Persian negation is expressed with the prefix *na-*

**Example**

Sarah in ketâb-ro *na*-xarid.
Sarah this book-ACC NEG-buy.PAST.3SG
‘Sarah didn’t buy this book.’

Ali ketâb-ro pâre *na*-kard.
Ali book-ACC torn NEG-do.PST.3S
‘Ali didn’t tear the book.’

Armita *na*-bâyad film-ro be-bin-e.
Armita NEG-should film-ACC SUBJ-see-3S
‘Armita shouldn’t watch the film.’

With no fixed position, placing a Neg head in the syntax is a challenge
Two of these look more or less like Korean (Hagstrom, 1995)

Example

Chelswu-ka chayk-ul an-ilk-ess-ta.
Chelswu-NOM book-ACC NEG-read-PST-DECL
‘Chelswu did not read the book.’

Chelswu-ka chayk-ul ilk-ci ani ha-yess-ta.
Chelswu-NOM book-ACC read-CI NEG do-PST-DECL
‘Chelswu did not read the book.’

No, these are not directly analogous to Persian complex predicates, but these are still considered light verb constructions
Taleghani (2006) and Kwak (2010) argue for high negation:

The key evidence for this is from the licensing of subject negative polarity items (NPI):

Example

Hichkas be in mehmni na-raft.
anybody to this party NEG-go.PAST.3SG
“Nobody went to this party.”

Having Neg probe the highest verbal element gives the variable spellout positions.
For Korean and Japanese, NPI licensing has been shown not to rely on C-Command.

To be valid proof of high negation, we should independently test whether C-Commanding negation licenses an NPI in Persian.

Spoilers

We argue that while we can’t just make a simple statement of “subject NPIs imply high negation” there’s still room to allow the existing analysis to survive (though this would mean moving heavily into LF).
Outline

1. The Issue

2. NPI Licensing in Head-Final Languages

3. Our Study

4. Placing Persian Negation

5. Head-Finality and NPIs
English NPIs require C-Command from a negative (or irrealis) head:

Example

I *(don’t) know anything.

This licensing can extend across clauses:

Example

I didn’t say [that he broke anything].
Sells and Kim (2006) note that embedded clause NPIs are not licensed by matrix negation in Korean:

Example


‘I do not think that Chelswu read any books.’

An embedded clause NPI is better for some speakers in subject position (but not universally accepted)
Han et al. (2007) notes that Korean negation scopes under an NPI:

Example

* Ku-nun celtaylo kukos-ey ka-ss-ta.
  he-TOP absolutely there-to go-PAST-DECL
  “He absolutely went there.”

Ku-nun celtaylo kukos-ey an ka-ss-ta.
  he-TOP absolutely there-to NEG go-PAST-DECL

✔ “It is absolutely true that he did not go there.”
✖ “It is not the case that he absolutely went there.”
This is known as the Clausemate Condition on NPI licensing: negation must be in the same clause as an NPI, but need not C-Command it.

Sells and Kim note that this is trivial to implement in HPSG, but somewhat more challenging in a framework where C-Command is our primary tool for licensing.

The same facts have been observed for Japanese (Nakao and Obata, 2007) and Turkish (Kelepir, 1999).
Outline

1 The Issue

2 NPI Licensing in Head-Final Languages

3 Our Study

4 Placing Persian Negation

5 Head-Finality and NPIs
We tested bi-clausal sentences in Persian to determine whether the same clausemate condition applies. If it does, we cannot use the existence of subject NPIs to motivate a high position of negation.
Rather than collecting judgements, we used a sentence comparison task.

Method of convenience; these were distractor items in another study which needed that method.

The coach drank some water. The player drank some water.

1 2 3 4 5 6 7

If both sentences are equally acceptable, participants select 4. The poles of the scale represent preference for one sentence over the other.
Example

Ali be **hichkas** na-goft 
[ke Sohrâb keyk-ra xord].
A. to anyone NEG-say.3.SG.PST that S. cake-RA eat.3.SG.PST

‘Ali didn’t tell anyone that Sohrab ate the cake.’

Ali be **hichkas** goft 
[ke Sohrâb keyk-ra na-xord].
A. to anyone say.3SG that S. cake-RA NEG-eat.3.SG

‘Ali told anyone that Sohrab didn’t eat the cake.’
Example

Ali be Goli ettela na-dad [ke Atash hichchiz gom kard].
Ali to Goli inform NEG-gave.3.SG that Atash anything miss did.3.SG
‘Ali didn’t inform Goli that Atash missed anything.’

Ali be Goli ettela dad [ke Atash hichchiz gom na-kard].
Ali to Goli inform gave.3.SG that Atash anything miss NEG-did.3.SG
‘Ali informed Goli that Atash didn’t miss anything.’
While study items were counterbalanced in presentation, we normalize the scores so that matrix negation is always a 7.

For the Matrix Clause NPIs:
- C-Command and Clausemate Licensing both predict ratings around 7

For the Embedded Clause NPIs:
- C-Command licensing predicts that ratings should be around 4
- Clausemate licensing predicts that ratings should be around 1
Participants and Results

- 20 adult participants in Tehran saw eight pairs of each NPI position, mixed in among a total of 97 trials.
- Presentation was on a laptop with all instructions (written and verbal), forms, and labelled keys in Persian.
- In the semantic bias trials, participants were very willing to use the middle of the scale.
- Not for these trials:
  - Matrix NPI: mean 6.75, significantly different from 4
  - Embedded NPI: mean 1.69, significantly different from 4

This suggests that we have clausemate licensing, and cannot straightforwardly use subject NPI licensing as a diagnosis for the position of negation.
Outline

1. The Issue
2. NPI Licensing in Head-Final Languages
3. Our Study
4. Placing Persian Negation
5. Head-Finality and NPIs
If we stick with the theme of seeing what has been done for Korean and Japanese, then we get to an interesting place.

Han et al. (2007) and Han et al. (2008) report that for Korean and Japanese, respectively, there is inter-speaker variation in the placement of Neg, detectable by scope relations.

Shafiei and Storoshenko (2017) reports similar studies for Persian, with less conclusive results, but a clear demonstration that negation can take narrow scope (more so with objects than subjects).
Another of the Sells and Kim tests for the scope of NPIs involves a three-way interaction with an NPI, negation, and *always*. They show that not only is negation in the scope of the NPI (interpreted as universal), but it must be immediately in that scope. Persian seems to replicate this as well:

**Example**

\[
\text{Hichkas hamishe puldar n-ist.} \\
\text{anyone always rich NEG-is.3.sg} \\
\text{‘Nobody is rich all the time.’ (\(\forall > \text{Neg} > \text{Always}\))}
\]
Resorting to LF

- While we have not run the full battery of tests, Persian is lining up as a (possibly) narrow scope of negation language.
- Nakao and Obata attribute the wide scope of Japanese NPIs to LF movement of the NPI.
- However, there is also considerable evidence that Japanese and Korean are scope rigid, and our prior tests with Persian seem to echo this, so LF movement needs to be carefully thought through.

The Caveat

If we are going to start using scope to diagnose the position of negation, we can't ignore the sentence-medial modal position (which means introducing another scopal element), because this is a big departure from Japanese/Korean.
Outline

1. The Issue
2. NPI Licensing in Head-Final Languages
3. Our Study
4. Placing Persian Negation
5. Head-Finality and NPIs
Korean, Japanese, Turkish, Persian.

Clausemate NPI licensing is not an areal feature, this seems like it’s something that is common to head final languages.

Even if this turns out to be a property of the NPIs, rather than something in the verbal projection, this seems like a typological avenue worth pursuing.

Ways of Framing the Question

Why is negation in these languages scoping so variably (and low)?

OR

Why are the NPIs in these languages able to scope so high?

OR

Why is NPI Licensing different in these languages?
Yup.

**Example**

Vrya ba Hiwa-y kot [ka Avin *hich*-i *na*-xward].
Vrya to Hiwa-3SG said COMP Avin nothing-3.SG NEG-eat
‘Vrya said to Hiwa that Avin ate nothing.’

* Vrya ba Hiwa-y *na*-kot [ka Avin *hich*-i *xward].
Vrya to Hiwa-3SG NEG-said COMP Avin nothing-3.SG NEG-eat
‘Vrya did not say to Hiwa that Avin ate anything.’
Of course, Persian is not as strictly a head final language as Japanese and Korean.

In terms of positioning an embedded clause, having prepositions, and allowing that medial modal, there’s a surface-level kinship to German.

**Example**

Hans glaubt *(nicht)*, [daß Peter **sonderlich** glücklich sein wird].

Hans believes NEG that Peter very happy be will

‘Hans does not believe that Peter will be very happy.’

Despite the English gloss, Lichte and Kallmeyer (2006) report that the matrix negation here scopes under the matrix verb, in the embedded clause.
1. Persian has the hallmarks of a clausal condition language for NPI licensing; we cannot just use subject NPIs as evidence for high negation C-Commanding the subject.

2. More examination of the scope properties of NPIs, and consideration of possible LF movement, might yet allow syntactically high negation to survive (and solve the original morphological problem).

3. Persian and Sorani Kurdish appear to occupy a middle ground on a German-to-Korean spectrum of head final languages; there may yet be room to link this with the NPI/negation facts.
Thanks to our participants in Tehran, and to Elias Abdollahnejad for the Sorani Kurdish examples.

Hagstrom, Paul. 1995. Negation, focus, and do-support in korean. Manuscript, MIT.


