktü.

No, spilled.

Intended: Ali spilled the food while it was warm.

Even though, there is a verbal mismatch in (23), the AdvP can still be interpreted as part of the answer in (23b), suggesting that it involves VVPE. Turkish is not the only language in which polar questions facilitate verbal mismatches. Gribanova (2020) also reports that the judgments on the mismatched verb- responses in Uzbek polar questions are not as robust as that of declarative sentences.²

Therefore, the non-uniform behavior of VIR in the declarative sentences and polar questions in Turkish poses an interesting question. If declarative sentences strictly obey VIR, why don't polar question behave the same? The reason might be due to the alternatives projected from the question clitic -mI. The clitic -mI might be evoking alternatives and making the question available to be answered with a non-identical and contrastive verb, as in (24).

(24) Ali yemeği sıcakken yedi mi (yoksa döktü mü)?

'Did Ali eat the food while it was hot (or did he spill it while it was hot)?'

The question can be answered with the contrastive verb *döktü* 'to spill' because the clitic *-mI* also allows the reading of the question where the focus is on the verb. This in turn creates alternatives that include all possible non-eat verbs.

This might show that Turkish does not require overt contrastive verbs (cf. Gribanova 2017) to allow mismatches in the case of polar questions, as the question clitic -mI makes the contrastive verbs more available.⁴

5 Conclusion

In this paper, I proposed that Turkish has Verb-stranding VP ellipsis contrary to what Şener and Takahashi (2010) argue. In section 2, I started by analyzing the differences in Argument Drop and Argument Ellipsis analyses of null constructions and argued that in some instances ellipsis operation is required. In section 3, I further showed that the null object constructions can yield quantificational and sloppy readings. To eliminate the possibility of AE analysis, I used the

² It should be noted that Uzbek APs can be interpreted only if the verbs are not mismatched differing from Turkish.

³ According to Kamali (2020), object attachment -mI leads to projective focal alternatives, while the verb-final -mI only creates polar alternatives. Therefore, the argument presented here is not in line with her proposal.

⁴ This might also suggest that the ellipsis operation is anaphoric to an implicit question rather than explicit linguistic material (see Barros & Kotek 2018). However, I leave this question to future work.

"adverb-including reading" test, the diagnostics developed by Gribanova (2020), and light verb constructions and proposed that VVPE is the mechanism that is involved in deriving these elliptical sentences. Finally, as the VVPE was the only possible mechanism in these environments, I investigated whether VIR holds in Turkish. We saw that Turkish obeys the requirement in declarative sentences while allowing violations in the polar questions. I argued that the reason why the VIR is violated in Turkish polar questions is due to contrastive alternatives projected from the question clitic -mI. The question of verb movement in Turkish, the availability of adverb interpretations and case of polar questions require further investigation and experimental study, and I leave them for future research.

References

- Bošković, Željko, and Serkan Şener. "The Turkish NP." *Crosslinguistic studies on noun phrase structure and reference*. Brill, 2014. 102-140.
- Funakoshi, Kenshi. "Verb-stranding verb phrase ellipsis in Japanese." *Journal of East Asian Linguistics* 25 (2016): 113-142.
- Goldberg, Lotus Madelyn. Verb-stranding VP ellipsis: A cross-linguistic study. McGill University (Canada), 2005.
- Gribanova, Vera. "Head movement and ellipsis in the expression of Russian polarity focus." *Natural Language & Linguistic Theory* 35 (2017): 1079-1121.
- Gribanova, Vera. "Predicate formation and verb-stranding ellipsis in Uzbek." *Glossa: a journal of general linguistics* 5.1 (2020).
- Holmberg, Anders. The syntax of ves and no. Oxford University Press, 2015.
- Kamali, Beste. "Motivating polar and focal alternatives in polar questions in broad focus." Manuscript available via lingbuzz/005477 (2020).
- Kornfilt, Jaklin. Turkish. Routledge, 1997.
- Barros, Matthew, and Hadas Kotek. "Ellipsis licensing and redundancy reduction: A focus-based approach." *Glossa: a journal of general linguistics* 4.1 (2019).
- Landau, Idan. "Missing objects in Hebrew: Argument ellipsis, not VP ellipsis." *Glossa: a journal of general linguistics* 3.1 (2018).
- Lipták, Anikó. "The syntax of emphatic positive polarity in Hungarian: Evidence from ellipsis." *Lingua* 128 (2013): 72-94.
- Manetta, Emily. "Reading Carefully: Verb Movement and Ellipsis in a Verb-Final Language." *Formal Approaches to South Asian Languages* 3 (2020).
- McCloskey, James. 2017. Ellipsis, polarity, and the cartography of verb-initial orders in Irish. Manuscript, University of California, Santa Cruz.
- Merchant, Jason. "Verb-stranding predicate ellipsis in Greek, implicit arguments, and ellipsis-internal focus." *A reasonable way to proceed: Essays in honor of Jim McCloskey* (2018): 229-269.
- Rasekhi, Vahideh. *Ellipsis and information structure: Evidence from Persian*. Diss. State University of New York at Stony Brook, 2018.
- Şener, Serkan, and Daiko Takahashi. "Ellipsis of arguments in Japanese and Turkish." *Nanzan Linguistics* 6 (2010): 79-99.