

Persian complex verbs: Idiomatic or compositional*

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Abstract

Verbalkonzepte im Persischen werden zum größten Teil in Form von komplexen Verben (CV) ausgedrückt, die aus einem *non-verbalen* Element (NV) und einem *Light Verb* (LV) bestehen. Sind die persischen CV idiomsche Elemente, die im Lexikon als vollständige Phrasen existieren, oder erreichen ihre Bestandteile die Syntax als separate Entitäten? Wie ist im letzten Fall die thematische und die Ereignisstruktur dieser CV bestimmt? Ist die Kompositionalität der NV und LV ein arbiträrer Prozess, oder ist sie durch gewisse syntaktische und semantische Bedingungen bestimmt? Lässt es sich zeigen, dass kompositionelle CV sprachübergreifend durch ein ähnliches Verhalten gekennzeichnet sind? Wie sind schließlich die Charakteristika der grammatischen Relation zwischen NV und LV im Persischen definiert?

Die Erörterungen, die in diesem Artikel vorgelegt werden, zeigen deutlich, dass die Mehrheit der persischen CV als *idiomatically combining expressions* im Sinne von Nunberg et al. (1994) verstanden werden müssen, wie z. B. *to take advantage of* im Englischen. Diese Erörterungen zeigen zusätzlich, dass nur wenige der persischen idiomschen CV als feststehende lexikalische Einheiten klassifiziert werden können, wie z. B. *to kick the bucket* in Englischen.

Die Diskussion ergibt die folgenden theoretischen Konsequenzen:

- Obwohl die CV-Bildung bestimmten lexikalischen Spezifikationen der NV und LV unterliegt, können die Argument- und die Ereignis-

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struktur der CV nicht als Projektionen aus dem Lexikon bezeichnet werden. Projektionen, die die lexikalischen Informationen in die syntaktische Komponente der Grammatik transformieren. Aus diesem Grund kann das *Projection Principle* nicht länger aufrecht erhalten werden.

- Die Analyse der persischen CV zeigt, dass idiomatische Kompositionalität stufenweise zu verstehen ist: Wie auch im Deutschen besitzen die CV im Persischen weniger syntaktische Freiheit als ihre englischen Entsprechungen.
- Schliesslich zeigt die in diesem Artikel übernommene Regel der *Covert Incorporation*, dass Baker's (1996) These über die ausschließliche Inkorporation von direkten Objekt- Nominalphrasen erweitert werden muss. Diese Erweiterung basiert auf der lokalen syntaktischen Relation zwischen der NV und LV der CV.

1. Introduction¹

Unpredictability has been the most frequent way of defining idioms in the generative grammar. Kiparsky (1976:79) states that in the case of idiomatic expressions "there is no relation between the meanings of the parts and the meaning of the whole from the viewpoint of synchronic structure." Nunberg, Sag, and Wasow (1994), however, reject this traditional view by stating that the meaning of an idiomatic expression like *pull strings* and *take advantage of* can be seen on the basis of the meaning of its parts. What these authors claim is that the meaning of the parts of these elements provide the interpretation of the whole unit. Therefore, the idiom will be given a compositional analysis in this case. Furthermore, these authors make a distinction between this type of expressions and a purely idiomatic type like *kick the bucket* or *saw logs* which do not distribute their meanings to their parts. They

¹ Complex verbs have been discussed in the literature by a number of authors with respect to different languages: among those authors are Grimshaw and Mester (1988), Miyagawa (1989), and Matsumoto (1996) for Japanese, Butt (1993) and (in press) for Urdu, Ramchand (1990) for Bangla, Huang (1992) for Chinese, Rizzi (1982), Alsina (1993), and Manning (1992) for Romance languages. As for Persian, complex verb constructions have been discussed by Moyne (1970), Bashiri (1981), Barjesteh (1983), Karimi (1987), Heny and Samiiian (1991), Mohammad and Karimi (1992), Sadeghi (1993), Massam and Ghomeshi (1994), Vahedi-Langrudi (1996), Karimi (1997a), and Dabir-Moghadam (1997), among others.

argue that only the second type must enter the lexicon as complete phrases.

Persian Complex Verbs (CV henceforth), consisting of a *Light Verb* (LV) and a Nonverbal element (NV), reveal interesting properties in this respect. Although a number of these complex entities receive an idiomatic interpretation, the meaning of the majority of them is predictable on the basis of the meaning of their parts. Thus the second type receives a compositional interpretation. However, these CVs have peculiarities that are not interpretable merely on the basis of a simple compositional process. Furthermore, the NV and LV of a number of idiomatic CVs reveal independent syntactic and semantic status, and thus share similar properties with their compositional counterparts.

Several questions emerge with respect to Persian CVs. Are they idiomatic elements that exist in the lexicon as complete phrases, or their parts enter the syntax as separate entities? If the latter is the case, how is the thematic and event structure of these CVs determined? Is the compositionality of NV and LV an arbitrary process, or is it determined and governed by certain syntactic and semantic constraints? Is there any evidence indicating that compositional CVs have similar behavior in other languages? Finally, what is the grammatical relation of NV to LV in Persian?

This paper is an attempt to address these questions by investigating the semantic and syntactic properties of Persian CVs. The arguments advanced in this paper lead to the conclusion that the majority of Persian CVs must be considered as *conventional complex predicates* in the sense of Nunberg et al. (1994), similar to *take advantage of* in English. These arguments further show that only a handful of Persian idiomatic CVs will be classified as fixed lexical items, similar to *kick the bucket* in English.

The discussion in this paper also provides theoretical consequences: First, even though CV formation is sensitive to certain lexical specifications of NV and LV, the argument and event structures of CV cannot be considered as being projected from the lexicon for the purpose of mapping into the syntactic component of the grammar. Thus Projection Principle can no longer be maintained. Second, the analysis of Persian CVs indicates that idiomatic compositionality is a matter of degree: Persian CVs, similar to those in German, reveal less syntactic freedom compared to their English counterparts. Finally, the rule of covert incorporation adopted in this paper will be shown to extend

Baker's (1996) claim that incorporation only applies to direct object noun phrases. This extension is based on the local relationship between the NV and LV of CV.

The organization of the paper is as follows. A general overview of Persian CV is provided in section 2. Section 3 investigates the syntactic and semantic properties of compositional and idiomatic CVs in Persian. This section also includes a brief discussion of the syntactic freedom of NV and LV in English and German. A theoretical account of the semantic fusion between the LV and NV in compositional CVs appears in section 4. This discussion is an effort to explain the idiomatic and grammatical properties of compositional CVs, and to support the claim that these properties are determined by the covert incorporation of NV into LV at the level of Logical Form (LF), a level that maps the syntactic structure of a linguistic expression into the semantic component of the grammar. Thus the process of incorporation provides the appropriate syntactic information for the semantic interpretation of these elements. Section 5 provides a list of language specific and universal implications of the analysis discussed in this paper. The syntactic differences between the NV of an LV, on the one hand, and the regular argument of a heavy verb, on the other, are discussed in an appendix at the end of this paper.

2. Persian complex verbs: an overview

Khanlari (1973) reports that complex verbs have gradually replaced simple verbs in Persian since the thirteenth century. As a result, the number of simple verbs does not exceed 115 in contemporary Persian (Sadeghi 1993), many of them are not even employed in the every day application of this language. The verbal concepts are, therefore, productively expressed by a combination of a nonverbal element and a verb, traditionally called "compound verb" (Khanlari 1976, Moyné 1970, among others). The tendency of forming complex verbs has resulted in the existence of two sets of verbs, simple and complex, for a number of verbal concepts. In many cases, the application of the simple verb is restricted to the written and elevated language. A few examples of simple/complex pairs are given in (1)².

² Persian infinitives have nominal properties (Karimi and Brame (1987)). Nevertheless, I translate them as [to-V] forms rather than [V-ing] forms since the difference does not have any bearing on the overall discussion in this paper.

(1)	Simple	Complex		
	geristan	gerye kardan	(weeping doing)	'to cry'
	kushidan	kushesh kardan	(attempt doing)	'to try'
	yâftan	peydâ kardan	(evident doing)	'to find'
	pasandidan	pasand kardan	(approve doing)	'to approve'
	lâfidan	lâf zadan	(brag hitting)	'to brag'
	porsidan	so'âl kardan	(question doing)	'to ask'

The productivity of CV formation is evidenced by the fact that its nonverbal element is not restricted to native Persian elements, nor to Arabic infinitives which had entered the language centuries ago, but that it also includes recent borrowings from European languages (e. g. *tâyp kardan*, 'to type' (lit. type doing), *telefon kardan* 'to call' (lit. call doing) (Mohammad and Karimi, 1992). It has been argued that the complex verb formation has completely replaced the former morphological rule of simple verb formation in this language (Bateni, 1989).

The verbal element of Persian CVs ranges over a number of simple verbs, called *Light Verbs* in the sense of Jespersen (1954). A sample of LVs employed in CV constructions is provided in (2)³.

(2)	<i>zadan</i>	'to hit'	<i>dâdan</i>	'to give'
	<i>dâshtan</i>	'to have'	<i>xordan</i>	'to eat, to collide'
	<i>kardan</i>	'to do'	<i>keshidan</i>	'to draw, to pull'
	<i>gereftan</i>	'to catch, to take'	<i>âvardan</i>	'to bring'
	<i>âmadan</i>	'to come'	<i>raftan</i>	'to go'
	<i>bordan</i>	'to carry, to take'	<i>nemudan</i>	'to show'
	<i>andâxtan</i>	'to throw'	<i>oftâdan</i>	'to fall'
	<i>sepordan</i>	'to entrust'		

Another characteristic of Persian CV is that its nonverbal element (NV) ranges over a number of phrasal categories, as exemplified by (3)⁴.

³ As Butt (in press, footnote 13) suggests, it seems that light verbs are crosslinguistically characterized by the fact that they correspond to the real verbs that are still in use in the language.

⁴ Dabir-Moghaddam (1997) reports that his corpus of N+V, even though not exhaustive, consists of 1299 elements. His nominal element of CV includes the nonspecific object as well. This is a position that is different from the one taken in this paper (see the appendix). Dabir-Moghaddam further states that there are 152 elements of the form PP+V, and 114 of the form Adv+V in this language. Again, neither one of these lists is exhaustive.

(3) a. N+V

da'vat kardan	(invitation doing)	'to invite'
kotak zadan	(beating hitting)	'to beat'
shekast dâdan	(defeat giving)	'to defeat'
panâh bordan	(refuge carrying)	'to take refuge'
panje andâxtan	(palm throwing)	'to grip'
râh raftan	(way going)	'to walk'
âdash zadan	(fire hitting)	'to put on fire'

b. A+V

tamiz kardan	(clean doing)	'to clean'
bidâr shodan	(awake becoming)	'to wake up'
xarâb kardan	(destroyed doing)	'to destroy'
sabok kardan	(light doing)	'to degrade'
pahn kardan	(wide doing)	'to spread, to widen'
derâz keshidan	(long pulling)	'to lie down'
kam kardan	(little doing)	'to subtract'

c. Adv+V

birun kardan	(out doing)	'to fire (someone), to make someone leave'
bâlâ bordan	(up carrying)	'to promote'
pas dâdan	(back giving)	'to return'
pâyin âvardan	(down bringing)	'to degrade (someone/ the value of some- thing)
bar chidan	(over arranging)	'to pick up, to remove'
dar kardan	(out doing)	'to fire (a shot), to de- duct'
dar gozashtan	(off passing)	'to die'
dar oftâdan	(off falling)	'to quarrel, to oppose'
dur andâxtan	(far throwing)	'to throw away'

d. PP+V

az dast dâdan	(of hand giving)	'to lose'
az yâd bordan	(of memory taking)	'to forget'
be yâd âvardan	(to memory bring- ing)	'to remember'
be nazar âmadan	(to view coming)	'to appear'

be kâr bastan	(to work tying)	'to use'
az sar gereftan	(of head catching)	'to restart'
be sar bordan	(to head taking)	'to spend, to live'
be sar âmadan	(to head coming)	'to expire'

Persian CVs receive either an idiomatic or a compositional interpretation, as in (4) and (5), respectively. Note that these lists serve only as samples, and are by no means exhaustive.

(4) **Idiomatic**

chune zadan	(chin hitting)	'to negotiate'
xar kardan	(donkey doing)	'to fool'
bejâ âvardan	(to place bringing)	'to recognize'
dast andâxtan	(hand throwing)	'to mock'
bâlâ âvardan	(up bringing)	'to vomit'
bâlâ keshidan	(up pulling)	'to steal'
dun pâshidan	(seed scattering)	'to try to attract someone's interest'
sabok kardan	(light doing)	'to degrade (someone)'
be bâd dâdan	(to wind giving)	'to waste'
dast o pâ kardan	(hand and foot doing)	'to try (hard)'
sar o kâr dâsh-tan	(head and work hav- ing)	'to be involved'
dast be dast kardan	(hand to hand doing)	'to hesitate'
dast be sar kardan	(hand to head doing)	'to get rid of someone'
sar az pâ nash-nâxtan	(head of foot not dis- tinguishing)	'to be excited'
dast az jân shostan	(hand of life washing)	'to despair'
dust dâsh-tan	(friend having)	'to love'

(5) **Compositional**

be donyâ âmadan	(to world coming)	'to be born'
az donyâ raftan	(from world departing)	'to die'
be zabân âvardan	(to tongue bringing)	'to express'
be dast âvardan	(to hand bringing)	'to obtain'
fekr kardan	(thought doing)	'to think'

gharâr dâdan	(position giving)	'to put'
pish raftan	(front going)	'to go forward, to make pro- gress'
be xâter âvardan	(to memory bringing)	'to remember'
narm shodan	(soft becoming)	'to become paci- fied'
pas dâdan	(back giving)	'to return'

Although Persian CVs bear one single word stress, the majority of them cannot be considered as lexical phrases since their NV and LV may be separated by a number of elements, including (a) negational and inflectional affixes, (b) the auxiliary verb for future tense, and (c) emphatic elements (Mohammad and Karimi 1992). Examples are provided in (6)–(8)^{5, 6}.

(6) a. Kimea be râdio gush *na*-dâd
 Klimea to radio ear neg-gave
 'Kimea did not listen to the radio.'

b. Kimea be radio gush *mi*-dâd
 prog
 'Kimea was listening to the radio.'

(7) pro be to gush *xâhad* kard
 to you ear will does
 'She will listen to you.'

⁵ Abbreviations:

râ = Specificity Marker for Accusative Case pl = plural sg = singular prog = progressive em-
 ph = Emphatic neg = negation Ez = Ezafe particle

Ezafe construction involves an NP consisting of a head noun (an element with the feature [+N] such as N or A), its modifier(s), an optional possessive NP, and the Ezafe particle *e* that is structurally utilized as a link between the head and its modifiers (and the possessive NP). For a detailed analysis of Ezafe constructions see Samiian (1983) and (1994), Karimi and Brame (1986), and Ghomeshi (1996).

⁶ Persian is a Null Subject language. I have added *pro* to Mohammad and Karimi's (1992) data in (7) and (8) for the sake of clarification.

- (8) pro gush *dige ne - mi - kon - e*
ear other neg- Prog- do - 3sg
'She does not listen anymore.' (Mohammad and Karimi
1992)

In (6)–(8) different types of affixes, the future verb *xâhad*, and the emphatic element *dige* separate the NV from LV⁷.

Persian CV cannot be the result of a syntactic incorporation in the sense of Baker (1988) either since NV is not necessarily an X⁰, as in (9)⁸.

- (9) kimea *ye zamin - e saxti xord*
Kimea a earth - Ez hard collide
'Kimea fell badly.' (Lit. Kimea hit a hard floor.)

The elements *ye 'a'* and *saxti 'hard'* modify the noun *zamin* in (9)⁹. Furthermore, NV can be separated from LV by a prepositional phrase, as in (10).

- (10) Kimea *unâ ro da'vat be mehmâni kard*
Kimea them râ invitation to party did
'Kimea invited them to a party.'

Persian CVs do not exhibit characteristics of frozen lexical elements nor syntactic incorporation, as evidenced by the data in (6)–(10). An investigation of their semantic and syntactic properties is thus required to shed light on their peculiarities.

⁷ The data in this paper are taken from the Standard Colloquial Persian, also called *Tehrani* variant. The example in (7) is an exception since it is taken from a more formal version of the language. The complex verbs discussed in this paper, however, are used in the colloquial as well as the written language.

⁸ See also Heny and Samiian (1991) and Ghomeshi and Massam (1994) for additional arguments against an analysis based on syntactic incorporation in these cases.

⁹ The singular determiner *ye* in (9) may also appear with a plural noun, as in (i):

- (i) *ye gol - â - ye ghashangi xarid-am*
a flower-pl-Ez pretty bought-1sg

'I bought some pretty flowers.'

It seems that this element bears the meaning of a quantifier such as 'some' rather than a singular determiner in these cases.

3. Syntactic and semantic properties of Persian CVs

In this section, the syntactic and semantic specifications of compositional and idiomatic CVs are discussed. Compositional CVs are examined with respect to their argument and event structure, volitional force, and control pattern. Regarding the idiomatic CVs, several syntactic processes such as modification, scrambling, and gapping are employed in order to exhibit the syntactic status of NVs in this type of CVs.

3.1 Properties of compositional CVs

The first property of Persian compositional CV to be discussed in this section is its thematic structure. The LV of CV does not necessarily have the same argument structure as its heavy counterpart (Mohammad&Karimi 1992, M&K henceforth). For example, the heavy verb *dâdan* 'to give' takes a direct and an indirect object, similar to its English counterpart. The light verb *dâdan*, however, takes different types of complements, as in (11)–(13) (= (24–25) in M&K).

- (11) Kimea zabânshenasi-ro *edâme* *dâd*
 Kimea linguistics-râ continuation gave
 'Kimea continued (studying) linguistics'
- (12) Kimea bâ Rahjou *mosâbeghe* *dâd*
 Kimea with Rahjou competition gave
 'Kimea competed with Rahjou.'
- (13) Kimea ketâb ro ruy-e miz *gharâr* *dâd*
 Kimea book- râ on-Ez table setting gave
 'Kimea put the book on the table.'

The subcategorizational framework of the light verb *dâd* in these examples is not the same as the heavy *dâd*: it takes only a theme in (11) and a prepositional phrase in (12). However, the thematic role of this

PP is not GOAL. Similar situation holds in (13) where the PP does not bear the thematic role GOAL¹⁰.

M&K suggest that Persian LV is compatible with Japanese *suru* and other light verbs discussed in the literature for a number of languages. Restricting their analysis only to type (3a) of Persian CVs, M&K suggest that Persian LV is semantically empty, and that it co-occurs with theta transparent NPs, noun phrases that assign theta roles outside their maximal projections. That is, the noun lends arguments to the verb, turning it into a theta-marker, as suggested by Grimshaw and Mester (1988) in terms of their Argument Transfer Hypothesis¹¹. M&K argue that this claim is supported by the examples in (14) and (15), where a and b have different verbs, but the same nominal element and the same meaning. The only difference between them is of a stylistic nature: b is used only in the written language.

- (14) a. ezhâr kardan b. ezhâr dâshtan 'to state'
 statement doing statement having
- (15) a. majbur kardan b. majbur nemudan 'to force'
 obliged doing obliged showing

Contrary to M&K's proposal, however, Persian LVs, although semantically bleached, are not completely 'empty'. Consider the following data:

¹⁰ Yiddish light verbs do not preserve the content of their heavy counterparts either (cf. Diesing (1996)). The example in (i) represents the heavy form of the verb *give*, while the one in (ii) represents its light counterpart.

- (i) Avrom hot Maksn gegebn a bukh
 Abraham has Max given a book
 'Abraham gave Max a book.'
- (ii) Er git a kum arayn
 he gives a come in
 'He comes in (suddenly).'

The light verb in (ii) has become an unaccusative verb with a single argument.

¹¹ Similar proposals have been made by S. Rosen (1989) and Manning (1992) for Romance languages. See also Cattle (1984) who suggests that the thematic structure of English composite predicates depends on the thematic structure of its nominal element, as in (ii):

- (i) Sue looked at the book
- (ii) Sue took a look at the book

- (16) a. tahvil gereftan (receiving catching) 'to take delivery, to take over'
 b. tahvil dâdan (receiving giving) 'to deliver'
- (17) a. panâh âvardan (refuge bringing) 'to take refuge'
 b. panâh dâdan (refuge giving) 'to give refuge/shelter'
- (18) a. tul dâdan (length giving) 'to prolong'
 b. tul keshidan (length pulling) 'to last'
- (19) a. bâlâ bordan (up taking) 'to promote'
 b. bâlâ âvardan (up bringing) 'to vomit'

Although the nominal element is the same in each pair, the light verb is different, triggering a change in the meaning and the thematic structure. In (16a), for example, the CV requires a SOURCE and a THEME, while the CV in (16b) requires a GOAL and a THEME.

Furthermore, there is a set of *unaccusative* LVs that correspond to a set of transitive counterparts in this language. The verb *xordan* 'to collide, to eat', for example, is among those light verbs that are marked *unaccusative* in the lexicon. Examples are provided in (20) and (21) (= (33) and (34), respectively, in M&K).

- (20) a. Kimea man-ro shekast dâd
 Kimea I – râ defeat gave
 'Kimea defeated me.'
- b. man (az Kimea) shekast xord-am
 I of Kimea defeat ate – 1sg
 'I was defeated (by Kimea).'
- (21) a. dowlat mardom-ro farib dâd
 government people – râ deception gave
 'The government deceived the people'
- b. mardom (az dowlat) farib xord-and
 people of government deception ate – 3pl
 'People were deceived (by the government).'

The sentences in (20a) and (21a) are transitive, while those in (20b) and (21b) are their unaccusative counterparts.

Considering the data in (20) and (21), M&K suggest that the fact that the external thematic role is not transferred to the unaccusative LV in (20b) and (21b) does not detract from the validity of the Argument Transfer Hypothesis. That is, the nominal element of CV lends its theta roles to the verb as long as the verb is capable of hosting them. The unaccusative light verb blocks the transition of the external theta role. In this case, the transparent NP optionally projects its external role into the sentence in the form of a prepositional phrase.

The data in (20) and (21), however, clearly show that LV plays an important role within the CV construction. This fact is supported by data from other languages as well where the LV determines the Case of the object. Butt (in press), for example, suggests that the Case of the subject is determined by the light verb in Urdu, as illustrated by the following examples¹²:

- (22) a. vo /-*ne ro
 pron-Nom /*Erg weep
 'He wept.'
- b. vo ro par-aa
 pron-Nom weep fall-perf.M. Sg
 'He fell to weeping (burst in tears).'
- c. us-ne ro daal-aa
 pron-Erg weep put-perf.M. Sg
 'He wept copiously on purpose'

Although the heavy verb *ro* 'weep' does not normally take an ergative subject, as in (22a), the subject of this verb receives an ergative Case when it combines with *daal* 'put', an LV that requires an ergative Case on its subject. This is illustrated in (22c). When the same verb combines with *par* 'fall', an LV that requires a nominative Case on the subject, it will take a nominative subject, as in (22b). The same pattern is observed with respect to the verb *gaa* 'sing' which can form a complex predicate with both *daal* and *par*. The influence of the light verb on the choice of Case is once again supported by the following examples.

¹² The abbreviations in these examples are taken from Butt (in press):
 pron = pronoun perf = perfect M = Masculine sg = singular Erg = Ergative

- (23) a. us-ne gaanaa gaa-yaa
 pron-Erg song.M-Nom sing-perf.M. Sg
 'He sang a song.'
- b. *us gaanaa sing-perf.M. Sg
 pron-Nom song.M-Nom
 'He sang a song.'
- (24) a. vo gaanaa gaa par-aa
 pron-Nom song. M-Nom sing fall-perf.M. Sg
 'He burst out into song.'
- b. us-ne gaanaa gaa daal-aa
 pron-Erg song.M-Nom sing put-perf.M. Sg
 'He sang a song (completely, forcefully, on purpose).'

The examples in (23) show that the verb *gaa* 'sing' must have an ergative subject in the perfective. However, when it forms a complex predicate with the light verb *par* 'fall', it takes a nominative subject, as in (24a). When combined with *daal* 'put', it takes an Ergative subject, as in (24b).

Returning to Persian, another problem with a theory based on argument transfer rests on the fact that the NV of CV does not necessarily have an argument structure to be transferred to LV in the first place. That is, although NV can be a predicate noun whose argument structure could be transferred to LV, as in (25), it can also be a non-predicate noun with no argument structure at all, as in (26).

- (25) a. da'vat kardan (invitation doing) 'to invite'
 b. kushesh kardan (trying doing) 'to try'
- (26) a. aks andâxtan/gereftan (picture throwing/taking)
 'to take pictures'
- b. pange andâxtan (palm throwing)
 'to grip'

Furthermore, The NV of Persian CV ranges over a number of categories, as the examples in (3) indicate. This fact provides a serious

problem for an analysis based on Grimshaw and Mester's Argument Transfer Hypothesis: unless we assume that PPs and adverbs have a thematic structure that can be transferred to the light verb, we will not be able to retain this hypothesis. Such an assumption, however, is not justified. Thus M&K's analysis, based on the Argument Transfer Hypothesis, does not hold for Persian CVs.

Let us now take a close look at the argument structure of NV and LV within the CV. The following examples suggest that the thematic structure of one node under CV is the subset of the thematic structure of the other node. (27) illustrates this fact with respect to a non-stative CV:

(27) a. edâme dâdan <AGENT, THEME>

AGENT AGENT

THEME THEME

GOAL

(continuation giving) 'to continue'

b. da'vat kardan <AGENT, THEME, (GOAL)>

AGENT AGENT

THEME THEME

GOAL

(invitation doing) 'to invite'

In (27), either the argument structure of NV is a subset of the argument structure of LV, as in (27a), or vice versa, as in (27b). The argument structure of CV is the subset of the argument structure of its parts.

The so-called raising constructions seem to reveal the same *subset* relation between the subparts of CV¹³:

(28) a. emkân dâshtan <THEME>

THEME POSSESSOR

THEME

(possibility having) 'to be possible'

¹³ There are no raising constructions in Persian. The subject of the embedded clause is in fact topicalized in the matrix clause where it appears in the sentence initial position in the so-called Raising constructions in this language (Karimi 1997b).

- b. ehtemâl dâshtan <THEME>
 THEME THEME
 (probability having) 'to be probable'

These CVs take a sentential argument which can be considered as their THEME. Examples are provided in (29).

- (29) a. emkân dâr-e [CP ke bachche-hâ xaste bâsh-an]
 possibility have-3sg that child - pl tired be-3pl
 'It is possible that the children are tired.'
- b. ehtemâl dâr-e [CP ke bachche-hâ xaste bâsh-an]
 probability have-3sg that child-pl tired be-3pl
 'It is probable that the children are tired.'

The same *subset* relation seems to hold between the argument structure of NV and LV in the following CVs. Although both LVs have a THEME as part of their argument structures, only the predicate noun *sa'y* 'to try' in (30a) has an argument structure including THEME. The nonpredicate noun *dust* 'friend' in (30b) lacks an argument structure altogether. Both CVs, however, take an embedded clause as their THEME.

- (30) a. Kimea sa'y mi-kon-e [CP ke be - r - e]
 Kimea try pres-do-3sg that subj-go-3sg
 'Kimea will try to go.'
- b. Kimea dust dâr-e [CP ke be - r - e]
 Kimea friend have-3sg that subj-go-3sg
 'Kimea likes to go.'

Inchoative verbs follow the same pattern, as in (31).

- (31) a. âb shodan <THEME> (water becoming) 'to melt'
 THEME
- b. sard shodan <THEME> (cold becoming) 'to cool off'
 THEME

The adjective *sard* 'cold' does not have an argument structure. Furthermore, the noun *âb* 'water' is among those nonpredicate nouns that do

not have an argument structure. The inchoative verb *shodan* 'to become', however, is subcategorized for an argument with the thematic role THEME. The THEME in these cases appears as the subject of the clause.

The discussion thus far supports Baker's (1996) claim that there is no process that would take as its input two lexical items, each with their own argument structure, to derive from them a new linguistic object with a new argument structure calculated as a combination of the two. The basic generalization Baker offers is that the theta grid of one of the elements in a CV construction is in most cases the subset of the argument structure of the other, as discussed for Persian CVs in this section.

Although the subset theory seems to make correct predictions, the thematic roles of the two sets are not always compatible. Consider the following example:

- (32) *mosâbeghe* *dâdan* (competition giving)
 AGENT AGENT
 PP (with+NP) THEME
 PP (GOAL)
 'to compete'

The two PPs in (32) do not bear the same theta role. *Mosâbeghe* has a [*with+NP*] as part of its argument structure, while the verb *dâdan* requires a GOAL.

Furthermore, the argument structure of CV may have properties that cannot be derived purely on the basis of a subset theory. For example, the prepositional phrase *be xâk* 'to soil' and the LV *sepordan* 'entrusting' constitute a CV, as in (33).

- (33) *be xâk sepordan* (to soil entrusting) 'to bury'

The NV and LV together determine the type of the direct object of the predicate, as evidenced by the contrast between (34) and (35).

- (34) *mâdar doxtar/ sag/ketâb-esh* *ro be hamsâye sepord*
 mother daughter/dog/book-her râ to neighbor entrusted
 'The mother entrusted her daughter/dog/book to the neighbor.'

- (35) mâdar doxtar/*sag/*ketâb-esh ro be xâk sepord
 mother daughter/dog/*book-her râ to soil entrusted
 'The mother buried her daughter/*dog/*book.'

Sepord in (34) is a heavy verb. It can take an inanimate object such as *ketâb* 'book' or an animate object such as *doxtar* 'daughter' and *sag* 'dog'. As a light verb combined with *be xâk* 'to soil', however, it can only take a human object, as in (35).

The example in (36) indicates that the CV *be xâk sepordan* requires more than the feature [+HUMAN] for its object. That is, it can only take a socially respectable object.

- (36) mardom shohadâ/*ghâtel-â ro be xâk sepord-an
 people martyrs/*killer-pl râ to soil entrusted-3pl
 'People buried the martyrs/*killers.'

Finally, the same LV combines with another prepositional phrase to create a different CV with a different interpretation and distinct specifications for its THEME:

- (37) Kimea she'r-hâ-ye Hâfez-ro be xâter sepord
 Kimea poem-pl-Ez Hafez-râ to memory entrusted
 'Kimea memorized Hafez's poems.'

Thus the interpretation of a CV and the specifications of its argument structure go beyond a subset theory or a simple compositional process.

In summary, the examples discussed in this section show that NV and LV have their independent syntactic and semantic status, and that they both contribute to the syntax and semantics of CV¹⁴. The CV,

¹⁴ The independent status of NV and LV in compositional CVs seems to be universal, as the following example indicates.

- (i) John gave Bill permission to buy a car. (Baker 1996: 353)

In this example, the NV *permission* is independent of the LV *gave*. Furthermore, the phrase *Bill* is dependent on the light verb while the infinitive *to buy a car* is dependent on the predicate noun *permission*, and forms a constituent with it as we see in (ii).

- (ii) The permission to buy a house was given John. (Baker 1996: 353).

however, receives a conventional interpretation as well, as the data in (32) and (35)–(37) indicate. Therefore, its semantic and syntactic interpretation cannot be derived simply from the interpretation of its parts.

The second property of compositional CVs concerns their event structure. Consider the following examples:

- (38) a. emkân dâshtan/ *shodan/ *budan
 possibility having/ *becoming/ *being
 b. momken *dâshtan/ shodan/ budan
 possible having/ becoming/ being

The verb *dâshtan* is associated with a type that denotes *possession*, and thus can be combined with a *noun*, a type that denotes *entity*. The verbs *budan* ‘to be’ and *shodan* ‘to become’, on the other hand, are associated with *state* and *change of state*, respectively. Therefore, they can combine only with an adjective that represents *state* or *change of state* (Hale and Keyser 1993:72). The light verb *shodan* may combine with a noun only if the latter receives the interpretation of an adjective:

- (39) kare âb shod
 butter water became
 ‘The butter melted.’

The CV *âb shod* in (39) reveals the change of state from a solid situation to a liquid and watery one. Now consider the following contrasts:

- (40) a. Kimea ta’ajjob kard/ *shod/ *bud
 Kimea astonishment did/ *became/ *was
 ‘Kimea was astonished.’

Although *Permission* will be generated as the THEME of *give*, it will be incorporated into *give* at an abstract level, and the infinitive clause *to buy a car* will be jointly θ -marked by *permission* and *give*. Therefore, the infinitive behaves like a complement of the complex predicate, rather than the complement of the head noun of the complex NP. Thus extraction out of it does not violate the Complex NP Constraint:

- (iii) What did you give John [permission to buy t]? (Baker 1996: 355)

This dependency is more salient in languages like Japanese and Urdu, that mark NP and VP dependents with different Cases. See Baker (1996) on this issue.

- b. Kimea mote'ajjeb shod/ bud
 Kimea astonished became/ was
 'Kimea became astonished.'
- c. in xabar Kimea-ro mote'ajjeb kard
 this news Kimea-râ astonished did
 'This news astonished Kimea.'

The NV *ta'ajjob* 'astonishment' in (40a) is a noun, and thus cannot appear with *shodan* 'to become' or *budan* 'to be'. The NV *mote'ajjeb* 'astonished' in (40b) is an adjective, and may combine with these two light verbs. The verb *kardan* 'to do' is combined with a noun in (40a) and an adjective in (40c). What is the explanation for this dual property of *kardan*?

Both *kardan* and *shodan* are verbs that denote *Transition*. Transition is an event that identifies a semantic expression that is evaluated relative to its opposition (Pustejovsky 1991, Jackendoff 1972, Lakoff 1970). This type of verb reveals the transition from a given situation to an opposite one, as in (41), where E is a variable ranging over any type of event.

$$(41) \quad \begin{array}{c} T \\ \wedge \\ E_1 \neg E_2 \end{array} \text{ (Pustejovsky 1991:56)}$$

This transition is apparent in verbs like *give*, *open*, *build*, *destroy*, etc. It is also apparent in the sentence in (39): the *butter* is transmitted from a solid situation to a watery one. Note that *âb* 'water' in (39) denotes the property 'liquidity', and thus is interpreted as an adjective rather than a noun.

There is an important difference, however, between the two transition LVs *kardan* and *shodan*. Transition verbs can make reference both to a predicate opposition AND the activity that brings about this change, and hence can be used as a verb of the aspectual type called *accomplishment*. They may also make no explicit reference to the activity being performed, and thus can be used as a verb of the aspectual type called *achievement*. While *kardan* may belong to both types, *shodan* 'to become' belongs only to the second type: *achievement*. Thus *shodan*, an unaccusative verb, reveals a transition involving a unary

predicate opposition, while *kardan*, a causative verb, may indicate a transition involving a unary predicate opposition AND the activity that brings about the change. Therefore, it can combine with an adjective, where the causer of the change is revealed, as in (40c). It can also appear with a noun, revealing no explicit reference to the activity being performed, as in (40a).

The discussion thus far suggests that there is a restriction on the combination of LVs and NVs. Therefore, the causative LV *kardan* 'to do' is not automatically interchangeable with its unaccusative counterpart *shodan* 'to become'. Similar situation holds with respect to other causative/unaccusative pairs as *dâdan* / *xordan* 'to give'/'to collide', and *zadan* / *xordan* 'to hit'/'to collide', as in (42) and (43).

- (42) a. *gul zadan/xordan* (deception hitting/ 'to deceive/to be
colliding) deceived'
b. *dâd zadan/* (yell hitting/colli- 'to yell'
**xordan* ding)
- (43) a. *shekast dâdan/* (defeat giving/col- 'to defeat/to be
xordan liding) defeated'
b. *tul dâdan/*tul* (length giving/col- 'to prolong'
xordan liding)

The NV *gul* 'deception' may enter a semantic fusion that allows transition events of the type of *accomplishment* and *achievement*. It may, therefore, combine with the transitive verb *zadan* 'to hit', and the unaccusative verb *xordan* 'to collide', as in (42a). The NV *dâd* 'yell', on the other hand, can only enter a semantic fusion that reveals *accomplishment*, thus the ungrammaticality of (42b). Similar situation holds between the NVs and LVs in (43).

The light verb *kardan* 'to do' not only denotes *accomplishment* and *achievement*, it is also utilized as a *psyche* or *experiencer* verb depending on the NV it takes.

- (44) a. *xarâb kardan* (destroyed do- 'to de- Accomplishment
ing) stroy'
b. *peydâ kardan* (found doing) 'to find' Achievement

- c. xoshhâl (happy doing) 'to please' Psyche verb
kardan
- d. fekr kardan (thought do- 'to think' Experiencer verb
ing)

similarly, the light verb *dâshtan* 'to have' combines with certain NVs to make a CV of *experience*, as in (45), or a CV of *achievement*, as in (46).

- (45) a. dust dâshtan (friend having) 'to like, to Experiencer
love' love'
- b. e'teghâd (belief having) 'to believe' Experiencer
dâshtan
- (46) a. negâh dâshtan (look having) 'to keep' Achievement
b. bâz dâshtan (back having) 'to prevent' Achievement

The noun *dust* 'friend' in (45a) is a nonpredicate noun with no argument structure. The light verb *dâshtan* 'to have' does not have an 'experiencer' as its argument. Nevertheless, the CV composed of these two elements receives the interpretation of an experiencer predicate. Similarly, only the semantic fusion of NV and LV can give us the reading *achievement* in (46).

The restriction on the semantic fusion of LV and NV seems to be universal. Analyzing complex predicates in Urdu, for example, Butt (in press) suggests that complex predicate formation is defined by the process of *Event Fusion* and *Argument Fusion* at a certain level (at a structure within the LFG model)¹⁵. That the event interpretation of the complex predicate consisting of a main verb and an LV is based on the amalgam of both of these elements is apparent in (22b&c) and (24), repeated below in (47a&b) and (48).

- (47) a. vo ro par-aa
pron-Nom weep fall-perf.M. Sg
'He fell to weeping (burst int tears).'

¹⁵ Butt states that Argument Fusion coindexes two arguments so that only one argument remains visible for linking purposes. Furthermore, Event Fusion unifies the information contained within two events.

b. us-ne ro daal-aa
 pron-Erg weep put-perf.M. Sg
 'He wept copiously on purpose'

(48) a. vo gaanaa gaa par-aa
 pron-Nom song. M-Nom sing fall-perf. M. Sg
 'He burst out into song.'

b. us-ne gaanaa gaa daal-aa
 pron-Erg song.M-Nom sing put-perf.M. Sg
 'He sang a song (completely, forcefully, on purpose).'

The event interpretation of these sentences depends on the combination of the main verbs *ro* 'weep' and *gaa* 'sing', on the one hand, and the light verbs *par* 'fall' and *daal* 'put', on the other. If there is a clash of information, the Event Fusion will fail. For example, whenever there are contradictory specifications for conscious choice on an argument, the formation process will fail.

(49) *anjum kahaanii b^huul par-ii
 Anjum.F-Nom story.F-Nom forget fall-perf.F. Sg
 'Anjum suddenly forgot the story impulsively.'

The light verb *par* 'fall' is positively specified for inception. The formation of the complex predicate *b^huul par-ii* 'forget impulsively' is, therefore, impossible.

Similarly, Wierzbicka (1982) suggests that "the *have a V* construction [in English] is agentive, experiencer-oriented, antidurative, atelic, and reiterative." Therefore, English allows verbal expressions like *have a drink*, and *have a try*, but not **have an eat* or **have a manage*. The reason is that the verbs *eat* and *manage* contrast with *drink* and *try* partially in repeatability of the actions in question, and thus are semantically not compatible with *have a V* constructions.

The third property of compositional CVs has to do with their volitional force. While a heavy verb might have a volitional force, this property is not necessarily preserved when it enters a CV construction as a light verb.

- (50) Kimea amdan dir be kelâs âmad
 Kimea intentionally late to class came
 'Kimea intentionally came late to class.'
- (51) *Kimea amdan dir be donyâ âmad
 Kimea intentionally late to world came
 '*Kimea was born late intentionally.'

Although we have a structure consisting of a PP and the verb *âmadan* 'to come' in both cases, only the heavy version of this verb allows a volitional interpretation, as in (50). This interpretation is not available in the case of the CV in (51).

Finally, the control pattern of CV seems to depend on its NV, as in (52)-(54). In all these examples, the LV *kardan* 'to do' is utilized. However, each CV reveals a different control pattern depending on its NV.

- (52) *Subject control*
 Kimea_i sa'y kard [_{CP} ke PRO_{i/*k} be - r - e]
 Kimea effort did that subj-go-3sg
 'Kimea tried [PRO_{i/*k} to go].'
- (53) *Direct object control*
 a. Kimea [bachche-hâ-ro]_i majbur kard [_{CP} ke PRO_{i/*k}
 Kimeas child - pl-ra\$ac forced did that
 be - r - an]
 subj-go-3pl
 'Kimea forced the children to go.'
- b. Kimea [bachche-hâ-ro]_i tashvigh kard [_{CP} ke
 Kimea child - pl-ra\$ac encouraged did that
 PRO_{i/*k} be - r - an]
 subj-go-3pl
 'Kimea encouraged the children to go.'
- (54) *Indirect object control*
 a. Kimea be [bachche-hâ]_i towsiyê kard [_{CP} ke
 Kimea to child - pl recommendation did that
 PRO_{i/*k} be - r - an]
 subj-go-3pl
 'Kimea recommended to children to go.'

- b. Kimea az [bachche-hâ]_i xâhesh kard [_{CP} ke PRO_{i/*k}
 Kimea of child – pl request did that
 be – r – an]
 subj-go-3pl
 ‘Kimea asked (of) the children to go.’

The change of LV, however, appears to change the control pattern. Compare the following examples with those in (53).

(55) *Subject control*

- a. [bachche-hâ]_i majbur shod-an [_{CP} ke PRO_{i/*k}
 child – pl forced became-3pl that
 be – r – an]
 subj-go-3pl
 ‘The children were forced to go.’
- b. [bachche-hâ] tashvigh shod-an [_{CP} ke PRO_{i/*k}
 child – pl encouraged became-3pl that
 be – r – an]
 subj-go-3pl
 ‘The children were encouraged to go.’

The unaccusative light verb *shodan* ‘to become’ turns the object-control CV in (53) to a subject control CV in (55). However, we have a case of THEME control in both cases. The lexical specifications of the two LVs determine only the surface position of the THEME, thus the subject/object control contrast in (53) and (55).

In some cases neither the NV nor the LV can provide a control pattern. Nevertheless, the CV containing those two non-control elements will become a control predicate:

- (56) Kimea_i dar-nazar dâr-e [_{CP} ke PRO_{i/*k} be – r – e]
 Kimea in-view have-3sg that subj-go-3sg
 ‘Kimea considers [PRO_{i/*k} going]’

Only the semantic fusion of the NV and the LV in (56) can provide the control pattern for this CV.

The discussion thus far has several implications:

First, even though the light verb is semantically bleached, it still has certain lexical specifications that are determined in the lexicon. As Ritter and S. Rosen (1996) argue, the semantic content of the verb influences the syntactic mapping and sentence interpretation. The degree of this influence depends on the lexical specification of the verb. That is, *strong* verbs have highly specified lexical semantic representation while the *weak* ones have minimal specified lexical semantic representation. Strong verbs have a greater influence on syntactic mapping and sentence interpretation than their weak counterparts. Ritter and Rosen place light verbs between the lexical verbs and auxiliaries on the semantic strength continuum, as in (57).

(57) stronger <-----> weaker
 Lexical Verbs Light verbs Auxiliaries

Given Ritter and Rosen's suggestion, it could be argued that light verbs are *weak* predicates in the lexicon, and become *strong* by a semantic fusion that applies between them and their NV at LF.

Second, NV contributes to the syntactic and semantic specifications of CV. This contribution, however, is not necessarily on a compositional basis.

Third, semantic fusion is only possible if the lexical specifications of LV and NV are compatible and there is no semantic clash between them. This claim is supported by previous proposals presented by Ghomeshi & Massam (1994), Butt (in press), and Vahedi-Langrudi (1996)¹⁶.

Forth, there is a conventional interpretation corresponding to Persian CVs that goes beyond a simple compositional process of its parts. This is true of English complex predicates as well. As Cattle (1984) states, there is a difference between a simple verb and the complex predicate consisting of the nominalized version of the same verb:

(58) I saw the man perform the Indian rope trick.

¹⁶ Regarding the issue of compatibility, Ghomeshi and Massam provide the following constraint:
The Compatibility Constraint

Meaning contributed from a given source must be
 compatible with meaning contributed from all sources.

(Ghomeshi and Massam 1994:178)

- (59) I saw the man give a performance of the Indian rope trick.
(Cattle 1984:17)

The complex predicate *give a performance* has a different meaning than the verb *perform*. The former must happen before an audience. This restriction is not necessary in the case of the latter. Similar semantic difference holds between the simple verbs *recite* and *imitate* ' on the one hand, and their complex form *give a recital* and *give an imitation*, on the other¹⁷.

If the discussion in this section is on the right track, Persian compositional CVs can be considered as *idiomatically combining expressions* in the spirit of Nunberg et al. (1994) who analyze elements like *take advantage of* and *pull strings* as expressions whose idiomatic meaning is composed on the basis of the meaning of their parts.

Having the syntactic and semantic properties of compositional CVs in mind, I turn now to idiomatic CVs and their specifications.

3.2. Idiomatic CVs

In this section, I show that the majority of Persian idiomatic CVs, exemplified by (4), receive a compositional interpretation, and thus should be classified as *idiomatically combining expressions*, similar to those discussed in 3.1.

Let us examine *châne zadan* (chin hitting=to negotiate) and *xar kardan* (donkey doing=to fool someone) with regard to their compositionality. Once we learn the meaning of these idiomatic CVs, we can see the relation between their parts. That is, *châne zadan* involves *figuration* indicating that *negotiation* requires *moving the chin*. *Xar kardan*, on the other hand, becomes transparent on the basis of the idiomatic meaning of *xar* 'donkey' which implies *foolishness* and *stupidity*: there is an apparent relation between the concrete and the abstract meaning of *xar* that provides the idiomatic meaning of the CV *xar kardan*. This relationship is reminiscent of the one that holds between *spill* and *beans* in the English idiomatic expression *spill the beans*. As Cacciari

¹⁷ Wierzbicka (1982) argues along the same lines. She shows that constructions consisting of *have a V* have properties that differs from the simple V. Thus *kissing someone* is not the same as *giving someone a kiss*.

and Glucksberg (1995:43) state :... the relationship between the concrete spilling of beans and the abstract notion of releasing (and therefore revealing) is intuitively apparent and presumably rooted both in the similarity of the two verbs and in the concrete referent of the word beans." A similar relationship holds between the parts in *bâlâ âvardan* (up bringing) 'to vomit', *dun pâshidan* (seed scattering) 'to try to attract someone', and *be bâd dâdan* (to wind giving) 'to waist'.

Nunberg et al. (1994:503) suggest that "modification, quantification, topicalization, ellipsis, and anaphora provide powerful evidence that the pieces of many idioms have identifiable meanings which interact semantically with (each) other.¹⁸" They also use passivization as a testing tool. Persian CVs do not allow passivization due to the fact that NV is not an argument of LV, as discussed in the appendix of this paper. Let us examine the other testing tools employed by Nunberg et al.

The NV of Persian compositional CVs allows limited modification, as in (60a).

- (60) a. Kimea az ra'is-e edâre [CV [NV da'vat-e rasmi]
 Kimea of boss-Ez office invitation-Ez formal
 kard]]
 did
 'Kimea extended a formal invitation to the boss of the office.'
- b. Kimea az ra'is-e edâre rasman [CV [NV da'vat] kard]]
 Kimea of boss-Ez office formally invitation did
 'Kimea formally invited the boss of the office.'

The adjective *rasmi* 'formal' modifies the nominal NV in (60a), while the adverb *rasman* 'formally' modifies the whole CV in (60b). Those idiomatic CVs in (4) whose meaning is distributed among their parts behave in the same fashion, as the following examples attest.

¹⁸ Along the same lines, Nicolas (1995:233) states that an incidental but unexpected and interesting result of this research is the discovery that, contrary to received views, at least 90% of V-NP idioms, including many usually regarded as completely frozen, appear to allow some form of (syntactically) internal modification.

See some of Nicolas's examples in the next footnote.

- (61) a. Kimea barâye in xune [CV [NV chune-ye xubi] zad]]
 Kimea for this house chin-Ez good hit
 'Kimea performed a good negotiation for this house.'
- b. Kimea barâye in xune xub [CV [NV chune] zad]]
 Kimea for this house well chin hit
 'Kimea negotiated well for this house.'
- (62) a. Kimea barâye in kâr [CV [NV dast-o-pâ-ye xubi] kard]]
 Kimea for this job hand-and-foot good
 kard]]
 did
 'Kimea did a good effort for this job.'
- b. Kimea barâye in kâr xub [CV [NV dast-o-pâ] kard]]
 Kimea for this job well hand-and-foot did
 'Kimea tried hard for this job.'

The contrast between (a) and (b) in (61) and (62) supports the claim that the parts of these CVs have their own syntactic and semantic status¹⁹.

Gapping is also allowed in the case of compositional CVs:

- (63) Kimea faghat man-o da'vat karde, to-ro ke
 Kimea only me-râ invitation did, you-râ emph
 — na-karde
 — neg-did
 'Kimea has only invited me, not you.'

¹⁹ Nicolas (1995:236–7) states that the adjective *close* in (i) syntactically modifies *tabs* but semantically modifies the whole idiom.

(i) They kept *close* tabs on John.

Following Arnold and Sadler (1988), Nicolas states that the sentence in (i) is equivalent to the one in (ii) since *keep tabs on* roughly means *observe*.

(ii) They observed John *closely*.

Nicolas argues that idiom-internal modifications are generally of the mere syntactic type. That is, the adjectives inserted into NPs in V-NP idioms can, where they are well-formed, systematically be interpreted as adverbial modifiers of the whole idiom.

The semantic distinctions between (a) and (b) in (61) and (62), however, indicates that adjectives modifying the NP in an idiomatic expression is not purely a syntactic modification, as the English translation of these sentences indicates.

Similar situation holds with respect to some idiomatic CVs:

- (64) man bâ un sar - o - kâr dâr - am, to ke
 I with her head and work have-1sg, you emph
 — na-dâr-i
 — neg-have-2sg
 'I have to deal with her, you don't.'

Persian NV cannot be scrambled unless it contains a quantificational element and receives heavy stress, as attested by the contrast in (65).

- (65) a. Kimea [*che zamin-e saxti*]_i diruz [_{CV t_i xord}]
 Kimea what earth-Ez hard yesterday collided
 'What a hard fall Kimea had yesterday.'
 Lit. Kimea what a hard earth yesterday collided.
- b. *Kimea zamin diruz xord
 Kimea earth yesterday collide

The same restriction holds for some of the idiomatic CVs:

- (66) a. [*che dast-o- pâyi*]_i Kimea barâye in kâr [_{CV [NV t_i}]
 what hand-and-foot Kimea for this job
 kard]]
 did
 'what an effort Kimea did for this job.'
- b. *[*dast-o- pâ*]_i Kimea barâye in kâr [_{CV [NV t_i} kard]]

The compositional interpretation of a number of idiomatic CVs, in addition to the fact that their NV can be separately modified, scrambled, and gapped indicates that they are not true idiomatic expressions. Therefore, they are to be classified as *idiomatically combining expressions* which were discussed in section 3.1. Thus only a handful of idiomatic phrases such as *dast andâxtan* (hand throwing) 'to mock', *bâlâ keshidan* (up pulling) 'to steal', *dust dâshtan* (friend having) 'to love', and *sar az pâ nashnâxtan* (head of foot not distinguishing) 'to be excited' are classified as fixed lexical items in Persian, similar to expressions like *kick the bucket* and *shoot the breeze* in English.

3.3. The degree of independency

The discussion in this paper suggests that the LV and NV of Persian compositional CVs are separately generated in syntax, and become semantically fused at a different level. Thus the two parts of CV enjoy syntactic freedom to a certain degree. The syntactic restrictions imposed on these elements, however, is more severe than the restrictions observed in the case of their English counterparts such as *pull strings* 'keep tabs, and *spill the beans*. For example, Persian CVs do not allow anaphoric reference and topicalization, unlike idiomatically combined predicates in English. English examples are provided in (67). That anaphoric reference and topicalization are not possible with respect to the NV of Persian CV is evidenced by the ungrammaticality of the data in (68).

(67) a. Although the FBI kept *tabs* on Jane Fonda, the CIA kept *them* on Vanessa Redgrave.
(Nunberg et al 1994:502)

b. *Those strings*, he wouldn't pull for you. (Nunberg et al 1994:501)

(68) a. *Kimea be Rahjou panâh dâd, be mâ un-o na-dâd
Kimea to Rahjou refuge gave, to us it-râ neg-gave

b. *panâh Kimea be Rahjou dâd.

Lack of anaphoric reference and topicalization in Persian CVs shows that idiomatic compositionality is a matter of degree.

German CVs reveal some restrictions along the same lines. That is, certain deformations of some idiomatic compositional predicates are possible in this language, but not others. The following data are from Ackerman and Webelhuth (1993), cited by Nunberg et al. (1994).

(69) a. Hans hat den Vogel abgeschossen
Hans has the bird shot off
'Hans stole the show.'

b. Den Vogel hat Hans abgeschossen.

c. *Abgeschossen hat Hans den Vogel.

- (70) a. Er hat ins Grass gebissen
 He has into the grass bitten
 'He died.'
- b. Ins Grass hat er gebissen.
- c. *Gebissen hat er ins Grass.

The input data in (69) and (70) are significantly less constrained compared to purely idiomatic chunks like *kick the bucket*. Nevertheless, verb fronting, which is allowed in the case of heavy verbs in German, is not possible in these cases. As Nunberg et al. state, the fact that scrambling of *den Vogel* in (69b) and *ins Grass* in (70b) is possible provides evidence regarding the lexical independence of the pieces of these predicates and their compositional status.

Persian exhibits similar restriction; even though the NV may scramble in a restricted manner, as in (65a) and (66a), repeated below, the light verb cannot be fronted. Its heavy counterpart, however, is productively fronted in interrogative, focus, or emphatic constructions. The contrast between the heavy verb and its light counter part is illustrated by the data in (71) and (72).

- (65) a. Kimea [*che zamin-e saxti*]_i diruz [_{CV} t_i xord]
 Kimea what earth-Ez hard yesterday collided
 'What a hard fall Kimea had yesterday.'
 Lit. Kimea what a hard earth yesterday collided.
- (66) a. [*che dast-o-pâyi*]_i Kimea barâye in kâr [_{CV} [_{NV} t_i]
 what hand-and-foot Kimea for this job
 kard]]
 did
 'what an effort Kimea did for this job.'
- (71) XORD_i Kimea ghazâ-sh ro t_i
 ate Kimea food-her râ
 'Kimea DID eat her food.'
- (72) *XORD_i Kimea zamin t_i
 collided Kimea cmearth

The example in (72) illustrates the same restriction we observe in the case of German data in (69c) and (70c)²⁰.

4. Covert incorporation at logical form

As we saw in section 2, Persian CV consists of a light verb and an XP that ranges over a number of different categories. Furthermore, we saw that the majority of Persian CVs are of the type of *idiomatically combining expressions*. Since these elements cannot be constructed in the lexicon nor in syntax, they must be interpreted as one unit at an abstract level.

I suggest that the head of NV is incorporated into LV at the level of Logical Form (LF) in order to provide the semantic fusion required between these two elements. As Safir (1996) suggests, LF incorporation is motivated by the need to generate specialized interpretations that the grammar does not provide otherwise. I further suggest that the process of incorporation is based on

- (a) the lexical specifications of the parts of CV provided by the lexicon, and
- (b) an unambiguous system of structural relation between the elements of CV.

Thus I propose the following informal generalization:

(73) **CV Interpretation**

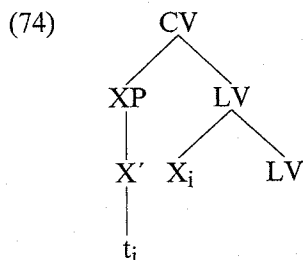
The interpretation of a Complex Verb (CV) is determined by the covert incorporation of the head of its Nonverbal element (NV) into the Light Verb (LV) only if

- (i) the lexical specifications of NV and LV are compatible, and
- (ii) NV and LV are dominated by a node CV at LF²¹.

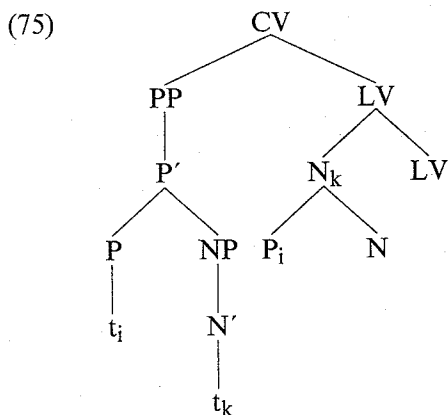
²⁰ Note that this restriction holds with respect to the heavy verb when its direct object is nonspecific. See Karimi (in preparation) for discussions and explanations.

²¹ This is in the spirit of Hale and Keyser's (1993) Unambiguous Projection. Their proposal, however, is based on thematic relations. See the appendix in this paper where Persian NV is suggested to have no thematic relation with its LV.

As for (i), the process of CV formation will be successful only if there is no semantic clash between the lexical specifications of NV and LV, as we saw in section 3. (ii) is crucial in order to satisfy the locality condition on incorporation. The process of LF incorporation provides a single unit that accounts for semantic and syntactic properties of complex verbs in this language. This process is illustrated in (74):



In those cases where there is more than one head inside the XP, as in the case of a PP, we will have multiple head movements, as in (75).



The incorporation of P into N can be argued to apply prior to Spellout since the P and N appear to be one word phonologically as in *be-nazar âmadan* 'to appear' and *be-xâter âvardan* 'to remember'²².

The example in (10), repeated below, in addition to the sentence in (76), indicate that a prepositional phrase can intervene between the NV and LV. Since Persian is a scrambling language, these examples

²² This phonological fusion is reminiscent of P+Det fusion in German, as in *zu+dem* = *zum*.

suggest that NV has scrambled to a higher position, violating the locality condition in (73ii).

- (10) Kimea unâ ro da'vat *be mehmâni* kard
 Kimea them râ invitation to party did
 'Kimea invited them to a party.'
- (76) Kimea in otâgh ro extesâs *be mehmân* dâd
 Kimea this room râ allocation to guest gave
 'Kimea allocated this room to guests.'

The prepositional phrases *be mehmân* 'to guests' and *be mehmâni* 'to the party' intervene between the NV and LV in (10) and (76). As we saw before, however, scrambling is available to the NV of Persian CV only if it is quantificational and receives heavy stress. The contrast in (65), repeated below, attests this claim.

- (65) a. Kimea *che zamin-e saxti* diruz [CV ti xord]
 Kimea what earth-Ez hard yesterday collided
 'What a hard fall Kimea had yesterday.'
 Lit. Kimea what a hard earth yesterday collided.
- b. *Kimea zamin diruz xord
 Kimea earth yesterday collide

Furthermore, scrambling is not possible in the case of other types of CVs:

- (77) a. *Kimea ketâb-â-ro gharâr *ru miz* dâd
 Kimea book-pl râ position on table gave
- b. *Kimea hoghugh-e mâhiyâna-ro pardâxt *be kârmand-â* kard
 Kimea salary - Ez monthly -râ paid to employee-pl did
- c. *Kimea ketâb-â-ro pas *be Sepide* dâd
 Kimea book-pl-râ back to Sepide gave

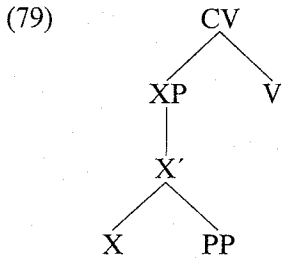
Moreover, scrambling to a position higher than V' seems to be prohibited even in the case of the data in (10) and (76), as the ill-formedness of the following examples attests²³:

²³ I am assuming a layered VP for Persian in the spirit of Larson (1988). The specific object followed by the Specificity Marker *râ* is base generated in the Specifier position of VP. See Karimi (1997b) and Karimi (in preparation) on this issue.

- (78) a. *Kimea da'vat *unâ ro be mehmani* kard
 b. *Kimea extesâs *otâgh ro be mehman dâd*

Thus the contrast between (10)/(76), on the one hand, and (77), on the other, requires some explanation.

I suggest that the prepositional phrases in (10) and (76) are subcategorized by the NV rather than CV, and hence are base-generated in a configuration as the following²⁴:



The PP can move out of CV prior to Spellout, as in (80):

- (80) a. Kimea bachche-hâ ro [_{PP} *be mehmani*] [_{CV} [_{XP} da'vat t_i] kard]]
 b. Kimea in otâgh-ro [_{PP} *be mehman*] [_{CV} [_{XP} extesâs t_i] dâd]]

Scrambling in Persian is generally motivated by functions such as topic, focus, contrast, or the rule of scope assignment (Karimi, in Preparation). The structure in (79) is supported by the fact that both PPs in (80) must receive a focal stress or a topic interpretation, indicating that they have moved out of their base positions. The prepositional phrases in (77), on the other hand, must be subcategorized by the whole CV, and hence cannot appear between the NV and LV.

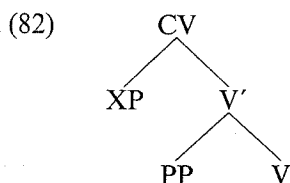
Some light verbs can optionally subcategorize independent of their NV: *zadan* 'to hit' and *gereftan* 'to catch' are among them, as in the following examples:

- (81) a. Sepide âtash *be zendegi-sh zad*
 Sepide fire to life – her hit
 'Sepide destroyed her life.' (=lost the value of her life)

²⁴ Note that Persian is head initial except for the verb phrase.

- b. Sepide aks az *bachche-hâ* gereft
 Sepide picture of child – pl caught
 ‘Sepide took pictures of children.’

The prepositional phrases in (81) cannot be subcategorized by the NV since the latter is a nonpredicate noun with no argument structure. Thus they must be subcategorized by the light verb, and can appear between the NV and LV. I suggest the following structure for this type of CVs.



As in the case of the examples in (80), these PPs can also scramble out of the CV.

- (83) a. Sepide [_{PP} *be zendegi-sh*]_i [CV [_{XP} *âdash*] t_i zad]
 b. Sepide [_{PP} *az bachche-hâ*]_i [CV [_{XP} aks] t_i gereft]

Note that the CV in (83a) receives an idiomatic interpretation. The light verb *zadan* ‘to hit’ can also combine with *âdash* ‘fire’, without the prepositional phrase. In that case, its primary interpretation will be compositional, although it can also receive an idiomatic interpretation. The whole CV in this case takes a THEME which cannot intervene between the NV and LV, as evidenced by the contrast in (84).

- (84) a. Sepide *xuna-ro âdash zad*
 Sepide house-râ fire hit
 ‘Sepide put the house on fire’ or
 ‘Sepide destroyed the house.’ (lost the house)
 b. *Sepide *âdash xuna-ro zad*

Before concluding this section, three more issues need to be addressed. First, examples such as those in (65a), where the NV has moved out

of CV, seem to contradict the statement in (73ii) which requires that NV and LV be dominated by the node CV at LF²⁵. Given the Copy Theory (Chomsky 1993, 1995), however, the underlying structure will still be available for covert incorporation due to the presence of the copy of NV dominated by CV at LF.

Second, the adjective, adverbial, and PP NVs in (3b)-(3d) seem to be syntactically more fused to LV than those in (3a). This is probably due to the fact that these NVs cannot be modified by a quantificational element, and thus cannot be scrambled as easily as their nominal counterparts. Furthermore, they lack an argument structure, and therefore, cannot be separated from the LV by an argument either^{26, 27}.

Third, Safir (1996) suggests that a compositional interpretation is too costly to be construed by a covert movement at LF. If the discussion in this section is on the right track, Persian compositional CVs are considered as *idiomatically combining expressions*. That is, even though the meaning of these CVs is distributed among their parts, they receive a conventional interpretation as well. If Persian compositional CVs have in fact idiomatic flavor, as the discussion in this section

²⁵ The nominal element can also be separated from the verb by a member of a serial verb, an adverb, or an emphatic element, as observed by M&K (footnote 5, page 209–10).

- (i) gush *bâyad* bo – kon -i
 ear must subj- do -2sg
 ‘You must listen.’
- (ii) gush *ham ne – mi -tun-i* bo -kon-i
 ear even neg- Prog -can-2sg subj do-2sg
 ‘You can’t even listen?’

This is true of those idiomatic CVs whose NV and LV reveal independent syntactic and semantic status.

- (iii) chune *ne-mi-xâd dige* be-zan-i.
 chin neg-pres-want no more subj-hit-2sg
 ‘You don’t need to negotiate any more.’

In all these cases, the scrambled NV receives heavy stress.

²⁶ Some adverbial NVs can take an argument in a very restricted way, as in *man ketâb ro pas-e Hasan dâd-am* ‘I returned the book to Hasan’, as observed by Samiian (1983). However, these examples are very rare.

²⁷ The question that emerges is this: why can the LV not take an argument in these cases, while it can when NV is a nominal element, as those in (81). I have no explanation for this problem at this point.

suggests they do, then they can be considered the result of a covert incorporation at LF without rejecting Safir's proposal²⁸.

5. Conclusion

The arguments advanced in this paper lead to the following language specific conclusions; First, the interpretation of Persian compositional CVs goes beyond a simple compositional process. Thus these CVs can be considered as *idiomatically combining expressions*, similar to *take advantage of* in English. Second, the majority of Persian idiomatic CVs receive a compositional interpretation as well since their parts exhibit independent syntactic and semantic status. Thus only a handful of these elements will be classified as fixed lexical items, similar to *kick the bucket* in English.

The discussion in this paper also provides theoretical consequences. First, even though CV formation is sensitive to certain lexical specifications of NV and LV, the argument and event structures of CV cannot be considered as being projected from the lexicon for the purpose of mapping into the syntactic component. Thus, Projection Principle can no longer be maintained. Second, the analysis of Persian CVs indicates that idiomatological compositionality is a matter of degree: Persian CVs reveal less syntactic freedom with respect to anaphoric reference and topicalization compared to their English counterparts. Third, covert incorporation is not restricted to the object of the verb, contrary to Baker (1996); as discussed in the following appendix, the NV of Persian CV does not bear a thematic relation to its LV.

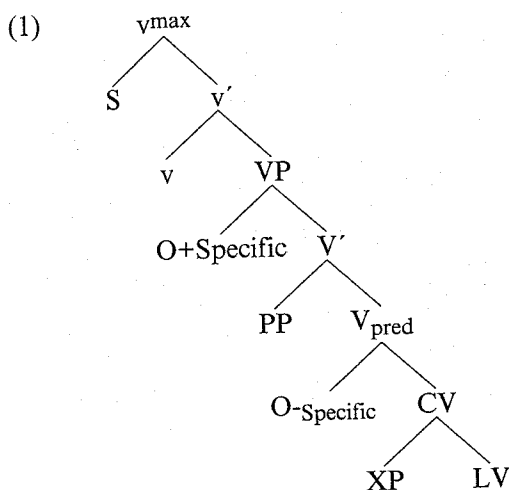
Appendix: What is the Relation of NV to LV?

The NV of Persian CV does not exhibit the properties of an argument bearing a thematic relation to the verb. That is, the syntactic behavior

²⁸ Relying on Baker's (1988) incorporation theory, Safir (1996) suggests an abstract head movement for English idiomatic expressions that will take place at LF. An idiomatic interpretation of an expression such as *shook her head* (meaning: she said no) is derived by the movement of N (head) to D, and the movement of the derived D to V (*shook*). Thus the sentence in (i) will have the LF structure in (ii).

- (i) Shiela shook her head.
- (ii) Shiela [_{head}-her]_j-shook [_{DP} pro e_j [_{NP} e_i]] (Safir 1996)

of NV is not compatible with an object NP or an indirect object PP. Furthermore, if NV is an adjective or adverbial, it cannot be an argument of LV anyway. I start the discussion with an analysis of the differences between the nominal NV of a CV and the nonspecific object of a heavy verb. First consider the phrase structure in (1).



The configuration in (1), borrowed from Karimi (1997b & in preparation), suggests that the nominal element of Persian CV has a different position than the nonspecific object of a real verb. The following arguments support this claim²⁹.

²⁹ Ghomeshi and Massam (1994) and Vahedi-Langrudi (1996) propose that the nominal element of a CV and the nonspecific object of the verb have the same properties. They also suggest the same syntactic position for both of these elements. The syntactic differences between the nominal NV of CV and the nonspecific object of the heavy verb discussed in the text provides some problems for the analysis proposed by these authors. Their account becomes more problematic when we take into consideration CVs whose NV is either an AP, a PP, or an adverbial:

- (i) Kimea xuna-ro [CV tamiz kard]
Kimea house-râ clean did
'Kimea cleaned the house.'
- (ii) Kimea in she'r-ro [CV be-xâter sepord]
Kimea this poem-râ to memory entrusted
'Kimea memorized this poem.'
- (iii) Kimea bachche-hâ-ro az otâgh [CV birun kard]
Kimea child - pl - rašac of room out did
'Kimea kicked the children out of the room.'

First, the distinction between the nominal NV of a CV and the nonspecific object of a heavy verb follows from the simple syntactic test in (2)–(4) (= (21–23) in M&K): only the NP bearing a thematic relation to the verb can appear in an Ezafe construction as the complement of the nominalized verb³⁰.

- (2) a. Kimea be Râmin *ketâb* *dâd*
 Kimea to Ramin book gave
 ‘Kimea gave (a) book to Ramin.’
 b. *dâdan-e ketâb* be Râmin dorost na-bud
 giving-Ez book to Ramin right neg-was
 ‘Giving books to Ramin was not right.’
- (3) a. Kimea be *râdio gush* *dâd*
 Kimea to radio ear gave
 ‘Kimea listened to the radio.’
 b. **dâdan-e gush* be *râdio* dorost na-bud
 giving-Ez ear to radio right neg-was
- (4) a. Kimea in *otâq-ro* be mehmun *extesâs* *dâd*
 Kimea this room-ra\$ac to guest allocation give
 ‘Kimea allocated this room to the guest.’
 b. **dâdan-e extesâs* *otâq-ro* be mehmun dorost
 giving-Ez allocation room-ra\$ac to guest right
 na-bud
 neg-was

The verb *dâd* ‘gave’ theta-marks *ketâb* ‘book’ in (2a). Therefore the latter can appear as the complement of the nominalized verb in the Ezafe Construction in (2b). No thematic relationship holds between the light verb *dâd*, on the one hand, and the nominals *gush* ‘ear’ and *extesâs* ‘allocation’ in (3a) and (4a), on the other. Thus the ungrammaticality of (3b) and (4b) is accounted for. This fact is true of all nominal NVs in (3a).

³⁰ See footnote (5) for a brief definition of the Ezafe Construction.

Second, we saw before that NV may undergo scrambling only if it is quantificational. Given the right stress, however, the nonspecific object of a real verb can undergo scrambling to the sentence initial position without the need to have a quantificational quality.

- (5) a. Kimea mehmun da'vat kard
 Kimea guest invitation did
 'Kimea invited guests.'
- b. [mehmun]_i Kimea [V_{pred} t_i [CV da'vat kard]]
- c. *[da'vat]_i Kimea [V_{part} mehmun [CV t_i kard]]

The nonspecific object has scrambled in (5b). This movement is not allowed in the case of the nominal element of CV, as in (5c).

Finally, the nominal element of a CV cannot take a real determiner as in (6). This restriction does not hold for the nonspecific object of a real verb in (7).

- (6) ye/ *se tâ/ *chan tâ zamin-e xeyli saxti
 a/ *three part./ *few part/ earth-Ez very hard
 xord-am
 collided-1sg
- (7) ye/ se tâ/ chan tâ ketâb-e xeyli jâleb
 a/ three part./ few part. book-Ez very interesting
 xarid-am
 bought-1sg
 'I bought a/three/a few very interesting book(s).'

The nonspecific object *ketâb* 'book' in (7) can take a variety of determiners, while the nominal element *zamin* 'earth' in (6) can only take *ye* 'a'³¹.

Let us now turn to the prepositional NVs in (3d), repeated below:

- (3) d. **PP+V**
- | | | |
|----------------|----------------------|---------------|
| az dast dâdan | (of hand giving) | 'to lose' |
| az yâd bordan | (of memory taking) | 'to forget' |
| be yâd âvardan | (to memory bringing) | 'to remember' |

³¹ See footnote 9.

be nazar âmadan	(to view coming)	'to appear'
be kâr bastan	(to work tying)	'to use'
az sar gereftan	(of head catching)	'to restart'
be sar bordan	(to head taking)	'to spend, to live'
be sar âmadan	(to head coming)	'to expire'

The NVs in (3d) appear to be the indirect arguments of their corresponding LVs. However, there are syntactic differences between PPs that are true arguments of the verb and those that are involved in a CV construction. Consider the following contrast.

- (8) a. *ba'daz âmadan-e Kimea be donyâ, ...
 after coming-Ez Kimea to world
 Lit: after coming of Kimea to the world, ...
- b. ba'daz âmadan-e Kimea be kelâs, ...
 after coming-Ez Kimea to class, ...
 Lit. after coming of Kimea to class

The PP *be donyâ* cannot be separated from the nominalized LV *âmadan* in order to follow it in an *Ezaf* construction, as evidenced by (8a). This restriction does not hold for the directional argument of the verb, as in (8b). Similar situation is observed with respect to other CVs consisting of a PP and an LV:

- (9) a. *ba'daz sepordan-e in dâstân be xâter, pro be
 after entrusting-Ez this story to memory, to
 kelâs raft
 class went
- b. ba'daz sepordan-e Rahju be Kimea, pro be xune
 after entrusting-Ez Rahju to Kimea, to home
 raft
 went
 'After entrusting Rahju to Kimea, (she) went home.'

Second, there are CVs whose LV does not subcategorize for a specific type of PP. *Dâshtan* 'to have', for example, is one of those verbs that does not subcategorize for an argument of the form [to NP], and yet we have CVs such as *be yâd dâshtan* (to memory having) 'to remem-

ber', *be xâter dâshtan* (to mind having) 'to remember', *be sar dâshtan* (to head having) 'to be up to (something)'.

The discussion in this appendix shows that NV does not bear a thematic relation to the light verb. This fact violates Baker's (1988, 1996) condition on incorporation, since he suggests that incorporation can apply only if the nonverbal element is the direct object of the verb.

The structural property of nonspecific objects and heavy verbs is based on their local relationship that allows incorporation (cf. 1 in this appendix). A similar local relation is captured by the structure in (74) between the two parts of CV. Thus LF incorporation is allowed on the basis of locality, rather than thematic relations, in the case of Persian CVs. This analysis extends Baker's restriction on Incorporation from a purely thematic relation to a locality condition.

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