

Copy Raising in Persian

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Presented at the Canadian Linguistic Association, Western University - May 30-June 1, 2020
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*This poster is best enjoyed if the accompanying video is watched first

1 Existing Analysis

Karimi (2018) argues that Persian “raising” sentences are instances of A'-Movement for three reasons:

1. Movement is optional, matrix has default 3sg agreement:
 be nazar mi-yâ-d [(ke) bachche-hâ ketab-â-ro xunde bâsh-an]
 to view ASP-come-3SG C child-PL book-PL-OBJ read SUBJ.be-3PL
 'It seems that the children read the books.'
2. Moved elements do not agree with the matrix verb:
 bachche-hâ; be nazar mi-yâ-d [(ke) t; ketab-â-ro xunde bâsh-an]
 lit: 'The children seems that (they) read the books.'
3. Movement options from the embedded clause are symmetrical:
 ketab-â-ro; be nazar mi-yâ-d [(ke) bachche-hâ t; xunde bâsh-an]
 lit: 'The books seems that the children read (them).'

Note though that a 3sg subject of an embedded clause, upon movement, has no strong evidence for an A' analysis

2 Challenges

- We have found three challenges to the A'-movement analysis:
1. Some speakers accept sentences with non 3sg matrix clause agreement (with a slight meaning difference)
 2. In a pairwise sentence comparison study, participants most reliably treat both subject and object movement from the same embedded clause as equally acceptable when both must be A' movement
 3. In a self-paced reading task with moving 3sg subjects, we find no processing evidence for a movement trace

Our Proposal:
 When there is agreement between the matrix verb and an overt non 3sg subject, the derivation is by copy raising, not movement. Sentences with overt 3sg matrix subjects have two possible derivations: copy raising or movement.

3 Unexpected Agreement

Some speakers allow an agreeing version of example 2:
 4. bachche-hâ; be nazar mi-yâ-an [(ke) t; ketab-â-ro xunde bâsh-an]
 child-PL to view ASP-come-3PL C book-PL-OBJ read SUBJ.be-3PL
 'The children seem that (they) read the books.'

But, there is a contextual restriction: 2. is utterable upon seeing a pile of books, while 4. is only utterable upon seeing children reading.

This is similar to the PERCEPTUAL SOURCE requirement on copy raising (Asudeh & Toivonen 2012, Landau 2011) compared to canonical raising in English:

5. The children seem like they are reading (Copy Raising)
 6. The children seem to be reading (Canonical Raising)

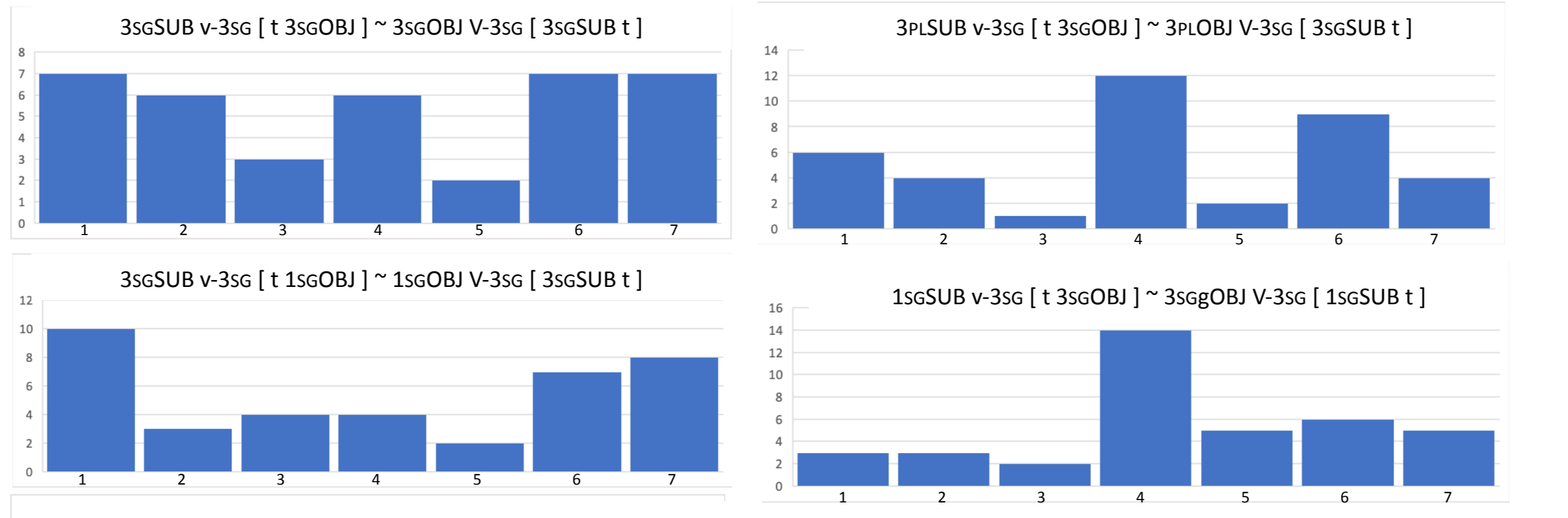
“Copy Raising” is a misnomer. This is now treated as two DPs, one in each clause

4 Pairwise Comparisons

Participants do not behave consistently when faced with sentences having 3sg 'moved' subjects:

Participants see two sentences simultaneously, each at one end of a 7pt Lickert Scale. If the sentences are equally grammatical, participants are instructed to select 4. Otherwise, they rate toward either end.

5 types of sentence pairs were tested, contrasting movement of embedded subjects or objects. Matrix agreement was always 3sg. 20 native speaking participants judged two tokens of each sentence pair. If movement is symmetrical, responses should cluster around 4



Only non 3sg subject pairs have clear modes of 4, suggesting parallel derivations of both orders.

*Only condition with responses significantly different from μ=4 (p < 0.001)

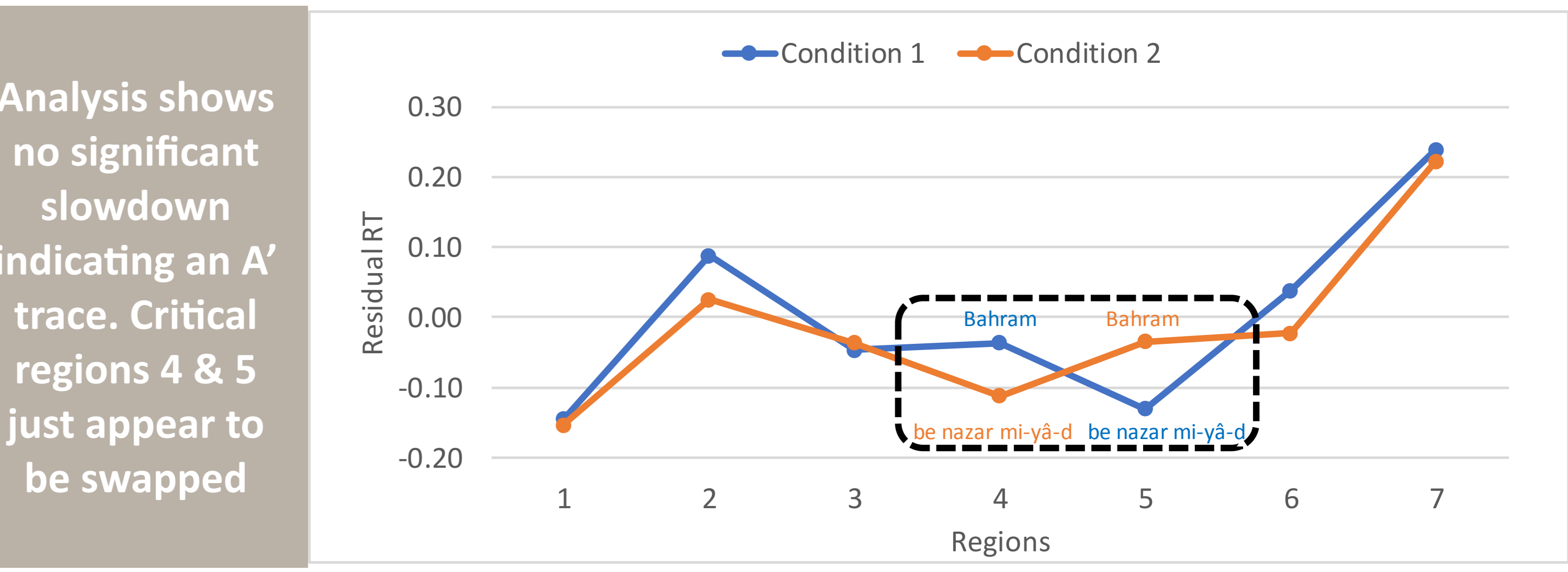
5 Self Paced Reading

No evidence of movement is found when a 3sg subject 'moves':
 Participants saw sentences in seven regions with 3sg subjects either immediately before or after the raising verb:

7. Sina be Shirin goft ke Bahram be-nazar mi-yâ-d
 Sina to Shirin said that Bahram to view ASP-come-3SG
 az šarik-e tejari-š joda be-še
 of partner-EZ business-3SG.POSS separate SUBJ-become.3SG
 'Sina told Shirin that Bahram seems to separate from his business partner.'

When the subject is early, we would expect to see a higher residual reading time (slower than expected reading) at the region containing the raising verb, as an A' gap is postulated (Featherston 2001).

32 native speaking participants saw four trials of each type:
 Sina be Shirin | goft | ke | Bahram | be nazar mi-yâ-d | az šarik-e tejari-š | joda be-še
 Sina be Shirin | goft | ke | be nazar mi-yâ-d | Bahram | az šarik-e tejari-š | joda be-še
 1 2 3 4 5 6 7



Analysis shows no significant slowdown indicating an A' trace. Critical regions 4 & 5 just appear to be swapped

6 Conclusion

Persian “raising” has two possible origins, discernible by subject agreement:
 Moved element is not 3sg, and controlling matrix agreement: the matrix subject is base generated high, and must be perceived, with a null pro at the corresponding embedded clause position (e.g. 4).
 Moved element is not 3sg, not controlling matrix agreement: the matrix subject is base generated in the embedded clause, and undergoes A' movement (e.g 2).

3sg subjects before be nazar mi-yâ-d are compatible with either analysis, reflected by the unexpected results in these studies

References

- Asudeh, A. & I. Toivonen. 2012. Copy raising and perception. *Natural language and linguistic theory* 30: 321-380.
- Featherston, Sam. 2001. *Empty categories in sentence processing*. Amsterdam: John Benjamins
- Karimi, Simin. 2018. Generative approaches to syntax. In *The Oxford handbook of Persian linguistics*, ed. A. Sedighi and P. Shabani-Jadidi, 161-204. Oxford: Oxford University Press.
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