

# The Status of the Nominal in Persian Complex Predicates

Karine Megerdooomian

## Abstract.

The nature of preverbal nominals and their relation to the verb have been the focus of much debate in languages with a productive complex predication process. For Persian, certain analyses have argued that the bare nominals in Complex Predicate constructions are distinct from bare objects, while others have treated the two types of bare nominals uniformly. This paper argues that the two categories of preverbal nouns cannot receive the same analysis since they display distinct syntactic and semantic behavior: The preverbal nominals, unlike the bare object nouns, cannot be questioned, are modified differently, have different interpretations, give rise to distinct case-assignment contexts, and can co-occur with a nonspecific object. The distinct properties of the two nominal categories are captured by positing distinct structural positions for these nouns. Non-specific bare nouns are internal arguments of the thematic verb, while the nominal element of the complex predicate construction is part of the verbal domain with which it combines through a process of conflation, as defined in Hale and Keyser (2002), to form a single predicate.

**Keywords:** complex predicates; bare nouns; internal arguments; light verbs; Persian.

## 1. Introduction

The status of bare nominal elements in verbal predicates has been a controversial topic for languages with a productive complex predicate formation process. The bare nouns appearing in the verb-adjacent position display mixed properties, sometimes behaving as the internal argument and at other times forming a semantic unit with the verbal element. These nominals have been difficult to classify and researchers have historically disagreed on their syntactic status.

The Persian sentences<sup>1</sup> in (1) represent preverbal nominals that seem to form a semantic unit with the verbal element. The bare nouns in (2), however, are internal arguments of the verb.

- (1) a. mærdom **færib** xord-æn<sup>2</sup>  
people   deceit   ate/collided-3PL  
‘(The) people were deceived.’

---

<sup>1</sup>Persian data are given in the conversational form of the standard dialect of Iran.

<sup>2</sup>The heavy or thematic verb *xordæn* generally means ‘to eat’, but it can also be used to mean ‘to collide’ as in the example below:

- (i) tup   be   divar   xord  
ball   to   wall   collided-3SG  
‘The ball collided with the wall’

- b. nārges mu-ha-š-o                      **šune** zæd  
 Narges hair-PL-POSS.3SG-OM comb hit-3SG  
 ‘Narges combed her hair.’
- (2) a. mæn **hævij** xord-æm  
 I carrot ate-1SG  
 ‘I ate carrot(s).’
- b. bæčče-ha **ketab** mi-xund-æn  
 child-PL book DUR-read-3PL  
 ‘The children were reading a book/books.’

At the outset, the preverbal nominals in (1) seem to display distributional properties similar to the nonspecific objects in (2). Both sets of preverbal elements appear as bare nouns occupying the position immediately to the left of the verb. As we will see in Section 2, they both seem to be non-referential nouns and display similar stress patterns and aspectual properties. On the other hand, there is a clear intuition among native speakers that the verb *xordæn* in the sentence in (1a) is a *light verb* containing underspecified or bleached semantics, whereas the same verb *xordæn* in (2a) is a thematic verb referring to the act of consuming food.

The mixed properties of the preverbal nouns have given rise to disagreements on the linguistic analysis of the two types of noun+verb constructions. In the Persian literature, certain authors have argued that the preverbal nominals in the examples in (1) are distinct from the non-specific objects exemplified in (2) (Moyné, 1970; Khanlari, 1986; Karimi, 1989; Mohammad and Karimi, 1992; Karimi, 1997). Other approaches, however, have provided a uniform syntactic configuration for the treatment of both categories of bare nouns (Barjasteh, 1983; Ghomeshi and Massam, 1994; Vahedi-Langrudi, 1996; Samvelian, 2001).

In this paper, I examine the distribution and properties of the bare nominals in Persian and show that the preverbal nominals in (1), unlike the bare object nouns in (2), do not have a specific counterpart; cannot be questioned or specified for number; are modified differently; and can co-occur with a direct object. In addition, the verbal elements in the two constructions have different interpretations and give rise to distinct case-assignment contexts. Based on these results, I argue that a distinction should be drawn between the preverbal element that joins with the light verb to form a complex predicate and the bare non-specific object.

---

In its light verb usage, *xordæn* is often glossed as ‘eat’ in the literature, although it is more likely that it is derived from the ‘collide’ meaning of the verb since it is used to form unaccusatives and gives rise to an affected or experiencer interpretation on the patient of the light verb construction.

In the analysis proposed, the two bare noun categories exemplified in (1) and (2) occupy distinct structural positions. The preverbal nouns in (1) are in fact the nonverbal component (NV) of a complex verbal predicate. These nominals combine with the light verb to form a single event where the NV contributes the encyclopedically contentful part of the predicate. The bare nouns in (2), on the other hand, are non-specific direct objects. These nouns are internal arguments, satisfying the selectional requirements of the thematic verb they are associated with. Based on a constructionalist approach to verb formation, as in the framework of Hale and Keyser (2002), I argue that the preverbal nominal in (1) is the thematic component in a decomposed verbal structure providing the core meaning, while the light verb is the overt realization of the functional *v* head that determines the agentivity and eventiveness (e.g., causation) of the verbal predicate. The verb in the examples in (2), however, is a ‘heavy’ verb consisting of the conflation of a substantive root and a *v*-head. The bare noun in this case occupies the structural position of the direct object. Crucially, this analysis predicts that in transitive complex predicates in Persian, a bare direct object can cooccur with the nominal NV element. This prediction is in fact borne out as we will see in the following sections.

The paper is organized as follows: Section 2 introduces the two types of preverbal nominals and reviews the arguments put forth in the literature for providing these bare nouns with a uniform treatment. Section 3 investigates the syntactic and semantic properties of the preverbal nominal in modern Persian and shows that the nominal NV element and the bare direct object display different properties, clearly demonstrating that they cannot be treated uniformly. Section 4 then provides an analysis based on a compositional construal of the complex verbal predicate and shows that the differing syntactic and semantic properties of the two bare noun categories can be captured if we posit two distinct syntactic structures. Section 5 revisits some of the arguments presented in the literature for an equal treatment of the two bare noun categories demonstrating that the facts are naturally accommodated within the proposed analysis. Section 6 concludes the paper.

## 2. Uniform Treatment of Preverbal Nouns

### 2.1. COMPLEX PREDICATES

Persian employs a large number of complex predicates (also known as light verb constructions or compound verbs) that consist of a preverbal element and a verb, combining to form a single syntactic predicate. The verbal elements in these predicates are usually referred to as *light verbs* since their semantic or thematic content is partially or completely bleached. They can, however,

carry tense, aspect or negation morphology like simple verbs. Each of the light verbs in Persian corresponds to a ‘heavy’ or fully thematic verb. A list for the verbs that most commonly appear in light verb constructions is provided in (3):

- (3)
- |          |                |
|----------|----------------|
| oftadæn  | ‘fall’         |
| amædæn   | ‘come’         |
| aværdæn  | ‘bring’        |
| ændaxtæn | ‘throw, drop’  |
| bordæn   | ‘take’         |
| xordæn   | ‘eat, collide’ |
| dadæn    | ‘give’         |
| daštæn   | ‘have’         |
| didæn    | ‘see’          |
| ræftæn   | ‘go’           |
| zædæn    | ‘hit, strike’  |
| šodæn    | ‘become’       |
| kærdæn   | ‘do, make’     |
| kešidæn  | ‘pull, drag’   |
| gozaštæn | ‘put’          |
| gereftæn | ‘catch, take’  |
| yaftæn   | ‘find’         |

Some of these verbs also have certain stylistic variations, which are often used as light verbs in more literary or formal contexts:

- (4)
- |        |            |   |          |         |
|--------|------------|---|----------|---------|
| dadæn  | ‘give’     | ⇒ | bæxšidæn | ‘offer’ |
| šodæn  | ‘become’   | ⇒ | gærdidæn | ‘turn’  |
| kærdæn | ‘do, make’ | ⇒ | nemudæn  | ‘show’  |

The sentences in (5) illustrate parallel constructions using the light verb *šodæn* ‘become’ and its stylistic variant *gærdidæn*.

- (5)
- |    |               |             |               |            |              |  |
|----|---------------|-------------|---------------|------------|--------------|--|
| a. | konferans-e   | bælučestan  | dær           | lændæn     | bargozar     | <i>šod</i>                                       |
|    | conference-EZ | Baluchistan | in            | London     | [held]       | became   |
|    |               |             |               |            |              | ‘The Baluchistan conference was held in London.’ |
| b. | čaharomin     | nešæst-e    | kanun-e       | kontrol-e  | ofunæt-e     | iran   |
|    | fourth        | session-EZ  | society-EZ    | control-EZ | infection-EZ | Iran   |
|    | emruz         | bargozar    | <i>gærdid</i> |            |              |  |
|    | today         | [held]      | turned-3SG    |            |              |  |

‘The fourth session of the Society for Prevention of Infectious Diseases of Iran was held today.’

Light verbs can combine with various types of non-verbal items such as Nominals, Adjectivals or Prepositional phrases to form complex predicates, as shown in the following examples from Dabir-Moghaddam (1997).

(6) Noun + LV

telefon	kærdæn	(telephone do)	‘to telephone’
šane	zædæn	(comb hit)	‘to comb’
ney	zædæn	(flute hit)	‘to play the flute’
dærd	kešidæn	(pain pull)	‘to hurt (intrans.)’
hæmam	kærdæn	(bath do)	‘to bathe’
šekæst	dadæn	(defeat give)	‘to defeat’
duš	gereftæn	(shower take)	‘to shower’
vojud	daštæn	(existence have)	‘to exist’
zendegi	kærdæn	(life do)	‘to live’

(7) Adjective/Past Participle + LV

delxor	kærdæn	(annoyed make)	‘to annoy’
delxor	šodæn	(annoyed become)	‘to be annoyed’
tælx	kærdæn	(bitter make)	‘to make bitter’

(8) Prepositional phrase + LV

be donya	amædæn	(to world come)	‘to be born’
æz beyn	ræftæn	(from between go)	‘to vanish’
æz beyn	bordæn	(from between take)	‘to destroy’
be xun	kešidæn	(to blood pull)	‘to kill, to massacre’
be yad	daštæn	(to memory have)	‘to remember’

The formation of complex verb forms is highly productive. Mohammad and Karimi (1992) have reported that only 115 verbs are used as simple verbs in modern colloquial and standard Persian. In fact, the majority of simple verbs in Middle or Classical Modern Persian have now been replaced by light verb constructions as shown in (9). Furthermore, some of the existing simple verbs also have complex counterparts as illustrated in (10), which are often preferred in colloquial speech.

- | (9)  | <u>Classical Modern Persian</u>  | <u>Modern Persian</u>                    |
|------|----------------------------------|--|
|      | agahanidæn <sup>3</sup> ‘inform’ | ⇒ agah kærdæn (informed make)            |
|      | piruzinidæn ‘make victorious’    | ⇒ piruz gærdandæn (victorious turn-Caus) |
|      | peydaginidæn ‘show’              | ⇒ nešan dadæn (sign give)                |
|      | aqazidæn ‘begin’                 | ⇒ aqaz kærdæn (beginning do)             |
|      | rowšaninidæn ‘turn on, light’    | ⇒ rowšæn kærdæn (bright make)            |
|      | ayasidæn ‘remember’              | ⇒ be yad aværdæn (to remembrance bring)  |
|      |                                  |  |
| (10) | zistæn ‘live’                    | ⇒ zendegi kærdæn (life do)               |
|      | geristæn ‘cry’                   | ⇒ gerye kærdæn (cry do)                  |
|      | pærdaxtæn ‘pay’                  | ⇒ pærdaxt kærdæn (payment do/make)       |
|      | kušidæn ‘try’                    | ⇒ kušeš kærdæn (try do/make)             |
|      | qæltidæn ‘roll (intrans)’        | ⇒ qælt xordæn (roll eat/collide)         |
|      | færiftæn ‘trick, fool’           | ⇒ færib dadæn (trick give)               |

Moreover, new loan words are used as verbs through combination with a light verb:

- |      |          |         |                       |                         |
|------|----------|---------|-----------------------|-------------------------|
| (11) | telefon  | kærdæn  | (telephone do)        | ‘to telephone’          |
|      | danlod   | kærdæn  | (download do)         | ‘to download’           |
|      | fæks     | kærdæn  | (fax do)              | ‘to fax’                |
|      | telegraf | zædæn   | (telegraph hit)       | ‘to telegraph’          |
|      | imeyl    | zædæn   | (email hit)           | ‘to email’              |
|      | klik     | kærdæn  | (click do)            | ‘to click (on a mouse)’ |
|      | masaj    | dadæn   | (massage give)        | ‘to massage’            |
|      | montaj   | kærdæn  | (editing/assembly do) | ‘to edit’               |
|      | sigar    | kešidæn | (cigarette pull)      | ‘to smoke’              |

Persian complex predicate constructions have been studied by several researchers, resulting in many important insights<sup>4</sup>. In particular, it is now generally accepted that the verbal elements in complex predicate constructions contribute the eventive properties of the verb such as causation, while the

<sup>3</sup>The *-an/in* suffixes in these examples are causative morphemes, while *-idæn* is the infinitival ending. The causative *-an* suffix (colloquial *-un*) is still used in Modern Persian on certain verbs such as unergatives: *xændidæn* ‘to laugh’ ⇒ *xændandæn* ‘to make laugh’.

<sup>4</sup>See Moyne (1970), Bashiri (1981), Barjasteh (1983), Khanlari (1986), Karimi (1989), Mohammad and Karimi (1992), Ghomeshi and Massam (1994), Vahedi-Langrudi (1996), Dabir-Moghaddam (1997), Karimi (1997), Karimi-Doostan (1997), Samvelian (2001), Haji-Abdolhosseini (2002), Megerdooimian (2002b), Goldberg (2004), Folli et al. (2005), among others.

core meaning is introduced by the nonverbal element. In addition, both components of the complex predicate seem to contribute to the final verbal aspect and argument structure (see in particular Folli et al. (2005) and Megerdoo-mian (2002a)). These works have been mainly concerned with the determination of the exact syntactic and semantic contributions of the preverbal element and the light verb. The ambiguous nature of the preverbal noun has not been examined as often, yet its understanding is crucial to the investigation of complex predicates. The latter will be the focus of the discussion in this paper.

## 2.2. BARE COMPLEMENTS

Let us return to the sentences in (2) that include a bare preverbal object, repeated below as (12).

- (12) a. mæn hævij xord-æm  
I carrot ate-1SG  
'I ate carrot(s).'
- b. bæčče-ha ketab mi-xund-æn  
child-PL book DUR-read-3PL  
'The children were reading a book/books.'

As can be seen from the English translations, the bare noun in these examples is number neutral in the sense that there is no singular or plural implicature. Hence, the bare object in (12b) can refer to one book or several books. In addition, the bare nouns are generally not salient in the discourse since they cannot be referred to by a pronominal. This is illustrated in (13), where the bare noun is interpreted as a kind term and does not introduce a discourse referent. In both examples, the pronoun in the second clause cannot pick the bare noun as an antecedent.

- (13) a. [Example from Barjasteh (1983), 5-99(ii)]  
\*mæn dišæb qæza<sub>i</sub> xord-æm və kæmi æz an<sub>i</sub>-ra  
I last night food ate-1SG and some of it-OM  
hæm be gorbe dad-æm  
also to cat gave-1SG  
'\*Last night I ate (food<sub>i</sub>) and gave some of it<sub>i</sub> to the cat, too.'
- b. ?\*šadi diruz ketab<sub>i</sub> xund. bæ'd un<sub>i</sub>-ro be  
Shadi yesterday book read-PAST. Then it/he/she-OM to  
ketabxune bær gærd-un-d  
library over turn-CAUS-PAST.3SG  
'?\*Yesterday Shadi read a book/books<sub>i</sub>. Then she returned it<sub>i</sub> to the bookstore.'

Similarly in (14), the second clause cannot refer to the bare noun *ketab* ‘book’ but rather describes the whole book reading event.

- (14) \**mæn dišæb ketab<sub>i</sub> xund-æm. pro<sub>i</sub> xeyli xænde-dar bud*  
 I last night book read-1SG. very laughter-have was  
 ‘\*Last night I read a book/books<sub>i</sub>. It<sub>i</sub> was very funny.’

In fact, Dabir-Moghaddam (1997) describes noun+verb combinations as forming a “conceptual whole”. According to this view, (12b) for instance, depicts an activity of book-reading whereby *ketab* ‘book’ seems to modify the reading event denoted by the verb *xandæn* ‘to read’.<sup>5</sup>

In Persian, when a direct object is specific, it receives the overt object marker *-ra* (pronounced *ro* or *o* in colloquial speech).<sup>6</sup> As expected, the specific direct object is salient in the discourse and can be picked up by a referring anaphor.

- (15) a. *mæn dišæb qæza-ro<sub>i</sub> xord-æm væ kæmi æz an<sub>i</sub>-ra*  
 I last night food-OM ate-1SG and some of it-OM  
*hæm be gorbe dad-æm*  
 also to cat gave-1SG  
 ‘Last night I ate the food<sub>i</sub> and gave some of it<sub>i</sub> to the cat, too.’
- b. *šadi diruz ye ketab<sub>i</sub>-o xund. bæ’d un<sub>i</sub>-ro*  
 Shadi yesterday one book-OM read-PAST. Then it/he/she-OM  
*be ketabxune bær gærd-un-d.*  
 to library over turn-CAUS-PAST.3SG

<sup>5</sup>It should be noted, however, that the judgments on the referentiality of the bare objects are not always clear. For instance, the following sentences seem fine to my consultants with the bolded anaphor referring to the underlined bare noun.

- (i) a. *mæn diruz xyar xord-æm væ pust-a-š-o*  
 I yesterday cucumber ate-1SG and skin-PL-POSS.3SG-OM  
*endaxt-æm tu sætl-e ašxal*  
 threw-1SG in bucket-EZ garbage  
 ‘Last night I ate a cucumber and threw its skin in the trashcan.’
- b. *šadi xune xærid-e. **pro** dær lændæn-e*  
 Shadi house bought-PERF.3SG. In London-COP.3SG  
 ‘Shadi has bought a house. It’s in London.’

Dayal (2003) also notes that certain Hindi referentiality judgments with bare nouns are not straightforward. A thorough analysis of these referentiality tests is outside the scope of this paper. In section 3, however, I will show that there are different degrees of referentiality displayed by the bare object and the predicate nominal.

<sup>6</sup>The properties of the specific object have been discussed in more detail by Karimi (1996), Karimi (2003), Kahnemuyipour (2004) and Ganjavi (2007).

(i) ‘Yesterday Shadi read a (specific) book<sub>i</sub>. Then she returned it<sub>i</sub> to the bookstore.’

(ii) ‘Yesterday Shadi read one of the books<sub>i</sub>. Then she returned it<sub>i</sub> to the bookstore.’

Similarly, the second clause in (16) can refer to the specific object. Hence, in this example, the book itself is interpreted as funny rather than the event of reading the book.

(16) mæn diʃæb ketab<sub>i</sub>-ro xund-æm. pro<sub>i</sub> xeyli xænde-dar bud  
I last night book-OM read-1SG. very laugh-have was  
‘Last night I read the book<sub>i</sub>. It<sub>i</sub> was very funny.’

Furthermore, the bare nouns in (12) need to remain adjacent to the verb. The example below shows a bare noun and verb combination in (17a). The object in (17b), however, has a definite interpretation and receives the overt object marker.

(17) a. bæčče-ha qæza xord-æn  
child-PL food ate-3PL  
‘The children ate.’  
b. bæčče-ha qæza-ro xord-æn  
child-PL food-OM ate-3PL  
‘The children ate the food.’

As (18) illustrates, the specific object can be separated from the verb by an adverb. The bare noun, however, does not allow an intervening adverb and needs to remain adjacent to the verb as illustrated in (19).<sup>7</sup>

(18) bæčče-ha qæza-ro ba eštyaq xord-æn  
child-PL food-OM with enthusiasm ate-3PL  
‘The children ate the food enthusiastically.’  
(19) a. bæčče-ha ba eštyaq qæza xord-æn  
child-PL with enthusiasm food ate-3PL  
‘The children ate enthusiastically.’  
b. \*bæčče-ha qæza ba eštyaq xord-æn  
child-PL food with enthusiasm ate-3PL  
‘\*The children ate enthusiastically.’

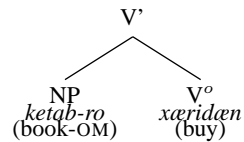
<sup>7</sup>(19b) is felicitous with a contrastive stress on *qæza* but ungrammatical in a neutral reading.

The preverbal position occupied by the bare noun in these constructions and the close relation between the verb and the nominal have led a number of researchers to treat these nouns as identical in structure to the preverbal nouns that appear in complex predicate constructions discussed in Section 2.1.

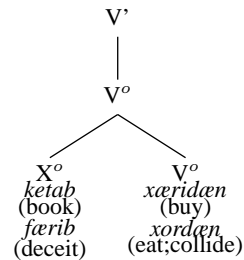
Ghomeshi and Massam (1994) also notice that both the bare object and the NV element receive the main stress in the verb phrase. In contrast, specific direct objects that appear with the overt marker *-ra/ro* fall outside the VP stress domain; with a specific object (as in (17b)) the primary stress appears on the verb. Ghomeshi and Massam therefore argue that both categories of bare nominals form a phonological and syntactic unit with the verb. In addition, they treat the non-referential bare nouns as predicate modifiers. Thus, for them *ketab xæridæn* ‘book buy’ refers to an activity of ‘book-buying’ and the bare noun modifies the action described by the verb rather than function as its argument.

Ghomeshi and Massam (1994) propose to treat both types of noun+verb constructions uniformly in syntax as a *juxtaposition* structure. Thus, they suggest that a “regular direct object” (i.e., an object that is specific or contains a Num feature) is a nominal phrase that appears as a sister to  $V^o$  as illustrated in (20a). On the other hand, both types of bare nouns are considered N heads “juxtaposed” in the  $V^o$  node. Note that the juxtaposed position could also contain a non-thematic element in Persian such as an adjective and is therefore represented as  $X^o$ , rather than  $N^o$ .

(20) a. Regular direct object



b. Juxtaposed noun:



The two configurations also have some aspectual consequences. Ghomeshi and Massam argue that the direct object arguments can delimit an event and give rise to bounded events or accomplishments. This is shown in the sentence in (21), which contains a specific object *sib-ra* ‘the apple’. The sentence is fine with the temporal adverbial ‘in two minutes’ but is ungrammatical if used with the ‘for an hour’ adverb, indicating that the sentence receives a bounded aspect reading. In contrast, the authors claim that the sentences in (22) involving juxtaposition denote processes, are unbounded, and are canonically ‘intransitive’ (Ghomeshi and Massam, 1994, p.191).

(21) a. (mæn) sib-ra dær do dæqiqe xord-æm  
I apple-DEF in two minutes ate-1SG

‘I ate the apple in two minutes.’

- b. \*(mæn) sib-ra yek sa’æt xord-æm  
 I apple-DEF one hour ate-1SG  
 ‘I ate the apple for an hour.’

- (22) a. \*(mæn) dær do dæqiqe sib xord-æm  
 I in two minutes apple ate-1SG  
 ‘I ate apples in two minutes.’

- b. (mæn) yek sa’æt sib xord-æm  
 I one hour apple ate-1SG  
 ‘I ate apples for an hour.’

To summarize, the two types of preverbal nominals, bare object NPs and nominal NV elements display a number of identical properties: They are both number neutral, are not salient in the discourse, appear immediately to the left of the verb, receive the main VP stress, and according to Ghomeshi and Massam, they both give rise to unbounded readings. All these properties clearly contrast with those of the specific direct object. Based on these results, previous works (Barjasteh, 1983; Ghomeshi and Massam, 1994; Vahedi-Langrudi, 1996) have opted to treat the two types of bare nouns with identical syntactic structures, while providing a separate analysis for the specific direct object. In section 3, I will review some of these arguments and present new evidence that clearly shows that the two preverbal nominals are quite distinct.

### 3. Distinguishing Preverbal Categories

#### 3.1. LIGHT VERB VS. THEMATIC VERB

Although certain researchers conclude that the predicate nominal and the bare object occupy the same structural position and should receive identical treatment, they do distinguish the two types of constructions – at least at the level of interpretation. For instance, Vahedi-Langrudi (1996) makes a distinction between the thematic verb *neveštæn* ‘to write’ in (23) and the light verb *kærdæn* in (24). He nevertheless claims that he sees no real difference between these two constructions as far as semantic interpretation, case-marking and syntactic configuration are concerned.

- (23) daræm name mi-nevis-æm  
 have-1SG letter DUR-write-1SG  
 ‘I am writing letters.’

- (24) Ali gerye kærð  
 Ali cry did-3SG  
 ‘Ali cried.’

Vahedi insists on an equal treatment of the two bare nouns, yet admits that there exist very distinct interpretations: Light verbs refer only to the “logical” component of the verb meaning, affecting aspect and event information, while thematic verbs are full-fledged verbal elements with logical as well as thematic components. I argue, however, that the distinct interpretations in the two constructions clearly point to a difference in structure between predicates formed with a light verb and those composed of a thematic verb. Consider the following contrasting sets: The noun+verb combinations in (25) represent a bare direct object followed by the thematic verb *xordæn* ‘eat’, while the examples in (26) consist of complex predicate constructions where a noun is followed by the light verb counterpart of *xordæn*.

- (25) NP + ThV
- |      |        |                |                   |
|------|--------|----------------|-------------------|
| qæza | xordæn | (food eat)     | ‘to eat (food)’   |
| xyar | xordæn | (cucumber eat) | ‘to eat cucumber’ |
| šam  | xordæn | (dinner eat)   | ‘to eat dinner’   |

- (26) NV + LV
- |        |        |                         |                  |
|--------|--------|-------------------------|------------------|
| kotæk  | xordæn | (beating eat/collide)   | ‘to be beaten’   |
| færib  | xordæn | (deception eat/collide) | ‘to be deceived’ |
| šekæst | xordæn | (defeat eat/collide)    | ‘to be defeated’ |

The interpretation of the verb and of the preverbal noun in the two sets of constructions are quite distinct. The nominals in (25) correspond to an entity that undergoes the action denoted by the verb (i.e., they are being consumed). These nouns satisfy certain selectional restrictions of the verbal element: In all the examples in (25), the verb *xordæn* is a thematic verb meaning ‘to eat’ and it can appear with any noun that refers to edible entities such as *qæza* ‘food’, *šam* ‘dinner’, *pænir* ‘cheese’, *xyar* ‘cucumber’, etc. These interpretations clearly contrast with the properties of the NV element in the complex predicate constructions in (26). All these constructions correspond to a passive reading in English translations where the subject has been affected by the event. The data suggest that the bare nouns in (25) are non-specific direct objects selected by the thematic verb *xordæn* ‘eat’, while the preverbal nouns in (26) are part of the verbal predicate.

In general, the nonspecific (or bare) direct object can be anything that satisfies the selectional restrictions of the thematic verb. For instance, in the following noun+verb examples, the nominal can be replaced by any noun that can be read (27), worn (28), or bought (29).

- (27) ruzname xandæn (newspaper read) ‘to read newspapers’  
ketab xandæn (book read) ‘to read a book’  
mæjælle xandæn (magazine read) ‘to read a magazine’  
mæqale xandæn (article read) ‘to read an article’
- (28) lebas pušidæn (dress wear) ‘to wear clothes/a dress’  
kæfš pušidæn (shoe wear) ‘to wear shoes’
- (29) dæftærče xæridæn (notebook buy) ‘to buy a notebook’  
pyaz xæridæn (onion buy) ‘to buy onion’  
gol xæridæn (flower buy) ‘to buy flowers’

The choice of the NV element, however, is much more restricted (and less predictable). To begin with, only verbs that possess a light verb counterpart (see the light verb list in (3)) may appear with a preverbal noun to form a complex predicate. Hence, the thematic verbs *xæridæn* and *pušidæn* that lack a light verb equivalent only appear in a noun+verb construction where the preverbal bare noun behaves as the internal argument of the verb as exemplified in (30).

- (30) a. bæčče-ha ketab xærid-æn  
child-PL book bought-3PL  
‘The children bought book(s).’  
b. behzad lebas mi-puš-id  
Behzad clothes/dress DUR-wear-3SG  
‘Behzad was putting on clothes.’

These nouns can appear with the specific object marker *ra* (colloquial *ro/o*) as shown in (31) which, as we will see in Section 3.3, appears on object nouns and not on nominal NVs.

- (31) a. bæčče-ha ketab-o xærid-æn  
child-PL book bought-3PL  
‘The children bought the book.’  
b. behzad lebas-a-š-o mi-puš-id  
Behzad clothes/dresses-POSS.3SG-OM DUR-wear-3SG  
‘Behzad was putting on his clothes.’

Vahedi-Langrudi (1996) proposes that the bare noun appearing with a light verb is a subcategorized object of the bleached verb. Recent investigations have convincingly shown, however, that the tight relationship between the

light verb and the preverbal noun is due to the properties of complex predicate formation, whereby the two constituents join to compose a single predicate syntactically and semantically. For instance, it has been demonstrated by Folli et al. (2005) that the light verb contributes eventive and aspectual properties to the complex verb, the NV determines Aktionsart (or inner aspect) and substantive information, while both components contribute to the argument structure (see Section 5 for further discussion). A thematic verb, on the other hand, includes all of the mentioned properties of event, aspect, and argument structure, as well as the core meaning. In other words, the combination of nominal NV and light verb (NV + LV) is equivalent semantically and structurally to the heavy or thematic verb (ThV). The bare object noun, however, is to be treated as an internal argument of a heavy verb.

### 3.2. REFERENTIALITY

#### 3.2.1. *Question Formation*

Evidence for the distinct distribution of the nominal NV and the object noun can be found in the formation of interrogatives. (32a) and (33a) both represent a bare object and thematic verb construction. Although bare indefinite objects are generally considered to be non-referential, they can be questioned as shown in the (b) examples.

- (32) a. nima ketab mi-xun-e  
Nima book DUR-read-3SG  
'Nima is reading a book.'
- b. - nima či mi-xun-e?  
Nima what DUR-read-3SG  
'What does Nima read?'  
- ketab  
'book'
- (33) a. pezešk be bæčče-ha dæva dad  
physician to child-PL medication gave  
'The physician gave medication to the children.'
- b. - pezešk be bæčče-ha či dad?  
physician to child-PL what gave  
'What did the physician give to the children?'  
- dæva  
'medication'

The nominal NV in complex predicates, however, cannot be questioned as illustrated below for *færib xordæn* (deceit eat/collide) 'to be deceived' in (34) and *šæfa dadæn* (cure give) 'to cure' in (35). Thus, the preverbal noun in

the complex predicate construction in (35) cannot be questioned separately, in clear contrast to its thematic verb counterpart in (33).

(34) - mærdom či xord-æn?  
 people what ate-3PL  
 ‘What did people eat?’

- \*færib  
 ‘deceit’

(35) - pezešk be bæčče-ha či dad?  
 physician to child-PL what gave-3SG  
 ‘What did the physician give to the children?’

- \*šæfa  
 ‘cure’

### 3.2.2. Number Neutrality

Number neutrality is a common property of bare nouns. In the sentence in (36a), the bare noun could denote a single indefinite book or several of them. Similarly, in (36b) the professors were eating an unspecified number of pomegranates: they could have been eating several pomegranates or sharing the same one.

(36) a. šadi ketab xærid  
 Shadi book bought-3SG  
 ‘Shadi bought a book/books.’

b. ostad-a ænar mi-xord-æn  
 professor-PL pomegranate DUR-ate-3PL  
 ‘The professors were eating a pomegranate/pomegranates.’

However, in the complex predicate examples in (37), the nominal NV does not imply a singular or plural entity and is instead interpreted as part of the predicate. Note that this observation is not limited to deverbal nouns such as *færib* ‘deceit’ and *kotæk* ‘beating’, but also applies to countable nouns such as *šune* ‘comb’ as in (37c), where there is no implicature of the singularity or plurality of the comb used in the event, just as there is no number implicature for the comb used in the English event of combing.

(37) a. bimar sær ænjam šæfa yaft  
 patient finally cure found-3SG  
 ‘At the end, the patient was cured.’

- b. bəčče-ha kotæk xord-æn  
 child-PL beating ate/collided-3PL  
 ‘The children were beaten.’
- c. nærges mu-ha-š-o šune zæd  
 Narges hair-PL-POSS.3SG-OM comb hit-3SG  
 ‘Narges combed her hair.’

The sentences below also show that the bare object nouns can easily receive a numeral reading, whereas the nominal NVs are unable to appear with a number or classifier head since they are part of the verbal predicate: (38a) consists of a bare object noun appearing with a thematic verb. In (38b), the object noun has number specification and the translation indicates that the sentence now refers to two magazines, rather than to an unspecified number.

- (38) a. ma diruz mæjælle xærid-im  
 we yesterday magazine bought-1PL  
 ‘Yesterday, we bought a magazine/magazines.’
- b. ma diruz do-ta mæjælle xærid-im  
 we yesterday two-CL magazine bought-1PL  
 ‘Yesterday, we bought two magazines.’

In contrast, the light verb constructions in (39) do not allow the preverbal nouns to be specified for number. The sentence in (39b), for instance, cannot be interpreted as Narges using two combs to comb her hair.<sup>8</sup>

- (39) a. \*mærdom čæn-ta færib xord-æn  
 people few-CL deceit ate-3PL  
 ‘\* Lit. (The) people ate a few deceits.’
- b. ?\*nærges mu-ha-š-o do-ta šune zæd  
 Narges hair-PL-POSS.3SG-OM two-CL comb hit-3SG  
 ‘?\* Lit. Narges hit her hair two combs.’

### 3.3. SPECIFIC OBJECT COUNTERPARTS

The object marker *ra* appears on direct objects with specific readings as illustrated in the contrast between (40a) and (40b). The first sentence contains a bare indefinite object that receives a nonspecific reading, but the definite object in (40b) has to appear with the specificity marker *ra*.<sup>9</sup>

<sup>8</sup>The only possible interpretation here is that Narges combed her hair twice, thus the number and classifier actually modify the whole predicate. This will be discussed further in Section 3.4.

<sup>9</sup>*Ra* may also appear on topics, which are external to the *vP* (Ghomeshi, 1997; Ganjavi, 2007).

- (40) [Examples from Karimi (1996)]
- a. Kimea be mæn ketab dad  
Kimea to me book gave  
'Kimea gave me book(s).'
  - b. Kimea in ketab \*(ro) be mæn dad.  
Kimea this book OM to me gave  
'Kimea gave me this book.'

The availability of a specific counterpart presents another distinction in the behavior of the NV and the bare object. In the following examples, only the nouns that appear with thematic verbs have specific counterparts: The bare object *dæva* can be made specific (41b) but there is no specific counterpart for the nominal NV in (42b).

- (41) a. doktor be mæriz dæva dad  
doctor to patient medication gave  
'The doctor gave the patient some medication.'
- b. doktor dæva-ro be mæriz dad  
doctor medication-OM to patient gave  
'The doctor gave the medication to the patient.'
- (42) a. doktor mæriz-ra šæfa dad  
doctor patient-OM cure gave  
'The doctor cured the patient.'
- b. \*doktor šæfa-ro be mæriz dad  
doctor cure-OM to patient gave  
'\*The doctor gave the cure to the patient.'

The sentences below provide similar examples. In these sentence pairs, the (a) examples illustrate a bare noun followed by a thematic verb. As shown in the (b) counterparts, the bare nouns in these cases can be formed as a specific internal argument and receive the object marker *-ra*.

- (43) a. (mæn) tæmum-e ruz mæjælle xund-æm  
I complete-EZ day magazine read-1SG  
'I spent the whole day reading magazines/a magazine.'
- b. (mæn) mæjælle-ro diruz xund-æm  
I magazine-OM yesterday read-1SG  
'I read the magazine yesterday.'
- (44) a. in pesær-e hærgyz jurab ne-mi-puš-e  
this boy-DEF never sock NEG-DUR-wear-3SG  
'This boy never wears socks.'

- b. in pesær-e jurab-a-ye syah-o pušid  
 this boy-DEF sock-PL-EZ black-OM wore.3SG  
 ‘This boy wore the black socks.’

The availability of a specific counterpart for these bare nouns suggests that they are in fact internal arguments of the verb. In contrast, the bare noun appearing with the light verb *xordæn* cannot appear as a specific direct object as shown below, suggesting that NV elements are part of the verbal predicate rather than an argument of the verb.

- (45) a. pesær-æk dobare kotæk xord  
 boy-DIM again beating ate/collided  
 ‘The little boy was beaten again.’  
 b. ?\*pesær-æk dobare kotæk-ro xord  
 boy-DIM again beating-OM ate  
 ‘?\*The little boy ate the beating again.’

It should be noted that there are some instances where the NV elements may receive the overt object marker *ra*, but they can only do so in very specific constructions. These occur usually when the NV is preceded by a quantifier or determiner such as *čenin* ‘such’ or *in* ‘this’ (46a), is modified by a superlative adjective (46b), or is the head of a relative clause (46c).

- (46) a. mæn hæta æz bæčče-ha in kotæk-ro xord-æm  
 I even from child-PL this beating-OM ate/collided-1SG  
 ‘I got beaten like that even by children.’  
 b. in tæsmim bozorgtærin lætme-ra be ĵimnastik-e iran  
 this decision biggest damage-OM to gymnastics Iran  
 zæd  
 hit-3SG  
 ‘This decision caused the biggest damage to Iranian gymnastics.’  
 c. in kæšf-i-ra ke kærd-æm mædyun-e šoma  
 this discovery-REL-OM that did-1SG indebted-EZ you  
 hæstaem  
 be-1SG  
 ‘This discovery that I made, I owe it to you.’

At first glance, these examples consisting of separable complex predicates seem to contradict the argument put forth in this section with respect to the lack of a specific object counterpart for the nominal NV. It is crucial to note, however, that the object marker can appear on nominal NVs only in the context of these bigger, modified structures. In fact, the sentences in (46) are

unacceptable if the NV receives the specific object marker in the absence of modification or quantification, as shown in (47). I therefore posit that this points to an important distinction between the behavior of the two nominal categories: while the direct object noun can always be interpreted as a specific object and receive the overt object marker, the NV can only receive the object marker in modified structures.

- (47) a. \**mæn hæta æz bæčče-ha kotæk-ro xord-æm*  
 I even from child-PL beating-OM ate/collided-1SG  
 ‘I got the beating even from children.’
- b. \**in tæsmim lætme-ra be ĵimnastik-e iran zæd*  
 this decision damage-OM to gymnastics Iran hit-3SG  
 ‘This decision caused the damage to Iranian gymnastics.’
- c. \**kæšf-ra ke kærd-æm mædyun-e šoma hæstaem*  
 discovery-OM that did-1SG indebted-EZ you be-1SG  
 ‘The discovery that I made, I owe it to you.’

The specific context in which a NV element can be separated from the light verb it appears with is an important issue in the study of complex predicates that has not received enough attention. Recent work by Karimi-Doostan on Persian suggests that the internal properties of the NV are significant in the level of separability allowed (Karimi-Doostan, 2008), but there is no explanation in the literature for the limited availability of the object marker on the NV as exemplified in the contrast between (46) and (47).<sup>10</sup>

### 3.4. PREDICATE MODIFICATION

Another major difference between complex predicate constructions and non-specific argument and verb combinations is the type of modification that is available in each instance. As illustrated in the examples in (48), the non-specific argument can be modified by an adjective. Note that in Persian, the *ezafe* affix *-e* (*ye* after vowels) is used to link the head noun to the following noun phrase elements.

- (48) a. *qæza-ye bæd-i xord-im*  
 food-EZ bad-INDEF ate-1PL  
 ‘We ate some bad food.’
- b. *ketab-e xub-i xunde bud*  
 book-EZ good-INDEF read was  
 ‘He had read a good book.’

<sup>10</sup>One possible account can be found in the analysis of *ra* proposed in Ghomeshi (1997) where *ra* is argued to mark not only direct objects but also noun phrases that are construed as topic. I will leave an investigation of this idea for future research.

- c. ræft-im ye vyolon-e hessabi xærid-im  
 went-1PL one violin-EZ awesome bought-1PL  
 ‘We went and bought an awesome violin.’

The examples in (49) represent complex predicates that allow an intervening adjective between the nominal element and the light verb. In these instances, the nouns are also linked to the adjective using the *ezafe* affix as shown. However, in these complex predicates, the modifying adjective is not modifying the noun with which it forms an *ezafe* construction but rather behaves as an adverb modifying the whole verbal predicate. As the translations indicate in the contrastive pairs (48c) and (49c), for instance, the adjective *hessabi* has different interpretations: In (48c) the violin is considered awesome while the adjective in (49c) refers to the act of violin-playing. Similarly, the sentence in (49d) does not entail that the goat’s horn was strong but rather that the act of hitting with the horn was forceful.

- (49) a. kotæk-e bæd-i xord  
 beating-EZ bad-INDEF ate-3SG  
 ‘He got a bad beating.’
- b. če otu-ye bæd-i kærde  
 what iron-EZ bad-INDEF did-PART.3SG  
 ‘He has ironed (it) so badly.’ (Lit. He has done such a bad iron)
- c. dišæb ye vyolon-e hessabi zæd-im  
 last night one violin-EZ awesome hit-1PL  
 ‘We played some awesome violin last night.’
- d. boz-e šax-e mohkæm-i zæd be laše  
 goat-DEF horn-EZ hard-INDEF hit-3SG to cadaver  
 ‘The goat hit the cadaver with force.’ (Lit. The goat hit a hard horn to the cadaver)

The examples above show a clear distinction between the noun+verb constructions consisting of a non-specific argument and a thematic verb (48) where the adjective modifies the bare object in each case, and those formed from the combination of a nominal NV and a light verb (49) where the adjective behaves as an adverb modifying the whole verbal predicate. The sentences in (49) can even be rewritten as in (50) with overt adverbial modification as shown. Note that in these instances, the nominal element is no longer linked to an adjectival by the *ezafe* affix. Instead, VP adverbs are used (shown in *italic*) in order to modify the event.

- (50) a. *bæd jur-i* kotæk xord  
 bad way-INDEF beating ate-3SG  
 ‘He was beaten badly.’ (Lit. ‘He ate a beating in a bad way’)

- b. *če bæd otu kærde*  
 what bad iron did-PART.3SG  
 ‘He has ironed (it) so badly.’
- c. *dīšæb hessabi vyolon zæd-im*  
 last night awesome violin hit-1PL  
 ‘We played violin really well last night.’
- d. *boz-e mohkæm šax zæd be laše*  
 goat-DEF hard horn hit to cadaver  
 ‘The goat hit the cadaver with force.’

Similar contrasts are obtained when the preverbal nouns are pluralized or when they appear with an indefinite marker. In (51), the indefinite marker is added to the preverbal noun; the nouns *ketab-i* and *ænar-i* now refer to a nonspecific single book and pomegranate, respectively.

- (51) a. *šadi qæbl æz xab ræftæn ketab-i xund*  
 Shadi before from sleep go.INF book-INDEF read-3SG  
 ‘Before going to sleep, Shadi read a book.’
- b. *ostad-a dour-e hæm jæm’ šode*  
 professor-PL around-EZ together collection became-PART  
*ænar-i mi-xord-æn*  
 pomegranate-INDEF DUR-ate-3PL  
 ‘Gathered together, the professors were eating a pomegranate.’

The examples below illustrate the light verb construction *šune zædæn* ‘to comb’ with an indefinite morpheme (52a) and number specification (52b).

- (52) a. *nærges mu-ha-š-o šune-i zæd o*  
 Narges hair-PL-POSS.3SG-OM comb-INDEF hit-3SG and  
*ræft*  
 went-3SG  
 ‘Narges combed her hair and left.’ ‘Narges gave her hair a quick comb and left.’
- b. *nærges mu-ha-š-o do-ta šune zæd o ræft*  
 Narges hair-PL-POSS.3SG-OM two-CL comb hit-3SG and left  
 ‘Narges combed her hair twice and left.’

In each of these sentences, the added plurality or numeral morpheme does not specify the number of the preverbal noun *šane* (pronounced *šune* in colloquial speech); instead, it modifies the whole event of combing denoted by the complex predicate. The sentence in (52a) does not mean that Narges used a single comb to comb her hair, but rather that she combed her hair once. It

has the meaning that Narges gave it a quick comb before dashing off. This sentence is in fact equivalent to the french ‘se donner un coup de peigne’ (Lit. give oneself a hit of comb). Similarly, the numeral modification in (52b) is interpreted as modifying the event and indicates that Narges combed her hair twice.

The distinct modification possibilities of the two constructions provides a strong argument for representing the bare object and the NV within different structural configurations.

### 3.5. CASE ASSIGNMENT

Another type of evidence for the distinct structural positions of the preverbal noun categories relates to the case-assignment properties of the complex predicate. While the thematic verb *dadæn* ‘give’ in (53a) occurs in a ditransitive construction in Persian, the light verb construction shown in (53b) can only assign Accusative or object case as illustrated by the ungrammaticality of (53c). These examples confirm the proposal that the preverbal nominal in complex predicate formations combines with the light verb to form a single case-assigning predicate.

- (53) a. doktor **be æli** dæva dad  
 doctor to Ali medication gave  
 ‘The doctor gave Ali medication.’
- b. doktor **æli-ro** šæfa dad  
 doctor Ali-OM cure gave  
 ‘The doctor cured Ali.’
- c. \*doktor **be æli** šæfa dad  
 doctor to Ali cure gave

Similarly, although the thematic verb *zædæn* ‘hit’ is a transitive verb, as illustrated in (54), it can be used as a light verb to form an unergative verb of emission as shown in (55a), a verb marking an intransitive, repetitive event as in (55b), a transitive verb incorporating the instrument of the event as part of the complex predicate as exemplified in (55c), or as the causative of an intransitive predicate as shown in (55d)<sup>11</sup>.

- (54) moællem šagerd-o zæd  
 teacher student-OM hit

<sup>11</sup>The intransitive variant of (55d) is formed with the light verb *xordæn* ‘eat/collide’:

- (i) bæččeha gul xordæn  
 children trick ate/collided  
 ‘The children were fooled.’

‘The teacher hit the student.’

- (55) a. *bæčče-ha sut mi-zæd-æn*  
 child-PL whistle DUR-hit-3PL  
 ‘The children were whistling.’
- b. *morqabi pær zæd o ræft*  
 duck wing hit and left  
 ‘The duck flew away’
- c. *nærges mu-ha-š-o šune zæd*  
 Narges hair-PL-POSS.3SG-OM comb hit  
 ‘Narges combed her hair.’
- d. *æli bæčče-ha-ro gul zæd*  
 Ali child-PL-OM trick hit  
 ‘Ali fooled the children.’

These constructions show that the heavy verb *zædæn* always entails the presence of an accusative or direct object. However, in the complex predicates in (55), the argument structure of the verbal construction obtains from the composition of the NV and light verb components of the predicate. Thus, the nominal element in this instance plays an important role in determining the transitivity of the final verbal construction.

### 3.6. COOCCURRENCE OF BARE NOUNS

If the NV elements in complex predicates and the bare objects appearing with thematic verbs occupied the same structural position, then we would not expect to find the two nominals co-occurring within the clause. Yet as the sentences in (56) clearly show, the two can co-occur when the complex predicate is transitive. These constructions raise a major problem for analyses arguing that the bare object and the nominal NV both occupy the same structural position.

- (56) a. *čæn bar bæčče kotæk zæd-i?*  
 how many time child beating hit-2SG  
 ‘How many times have you beaten a child?’
- b. *ma tæmam-e ruz otaq jaru kærd-im*  
 we complete-EZ day room broom did-1PL  
 ‘We swept rooms all day.’
- c. *in doktor mi-tun-e mæriz šæfa be-de*  
 this doctor DUR-can-3SG patient cure SUBJ-give.3SG  
 ‘This doctor can cure patients.’

Samvelian (2001) refers to Persian as a double object language thus treating both bare nominals as direct objects of the verb. In her analysis, the nouns do not occupy distinct positions in the syntax although she suggests that the NV is in a closer semantic relation to the verbal element than the bare object noun. This analysis fails to explain the availability of the specific marker with the bare object nouns but not with the NV, as discussed in Section 3.3 above. Moreover, two bare object nouns cannot cooccur in Persian as illustrated in (57) demonstrating that it is not a double object language.

- (57) \*doktor mæriz dæva dad  
 doctor patient medication gave  
 ‘\*The doctor gave (a) patient (some) medication.’

Moreover, the preverbal noun of a thematic verb that does not have a light verb variant (see light verb list in (3)) can always have a specific counterpart as exemplified below, clearly suggesting that it is the direct object of the predicate. This is in contrast with the nominal NV elements seen earlier.

- (58) a. ma diruz kæfš pušid-im  
 we yesterday shoe wore-1PL  
 ‘We wore shoes yesterday.’  
 b. ma diruz kæfš-a-ro pušid-im  
 we yesterday shoe-PL-OM wore-1PL  
 ‘We wore the shoes yesterday.’
- (59) a. mæn ketab dar-æm  
 I book have-1SG  
 ‘I have a book/books.’  
 b. mæn ketab-æm-o dar-æm  
 I book-POSS.1SG-OM have-1SG  
 ‘I have my book.’

The cooccurrence possibility of the two bare noun categories illustrated in (56) convincingly shows that the two nominals cannot occupy the same structural position. In fact, if two bare nouns appear in a verbal predicate, the nominal closest to the verb has to be the NV that combines with the light verb to form a transitive verb as in (60). The bare object is shown in italics.

- (60) a. hæmiše *lebas* [<sub>CP</sub> otu mi-kon-e]  
 always clothes iron DUR-do-3SG  
 ‘He/she always irons clothes.’

- b. ma dar-im xune [<sub>CP</sub> jaru mi-zæn-im]  
 we have-1PL house broom DUR-hit-1PL  
 ‘We are sweeping houses/the house.’

In these examples, the NV elements (*otu* in (60a) and *jaru* in (60b)) form complex verbal predicates with the light verbs, and demonstrate the NV properties of number-neutrality (61), predicate modification (62), and the lack of a specific object counterpart as illustrated in (63). As shown in (63a), the bare object *xune* ‘house’ can receive the object marker *ra*, but the sentence is ungrammatical if the NV element appears with the *ra* in (63b). The sentence in (63c) can only mean that the broom itself is being hit; the complex predicate interpretation of sweeping is not available anymore.

- (61) a. æge lazem baše miy-am pirhæn-et-o ye  
 if need be-SUBJ DUR-come-1SG shirt-POSS.2SG-OM one  
 otu-yi mi-kon-æm  
 iron-INDEF DUR-do-1SG  
 ‘If need be, I’ll come and iron your shirt.’ (Lit. will give your shirt an iron)
- b. inja-ro ye jaru mi-zæn-æm bæd mi-shin-im ba hæm  
 here-OM one broom DUR-hit-1SG then DUR-sit-1PL together  
 gæp mi-zæn-im  
 chat DUR-hit-1PL  
 ‘I’ll give this place a sweep then we’ll sit and chat together.’
- (62) a. če otu-ye bæd-i kærde  
 what iron-EZ bad-INDEF did-PART.3SG  
 ‘He has ironed (it) so badly.’ (Lit. He has done such a bad iron)
- b. doxtær pa šod o hâyat-o ye jaru-ye  
 girl foot became-3SG and yard-OM one broom-EZ  
 særsæri zæd o bærgæšt  
 cursory hit-3SG and returned-3SG  
 ‘The girl got up and gave the yard a cursory sweep and returned.’
- (63) a. ma dar-im xunæ-ro jaru mi-zæn-im  
 we have-1PL house-OM broom DUR-hit-1PL  
 ‘We are sweeping the house.’
- b. \*ma dar-im jaru-ro xune mi-zæn-im  
 we have-1PL broom-OM house DUR-hit-1PL
- c. ma dar-im jaru-ro mi-zæn-im  
 we have-1PL broom-OM DUR-hit-1PL  
 ‘We are hitting the broom.’

These facts confirm that the bare noun closer to the light verb in these sentences is the NV that forms a complex predicate with the verb. The nouns shown in italics in (60) namely *lebas* ‘clothes’ and *xune* ‘house’, on the other hand, are the internal arguments of the resulting complex predicates.<sup>12</sup>

#### 4. Structure and Predication

The previous section provided strong evidence for the distinct properties of the bare noun appearing with a thematic verb and the nominal occurring adjacent to a light verb. It was argued that the ability of the NV and the object noun to cooccur, the distinct modification possibilities, and the differing availability of a specific counterpart in each case cannot be accounted for by an analysis that treats the two categories of bare nouns within a uniform syntactic structure such as the ones proposed by Ghomeshi and Massam (1994) and Vahedi-Langrudi (1996). The evidence suggests that the nominal NV is a component of the verbal predicate and combines with the light verb to form a single event, which is in effect equivalent in meaning and structure to the thematic verb. The bare object noun, however, is to be treated as an internal argument of the full verb (i.e., a thematic verb or a complex NV+LV verb) and not as part of the predicate. In the rest of this section I propose an analysis to capture these characteristics.

##### 4.1. VERBAL DECOMPOSITION

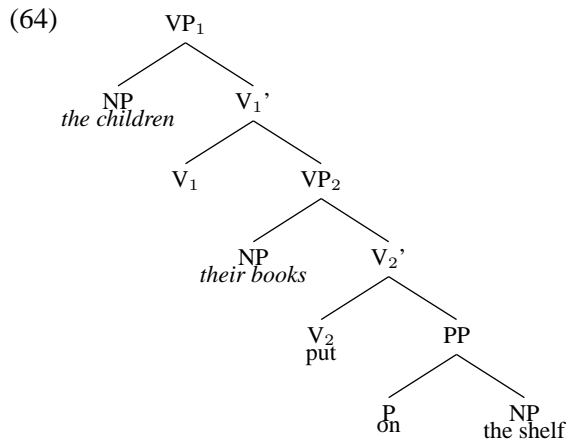
Recent studies in the formation of verbal predicates have adopted an approach to verbal construal whereby the construction is built compositionally by combining the various components of the verb (cf. Jackendoff (1990), Halle and Marantz (1993), Hale and Keyser (1993), Levin and Rappaport Hovav (1995), Harley (1996), among others).<sup>13</sup> In particular, Hale and Keyser (1993) and subsequent work on argument structure by these authors develop a representation of argument structure that is subject to syntactic principles. Within this lexical component, which Hale and Keyser refer to as l-syntax, lexical items are decomposed into basic, atomic units that are put together by syntactic mechanisms of complementation and adjunction, subject to principles

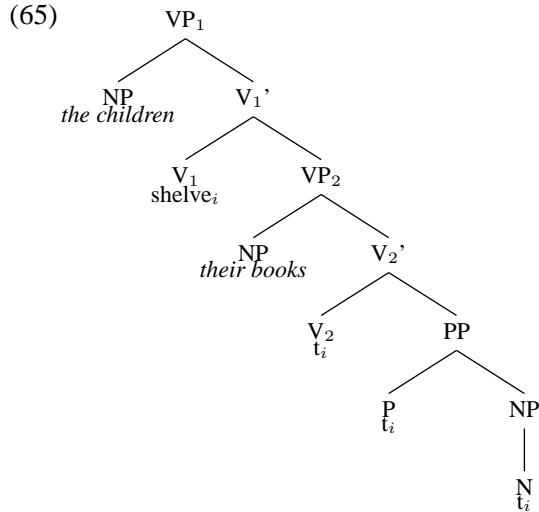
<sup>12</sup>The predicates formed by the combination of a PP and a light verb will not be discussed in this paper. However, see the Appendix section of Karimi (1997) for arguments distinguishing these “predicative” PPs from indirect arguments of a thematic verb, as in *be donya amædæn* (to world come) ‘to be born’ vs. *be kelas amædæn* (to class come) ‘to come to class’, or *be xater sepordæn* (to memory entrust) ‘to remember’ vs. *be ali sepordæn* (to Ali entrust) ‘to entrust to Ali’. Karimi reaches conclusions similar to the ones in this paper claiming that the two categories of PPs are quite distinct: while the PPs found in complex verb constructions are part of the verbal predicate, the PPs found with thematic verbs are in fact indirect arguments.

<sup>13</sup>The decomposition approach proposed is essentially similar to the one argued for in much of the work in the Generative Semantics tradition, as in, e.g. McCawley (1968).

of syntactic well-formedness such as the Head Movement Constraint (Travis, 1984) and the Empty Category Principle (Chomsky, 1981).

Following the VP-shell structure that Larson (1988) proposed for verbs such as *put*, whereby the verbal predicate is decomposed into two distinct verbal heads each projecting an argument in a binary branching structure as shown in (64), Hale and Keyser suggest the I-syntax derivation of the denominal verb *shelve* shown in (65). These authors propose that the verb *shelve* is derived through the combination of four distinct syntactic heads – the noun *shelf*, the preposition *on*, and two Vs – via a process of head incorporation referred to as *conflation*. Hale and Keyser (2002) define conflation as the process that allows the phonological matrix of a complement C to be introduced into the empty phonological matrix of the head that selects C. In the formation of synthetic “location” verbs such as *shelve*, the head element P has the morphological property that it is empty and thus must conflate with its complement. Similarly, the V-heads are empty and therefore conflate with their respective complement heads as well. The resulting conflation processes give phonological constituency to the upper V-head in (65), producing the sentence ‘The children shelve their books’. According to the analysis provided by Hale and Keyser, all of these conflated heads contribute meaning to the verb: P represents the locative relation and *shelf*, the complement of P, corresponds to the endpoint in a change of location. The lower verb contributes the concept of BE while the higher verb denotes a causation or CAUSE. Thus, the verb *shelve* can be viewed as meaning ‘CAUSE x to BE on a SHELF’.

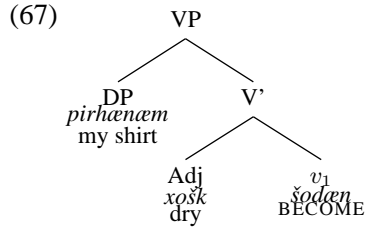




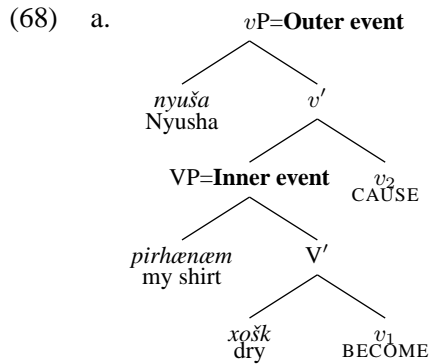
Similar proposals have been put forth in the literature on Persian in which the constituents of the complex predicate correspond to various substantive and functional heads that combine to form verbal meaning. Folli et al. (2005), for instance, argue that Persian complex predicates are syntactically derived from two independent elements, namely the light verb and the nonverbal element. Megerdooomian (2001) studies causative alternations and unergatives in Persian and also argues for a decomposition of the verbal structure into smaller components of meaning consisting of a root and functional features. To illustrate, consider the causative alternating pair in (66):

- (66) a. *pirhæn-æm xošk šod*  
 shirt-POSS.1SG dry became-3SG  
 ‘My shirt dried.’
- b. *nyuša pirhæn-æm-o xošk kærd*  
 Nyusha shirt-POSS.1SG-OM dry made-3SG  
 ‘Nyusha dried my shirt.’

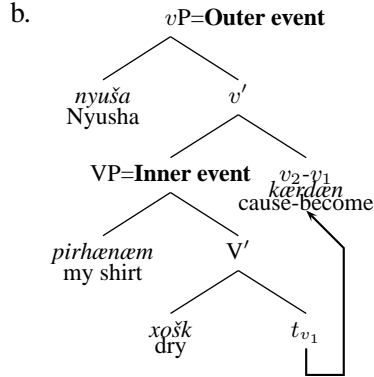
The stative complex predicate in (66a) is represented by the configuration in (67) where VP represents the change of state undergone by the internal subject *pirhænæm* ‘my shirt’. The resulting state is denoted by the adjectival element *xošk* ‘dry’ which composes with the functional head  $v_1$ , denoting a BECOME event, to form a change of state predicate. The configuration in (67) is also the underlying argument structure for ‘my shirt dried’ in English (cf. Hale and Keyser (2002)) before the conflation of the light verb and the nonverbal element.



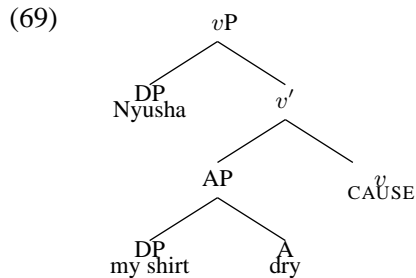
The transitive variant of the alternating pair is obtained by adding the outer or causation event on top of the VP projection as illustrated in (68a). This outer event consists of a verbal functional head  $v_2$ , which also projects a specifier position. The resulting structure represents a causal relation: the event denoted by  $v_2$  represents the concept of CAUSE and the argument DP occupying the [Spec,  $v$ P] position acts as the causer of the change of state. As illustrated in (68b), the verbal head  $v_1$  then incorporates into the higher verbal element  $v_2$ , giving rise to the newly formed light verb  $v$  which consists of the events CAUSE + BECOME. In the case of Persian, the combination of the two verbal heads is overtly realized as the light verb *kærdæn* with the meaning of ‘make’ while the nonverbal element is spelled-out as *xošk*.<sup>14</sup>



<sup>14</sup>It is generally accepted in the literature on Persian that the specific direct object subsequently moves out of the  $v$ P domain where it receives the object marker *ro/o*. Although not directly represented in the tree structures in this section, I also assume this analysis.



The analysis proposed for the causative verb in (68b) is in line with the structure proposed by Hale and Keyser but differs from the configuration argued for Persian by Folli et al. (2005), which assumes a complementary distribution of the causative and inchoative light verbs. In their analysis, the causative construction consists of a single *v*-head representing CAUSE as shown:



There is, however, evidence from other alternation verbs in Persian that the causative light verb does not simply replace the intransitive counterpart but actually includes the latter. In each of the following sentences, the light verb in the (b) examples is in fact a causative variant of the light verb in the (a) counterparts. This is especially clear in (72) where the causative alternant is obtained by adding an overt causative morpheme to the intransitive verb in (72a).

- (70) a. ab be juš amæd  
 water to boil come-PAST.3SG  
 ‘The water boiled.’

- b. nima ab-o be juš ovord  
Nima water-OM to boil bring-PAST.3SG  
'Nima boiled the water.'
- (71) a. homa be gerye oftad  
Homa to crying fall-PAST.3SG  
'Homa started to cry.'
- b. nima homa-ro be gerye endaxt  
Nima Homa-OM to crying throw-PAST.3SG  
'Nima made Homa (start to) cry.'
- (72) a. jæng be payan resid  
war to end arrive-PAST.3SG  
'The war came to an end.'
- b. soqut-e in rejim jæng-ra be payan res-an-d  
fall-EZ this regime war-OM to end arrive-CAUS-PAST.3SG  
'The war came to an end.'

Based on this pattern I argue that the causative verb *kærdæn* in fact represents the causative variant of the inchoative light verb *šodæn* 'become' and does not simply replace it.<sup>15</sup> In the *šodæn/kærdæn* alternating pairs, these light verbs combine with an adjectival NV to form the inchoative-causative alternation in Persian.

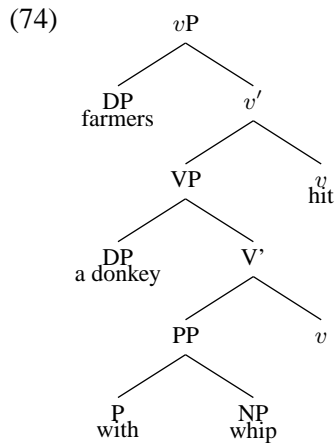
Now consider the following alternations formed with the light verbs *xordæn* and *zædæn* and with the nominal NV *šællaq* 'whip':

- (73) a. ye olaq šællaq xord  
one donkey whip ate/collided-3SG  
'A donkey was whipped.'
- b. dehqan-a ye olaq-o šællaq zædæn  
farmer-PL one donkey whip hit-3PL  
'The farmers whipped a donkey.'

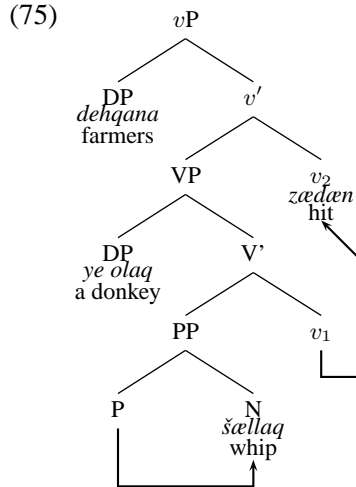
The *zædæn/xordæn* alternation occurs with complex predicates such as *čækoš zædæn* (hammer hit) 'to hammer', *čub zædæn* (stick hit) 'to hit with a stick, to punish', *tir zædæn* (bullet hit) 'to shoot'. Interestingly, these predicates are all verbs of surface contact where the event is accomplished by use of an instrument. I therefore argue that these constructions correspond to the structure of the heavy verb 'hit', which represents a verb of impact,

<sup>15</sup>Interestingly in Motuna, a Papuan language spoken in Bougainville, Papua New Guinea, the addition of the causative suffix *woota* to the verb *rii(n)* 'become' results in the meaning 'make' (Onishi, 2000, p.128).

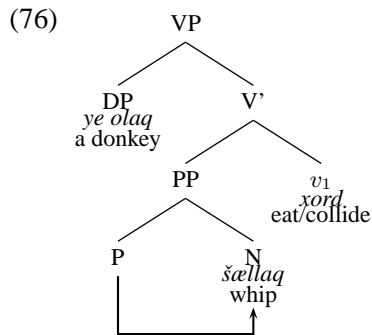
appearing with an instrument as in ‘The farmers hit a donkey with a whip’. This can be represented in the following complex configuration consisting of a prepositional projection denoting the instrument of the action, which is itself embedded as the complement of the lower verbal head.



Following Hale and Keyser (2002), the complex predicate variant in (73b) is represented in the structure in (75) where VP corresponds to an experiencer event and  $v_2$  represents an activity that brings about the inner event. The combination of the two verbal heads is overtly realized as *zædaen* ‘hit’ in Persian. In this configuration, the subject in the [spec,  $vP$ ] is an external argument performing an activity that affects the internal argument in the [spec, VP] position (i.e., *a donkey*). In this structure, the P head is morphologically empty and therefore needs to conflate with its complement, the instrument *whip*. Note that this structure also represents the verb *whip* in English, but in this instance the P head as well as the two  $v$ -heads are morphologically empty and undergo conflation resulting in the synthetic English verb *whip*.



In Persian, the unaccusative *xordæn* alternant in (73a) is obtained when the higher light verb and specifier are not projected in the structure as shown in (76). The subject is an internal argument appearing as the specifier of  $v_1$  while the instrument NV *šællaq* ‘whip’ is the complement of the empty P-head and undergoes conflation.



These conflated structures in (75) and (76) represent the *zædæn/xordæn* alternating light verbs in Persian that appear with an instrument NV and straightforwardly account for the properties of the two bare noun categories.

We saw earlier that the bare object and nominal NV can cooccur in a sentence. This is shown in the following examples. Given the structural representation proposed in (75), the NV element *šællaq* ‘whip’ in (77a) appears as the complement of P with which it incorporates. The bare noun *olaq* ‘donkey’, however, would occupy the [Spec,VP] position and serve as the internal argument of the complex predicate.

- (77) a. dehqan-a æqlæb *olaq* *šællaq* mi-zæn-æn?  
farmer-PL often donkey whip DUR-hit-3PL

‘Do farmers often whip donkeys?’

- b. in doxtær-e hæmiše *mu šune* mi-zæn-e  
 this girl-DEF always hair comb DUR-hit-3SG  
 ‘This girl is always combing (her) hair.’

Moreover, it was shown that bare object nouns display a higher degree of referentiality than the nominal NV as illustrated by the fact that the latter, unlike the bare objects, cannot be questioned. This result is expected if the NV is analyzed as part of the verbal structure, in contrast with the object bare noun which is construed independently of the verbal and empty preposition heads. Furthermore, the bare noun appearing as the direct object of the complex verbal predicate is a full-fledged nominal element that can occur within a larger structure consisting of a modifier (forming a NP), a numeral element (NumP), or a determiner (DP) as illustrated in (78). In each instance, the modifications apply directly to the object noun.

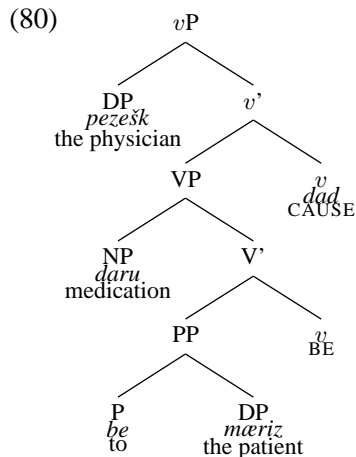
- (78) a. ma [<sub>N</sub> mæjælle] xærid-im  
 we magazine bought-1PL  
 ‘We bought a magazine/magazines.’
- b. ma [<sub>NP</sub> mæjælle-ye jaleb-i] xærid-im  
 we magazine-EZ interesting-INDEF bought-1PL  
 ‘We bought an interesting magazine.’
- c. ma [<sub>NumP</sub> do-ta mæjælle] xærid-im  
 we two-CL magazine bought-1PL  
 ‘We bought two magazines.’
- d. ma [<sub>DP</sub> in mæjællæ-ro] xærid-im  
 we this magazine-OM bought-1PL  
 ‘We bought this magazine.’

The nominal NV, on the other hand, is conflated with the P head and functions as part of the complex predicate and thus its structure may not be complex as in a DP. Recall however that the NV can appear with an adjective or a numeral element that modifies the whole verbal predicate. Although the details of predicate modification still need to be worked out, I posit that since the NV is conflated within the empty preposition head and is not functioning as an argument of the *vP*, its numeral and adjectival modifiers can only be interpreted as predicate modifiers. The proposed structures in (75) and (76) therefore capture the distinct properties of the two bare nouns with respect to modification, availability of number specification, and *ro*-marking.

Let us now turn to the sentences formed with *dadaen* ‘give’ discussed earlier:

- (79) a. *pezešk be mæriz daru dad*  
 physician to patient medication gave-3SG  
 ‘The physician gave medication to the patient.’
- b. *pezešk mæriz-ra šæfa dad*  
 physician patient-OM cure gave-3SG  
 ‘The physician cured the patient.’

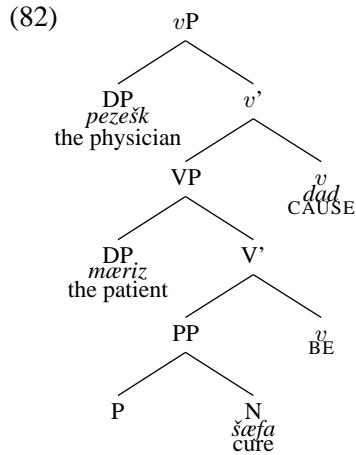
It has been suggested in the literature that double object *give* is a causative of the verb HAVE (Harley, 1995b), and HAVE has itself been analyzed either as [BE+WITH (+Theme)] (Hale and Keyser, 1990; Labelle, 2000) or as a prepositional node  $P_{have}$  indicating possession (Harley, 1995a). Based on the causative analysis of *give*, I propose the configuration in (80) corresponding to the *to*-dative structure in (79a), where the sentence can be analyzed as the physician causing the theme (medication) to be transferred to the goal (patient). In this configuration, the bare noun *daru* ‘medication’ occupies the internal argument position of the predicate.



The complex predicate construction in (79b), however, is derived from the structure of *give* shown in (81).

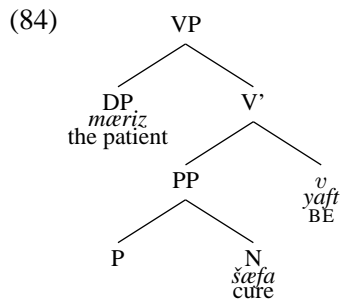
- (81) [ x CAUSE y BE WITH z ]

This is illustrated in the following structure for the Persian example (79b), where the preposition head is morphologically empty and thus conflates with its complement, namely the NV *šæfa* ‘cure’. In this configuration, the internal argument is the patient who has undergone or experienced the event.



The transitive complex predicate *šæfa dadaen* ‘to cure’ also has an intransitive counterpart which is formed with the light verb *yaftæn* ‘find’ as shown in (83) and which can be represented in the configuration in (84) where the CAUSE event is not projected. I assume that the  $v_{be}$  in the context of this construction is overtly realized as the light verb *yaftæn* ‘find’ in Persian.

- (83) a. pezešk mæriz-ra šæfa dad  
 physician patient-OM cure gave-3SG  
 ‘The physician cured the patient.’
- b. maeriz šæfa yaft  
 patient cure found-3SG  
 ‘The patient was cured.’



These structures capture the analysis proposed in the previous section where the bare noun *daru* ‘medication’ in (79a) is the direct object of the thematic verb ‘give’ while the bare nominal *šæfa* ‘cure’ in (79b) is part of the predicate and conflates with the verbal structure to construct the complex predicate *šæfa dadaen* ‘to cure’. The distinct case-assignment possibilities of the two noun+verb combinations shown in (85) are also captured by the current analysis.

- (85) a. doktor **be æli** dæva dad  
 doctor to Ali medication gave  
 ‘The doctor gave Ali medication.’
- b. doktor **æli-ro** šæfa dad  
 doctor Ali-OM cure gave  
 ‘The doctor cured Ali.’

The argument structure in (85a) is determined by the thematic verb which, in this instance, is the ditransitive heavy verb *give* (see the structure in (80)). The bare noun in this case *daru* ‘medication’ is the internal argument of the predicate; *Ali* is the goal of the ‘give’ event appearing with the *be* ‘to’ preposition. In (85b), the bare noun and light verb combine to form a single transitive predicate (see the structure in (82)). Both elements contribute to the final argument structure of the complex predicate and the internal object position is not saturated by the preverbal noun *šæfa* ‘cure’. In this case, *Ali* is the internal argument and receives the object marker *ra*.

The distinction between instrument verbs formed with the light verb *zædæn* ‘hit’ and the complex verbs formed with *dadæn* ‘give’ lies in the fundamental properties of the prepositions involved in each instance. In the case of the *zædæn* verbs discussed, the tacit preposition corresponds to the overt “instrumental” *with* while the preposition used with the *dadæn* verbs corresponds to the “possessional” *with*. Hence, in the Persian sentence *doktor mæriz-o šæfa dad* ‘The doctor cured the patient’, the object is in essence the (temporary) possessor of the NV *šæfa* ‘cure’, and the sentence is understood as *The doctor caused the patient to be “with cure” or to come to “possess” the cure.*

In what follows, I will review some of the arguments that have been put forth in the literature for the uniform treatment of the two preverbal nominals and I will show that these facts are naturally explained within the current analysis.

## 5. Against a Uniform Treatment of Preverbal Nouns

### 5.1. ASPECT

Ghomeshi and Massam (1994) argue for a uniform treatment of the two categories of bare nouns based on the fact that they both seem to give rise to unbounded verbal predicates (cf. (86a) and (86b)), in contrast with the specific direct object which displays bounded properties (86c).

- (86) a. (mæn) \*dær do dæqiqe / saætha qose xord-æm  
 I in two minutes / hours worry ate/collided-1SG  
 ‘I worried \*in two minutes / for hours.’

- b. (mæn) \*dær do dæqiqe / saætha sib xord-æm  
 I in two minutes / hours apple ate-1SG  
 ‘I ate apples \*in two minutes / for hours.’
- c. (mæn) sib-ro dær do dæqiqe / \*saætha xord-æm  
 I apple-OM in two minutes / hours ate-1SG  
 ‘I ate the apple in two minutes / \*for hours.’

However, bare nouns in light verb constructions can appear in bounded predicates as illustrated in the following examples with a bare noun NV used with the light verb *gereftæn* ‘catch’.

- (87) a. [Example from Karimi-Doostan (1997)]  
 dæst-e daryuš dær ye saniye / \*sa’æt-ha dærd gereft  
 hand-EZ Dariush in one second / \*hour-PL pain caught  
 ‘Dariush’s hand (started to) hurt in one second / \*for hours.’
- b. kar-æš dær nim sa’æt / \*sa’æt-ha ænjam  
 work-POSS.3SG in half hour / \*hour-PL accomplish  
 gereft  
 caught  
 ‘His/her work was taken care of in half an hour / \*for hours.’

As noted by Folli et al. (2005), certain eventive NVs can give rise to bounded predicates. For instance, the light verb construction *qosse xordæn* (worry eat) ‘to worry’ is unbounded, while *šekæst xordæn* (defeat eat) ‘to be defeated’ is a telic or bounded event. The authors therefore argue that the properties of the nominal NV are responsible for the Aktionsart of the complex predicate. These data clearly indicate that the bare noun appearing with a light verb does not always give rise to unbounded aspect.

In addition, it has been shown that the boundedness of the verb phrase is dependent on whether the direct object denotes a specified quantity (cf. Verkuyl (1993)). In order to capture the direct correlation between aspectual boundedness of the *vP* and the cardinality or ‘quantitative specification’ of the object, a number of analyses have been proposed establishing a Spec-Head relation between the direct object and the Asp head of the verb phrase. Hence, Borer (1994) proposes that a bounded aspect obtains when a quantitatively specific noun phrase appears in the specifier position of Aspect Phrase, thus “delimiting” or “measuring out” the aspect of the verbal event (see also Tenny (1987)). A similar analysis on the correlation between cardinality and verbal aspect has been proposed by Travis (1992). Thus, if the direct object appears as a bare noun, it will not be able to delimit the event. In contrast, a specific direct object or one specified for number will delimit the event and produce a bounded verb phrase aspect. It then follows that the reason the aspect of

the verbal construction in (86b) is interpreted as unbounded is due to the generalization that bare objects do not affect verb phrase aspect. Once the direct object structure becomes more complex as in the specific DP structure in (86c) repeated below as (88), or contains a number feature as in (89), the verb phrase aspect becomes bounded as expected.

(88) (mæn) sib-ro dær do dæqiqe / \*saætha xord-æm  
 I apple-OM in two minutes / hours ate-1SG  
 ‘I ate the apple in two minutes / \*for hours.’

(89) (mæn) ye dune sib dær do dæqiqe / \*saætha xord-æm  
 I one CL apple in two minutes / hours ate-1SG  
 ‘I ate one apple in two minutes / \*for hours.’

We can therefore conclude that the factors contributing to the unboundedness of the predicates formed with a bare object noun are distinct from those of predicates formed with a bare nominal NV. In particular, a bare object can never delimit verb phrase aspect since it does not contain a specified quantity. On the other hand, the NV may appear in either telic or atelic events based on the properties of the constituents in the complex predicate.<sup>16</sup>

## 5.2. STRESS

Another argument that has been provided for the equal treatment of the two preverbal categories is based on the fact that both noun types receive the main stress of the verbal predicate. I will show, however, that the observed stress pattern in the Persian verb phrase is expected given the analysis presented in this paper.

Recall that in a construction consisting of a specific direct object with an overt object marker, primary stress falls on the stem of the verb as shown in (90a). With a bare object as in (90b) and with a nominal NV as in (90c), the main stress falls on the last syllable of the nominal. Ghomeshi and Massam take this as indication that the bare nouns in (90b) and (90c) occupy the same position.

- (90) a. mæn hævij-ro xórd-æm  
 I carrot-OM ate-1SG  
 ‘I ate the carrot.’  
 b. mæn hævíj xord-æm  
 I carrot ate-1SG  
 ‘I ate carrot(s).’

<sup>16</sup>For details on how the properties of the NV and light verb contribute to telicity in a complex predicate, the reader is referred to Megerdoomian (forthcoming).

- c. mærdom færīb xord-æn  
 people deceit ate/collided-3PL  
 ‘(The) people were deceived.’

It has been argued in the literature on Persian that specific direct objects occupy a position outside the *vP* structure where they receive the overt object marker *ra*. Nonspecific direct objects, on the other hand, are internal to the *vP* (see arguments presented in Browning and Karimi (1994), Karimi (2003), and Ganjavi (2007)). In addition, Kahnemuyipour (forthcoming) convincingly argues that phrasal stress in Persian falls on the leftmost element within a specific stress domain, where a stress domain consists of everything contained within the *vP* before Spell-Out. Thus in the Persian verb phrase, nonspecific objects that remain inside the *vP* and appear at the left edge of that domain are expected to receive the primary stress as shown in (91). Note that nonspecific objects that appear in a NP or NumP structure display the same stress pattern as the bare object - namely, the phrase that they appear in receives the most prominent stress in the *vP*.<sup>17</sup>

- (91) a. mitra [<sub>*vP*</sub> [<sub>*N*</sub> mæjællé] xæride ]  
 Mitra magazine bought-has  
 ‘Mitra has bought a magazine/magazines.’
- b. mitra [<sub>*vP*</sub> [<sub>*NP*</sub> mæjælle-ye jaléb-i] xæride ]  
 Mitra magazine-EZ interesting-INDEF bought-has  
 ‘Mitra has bought an interesting magazine.’
- c. mitra [<sub>*vP*</sub> [<sub>*NumP*</sub> dó-ta mæjælle] xæride ]  
 Mitra two-CL magazine bought-has  
 ‘Mitra has bought two magazines.’

In contrast, when the direct object is specific, the primary stress falls on the verb as shown in (92). This result is not surprising given the fact that specific objects occupy a *vP*-external position in the syntax.

- (92) a. mitra [<sub>*DP*</sub> mæjællæ-ro] [<sub>*vP*</sub> xæridé ]  
 Mitra magazine-OM bought-has  
 ‘Mitra has bought the magazine.’
- b. mitra [<sub>*DP*</sub> ye mæjællæ-ro] [<sub>*vP*</sub> xæridé ]  
 Mitra one magazine-OM bought-has  
 ‘Mitra has bought a (specific) magazine.’ ‘Mitra has bought one of the magazines.’

<sup>17</sup>The AspP projection in Persian is posited to be internal to the *vP* domain and a complement to the higher *v* node (Megerdooomian, 2002b; Kahnemuyipour, 2004). This position is where the nonspecific direct objects that are specified for number (i.e., the NumP) will appear in the phrase structure.

Note that if any other element appears to the left of the bare object within the *vP*, it will receive main stress as shown in (93b). In this example, the manner adverb, argued to mark the left edge of the verbal domain (see for example Holmberg (1986) and Webelhuth (1992)), receives the primary stress.

- (93) a. Mani [*vP* qæzâ xord ]  
 Mani food ate  
 ‘Mani ate.’
- b. Mani [*vP* xúb qæza xord ]  
 Mani good food ate  
 ‘Mani ate well.’

As expected, if the manner adverb appears with a thematic verb as in (94) or (95), it gets the primary stress of the verbal predicate. However, one cannot argue that the manner adverb *xub* in these examples occupies the same position as the bare nouns in (90b) and (90c).

- (94) Mani [*vP* xúb xabid]  
 Mani good slept  
 ‘Mani slept well.’
- (95) Mani qæza-š-o [*vP* xúb xord]  
 Mani food-POSS.3SG-OM good ate  
 ‘Mani ate his food well.’

It is also interesting to note that when the NV and the bare object cooccur in a sentence, the primary stress falls on the element occupying the leftmost position in the verb phrase, namely the bare object noun as illustrated in (96). This fact also argues against a uniform treatment of the two types of bare nouns.

- (96) ma tæmam-e ruz [*vP* otâq jaru kærd-im ]  
 we complete-EZ day room sweep did-1PL  
 ‘We swept rooms all day.’

Given these facts, it is clear that neither stress pattern nor aspect can be used as an argument for the uniform treatment of the two preverbal categories.

## 6. Conclusion

In this paper, I investigated the properties of two categories of bare nouns in Persian and demonstrated that these preverbal nominals display very distinct behavior in terms of degree of referentiality, interdependence with the

verbal element, modification, and case-assignment possibilities. It is argued that the nominal NV forms a closer relation with the verb it appears with. More specifically, the NV combines with the light verb element in order to form a full verbal predicate. On the other hand, the bare object noun satisfies the selectional requirements of the thematic verb and behaves as the internal argument of the predicate.

An analysis is proposed for the derivation of Persian complex predicates based on the constructionalist approach in Hale and Keyser (2002). By examining the structure of instrument and ditransitive complex predicates, I argue that the distinct properties of the two preverbal noun categories can be accounted for by separating the domain in which they occur: The bare object noun is a nominal element that occupies the specifier position of the lower *v* head. It may be specified for number or it may be specific, in which case the nominal structure appears in a position outside the *v*P projection and receives an object marker. In contrast, the nominal NV is part of the verbal predicate. It contributes the core meaning to the verb and combines with the light verb to determine the final argument structure and *v*P aspect. In addition, it was shown that the facts previously used to argue for a uniform treatment of the two bare noun categories are due to independent factors and can naturally be accommodated within the proposed analysis.

The paper shows that there exists a clear difference between the bare nominal objects and the nominal NV components in Persian. In the current proposal, the relationship between the verb and the nominal elements in the verb phrase is defined by the position the noun occupies within the syntactic structure and its level of structural complexity. The analysis sheds light on the status of bare nouns and advances our understanding of complex predicate constructions.

### Acknowledgements

I would like to thank the journal editor and three anonymous reviewers for their invaluable comments. In particular, I am grateful to reviewer no. 2 whose detailed suggestions have improved the presentation significantly. The ideas in this paper have benefited greatly from discussions with Arsalan Kahnemuyipour and Jean-Roger Vergnaud. All remaining errors are naturally mine.

### References

- Barjasteh, D.: 1983, 'Morphology, Syntax, and Semantics of Persian Compound Verbs: A Lexical Approach'. Ph.D. thesis, University of Illinois.  
 Bashiri, I.: 1981, *Persian Syntax*. Minneapolis: Burgess Publishing Company.

- Borer, H.: 1994, 'The Projection of Arguments'. In: E. Benedicto and J. Runner (eds.): *Occasional Papers in Linguistics 17*. Amherst, Mass.: GLSA, University of Massachusetts, pp. 19–48.
- Browning, M. A. and E. Karimi: 1994, 'Scrambling to Object Position in Persian'. In: N. Corver and H. van Riemsdijk (eds.): *Studies in Scrambling*. Berlin: Mouton de Gruyter, pp. 61–100.
- Chomsky, N.: 1981, *Lectures on Government and Binding*. Dordrecht: Foris.
- Dabir-Moghaddam, M.: 1997, 'Compound Verbs in Persian'. *Studies in the Linguistic Sciences* 27(2), 25–59.
- Dayal, V.: 2003, 'A Semantics for Pseudo Incorporation'. Rutgers University, Ms.
- Folli, R., H. Harley, and S. Karimi: 2005, 'Determinants of event type in Persian complex predicates'. *Lingua* 115(10), 1365–1401.
- Ganjavi, S.: 2007, 'Direct Objects in Persian'. Ph.D. thesis, University of Southern California.
- Ghomeshi, J.: 1997, 'Topics in Persian VPs'. *Lingua* 102, 133–167.
- Ghomeshi, J. and D. Massam: 1994, 'Lexical/Syntactic Relations without Projections'. *Linguistic Analysis* 23(3-4), 175–217.
- Goldberg, A.: 2004, 'Words by Default: The Persian Complex Predicate Construction'. In: E. Frances and L. Michaelis (eds.): *Linguistic Mismatches*. CSLI Publications.
- Haji-Abdolhosseini, M.: 2002, 'Event Types in the Generative Lexicon: Implications for Persian Compound Verbs'. In: *Proceedings of NLS 2000*, Vol. 19. Toronto Working Papers in Linguistics.
- Hale, K. and S. J. Keyser: 1990, *On Some Syntactic Rules in the Lexicon*. MIT Lexicon Project, Cambridge, Mass.
- Hale, K. and S. J. Keyser: 1993, 'On Argument Structure and the Lexical Expression of Syntactic Relations'. In: K. Hale and S. J. Keyser (eds.): *The View from Building 20: Essays in Linguistics in Honor of Sylvain Bromberger*. Cambridge, Mass.: MIT Press, pp. 53–110.
- Hale, K. and S. J. Keyser: 2002, *Prolegomenon to a Theory of Argument Structure*. Cambridge, Mass.: MIT Press.
- Halle, M. and A. Marantz: 1993, 'Distributed Morphology and the Pieces of Inflection'. In: K. Hale and S. J. Keyser (eds.): *The View from Building 20: Essays in Linguistics in Honor of Sylvain Bromberger*. Cambridge, Mass.: MIT Press, pp. 53–110.
- Harley, H.: 1995a, 'If You *Have*, You Can *Give*'. In: B. Agbayani and S.-W. Tang (eds.): *Proceedings of WCCFL 15*. CSLI Publications.
- Harley, H.: 1995b, 'Subjects, Events and Licensing'. Ph.D. thesis, MIT.
- Harley, H.: 1996, 'Sase Bizarre: The Japanese Causative and Structural Case'. In: P. Koskinen (ed.): *Proceedings of the 1995 Canadian Linguistics Society Meeting*.
- Holmberg, A.: 1986, 'Word Order and Syntactic Features in the Scandinavian Languages and English'. Ph.D. thesis, University of Stockholm, Stockholm, Sweden.
- Jackendoff, R.: 1990, *Semantic Structures*. Cambridge, Mass.: MIT Press.
- Kahnemuyipour, A.: 2004, 'The Syntax of Sentential Stress'. Ph.D. thesis, University of Toronto.
- Kahnemuyipour, A.: forthcoming, *The Syntax of Sentential Stress*. Oxford University Press.
- Karimi, S.: 1989, 'Aspects of Persian Syntax, Specificity, and the Theory of Grammar'. Ph.D. thesis, University of Washington.
- Karimi, S.: 1996, 'Case and Specificity: Persian *Râ* revisited'. *Linguistic Analysis* 26, 174–194.
- Karimi, S.: 1997, 'Persian Complex Verbs: Idiomatic or Compositional'. *Lexicology* 3(2), 273–318.
- Karimi, S.: 2003, *Word Order and Scrambling*, Explaining Linguistics. Oxford: Blackwell Publishers.

- Karimi-Doostan, G.: 2008, 'Separability of Persian Complex Predicates'. Ms., University of Kurdistan.
- Karimi-Doostan, M.-R.: 1997, 'Light Verb Constructions in Persian'. Ph.D. thesis, University of Essex.
- Khanlari, P.: 1986, *Tarix-e zæban-e farsi (A History of the Persian Language) - 3 volume set*. Tehran, Iran: Nashr-e Now Publishing Company.
- Labelle, M.: 2000, 'The Semantic Representation of Denominal Verbs'. In: M. E. Peter Coopmans and J. Grimshaw (eds.): *Lexical Specification and Insertion*. Amherst, Mass.: John Benjamins, pp. 241–268.
- Larson, R.: 1988, 'On the Double Object Construction'. *Linguistic Inquiry* **19**, 335–391.
- Levin, B. and M. Rappaport Hovav: 1995, *Unaccusativity: At the Syntax-Lexical Semantics Interface*. Cambridge, Mass.: MIT Press.
- McCawley, J. D.: 1968, 'The Role of Semantics in Grammar'. In: E. Bach and R. Harms (eds.): *Universals of Linguistic Theory*. New York: Holt, Rinehart and Winston.
- Megerdooomian, K.: 2001, 'Event Structure and Complex Predicates in Persian'. *Canadian Journal of Linguistics/Revue Canadienne de Linguistique*.
- Megerdooomian, K.: 2002a, 'Aspect in Complex Predicates'. Talk presented at the *Workshop on Complex Predicates, Particles and Subevents*, Univ. of Konstanz.
- Megerdooomian, K.: 2002b, 'Beyond Words and Phrases: A Unified Theory of Predicate Composition'. Ph.D. thesis, University of Southern California.
- Megerdooomian, K.: forthcoming, 'Preverbal Nominals and Telicity in Persian Complex Predicates'. Ms., MITRE.
- Mohammad, J. and S. Karimi: 1992, 'Light verbs are taken over: Complex verbs in Persian'. In: *Proceedings of WECOL 5*. pp. 195–212.
- Moyne, J. A.: 1970, 'The Structure of Verbal Constructions in Persian'. Ph.D. thesis, Harvard University.
- Onishi, M.: 2000, 'Transitivity and Valency-Changing Derivations in Motuna'. In: R. Dixon and A. Y. Aikhenvald (eds.): *Changing Valency: Case Studies in Transitivity*. Cambridge, United Kingdom: Cambridge University Press, pp. 115–144.
- Samvelian, P.: 2001, 'Le statut syntaxique des objets nus en persan'. *Bulletin de la Société de Linguistique de Paris* **XCVI**, 349–388.
- Tenny, C.: 1987, 'Grammaticalizing Aspect and Affectedness'. Ph.D. thesis, MIT, Cambridge, Mass.
- Travis, L.: 1984, 'Parameters and Effects of Word Order Variation'. Ph.D. thesis, MIT, Cambridge, Mass.
- Travis, L.: 1992, 'Inner Tense with NPs: The Position of Number'. In: *1992 Annual Conference of the Canadian Linguistics Association*. pp. 329–345.
- Vahedi-Langrudi, M.-M.: 1996, 'The Syntax, Semantics and Argument Structure of Complex Predicates in Modern Farsi'. Ph.D. thesis, University of Ottawa.
- Verkuyl, H. K.: 1993, *A Theory of Aspectuality: The Interaction between Temporal and Atemporal Structure*. New York, NY: Cambridge University Press.
- Webelhuth, G.: 1992, *Principles and Parameters of Syntactic Saturation*. Oxford: Oxford University Press.