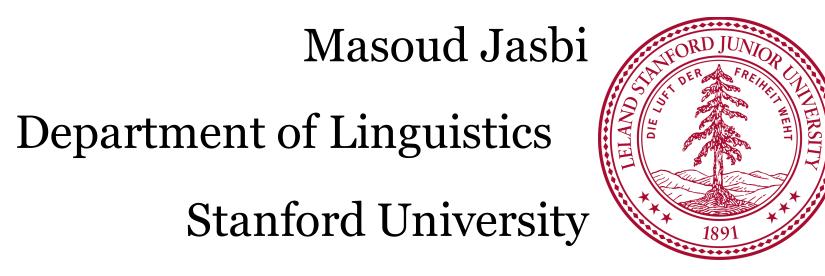
Three Types of Indefinites in Persian



Construction	Form	Cardinality	CG	Projection
Definite	NP	[NP]] = 1	Yes	[[NP]] = 1
Simple Indefinite	ye-NP	$ [NP] \ge 1$	No	_
Antidefinite	NP-i	[[NP]] ≠ 1	No	[[NP]] ≠ 1
Antisingleton Indefinite	ye-NP-i	[NP] > 1	No	[[NP]] ≠ 1

Project Summary

Persian (Indo-European):

- No overt definiteness marker.
- 2 singular indefinite markers: **ye** and **-i** [1,2] Three indefinite constructions

Empirical Questions for each construction:

- What is the cardinality implication?
- Is it required to be common ground?
- Is the implication projective [3,4]?

4. Theoretical Goals:

Determining the semantics of **ye** and **-i** Providing a compositional analysis of **ye**-NP-i

1. Cardinality Implications

2. Common Ground Status

All three indefinite constructions are acceptable when

[Context: Mr. and Ms. Karimi have two daughters and a son. They are all single. In this family ...]

ezdevāj kon-e, hanu doxtar e a. age **ye-doxtar** mojarad hast (1)InD-daughter marry do-3.sg, still daughter EZ single if is "If a daughter marries, there is still a single daughter."

doxtar-i ... b. age

c. age **ye-doxtar-i** ...

Only the simple indefinite (ye-NP) is acceptable when

|[NP]| = 1

|[NP]| > 1

a. age **ye-pesar** ezdevāj kon-e, dige mojarad n-ist pesar e (2)InD-son marry do-3.sg, anymore son EZ single NEG-is if "If a son marries, there is no single son anymore." b. # age pesar-i ... c. # age ye-pesar-i ...

Antidefinites (NP-i) are commonly used to convey that $|\llbracket NP \rrbracket| = 0$

[Context: Eli thinks Reza has started smoking and is keeping cigarettes. Reza argues that he has no cigarettes and Eli is free to search anywhere. He says ...] The cardinality implication of definites must be common ground (5) while indefinites do not have this requirement (6).

[Context: Eli's dad bought a new watch she does not know about. He leaves for work without it and later he notices and wonders if he left it on the table. He calls home and asks Eli ...]

- # ru miz sā'at-o mi-bin-i? (5)on table watch-OM MI-see-2.SG "Do you see the watch on the table?"
- (6) a. ru miz **ye-**sā'at mi-bin-i? on table InD-watch MI-see-2.SG "Do you see a watch on the table?" sā'at-i b. ... ? ... ye-sā'at-i ··· ? **C.** • • •

3. Projection

- Applying the family-of-sentences diagnostic [5], we see that in entailment canceling environments:
 - the implication of -i ($|[NP]| \neq 1$) survives (2).
 - The implication of **ye** can be targeted and canceled (6).

(3) a. # age ye-sigār peydā kard-i, har-chi to beg-i InD-cigarette find do-2.sg, whatever 2.sg say-2.sg if "If you found any cigarettes, whatever you say." b. age **sigār-i** ... c. # age ye-sigār-i...

(hich) **ide-i** na-dār-am (4)idea-InC NEG-have-1.SG no "I have no idea."

Explaining an Old Puzzle

-i differentiates RRCs from NRRCs.

a. bache [ke xaste bud] neshast (7)child that tired was sat "The child, who was tired, sat." \twoheadrightarrow |[child]| = 1

b. bache-i [ke xaste bud] neshast child-InC that tired was sat "The child who was tired sat."

4. Compositional Analysis $\lambda Q[\exists x[\operatorname{NP}(x) \land Q(x)]] \bullet |\operatorname{NP}| \neq 1$ $\lambda P \lambda Q[\exists x [P(x) \land Q(x)]]$ $NP \bullet |NP| \neq 1$ $\langle et, \langle et, t \rangle \rangle$ $\lambda P[P \bullet |P| \neq 1]$ $\underset{et}{\operatorname{NP}}$ ye \mathbf{NP} -1

• the antisingleton indefinite (ye-NP-i) is equivalent to an antidefinite (NP-i) (1b and 1c).

Pragmatic Effects

Ignorance: ye-NP-i signals the speaker or addressee cannot identify the witness.

[Context: Mona's phone had 65 photos but now has 64] pāk shode (8) a. **ye**-aks InD-photo clean became "A photo is deleted!" ----> does not know which b. ye-aks-i ... [Context: Eli asks Reza who he is going to dinner with tonight. Reza answers ...] (8) a. bā <u>ye</u>-dust-i with InD-friend-InC "with a friend!"

• Domain Widening: Given domain D and subdomain d, ye–NP is interpreted over d and ye–NP-i over D.



Antidefinite Distribution

- Non-veridical environments: questions, antecedent of conditionals, downward entailing environments e.g. under negation, restrictor of *har* ("every") and *hich* ("no")
- Restrictor of the indefinite determiner **ye** [6]
- NPs modified by adjectives or relative clauses (Subtrigging [7,8])
- On "what an NP" construction (e.g. *che pesar-i* "what a boy!")

An indefinite number of thanks to Cleo Condoravdi, James Collins, Chris Potts, Ciyang Qing, Beth Levin, and my helpful informants. [1] Jila Ghomeshi. Plural marking, indefiniteness, and the noun phrase. Studia Linguistica, 57(2):47–74, 2003. [2] Maziar Toosarvandani and Hayedeh Nasser. Quantification in persian. In Edward L. Keenan and Denis Paperno, editors, Handbook of quantifiers in natural language. Springer, 2nd edition, 2015. [3] D. Terence Langendoen and Harris Savin. The projection problem for presuppositions. In Charles J. Fillmore and D. Terence Langendoen, editors, Studies in linguistic semantics, pages 54–60. New York: Holt, Rinehart and Winston., 1971. [4] Lauri Karttunen. Presuppositions of compound sentences. Linguistic inquiry, pages 169–193, 1973. [5] Chierchia, Gennaro, and Sally Mcconnell-Ginet. 1990. Meaning and grammar. Cambridge, MA: MIT Press. [6] Donka F Farkas. Dependent indefinites. In Empirical issues in formal syntax and semantics. Citeseer, 1997. [7] Jean Ehrenkranz LeGrand. "or" and "any": The Semantics and Syntax of Two Logical Operators. PhD thesis, University of Chicago, 1975. [8] Veneeta Dayal. Any as inherently modal. Linguistics and philosophy, 21(5):433–476, 1998.

[Context: A dance party with many boys and girls; Mona went to the party with two of her boy friends and ...] (9)a. ba ye-pesar ragsid with InD-boy danced "danced with a boy." b. ba ye-pesar-i

Indifference: ye-NP-i signals speaker indifference.

(10) a. ye-kart bardār InD-card take "Pick a card!" b. ye-kart-i

----> does not matter which