BARE SINGULARS IN PERSIAN

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1. Introduction

Persian bare singular nouns (henceforth BNs) appear in different positions, including subject, object and indirect object. Persian BNs may receive kind, generic, existential and definite reading. The goal of this research is to account for the polysemic behavior of BNs and find out conditions under which each reading is licensed. Factors that play major roles in the interpretation of BN in Persian include: 1) Information Structure, 2) Predicate Types: (stage level/SLPs) versus Individual-level predicates/ILPs), 3) Aspect (habituality), and 4) the position of the BN in sentences (here object or subject position).

It will be shown that all these factors can be reduced to Information Structure; I will show:

a) BN subjects are interpreted as definite when they are topic and as existential when they are focused. The distinction between the two subjects (topic versus focus) is marked by changes in prosody.

b) BN objects are interpreted as existentially in their default position when they are under verb scope (narrowly focused) and as definite when they are outside VP as topic. The distinction between the two objects is indicated by whether they are marked with accusative marker –ra or not.

The comparison of Persian BN subjects versus BN objects, in terms of semantic features, prosody and syntactic structure leads us to map the syntactic LF representation to a logical representation on the one hand, using Diesing’s

Example (1) demonstrates a BN with a stage level predicate (Geryek-kardan/crying):

(1) Bachehgeryeh-mikoneh
    Bab  cry-do.pres.3SG
    ['the baby/some baby/ babies](often) cry.'    [definite/generic/existential]

Example (2) shows Individual-level predicates (ILPs) like ‘interesting/intelligent’, allow for a definite or a generic interpretation of their subjects. But like most ILPs across world languages, existential reading is blocked with ILPs.

(2) Meimoon bahoosh ast
    Monkey intelligent is.3SG
    ‘The Monkey is intelligent./ Monkeys are generally intelligent.’
Mapping Hypothesis (1992) and to a prosodic structure on the other hand, building up and adding to mapping hypothesis (The current study also shows that the same mapping can be carried out between syntax and prosody in Persian).

I propose that Information Structure (IS) determines the syntactic position at LF, which is mapped into a prosodic structure for BS subjects. Changes in the Information Structure (change from topic to focus) are correlated with changes in the syntactic structure at LF, changes in scope, changes in Prosody and consequently changes in the interpretation of Bare Nouns. Thus what causes the different readings for BNs depends on whether bare nouns at LF are mapped to a VP internal position or VP-external position, resulting in shift in the scope of BNs in any of these positions and thus shift in prosody.

2. Different Readings of Bare Singulars in Persian

2.1 BS Subjects

2.1.1 Information Structure (IS)

In this section I will examine whether my main observation about the interpretation of BS subjects holds, namely that: BS subjects are interpreted as definite when they are in Topic position and existential when they are focused. Evidence to support the hypothesis that interpretation of BSs is reflected in Information Structure is discussed in the following sections.

2.1.1.1 Evidence from Prosody (Changes in Default Prosody)

If we change the prosody the interpretation of BN can change from definite to existential:

a) In a declarative format, with default intonation, which is a rising intonation stressing on the object ‘food’, the BN (sag/dog) receives a definite reading.

    Dog  food  Obj-M  ate.3SG
    ‘the dog ate the food’

b) Varying intonation, with a lowering intonation and the focused BN accented with stress on the BN (Sag/‘dog’), the bare singular receives existential indefinite reading.

    Dog  food  Obj-M  ate.3SG
    ‘some dog ate the food’

2.1.1.2 Default word order

Evidently every position in sentences is mapped to a specific prosody and receives a distinct accentuation or pitch. If BN subjects are moved from their default position (topic) closer to the predicate, they occupy a place where a
specific ‘focus prosody’ (focus pitch accent) is obtained and thus their meaning changes. This shows that each syntactic constituent have a prosodic counterpart and they may map on to each other. Thus the overriding factor in interpretation of bare singular subjects appears to be prosody.

(2)  
   a.  [Sag]Top Ghaza ra khor-d [Default word order]  
       [dog] Top food ra ate.3SG  
       ‘the dog ate the food’  

   b.  Ghaza ra sag [F] khor-d [Changing word order]  
       Food obj.m dog[F] ate.3SG  
       ‘some dog ate the food’ (Existential)

(3)  
   a.  [Toop] Top roo miz ghel-khor-d [Def. w.o]  
       [Ball] Top on table roll-ate.3SG  
       “The ball rolled on the table” (Definite)  

   b.  Roo miz toop [F] ghel-khor-d [Changing w.o]  
       On table ball roll-ate.3SG  
       ‘some ball rolled on the table’

The focused reading of ‘toop/ball’ is existential and number neutral, referring to one or more ball (weak/strong positions).

2.1.1.3 Definition in Focus position

In focused position, if I want to obtain a definite reading either I need to resort to prosodic means, to word order or I obligatorily need to use overt markers such as demonstratives, colloquial definite marker (e) or possessives to obtain a definite reading.

(4)  
   a.  Roo miz [toop]F ghel-khor-d  
       On table ball roll-ate.3SG  
       ‘Balls rolled on the table.’

   b.  Roo miz [toop-e/am]F ghel-khor-d  
       On table [ball-e/my] roll-ate.3SG  
       ‘(The/my) ball rolled on the table.’

In the following example a colloquial definite marker (e/‘that specific one’) or possessive (am/’my’) is used:

   b.  Roo miz [toop-e/am]F ghel-khor-d  
       On table [ball-e/my] roll-ate.3SG  
       ‘(The/my) ball rolled on the table.’

So far I have shown that BNs in subject position are either topic and interpreted as definite or focused and interpreted as existential. The Information Structure is reflected in Prosody, either by moving bare singular subjects to positions where non-default prosody is obtained or by changing the intonation. Prosody is used as a major cue to distinguish each reading as well.
Default Prosody:

(5)  a. Police amad.3SG
    policeman[Top] came.3SG
    ‘The policeman came’ [Def]

Changing the default prosody:

(5)  b. police [F] amad.
policeman[F] came.3SG
‘some policeman came’ [Ex]

Note: BN subjects can be interpreted as generic too with habitual readings of ILPs and SLPs.

2.2 BS objects

As shown in the previous section prosody organizes the IS for BN subjects. For bare singular objects in this section I will show that the object marker –ra organizes IS. The following points listed here, will be backed up by examples in the next sections:

• BN objects lack quantification force and cannot be QRed out of VP (It will be shown that BN objects are non-specific and non-referential, and carry no presupposition of existence) [weak/strong].

• BN objects (when they are not marked with object marker –ra) receive existential reading and are interpreted VP internally [weak/dominated by the verb].

• Non-ra marked BN objects appear with atelic verbs (Ghoneshi & Massam, 1994; Ganjavi, 2007) and undergo Quasi Noun Incorporation (Quasi-NI, Modarresi & Simonenko, 2007) and for a general overview of Noun Incorporation in other languages see Bittner 1994; Van Geenhoven 1996; Dayal 2007; Farkas and de Swart 2003; Chung and Ladusaw 2004 among others).

• BN objects however can move out of VP when they are marked with object marker –ra [strong].

• -ra marked objects are either interpreted as definite or Generic.

To support the points mentioned above, I will give examples on the above-mentioned differences between non-ra marked BN objects versus ra-marked BN objects.

2.2.1 Scope

• Non-ra marked BN objects appear VP internally taking scope under VP

• ra-marked BN will take scope over VP.
With respect to quantifier ‘everybody’ in example (6), the BN film has narrow scope:

(6) Hameh film didand
    Everybody movie watched.3SG
    ‘everybody watched movies’

With respect to negation in (7), BN takes narrow scope:

(7) Ali film ne-mikharad
    Ali movie negation-buys.3SG
    ‘Ali does not buy movie’ (narrow)

Scope for BN in contrast with an indefinite marked noun:

Scope for an indefinite (-i-marked) object as shown in (8):

(8) Hameh film-i didand (narrow/ wide)
    Everybody movie-i watched.3PL
    ‘everybody watched a movie’

In (8) the noun is ambiguous between narrow and wide scope.

Scope for a ra-marked indefinite object as demonstrated in (9):

(9) Hameh film-i ra didand (wide)
    Everybody movie-i -ra watched.3PL
    ‘everybody watched a specific movie’

-ra changes the scope behavior of the indefinite nominal element and allows merely for wide scope reading.

(10) Hameh film ra didand
    Everybody film ra watched.3PL
    ‘Everybody watched the movie’

    The sentence here means that there is a definite movie that everybody watched.

2.2.2 Topicalization:

BN object are topicalized by ra-marking:

(12) a. Sag ghaza khord
    Dog food ate.3SG
    ‘The dog ate food’
versus:

b. ?ghaza sag khord
food dog ate.3SG

In (12c) the ra-marked objects can be easily topicalized.

c. ghaza-ra sag khord
food-ra dog ate

‘Some dog ate the food.’

–ra is also used to topicalize indirect object or adverbs of time (Mahootian & Gebhardt, 1997).

2.2.3 -ra marked objects are interpreted as definite or generic:

In (13) generic reading is caused by the habituality aspect of the verb

(13) Man KaghaZ ra pareh-mi-konam
I paper ra tear-DUR-do.1SG
‘I tear the paper/I tear any paper.’ (Generic or definite reading)

In (14) we can have either generic or definite reading for either ‘film’ or ‘concert’ or both:

(14) Man film ra be concert tarjih-mi-dam
film ra to concert prefer.DUR.give.1SG
‘I prefer (the) film over (the) concert.’

2.2.4 Position/word order:

Default word order with default intonation results in the adjacency for the non-specific BN and the predicate, at the presence of indirect object (Karimi, 2003). In contrast ra-marked objects usually precedes indirect object in default word order with default intonation.

Default word order for non-ra marked BN object:

(15) a. Man bara Ali ketab kharidam
I for Ali book bought.1SG
‘I bought books for Ali

versus

2 With a very limited number of psychological verbs or emotional experiencer verbs, such as ‘doost-dashtan/love’, ‘parastidan/worship’ (ILPs), BN objects receive generic reading despite being under verb scope. Perhaps since the spatio-temporal argument of the emotional experiencer verbs (ILPs) is bound by the life span of experiencer object, Gen can’t bind event argument of the predicate without binding BS objects as well. Thus the experiencer object receives a generic reading as well and can’t be detached from its life span, whether BS is –ra marked or not. So they may have to be QRed anyways.
Default word order for non-ra marked BN object:

(15) b. man ketab ra bara Ali kharidam
I Book ra for Ali buy.past.1sg
‘I bought the book for Ali’

2.2.5 Presupposition and Quantification Force:

Persian non-ra marked BN objects cannot be interpreted as definite. Therefore they cannot be interpreted as carrying a presupposition of the existence of some salient object. In the following context a BN would be ungrammatical. Accusative marker -ra should be present to make it referential instead, as illustrates (16).

(16) Ali dirooz Ketab kharid.
Ali yesterday book bought.3SG
va ketab-*ra/ an-*ra) baraye man avard.
and book-DM/ that-DM for-Ez me brought.3SG
‘Ali bought books yesterday and brought the book/that for me’

- According to Diesing, 1992, Berman 1991, presupposition of a quantified sentence is represented in the restrictive clause. Therefore presuppositional nominals that are in the domain of VP must be QRed to IP out of VP domain.
- ‘-ra’ marked BN objects carry a presupposition of existence that needs to be accommodated by updating the background (reflected in the restrictive clause), which is carried out by the rule of QR.

So far I have shown that definiteness is connected to topicality and that topic position is a specific position. I have demonstrated how subject and object move around to appear in this position. Now I am going to introduce a theory that maps these positions to syntactic positions. For BN subjects these movements are reflected in prosody. For BN objects these movements are organized with accusative marker –ra.

3. Diesing Mapping Hypothesis (MH)

As we have observed the information structure determines the interpretation of BN subjects and that prosody is the main criteria to organize IS. In object position the interpretation of BN objects depends on whether they are –ra marked or not. It was shown if they were not marked with –ra, they are interpreted as existential under Verb scope and if they were –ra marked they were taking scope over verb. –ra marked BN objects are interpreted either as definite or generic. At this point in order to unify these facts, I conclude that information structure is mapped from syntactic structure using Diesing MH.
Diesing deals with the syntax-semantics interface by proposing a mapping of the syntactic structure to a logical representation. Persian data shows the same mapping can be drawn for syntax-prosody for BS subjects as well.

The logical representation maximally consists of three parts: An operator + a restrictive clause + the nuclear scope:
Material from VP is mapped into the nuclear scope
Material from IP is mapped into a restrictive clause (Diesing 1992: 15)

Focused **BN subjects** are interpreted in the nuclear scope (lowered at LF) subject to Existential Closure (EC), topic BN subjects are interpreted VP externally either as definite or as generic. This mapping is reflected in changes in prosody, signaling a VP internal subject from a VP external one.

For **BN objects**, if they are not marked with –ra they are interpreted as existential VP internally (under verb scope/nuclear scope) and when they are marked with –ra, BN objects are interpreted outside VP domain in the restrictive clause as definite or generic.

**With –ra marked object:**

(17) Man *kaghaz* ra pareh-mi-kon.am
     I  *paper* -ra tear-Dur-do.1SG

‘I tear the paper (definite)/ I tear anything that is paper (Generic)

With tripartite structure  LF representation for (17) would be:

> [IP Gen [paper+ra+event argument of the predicate] [VP I tear it]]

**Versus**

**With Non-ra marked BN objects:**
(18) Man kaghaz pareh-mi-Kon.am
    I paper tear-Dur-do.1SG
    ‘I tear papers’

LF representation for (18) would be:
    ➢ [IP Gen [event argument of the predicate (all events)] [VP I tear papers]]

So here in the habitual reading of the predicate the Gen operator only binds
the event variables of [V+BN] and not just [V].

4. Further Evidence showing BN objects are inside VP:

The following examples are further evidences that –ra marked BN objects are
outside VP and non-ra marked BN objects form a unit with verb, restricting or
modifying verb:

Verb and BN Movement: In this section we see that non-ra marked BN objects
has to move with the verb, if verb moves higher up (Karimi, 2003a).

(19) a. Sam dirooz dar restaurant [ghaza khord].
    Sam yesterday in restaurant food-ate.3SG
    ‘Sam ate food in the restaurant yesterday’

b. * Sam dirooz khord dar restaurant ghaza
    Sam yesterday ate.3SG in restaurant food

c. Sam dirooz [ghaza-khord] dar restaurant
    Sam yesterday [food-ate.3sg] in restaurant
    ‘Sam ate food in the restaurant’

d. Sam dirooz khord dar restaurant ghaza ra
    Sam yesterday ate.3SG in restaurant food ra
    ‘Same ate the food in the restaurant’

Stress: According to (Kahnemuyipour, 2003), the stress falls on the leftmost
element in the phonological phrase and on the right most element in a
phonological word. With respect to stress the ‘BNs- + verb’ complex behaves
like one phonological phrase since the stress falls on the non-verbal element.
The stress pattern of non-ra marked BN is similar to compounds (complex
predicates) in Persian being included in the phonological phrase that contains
the predicate and the BN. –ra marked BN objects have a stress pattern similar to
a distinct phonological phrase.
5. Chierchia Blocking Principle

Does Persian data pose a problem for Blocking Principle?

The availability of a definite reading for BNs in Persian could in principle be explained by Chierchia’s Blocking Principle, which links the lack of definite marker (definite singular) to the extended interpretive range of the BN, to include definite interpretation. According to Chierchia (1998), if a language has an overt determiner that induces a particular type-shift meaning, that language will not license a covert option. However, note that in Persian definiteness is obtained for Information Structure reasons and in topic position via alternation of scope. This might be construed as a problem to the Blocking Principle. Moreover, the existential reading of BNs are obtained when they are focused and at the same time there exists two other indefinite markers, -i enclitic and ‘yek/one’, which is also a challenge to the Blocking Principle.

Blocking Principle (‘Type Shifting as Last Resort’) (Chierchia, 1995):

For any type shifting operation \( t \) and any \( X \)

\[ *t(X) \text{ if there is a determiner } D \text{ such that for any } X \text{ in its domain, } D(X) = t(X) \]

Thus lack of definite marker makes iota type-shift available \( \tau P = \text{The maximal element in } P \text{ (where defined).} \)

Although Persian lacks a definite article, however there are no covert definiteness operators as Chierchia would have it, but rather definiteness comes from mapping to a VP external position (syntax-prosody mapping), which leads to scope alteration. The Blocking Principle is saved, if we consider the mapping between prosody and syntactic structure as overt options in preference to covert type-shifts in Persian. But then again why do we need covert type shifting at all?

Moreover, the existential reading of BNs are obtained when they are focused and at the same time there exists two other indefinite markers, -i enclitic and ‘yek/one’, which also seems to falsify the Blocking Principle. Thus, in Persian there are three options available to obtain existential reading: a) yek-marking, b) i-marking and c) narrow focus position for Bare Singular nominals, but each of these options has a different semantic effect and looking more closely, nothing is carried out via covert type shifting:

Yek or –i marked nouns can be referred back to, but focused bare nouns cannot be referred back to.
(21)
a.  Man yek film did-am ke jaleb bood.
    
    I one film saw.1SG. that interesting was.3SG.
    
    “I saw a film that was interesting”

b.  *man film did-am ke jaleb bood.
    *I film saw.1SG that interesting was.
    *

Basically yek-marked and i-marked nouns have a referential property that non-ra marked BN objects lack. Besides BN object as shown earlier forms a fusion with the predicate becoming part of the event, modifying or restricting the predicate, rather than marking its end point.

Prosody is an overt option that can mark given-ness (old information) and focus (new information), which can have semantic consequences. Perhaps cross linguistically covert type shifts are equivalent to these overt options. In Russian no determiners are available and thus covert type shifts are licensed to operate. But there is evidence that even in Russian the definite or indefinite reading of bare nouns depend on Information structure of the clause (Brun, 2001).

6. Conclusions

In this research it has been shown that:

- Persian BNs (both subjects and objects) are interpreted as definite when they are topic and existential when they are focused.
- BN subjects interpretation is mainly determined by prosody.
- BN objects interpretation is determined whether it is inside VP or whether is QRed out of VP.
- –ra marked BN objects are interpreted outside VP domain, when they are either definite or generic (scope).
- I conclude that BN subjects are topic by default and are interpreted as definite. BN Objects are narrowly focused by default and are interpreted as existential. But subjects can be focused (existential reading) and objects can be topicalized or shifted by moving out of VP signaled by –ra marking (definite reading).
- Adopting Diesing mapping Hypothesis I have unified the findings for both object and subject position. Materials inside VP (focused material) are mapped into nuclear scope and materials outside VP (topic material) are mapped on to restrictive clause. It appears that both prosody and logical representation maybe mapped on to syntactic structure. The difference in argument structure of ILPs and SLPs can be reflected in IS as well.
- Information Structure is mapped to a syntactic structure and a correlated prosodic pattern but it is the latter structure that constrains the interpretation of bare singular nominal as demonstrated using Diesing’s Mapping Hypothesis, in accordance with scope principles.
The paper has also discussed the consequence of the current analysis for Chierchia’s Blocking Principle. It appears that:

- covert type shifts can be replaced by overt pragmatic means. I suggest that type shifting is handled by mapping from different syntactic positions (here VP internal versus VP external), which is reflected in changes in prosody, changes in scope and therefore changes in meaning.
- The existence of the three options of obtaining existential reading in Persian poses a challenge to Chierchia’s Blocking Principle as well.

References