

Lab 2, Writeup 1: Determiner Semantics

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1 Farsi Determiners

Farsi marks the definite/non-definite distinction morphologically. A noun without an indefinite clitic is either specific or generic. A noun with the indefinite clitic *-i* is indefinite.

- (1) *ketab*
book (definite/generic)
'the book' 'books (in general)'
- (2) *ketabi*
book (indefinite)
'a book'

Since the citation form of a noun is definite, I made the PRED value of the covert-det-phrase rule `def_q_rel`. An as-yet-unwritten lexical rule will add *-i* and change this to `indef_q_rel`.

Farsi has two demonstratives: *in* is for nouns close to the speaker and *an* is for nouns distant from the speaker. These always precede the noun and have the same form regardless of number.

- (3) *in ketab*
this book
'this book'
- (4) *in ketabha*
these books
'these books'
- (5) *an ketab*
that book
'that book'
- (6) *an ketabha*
those books
'those books'

I treat *in* and *an* as optional demonstrative determiners with PRED values proximal+dem_q_rel and distal+dem_q_rel respectively.

2 Optional Determiners

Since Farsi only has demonstrative determiners, all determiners are optional. All of the following sentences generate a parse.

- (7) *pesar bidar*
the boy wake up
'the boy wake up'
- (8) *in pesar bidar*
this boy wake up
'this boy wake up'
- (9) *an pesar bidar*
that boy wake up
'that boy wake up'
- (10) *Shirin ketab xandan*
Shirin the book read
'Shirin read the book'
- (11) *Shirin in ketab xandan*
Shirin this book read
'Shirin read this book'
- (12) *Shirin an ketab xandan*
Shirin that book read
'Shirin read that book'

Note that these are not grammatical Farsi sentences because the verbs are not properly inflected. To reflect this I have left the English translations in infinitive form.

3 Overgeneration

Since Farsi does not mark any kind of agreement on its demonstrative determiners, all parses unambiguously regenerate from their semantics. For example, the following sentences all generate only one string, which is identical to the original.

- (13) *gorbe ketab xandan*
the cat book buy
'The cat buy the book'

- (14) *in gorbe ketab xandan*
this cat book buy
'This cat buy the book'
- (15) *an gorbe ketab xandan*
that cat the book buy
'That cat buy the book'
- (16) *gorbe in ketab xandan*
the cat this book buy
'The cat buy this book'
- (17) *gorbe an ketab xandan*
the cat that book buy
'The cat buy that book'
- (18) *in gorbe in ketab xandan*
this cat this book buy
'This cat buy this book'
- (19) *an gorbe an ketab xandan*
that cat that book buy
'That cat buy that book'
- (20) *in gorbe an ketab xandan*
this cat that book buy
'This cat buy that book'
- (21) *an gorbe in ketab xandan*
that cat this book buy
'That cat buy this book'