

### Parallelism and specificity in Persian Non-Verbal Element Ellipsis

Persian exhibits a wide variety of complex predicate (CPr) constructions, consisting of a nonverbal element (NVE) and a light verb (Megerdooomian 2002, a.o.). Toosarvandani 2015 suggests that NVE ellipsis does not exist. We show that NVE ellipsis does exist, although it is grammatical only with specific, but not non-specific, internal arguments. We argue that this restriction boils down to the fact that copies of specific objects (of type <e>) convert into bound variables (Sauerland 2004), thus permitting parallelism when specific objects scramble out of the ellipsis site. Non-specific objects, however must obligatorily reconstruct into their base position, leading to a violation of parallelism.

Persian has several varieties of complex predicates, consisting of an NVE and a light verb (1):

- (1) Kimea otâgh-ro tamiz kard  
Kimea room-râ clean did-3sg  
'Kimea cleaned the room.'

The NVE can be elided (2), contra Toosarvandani (2015). The particle *râ* marks specificity for objects.

- (2) Bahâr miz -ro **tamiz kard-Ø**, vali panjere-ro ~~tamiz~~ **na-kard-Ø**.  
Bahâr table-râ clean did-3SG but window-râ clean NEG-did-3SG  
'Bahâr cleaned the table, but didn't the window.'

However, NVE ellipsis is not licensed when the object is not specific, hence not marked with *râ*, as in

- (3).  
(3) \*Bahâr miz **tamiz kard-Ø**, vali panjere ~~tamiz~~ **na-kard-Ø**.  
Bahâr table clean did-3SG but window clean NEG-did-3SG  
*Intended: 'Bahâr cleaned tables, but didn't windows'*

NVE ellipsis is subject to the typical parallelism requirement, shown in (4a, b). The objects differ with respect to specificity in these examples, rendering them ungrammatical.

- (4) a. \*Bahâr miz-ro tamiz kard, vali panjare ~~tamiz~~ na-kard  
Bahâr table-râ clean did-3sg, but window Neg-did-3sg  
b. \*Bahâr miz tamiz kard, vali panjare-ro ~~tamiz~~ na-kard  
'Bahâr cleaned tables, but did not the window.'

Many syntactic phenomena in Persian are sensitive to the distinction between specific and nonspecific objects (Karimi 1999). For example, specific, but not nonspecific objects, can license parasitic gaps (5), resumptive pronouns (6), and anaphor binding (7).

- (5) Kimea [<sub>NP</sub> ketâb\*(-ro)]<sub>i</sub> [<sub>CP</sub> ghablaz inke pro e<sub>i</sub> 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).'
- (6) otâgh\*(-ro) tamiz-esh kard-am  
room -râ clean-it did-1sg  
'I cleaned the room.' (Or: 'As for the room, I cleaned it.')
- (7) man [bachcha\*(-ro)]<sub>i</sub> be xodesh<sub>i</sub> tu âyne neshun dâd-am  
I child -râ to self in mirror sign gave-1sg  
'I showed the child herself in the mirror.'

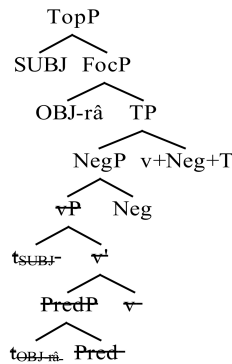
Finally, when a quantified specific object is scrambled over the subject (8a), scope ambiguity arises, but although the non-specific object can be scrambled, the sentence is unambiguous, and the sentence is interpreted as though no scrambling had occurred (Karimi 2003).

- (8) a. [ye she'r-ro]<sub>i</sub>, har dâneshtju-i t<sub>i</sub> bâyard be -xun-e *DP+râ>>>har*  
one poem-râ every student-ind must SUBJ-read-3sg *har>>>DP+râ*  
'There is one poem, such that every student has to read that poem' (primary)  
'Every student has to read one poem (out of a specific set)'  
b. [ye she'r ] har dâneshtju-i t<sub>i</sub> bâyard be -xun-e *har>>DP*  
'Every student must read a poem'

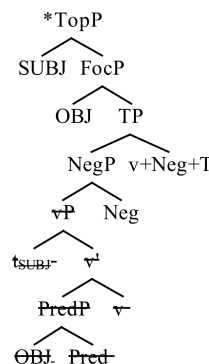
These data suggest that an important dimension of difference between specific and nonspecific objects involves i) the inability of a nonspecific object to bind variables and ii) obligatory reconstruction of the non-specific object. Assuming a vP ellipsis analysis of NVE ellipsis, we can explain the difference between (2) and (3) in these same terms.

We propose that in NVE ellipsis, the specific object moves to the Specifier of FocP, leaving behind a copy which can be converted into a bound variable at LF (Sauerland 2004). We illustrate the derivation of the grammatical (2) in (9). In addition to object movement, the light verb head-moves through Neg to T. The vP containing the NVE and the variable is then elided (9) (NB: vP ellipsis is independently available in the language). Although it is also possible to scramble the nonspecific object to the focus position, unlike the specific object, its copy cannot be converted into a variable, so the antecedent and the ellipsis target are not parallel in (3), as in (10). (Non-crucial details are not illustrated.)

(9) Specific Object



(10) Nonspecific object



The data we have observed is thus immediately explained by the parallelism condition on ellipsis: in (2), the specific objects have moved out of both the antecedent vP and the elided vP, and their copies have been converted into variables, satisfying parallelism. In (3), however, both objects are nonspecific, and therefore they must reconstruct into their base position. Thus the ellipsis target and its antecedent cannot be made identical, failing the parallelism requirement. In (4), the vP contains a variable in one clause but a reconstructed object in the other, also failing to satisfy parallelism.

This analysis makes correct predictions about the interaction of internal arguments other than direct objects with NVE ellipsis. For example, nonspecific subjects of unaccusatives are ungrammatical with NVE ellipsis (11a), while their specific counterparts are fully acceptable (11b).

- (11) a. \*dar-i bâz shod, vali panjare-yi ~~bâz~~ na-shod  
 door-indef open became, but window-indef open Neg-became.  
*Intended meaning: 'A door opened, but a window didn't (open).'*
- b. dar-â bâz shod-an, vali panjare-hâ ~~bâz~~ na-shod-an  
 door-Pl open became-pl but window-pl open Neg-became-pl  
*'The doors opened, but the windows didn't.'*

Persian NVE ellipsis exists and is tightly constrained by the specificity of the internal argument. Our analysis connects the restrictions on NVE ellipsis to independently motivated differences between specific and non-specific DPs, namely, that specific DPs are capable of binding variables and are not required to reconstruct into their base position at LF, while non-specific objects cannot bind variables and must reconstruct into their base position. The analysis further supports the hypothesis that certain types of nominal traces can undergo variable conversion at LF while others cannot.

**REFERENCES:** Fox, D. (2002). Antecedent-contained deletion and the copy theory of movement. *Linguistic Inquiry*, 33(1), 63-96; Karimi, S. (1999). A note on parasitic gaps and specificity. *Linguistic Inquiry*, 30(4), 704-713; Karimi, S. (2003). On object positions, specificity, and scrambling in Persian. *Word order and scrambling*, 91-124; Megerdooian, K. (2002). *Beyond words and phrases: A unified theory of predicate composition*. VDM Publishing; Sauerland, U. (2004). The interpretation of traces. *Natural language semantics*, 12(1), 63-127; Toosarvandani, M. (2015). Persian. To appear in *The Oxford Handbook of Ellipsis*, van Craenenbroek, J. & Tellerman, T. (eds.). Oxford University Press.