

Parallelism and specificity in Persian ellipsis

Ryan Walter Smith, Rana Nabors, Mohsen Mahdavi Mazdeh, Simin Karimi, & Heidi Harley
University of Arizona

Introduction: This paper examines three types of ellipsis in Persian: sluicing, gapping, and non-verbal element ellipsis (NVEE). We show that NVEE is only grammatical if it occurs with a specific direct object, but sluicing and gapping are grammatical regardless of the specificity of the object. We propose that this restriction on NVEE arises from differences in the syntax of specific and non-specific objects in Persian: specific objects, but not non-specific objects, move to Spec-vP, creating a new, larger parallelism domain (Takahashi & Fox 2005; Hartman 2011). The fact that the object in both the antecedent and the clause containing the ellipsis site must be specific falls out from the requirement that the ellipsis site be parallel to its antecedent. The fact that sluicing and gapping are grammatical regardless of the specificity of the object follows from the fact that both specific and non-specific objects can move to FocusP via scrambling.

Ellipsis in Persian: Persian possesses many types of elliptical constructions. These include sluicing (1), gapping (2), and light verb stranding VP-ellipsis (3).

- (1) Bahâr yechizi xord, vali ne- mi- dun -am chi
Bahâr something ate but NEG-IMP-know-1.SG what
'Bahâr ate something, but I don't know what'
- (2) Bahâr miz tamiz kard Rezâ panjere
Bahâr table clean did Rezâ window
'Bahâr cleaned tables, and Rezâ windows'
- (3) Sohrâb piran-â -ro otu na- zad, vali Rostam zad
Sohrâb shirt-PL-RÂ iron NEG-hit but Rostam hit
'Sohrâb didn't iron the shirt, but Rostam did' (Toosarvandani 2009)

As of yet little studied type of ellipsis is Non-verbal Element Ellipsis (NVEE), in which only the non-verbal element of a complex predicate is elided. NVEE is peculiar among ellipsis types in Persian in that it is only grammatical with specific objects, which are suffixed with the differential object marker *-râ*.

- (4) Bahâr miz*(-o) tamiz kard vali panjere*(-ro) na- kard
Bahâr table-RÂ clean did but window-RÂ NEG-did
'Bahâr cleaned the table, but she didn't the window'

Interestingly, neither sluicing nor gapping exhibits a similar restriction: both are grammatical regardless of whether the object is marked with *-râ* or not.

- (5) Bahâr yechizi(-ro) xord, vali ne- mi- dun -am chi(-ro)
Bahâr something ate but NEG-IMP-know-1.SG what
'Bahâr ate something, but I don't know what'
- (6) Bahâr miz(-o) tamiz kard Rezâ panjere(-ro)
Bahâr table clean did.3.SG Rezâ window
'Bahâr cleaned tables/the table, and Rezâ windows/the window'

The syntax of specific objects in Persian: Much work on Persian syntax has shown that specific objects behave differently from non-specific objects in the language. For example, sentences with specific objects have a different neutral word order than those with non-specific objects; non-specific objects appear adjacent to the verb, and after other elements of the sentence (7a), but specific objects precede PPs (7b).

- (7) a. man be Mohsen ketâb dâd -am b. man ketâb-o be Mohsen dâd -am
I to Mohsen book gave-1.SG I book-RÂ to Mohsen gave-1.SG
'I gave books to Mohsen' 'I gave the book to Mohsen'

Furthermore, specific objects, but not non-specific objects, license parasitic gaps (8) and can serve as antecedent for an anaphor (9) (Karimi 1999).

- (8) Kimea [_{NP} ketâb*(-ro)]_i [_{CP} ghablaz inke pro e_i be-xun-e] be man dâd
Kimea book -RÂ before that SUBJ-read-3.SG to me gave
'Kimea gave me the book before reading (it).'
- (9) man [bachcha*(-ro)]_i be xodesh_i tu âyne neshun dâd-am
I child -RÂ to self in mirror sign gave-1.SG
'I showed the child herself in the mirror.'

Karimi (2005) proposes that specific objects must move to the specifier of vP, while the non-specific object remains in-situ. This explains the distinct syntactic behavior of specific and non-specific objects.

Analysis of NVEE: We propose that the fact that specific objects move to the specifier of vP, but non-specific objects do not, also explains the fact that NVEE is only possible with specific objects. First, we adopt Takahashi & Fox's (2005) definition of parallelism (see also Hartman 2011).

(10) Parallelism Domain (PD)

For ellipsis of EC [elided constituent] to be licensed, there must exist a constituent, which reflexively dominates EC, and satisfies the parallelism condition. Call this constituent the Parallelism Domain.

(11) Parallelism

PD satisfies the parallelism condition if PD is semantically identical to another constituent AC [antecedent constituent], modulo focus-marked constituents.

The definition in (10) leaves the size of the PD unfixed, but there is a case in which the PD must be larger than the elided constituent, namely, when the elided constituent contains a variable whose binder lies outside of the elided constituent, as arises through syntactic movement. In these cases, the PD extends to include the binder of the variable.

When the specific object moves to Spec-vP, it creates a variable binding relationship. Because the ellipsis site contains a variable, the PD must be extended to include the binder. The PredP will then be elided, as in Toosarvandani's (2009) analysis of Persian VPE. The analysis is schematized in (12).

The underlined text denotes the parallelism domains, and the struck out text denotes elided material.

(12) [_{VP} miz-o [λx [_{PredP} x tamiz]] kard] ... [_{VP} panjere-ro [λy [_{PredP} y tamiz]] na-kard]

This then explains why only specific objects can appear in NVEE: in cases where there is a mismatch in specificity between the object in the antecedent clause and the one in the clause containing the ellipsis site, the antecedent and ellipsis site will not be parallel (13-14). If neither object is specific, they will remain within their respective PredPs, and the two PredPs will not be parallel (15).

(13) * [_{VP} miz-o [λx [_{PredP} x tamiz]] kard] ... [_{VP} [~~panjere tamiz~~] na-kard]

(14) * [_{VP} [~~miz tamiz~~] kard] ... [_{VP} panjere-ro [λx [_{PredP} x tamiz]] na-kard]

(15) * [_{VP} [~~miz tamiz~~] kard] ... [_{VP} [~~panjere tamiz~~] na-kard]

Even if the two PredPs were identical, as in (16), the fact that non-specific objects do not move out of PredP, and the fact that ellipsis applies to entire constituents, not to heads, will result in light verb-stranding VPE, and thus (16) could never give rise to NVEE as observed in (5).

(16) [_{VP} [_{PredP} miz tamiz] kard] ... [_{VP} [~~miz tamiz~~] na-kard] (VPE, not NVEE)

Sluicing and gapping: Although non-specific objects do not move to the specifier of vP, they can undergo scrambling to the specifier of FocusP (Karimi 2005), which occurs in the analysis of sluicing and gapping according to Toosarvandani (2015). In both sluicing and gapping, the PD includes everything up to FocusP, which is in the left periphery of the clausal spine, and the largest deletable constituent is TP. If Toosarvandani's analysis is on the right track, then we can see why sluicing and gapping are not sensitive to object specificity: both specific and non-specific objects can move to the specifier of FocusP, while only specific objects move to the specifier of vP.

Conclusion: In this paper, we show that non-verbal element ellipsis in Persian is only grammatical if the object in both the antecedent clause and the clause containing the ellipsis site is specific. This differentiates it from other types of ellipsis in Persian, such as gapping and stripping, which are grammatical regardless of object specificity. We have proposed an analysis that derives these facts from the syntax of specific objects, which must move to the specifier of vP, while non-specific objects do not. The fact that gapping and stripping are grammatical with both specific and non-specific objects follows from the fact that both types of objects can move to the specifier of FocusP.

References:

Hartman, J. (2011). The semantic uniformity of traces: Evidence from ellipsis parallelism. *Linguistic Inquiry*, 42(3), 367-388; Karimi, S. (1999). A note on parasitic gaps and specificity. *Linguistic Inquiry*, 30(4), 704-713; Karimi, S. (2005). *A Minimalist approach to scrambling: Evidence from Persian* (Vol. 76). Walter de Gruyter; Takahashi, S., & Fox, D. (2005). MaxElide and the re-binding problem. In *Proceedings of SALT* (Vol. 15, pp. 223-240); Toosarvandani, M. (2009). Ellipsis in Farsi complex predicates. *Syntax*, 12(1), 60-92; Toosarvandani, M. (2015). Persian. To appear in *The Oxford Handbook of Ellipsis*, van Craenenbroek, J. & Tellerman, T. (eds.). Oxford University Press.