

## Neg-Raising: The Case of Persian

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**Introduction:** It is observed that negation on certain predicates such as think and want can take scope in the embedded sentence. Literature refers to this phenomenon as neg-raising (NR), and predicates like think and want are called neg-raising predicates (NRPs). For instance, sentence (1) has an interpretation as (2).

- (1) Bill doesn't think Mary is here.
- (2) Bill thinks Mary isn't here.

There are two main approaches to account for this phenomenon. Within a syntactic approach, this scope phenomenon is the result of the movement of negation element from the embedded clause into the main clause. NR reading is the result of the interpretation of negation in its base-generated position. A semantic approach, on the other hand, suggests that NRPs invoke the presupposition of Excluded Middle; that is, the speaker of NRPs is biased about the proposition in the complement clause. NR reading is the logical consequence of this presupposition and the literal meaning of the sentence as shown in (3).

- (3) not [ NRP [ S ] ]  
Assertion:  $\neg$  NRP (S)  
Presupposition:  $\text{NRP}(S) \vee \text{NRP}(\neg S)$  (Gajewski 2005:14)

Persian data pose some evidence which pose problem for the semantic approach. The evidence come from: the licensing of super-strong NPIs in Persian, the narrow-scope reading of negation with respect to the embedded indefinite object, incompatibility of progressive aspect under negated NRPs and sensitivity of NR to Island constraints (Collins & Postal 2014).

**Super-strong NPIs:** "aslan" is a super-strong NPI which is only licensed in anti-morphic contexts which only overt negation and "without" can provide as in (4). (5) and (6) show that anti-additive operators cannot license this NPI. However, it can be licensed under negated NRPs as in (7).

- (4) Bedoone in-ke aslan dars xunde bashe, dar emtehan sherkat  
Without this-that at-all lesson studied-PERF be-3SG in exam participate  
kard.  
did  
She participated in exam without studying at all.
- (5) \*eddeye kami aslan dars xundan.  
group-EZ few-IND at-all lesson studied-3PL  
few people studied at all.
- (6) \*hameye kasayi ke aslan didanesh, dustesh darand.  
all-EZ person-PL-IND that at-all see.PST-3-her, like-her have-3PL  
all people who have ever seen her,like her.

- (7) fek        nemikardam                in    ettefagh aslan biofte.  
 thought NEG-IMPF-did-1SG this event    at-all SUB-fall-3SG  
 I didn't thought this happen at all.

Gajewski(2005) argued that negated NRPs provide anti-additive contexts for licensing strong NPIs. Under his approach, the licensing of super-strong NPIs embedded under negated NPRs is not predicted.

**Low-scope Negation:** The excluded middle presupposition predicts only a wide-scope reading of negation in the embedded proposition. However, negation can have a narrow scope with respect to indefinite object *ye ketab* "a book" in the sentence (8).

- (8) fek        nemikonam                Ali ye ketabo    xunde    bashe.  
 thought NEG-IMPF-did-1SG Ali a    book-ra studied SUB.be-3SG  
 I don't think that Ali read a book. (meaning: I think there is a book that Ali didn't read.)

**Progressive Aspect:** Progressive aspect in Persian is incompatibility with a negation in the same clause as is shown in (8). Progressive aspect, however, tolerate the existence of negation in the matrix clause.

- (9) Man (\*na)daram                shir (\*ne)mixoram  
 I    NEG-have.1sg(PROG) milk NEG-Imperf-eat-1sg  
 I am not drinking milk.
- (10) Man nagoftam        daram        dars    mixunam.  
 I    NEG-said-1SG PROG-1SG lesson IMP-study-1SG  
 I didn't say that I'm studying.

Progressive aspect is not felicitous under negated NRPs. A fact that remains mysterious under semantic approach.

- (11) \*Man fekr nakonam    Ali dare                dars    mixune  
 I    think neg-did-3SG Ali PROG-3SG lesson IMP-study-3SG  
 I didn't think that Ali is studying. It should be noted that

**Island Constraint:** NR in Persian is impossible out of islands.

- (12) \*oona fekr        nemikonan                key    ali be mehmooni bi-ya-d.  
 They thought not-ASP-do-3PL when Ali to party        SUB-come-PST.3SG  
 They don't think when Ali would come to the party.
- (13) \*oona in    ke    ali be mehmooni biyad                ro    doost                nadaran.  
 They this that Ali to party        SUB-come-PST.3SG like not-have-3PL  
 they don't like that Ali would come to the party.(bad with neg-raising reading)

## References

- Collins, C., & Postal, P. M. (2014). Classical NEG Raising: An Essay on the Syntax of Negation. Cambridge, MA: The MIT Press.
- Gajewski, J. (2005). Neg-raising: Polarity and presupposition. Ph.D. Dissertation. The MIT Press.