

On Incorporation in Persian Verbal Predicates

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1 Introduction

- Investigate the nature of the preverbal nominal and its relation to the verb in Persian
- The nominals in N+V constructions in (1) display mixed properties and have been hard to classify

- (1)
- | | | |
|-----------------------|-------------|-----------------|
| <i>qæza xordæn</i> | food eat | ‘to eat (food)’ |
| <i>zæhr dadæn</i> | poison give | ‘to poison’ |
| <i>mahi gereftæn</i> | fish catch | ‘to fish’ |
| <i>ketab foruxtæn</i> | book sell | ‘to sell books’ |
-
- (2)
- | | | |
|-----------------------|-------------|-------------------------|
| <i>færib xordæn</i> | deceit eat | ‘to be deceived’ |
| <i>ab dadæn</i> | water give | ‘to water’ (transitive) |
| <i>jæshn gereftæn</i> | feast catch | ‘to celebrate’ |
| <i>shane zædæn</i> | comb hit | ‘to comb’ |

- Past analyses have suggested some form of incorporation:

Noun Incorporation (NI): (e.g., Dabir-Moghaddam 1997)

- direct object incorporates into the verb and creates “an intransitive compound verb which is a conceptual whole”

- (3)
- | | | |
|--------------------------------|--------------------|----------------|
| a. <i>bæchche-ha</i> | <i>qæza-shun-o</i> | <i>xord-æn</i> |
| child-PL | food-POSS.3SG-ACC | ate-3PL |
| ‘The children ate their food.’ | | |
| b. <i>bæchche-ha</i> | <i>qæza</i> | <i>xord-æn</i> |
| child-PL | food | ate-3PL |
| ‘The children ate.’ | | |

Juxtaposition: (e.g., Ghomeshi and Massam 1994)

- N loses its argument status and is juxtaposed with the host V
- although N and V remain separate words phonologically, they form a single syntactic unit

⇒ Incorporation analyses: $[_V \text{ N+V }]$ or $[_V \text{ N } V]$

Outline

- There is empirical evidence against a traditional incorporation approach (NI or juxtaposition) for Persian
- The data seem to suggest Pseudo Noun Incorporation (PNI) (Massam 2001)
- *Proposal*
 - No need for any incorporation analysis to capture the properties observed
 - Preverbal nouns in (1) are nonspecific internal arguments and the properties can be derived from the syntactic structure without positing PNI

2 Noun Incorporation

2.1 Identifying noun incorporation

Incorporation: constructions in which a verb and one of its arguments form a particularly tight unit (Farkas and de Swart 2003)

- NI has been used to describe a process of word formation where the N+V form a single morphological unit

- (4) *Tongan* (Churchward 1953)
- | | | | | | | |
|--|------------|-------------|-----------|--------------|----------|--------------|
| a. <i>Na'e</i> | <i>inu</i> | <i>'a</i> | <i>e</i> | <i>kavá</i> | <i>é</i> | <i>Sione</i> |
| PAST | drink | ABS | CONN | kava | ERG | John |
| ‘John drank the kava.’ [subj. of transitive → ergative case] | | | | | | |
| b. <i>Na'e</i> | <i>inu</i> | <i>kavá</i> | <i>'a</i> | <i>Sione</i> | | |
| PAST | drink | kava | ABS | John | | |
| ‘John kava-drank.’ [subj. of intransitive → absolutive case] | | | | | | |

- (5) *Ponapean* (Rehg 1981)
 a. *I kanga-la wini-o*
 I eat-COMP medicine-that
 ‘I took all the medicine.’ [→ completion of medicine]
 b. *I kanga-winih-la*
 I eat-medicine-COMP
 ‘I completed my medicine-taking.’ [→ completion of activity]

- There are many types of NI with varying characteristics (cf. Mithun 1984)
- Common features of NI across languages:
 - N is generally an internal argument of transitive and intransitive verbs, or marks an instrument or location relation to the host V
 - Bare stem N⁰ (no determiner, case, plurality or modification)
 - Loss of transitivity:
 N and V stems combine to form an intransitive V denoting a unitary activity
 N loses its individual salience and syntactic role and becomes a component of V
 - Significantly affects case distribution
 - Number neutrality on N: no singularity or plurality implicature
 - N takes narrow scope: non-referential, non-specific, takes scope under operators such as negation
 - Productive process: combines two open class stems not a stem and a limited affix set (as in word-formation processes such as nominalization or causativization)
 - Difficult for acquisition/susceptible to decay: NI is one of the last operations to be learned by children, only advanced L2 learners can use NI well, and NI among the first processes to undergo language loss.

2.2 Against noun incorporation in Persian

N+V constructions in (1) lack a number of important NI properties:
 (also see Karimi 1997, Samvelian 2001, Megerdooimian to appear)

- *N is not a bare stem:*
 - it can be modified or conjoined

- (6) a. *kia qæza-ye taylændi mi-xor-e*
 Kia food-EZ Thai DUR-eat-3SG
 ‘Kia eats/is eating Thai food.’
 b. *bæchche-ha ketab o dæftærche xærid-æn*
 child-PL book and notebook bought-3PL
 ‘The children bought books and notebooks.’

- but the presence of a determiner forces the ‘ra’ morpheme
 → the preverbal part is a NP but not a DP

- (7) *kia dare in qæza-ro mi-xor-e*
 Kia has this food-OM DUR-eat-3SG
 ‘Kia is (in the process of) eating this food.’

- *Loss of transitivity is questionable:*
 - Preverbal noun is a nonspecific argument, but it always has a specific counterpart: the argument structure and case distribution don’t change at all in (8a) vs. (8b)

- (8) a. *doktor dæva-ro be mæriz dad*
 doctor medication-OM to patient gave
 ‘The doctor gave the medication to the patient.’
 b. *doktor be mæriz dæva dad*
 doctor to patient medication gave
 ‘The doctor gave the patient some medication.’

- This is in contrast with the case-assignment properties of the light verb construction:

- (9) *doktor æli-ro shæfa dad*
 doctor Ali-OM cure gave
 ‘The doctor cured Ali.’

→ these examples show that *dæva* in (8) acts as the direct object of the verb; it does not lose its syntactic role.

- There is no doubling in Persian where an incorporated nominal is doubled by a full NP. (equivalent to *John pet-has a dog*)

- (10) *kia tayləndi qæza mi-xor-e
Kia Thai food DUR-eat-3SG
'*Kia eats/is eating Thai food.'

- Possible examples of loss of transitivity in (11) (Samvelian 2001)

- (11) a. omid mehman-an ra chay dad
Omid guest-PL OM tea gave.3SG
'Omid served tea to the guests.'
b. omid zæmin ra gændom kasht
Omid land OM wheat planted.3SG
'Omid planted the land with wheat.'

- (12) a. omid be mehman-an chay dad
Omid to guest-PL tea gave.3SG
'Omid served tea to the guests.'
b. omid dar in zæmin gændom kasht
Omid in this land wheat planted.3SG
'Omid planted wheat in this land.'

- Preverbal nouns can become the subject of a passive (Samvelian 2001)

- (13) mæryæm dær aseman setare did
Maryam in sky star saw.3SG
'Maryam saw a star/stars in the sky.'
(14) dær aseman setare dide shod
in sky star seen became.3SG
'A star was seen in the sky / Stars were seen in the sky.'

• *N is not completely non-referential:*

- The noun generally cannot refer to a discourse anaphor (but see examples in 16)

- (15) *shadi dishæb dasht **ketab**_i mi-xund. *pro*_i xeyli xændedar bud
Shadi last night had book DUR-read-3SG very funny was
'*Last night Shadi was reading a book/books_i. It_i was very funny.'

- (16) a.?? mæn dishæb **qæza**_i xord-æm væ kæmi æz **an**_i-ra hæm
I last night food ate-1SG and some of it-OM also
be gorbe dad-æm
to cat gave-1SG

'?? Last night I ate (food_i) and gave some of it_i to the cat.'¹

- b. mæn diruz **xyar**_i xord-æm væ pust-a-**sh**_i-o
I yesterday cucumber ate-1SG and skin-PL-CL.3SG-OM
endaxt-æm tu sætl-e ashxal
throw-1SG in bucket-EZ garbage
'Yesterday I ate a cucumber_i and threw its_i skin in the trashcan.'

- But the N can be questioned (contrast with light verb constructions in 18).

- (17) a. *ketab xandæn* (book read)
- nima chi mi-xun-e?
Nima what DUR-read-3SG
'What does Nima read?'
- ketab
book(s)
b. *dæva dadaæn* (medication give)
- pezeshk be bæche-ha chi mi-de?
physician to child-PL what DUR-give.3SG
'What does the physician give to the children?'
- dæva
medication
(18) a. *færib xordæn* (deceit eat)
- mærdom chi xord-æn?
people what ate-3PL
'What did people eat?'

¹ Barjasteh 1983 marks this as *, but it's more acceptable to my informants.

- *færīb
deceit

b. *shæfa dadæn* (cure give)

- pezeshk be bæche-ha chi dad?
physician to child-PL what gave
‘What did the physician give to the children?’
- *shæfa
cure

- *N is not always adjacent to the verb:*
- Incorporated nouns cannot be scrambled

(19) *Tongan* (Ball 2005)

a. *Na’e tō manioke kano lelei ‘a Sione*
PAST plant cassava good ABS Sione
‘Sione planted a good cassava.’
b. **Na’e tō ‘a Sione manioke kano lelei*
PAST plant ABS Sione cassava good

- The preverbal noun in Persian can be scrambled in certain conditions (focus, topicalization)

(20) a. *kia qæza tond mi-xor-e*
Kia food quick DUR-eat-3SG
‘Kia eats quickly.’
b. *migæn zæhr be bæch-æsh dad-e*
they-say poison to child-CL.3SG gave-PERF.3SG
‘They say that it’s poison that he/she has given to his/her child.’

- *N+V construction does not show word-level stress:*

(21) a. *salon-e qæza-xor-í*
hall-EZ food-eat-NOM/ADJ
‘dining room.’
b. *kia qæzá xord*
Kia food ate-3SG
‘Kia ate.’

Summary

	Noun Incorporation	Persian N+V
✓	N = internal argument	N = internal argument
✓	N is number neutral	N is number neutral
✓	N is non-specific	N is non-specific
✓	N takes narrow scope	N takes narrow scope
✓	Productive	Very productive
✓	Unbounded reading	Unbounded reading
?	Incorporated N must be verb adjacent	N can be scrambled (if focus, topic)
?	Loss of transitivity; case modified	No modification in case-assignment
✗	N = bare stem	N or NP (but not DP)
✗	N loses its syntactic role	N visible as syntactic object
✗	N is non-referential	N can be questioned → some level of referentiality
✗	Construction is difficult for acquisition and is subject to decay	Construction not problematic for acquisition and no evidence of decay
✗	Word-level stress pattern	Phrasal stress pattern

- The results suggest that Persian is a Pseudo Noun Incorporation language: (per Massam 2001, Dayal 2003)
 - Nominal can be NP (may include modifying phrase, conjunction) but not DP (no relative clause or functional elements such as case, number, specificity marker, possessor)
 - Nominal is visible to syntactic processes and behaves as internal argument
 - Very productive: occurs with an open class of verbs, so any verb that has an internal argument can appear in PNI construction.
 - Unbounded event: there is a habitual or frequentative meaning and event is unbounded
 - Nonspecific and restricted referentiality (limited to the incorporated domain)
 - Adjacency: Noun or NP and verb are adjacent; particles and adverbials don’t intervene.
 - Loss of transitivity: in the sense that the internal argument has a closer relation with the verb and the predicate-argument distinction seems to break down

Massam argues that PNI cannot be treated by lexical compounding or head movement. So the N+V construction is not a X⁰ head or morphological word since there is no lexical or syntactic incorporation of N into V, but it is instead a phrasal construction.

⇒ But we do not need to posit a process such as PNI to explain the Persian facts.



4 Analysis

- Preverbal nominal is a non-specific internal argument of a full thematic verb (e.g., Karimi 2003).
- Preverbal nominal is a NP but not a DP (Karimi 2003, Ganjavi 2007)
- It remains within the vP while the specific argument moves out of the vP domain (e.g., Karimi 2003, Megerdooian 2002, Kahnemuyipour 2002)

Proposal: All the characteristics discussed can be derived from the structure of

- (a) the NP
- (b) its relation to vP

NP structure		Internal argument low in vP
Number neutral	→ no NumP	Object properties visible in syntax
Non-“referential”		No doubling
Non-specific	→ no D	No change in case-marking
Unbounded event	→ no Num or quantification (Verkuyl 1993)	Very productive
		Phrasal stress pattern
		not difficult for acquisition / no decay

Theoretical discussion

Incorporation interesting because of the syntax-morphology interface

So NI creates a morphological word (generally in syntax)

PNI is posited to explain why there are mixed lexical and phrasal properties (closer to verb, less transitivity, but visible to syntax and not a N head)

But if we can already derive all the characteristics from the structure on independent grounds, we don't need to posit PNI (at least for Persian)

4 Conclusion

- presented evidence that NI does not hold for Persian N+V constructions in (1)
- showed that it could be taken as a PNI, but reject that on economy principles
- derived characteristics observed of N+V constructions from the structure of
 - (i) NP element, and
 - (ii) structural relation of NP to the vP domain.

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