RESEARCH

A REVIEW OF LIGHT VERB CONSTRUCTIONS IN ENGLISH AND PERSIAN COMPLEX PREDICATES

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Summary: A light verb (LV) is a verb participating in a complex predication with little semantic content of its own but providing some details on the event semantics. LVs are extremely common in Indo-Iranian languages like Persian, in which verb compounding is a primary mechanism for marking aspectual distinctions. Children are observed to learn LVs quite early as a unit of meaning rather than as a multi-lexical construction. The acquisition of light verbs is associated with the acquisition of argument structure through parental input, which helps LVs to appear among the first verbs in children's spontaneous speech due to their high frequency in the adult speech.

1. Introduction

In linguistics, a light verb (LV) is a verb participating in a complex predication (a V+V compound) that has little semantic content of its own, but provides some details on the event semantics, often aspect or temporal information. Jespersen [1965] is generally credited with first coining of the term *light verb*, which he applied to English V+NP constructions, such as in expressions '*to have* a rest', '*to take* a walk', and '*to give* a sigh'. The semantics of the compound as well as its argument structure are determined by the head or primary verb. The intuition behind the term *light* is that although these constructions respect the standard verb complement patterns in English, the verbs *to take*, *to give*, etc. cannot be said to be fully predicating. In other words, one does not physically «give» a «sigh» but rather «sighs». The verbs, therefore, seem to be more of a verbal licenser for nouns. However, the verbs are not entirely devoid of semantic predicative power either; for instance, there is a clear difference between *to take a bath* and *to give a bath*. The verbs thus seem to be neither at their full semantic power, nor at a completely depleted stage. Rather, they appear to be semantically *light* in the sense that they are contributing something to the joint predication. While the exact characterization is difficult, many consider LVs as a separate syntactic class with a syntactic distribution lying somewhere

between functional and lexical domains. English has many compound verbs in comparison with the synthetical Eastern European languages (Russian, Ukrainian), we may consider examples such as *to take* in *to take a nap*, where the primary sense is provided by *nap*, and *to take* is the light verb. However, light verbs are even more common in Indo-Iranian languages like Persian, Urdu, and in languages like Korean, Japanese, etc., in which verb compounding is a primary mechanism for marking aspectual distinctions.

Light verbs are interesting to linguists from a variety of perspectives, including those of diachronic linguistics, compositionality, and computational linguistics. From the diachronic perspective, light verbs are said to have evolved from the *heavy* verb through semantic bleaching, a process in which a verb loses some or all of its original semantics. The intuition has been that the light form of these verbs developed from the main verb and that the light form lost some of the semantic content as part of historical change. In this sense, it is often viewed as part of a continuum (1):

(1) verb (heavy) → light verb → auxiliary → clitic → affix

2. Light verbs and polysemy

Much current work on complex predicates proposes that light verbs do not contribute to the thematic role inventory of the complex predicates because they are assumed not to have lexical semantic content. Therefore, the semantic relationship between the light verb and its «heavy» or main-verb counterpart is often taken to be irrelevant or unproblematic. But this idea is challenged in Brugman [2001] by examining the relationship between the polysemic structure of main verbs and their light counterparts. It is suggested that light verbs are systematically related to their heavy counterparts in retaining the force-dynamic properties of the heavy sense, but that the conceptual domain in which that force-dynamic structure applies shifts from the physical to a psychological domain. Her analysis implies that while light verb constructions (LVCs) may not have completely predictable semantics, the semantic contribution of the light verb is systematic and transparent.

3. The light verb construction

There are different approaches to light verbs. Some consider LVs as a semantically empty predicate-licenser [Grimshaw & Mester 1988], some as a subtype of auxiliary. Other approaches see LVs as contributing to the predication in a fairly systematic way and propose to encode this within analyses which allow for some kind of argument structure composition. In these approaches, the light verb is analyzed as being syntactically and semantically dependent on the main verb. That is, the light verb is in some way incomplete and depends on the predicative power of the main verb/ predicate.

Another possible idea within generative syntax is that LVs are actually instantiations of v [Adger 2003]. The idea of v goes back to Chomsky [1957] who introduced it for auxiliaries and modals. As used in current analyses within the Minimalist Program, v is a curious category; it could be interpreted as either a functional or a lexical category, or a mixture of both. Given the mixed nature of light verbs (bearing some semantic but predicationally-dependent information),

v would actually seem to be quite a good candidate for a light verb analysis. However, it should be noted that most analyses with Government-Binding or minimalist program tend to conflate the distinction between auxiliaries/ modals and LVs as in *to take a bath*.

Still another approach to LVCs is the syntax of event structure. Butt [2003] argues that a central key to understanding the special semantics of V-V complex predication is the recognition of *subevents*. Work on argument structure has assumed the need for lexical decomposition or a relationship between subevents [Hale & Keyser 1993]. However, the semantics of events is assumed to be closely connected to the syntactic structure. This results in a very tight mapping between syntax and semantics at the syntax-semantic interface. It is important to note that, under this view, an event can only be decomposed into a maximum of *three* potential subevents: the causing event, the caused process, and the caused result state.

4. Persian light verb constructions

Persian LVCs have attracted a number of researchers [Vahedi-Langrudi 1996, Karimi 1997, Karimi-Doostan 2005]. Most recently, Megerdoomian [2001] and Folli et al. [2003] have focused on the event structure and aspectual properties of Persian LVCs. In Megerdoomian [2001], the LVs are considered to play an important role in determining the aspectual properties of LVCs, while in Folli et al. [2005], it is the verbal noun (VN) which has this role. Both claim that Persian LVCs can be accounted for syntactically and find it difficult to consider these complex verbs as lexical units. A considerable number of complex predicates is taken into consideration in both papers and their positions support the idea that the LVs are responsible for agentive arguments.

Also, Karimi-Doostan [2005] extensively investigates light verbs and structural case. He refers to Hale and Keyser's [1993] idea of «abstract light verb» and dubs it as v heading a phrase above VP. But Vahedi-Langrudi [1996] considers Persian LVs such as *kardan* 'to do' and *Shodan* 'to become' as the morphological realization of v. However, Megerdoomian [2001] argues that *kardan* is an outer v that contributes an external argument and *Shodan* is an inner v that adds an internal argument. In Folli et al. [2005], *kardan* is regarded as v that forms transitive and unergative LVCs, and *Shodan* is viewed as v that forms unaccusative LVCs. In Radford [2004], v plays a significant role in transitivity. The following English examples in (2), for instance, are considered different due to the existence of different *null* LVs.

(2) a. They *rolled* the ball down the hill.

b. The ball *rolled* down the hill.

The verb *rolled* in (2a) is transitive since the v has a theta-marked external argument, but in (2b) it is intransitive since the v in this clause lacks an external argument. In both clauses, the lexical verb *to roll* raises to merge with the null v.

Karimi-Doostan [2005] convincingly shows that the LVs can case-mark arguments and host verbal features but they lack semantic content and argument structure. Therefore, it is plausible to say that LVs are semantically bleached Vs which have lost their meaning and argument structure during the history of lan-

guages. This position is supported by the fact that all LVs have lexical counterparts that function as full predicates and they seem to be the origins of LVs. However, the diachronic view that LVs develop from lexical verbs which lose their lexico-semantic force creates some problems for the notion of v as a head above VP in the Minimalist Program. Based on the historical development of LVs as well as their thematic and functional roles, Karimi-Doostan [2005] concludes that LVs are semantically lightest, while morphologically realized natural LVs undermine the idea of v as a causal/ agentive head above VP [Adger 2003, Radford 2004]. However, it is possible to account for both LVCs under consideration and the transitive/ intransitive alternating pairs (2a/b) in the framework in which we have two heads, i.e. Intra/ Tra and X, instead of VP in the sense used in the Government-Binding Theory. The functional head Intra/ Tra heads a phrase that determines whether we can have an accusative case-marked DP in a clause or not, and the X head determines the type and number of participants in a clause. Another assumption or perhaps implied conclusion in his work is the fact that the native language speakers learn whether a lexical verb is either transitive or intransitive. But this classification does not match with the traditional view on transitivity. It seems that a classification in which two-place transitive verbs (real transitives) might be considered as «unmarked» transitives, the unergative verbs with an external argument as «marked» transitives, and unaccusatives and passive BECOME-type LVs as intransitives is closer to the linguistic knowledge of native speakers of a language.

5. The phrase structure in Persian

Folli et al. [2005] describe Persian as a verb-final language that exhibits the following unmarked word order in a double-object construction (3):

(3a)	S	Ospecific		PP	V
	Kimia	ketaab-ha	ro	be Saeed	daad
	Kimia	book-pl	raa (Obj)	to Saeed	gave
	‘Kimia gave the books to Saeed.’				

(3b)	S	PP	Ononspecific	V
	Kimia	be Saeed	ketaab	daad
	Kimia	to Saeed	book	gave
	‘Kimia gave book(s) to Saeed.’			

The specific direct object appears in a higher position, preceding the indirect object. The nonspecific object is adjacent to the verb, following the indirect object. This property can be seen in many other languages, such as Hindi, Turkish, German, and Dutch. The surface order in (3a) is obtained by the [+specific] object movement – which is followed by the specificity marker *raa* – to the edge of vP. Accusative case on the object is checked in that position too. The nonspecific object remains in situ, directly generating the word order in (3b) (see Folli et al. 2005 for details).

6. The complex predicates in Persian

Complex verbs have gradually replaced simple verbs in Persian since the 13th century [see Folli et al. 2005]. The tendency to form 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 appear in (4) (see Karimi 1997).

(4)	Simple	Complex	
	agaahaanidan	aagaah kardan	'to inform'
		(informed making)	
	aaghaazidan	aaghaaz kardan	'to start'
		(start doing)	

The LV in Persian Complex Predicate (CPr) ranges over a number of simple verbs, as shown by Karimi [1997]. A sample of LVs employed in Persian CPr constructions is provided in (5).

(5)

a. kardan	'to do'	l. budan	'to be'
b. shodan	'to become'	m. chidan	'to arrange'
c. xordan	'to collide'	n. gereftan	'to catch, to take'
d. zadan	'to hit'	o. keshidan	'to pull'
e. daadan	'to give'	p. nemudan	'to show'
f. daashtan	'to have'	q. oftaadan	'to fall'
g. aamadan	'to come'	r. paashidan	'to scatter'
h. andaaxtan	'to throw'	s. raftan	'to go'
i. aavardan	'to bring'	t. sepordan	'to entrust'
j. bastan	'to tie'	u. shostan	'to wash'
k. bordan	'to carry'	v. gozashtan	'to pass, to cross'

The light verb *kardan* 'to do/ make' has almost entirely lost its heavy interpretation and is the most productive light verb in Persian. The LV *shodan* 'to become' is systematically used in passive or unaccusative constructions.

Another characteristic of Persian CPr constructions is that their NV elements range over a number of phrasal categories, as exemplified by (6).

(6)

a. (N + LV):	kotak	zadan/ xordan	
	(beatin	hitting/ colliding)	'to beat, to get beaten'
b. (A + LV):	sabok	kardan/ shodan	
	(light	making/ becoming)	'to degrade' (Tr. & Intr.)

c. (Particle + LV):	baalaa keshidan	
	(up pulling)	‘to steal’
d. (PP + V):	be baad daadan	
	(to wind giving)	‘to waste’

Finally, the NV element of Persian CPr constructions may also be a complex phrasal element, as in (7):

(7) (Complex NV element)

Dast	o	paa	kardan	
(hand	and	foot	doing)	‘to provide’
Sar	o	kaar	daashtan	
(head	and	work	having)	‘to be involved’
dast	be	dast	kardan	
(hand	to	hand	doing)	‘to transfer’

7. Syntactic independence of the LV and the NV

Folli et al. [2005] believe that a Persian CPr construction cannot be considered a lexical unit since its NV element and LV may be separated by a number of elements, including [1] negative and inflectional affixes, [2] the auxiliary verb for future tense, and [3] emphatic elements. Furthermore, the NV element of Persian CPr constructions allows limited modification, as in (8).

(8a) Kimia az ra’is-e edaare [CV [NV da’vat-e rasmi] kard]
Kimia of boss-Ez office invitation-Ez formal did
‘Kimia extended a formal invitation to the boss of the office.’

(8b) Kimia baraaye in xune [CV [NV chune-ye xub-i] zad]
Kimia for this house chin-Ez good-a hit
‘Kimia performed a good negotiation for this house.’

Finally, Persian NV elements can be scrambled out of the CPr provided that they contain a quantificational element and receive heavy stress (9). This shows that the NV element is to some extent syntactically independent.

(9a) Kimia [che zamin-e saxt-i]i diruz [CV xord]
Kimia what earth-Ez hard-a yesterday collided
‘What a hard fall Kimia had yesterday!’

(9b) *Kimia zamin diruz xord
Kimia earth yesterday collided
‘Kimia fell yesterday.’

For Folli et al. [2005], the LV and the NV elements in Persian CPr are separately generated and combined in syntax and become semantically fused at a different, later level. The two parts of the CPr enjoy syntactic freedom to a cer-

tain degree, but their semantic properties are the same as those of single-word elements elsewhere in Persian and in the grammars of languages like English.

8. Compatibility of an NV element with a given LV

Although CPr formation is clearly a syntactic process, it is clearly not completely productive. Certain LVs may not combine with certain NV elements, while others may. Some such restrictions are syntactic in nature; for example, *shodan* 'to become' selects a predicative small clause complement, while *kardan* 'to do' can select either a nominal complement (when it gets a 'do' meaning) or a small clause complement (when it gets a 'make' meaning). This accounts for the success of a *kardan/ shodan* alternation in example (10) with a predicative NV element, and the failure of alternation with a nominal one in example (11) below:

(10a) miz-o tamiz kard-am
table-Obj clean made-1Single
'I cleaned the table.'

(10b) miz tamiz shod
table clean became
'The table got/ became clean.'

(11a) bachcha-ro hamum kard-am
child-Obj bath did-1Single
'I bathed the child.'

(11b) *bachche hamum shod
child bath became
'The child became bathed.'

Other similar restrictions reflect general effects arising from the compositionality of the CPr construction. The following data, for instance, seem to show the effects of the importance of the concepts of internal vs. external causation. Consider the examples below:

(12) Kimia sorx shod
Kimia red became
'Kimia blushed.'

(13) *John Kimia-ro sorx kard
John Kimia-Obj red made
*John made Kimia blush.
('John fried Kimia.')

Because, semantically speaking, blushing may only be internally caused, *sorx* 'red' may not receive the 'blush' meaning when it occurs in combination with causative *kardan*, despite being syntactically unaccusative when it occurs in the

intransitive form with *shodan* 'to become', and despite the availability of a *shodan/ kardan* inchoative/ causative alternation for many CPrs illustrated earlier.

9. The acquisition of light verbs

While there are many research reports on the linguistic and cross-linguistic behavior and characteristics of light verbs, there are not so many studies on the acquisition of these verbs. Sethuraman [2004] contends that in learning syntax, children master argument structure patterns. Child-directed speech provides information to children in ways that make learning argument structure constructions (form-meaning correlations) easier: mothers addressing younger children adjust their language to provide more cues for learning light verbs and constructions than they do for older children, who have more experience with these verbs and constructions. Two form-meaning correlations in argument structure are examined in her study: (1) the Intransitive Motion Construction (e.g., *I went to the store*), with the form [Subject Verb Oblique location] meaning «X moves to Y»; and (2) the Caused Motion Construction (e.g., *I put the book on the table*), with the form [Subject Verb Object Oblique location] meaning «X causes Y to move Z».

Her results indicated that parents used more complex features of language as their child's language ability grew, adjusting their speech to the proper level for their child – the Fine-Tuning Hypothesis. In overview, her study shows that mothers addressing younger children use a smaller vocabulary, smaller Multi-Lexical Units, and fewer types of syntactic forms. Mothers addressing younger children rely more on highly informative and less varied cues than do mothers addressing older children. In particular, mothers addressing younger children use one central light verb in a particular construction more frequently than mothers addressing older children. In addition, these light verbs appear to be used in extremely restricted syntactic contexts, appearing most predominantly in only one pattern. Such input may assist younger children in acquiring the meanings of those particular light verbs and constructions more efficiently.

Using light verbs more frequently in their respective constructions may enable younger children to lock onto the meanings of those particular constructions more efficiently, and older children who have mastered that stage are then provided with a larger variety of verbs in particular constructions. Using light verbs predominantly in one syntactic pattern helps children to further associate the meaning of the verb with the meaning of the pattern. Evidence from Naigles and Hoff-Ginsberg [1995, 1998] suggests that the input provided for the children by their mothers offers reliable cues to the verb classes and provides informative multiple frames, which might contain the type of information children need in order to learn new verbs. Other studies have also shown that children's use of verbs is highly related to their mothers' use of verbs (e.g., [DeVilliers 1985], cited in [Sethuraman 2004]). Also, the use of verbs in diverse syntactic environments helps children learn the meanings of those verbs. Therefore, the consistency of verb use in syntactic patterns may help children to learn argument structure patterns.

Conwell [2006], on the other hand, argues that semantically general or «light» verbs are among the very first to appear in children's spontaneous

speech. Previous work has suggested that these verbs have a special, even prototypical, semantic status that not only leads to their early acquisition, but also allows them to play a role in the acquisition of syntax. However, other researchers have suggested that it is the high frequency with which these words occur in speech to children that causes them to be learned very early. Conwell's study evaluates these two hypotheses by testing the predictions they each make regarding children's longitudinal light verb use. Those theories that propose a special semantic status as the driving force behind the early acquisition of light verbs predict that children's earliest speech should have a very high proportion of light verbs which decreases over time as children learn and use more specific verbs. Evidence for this was found in data from only 1 of 8 children, indicating that special semantic status probably does not account for children's early acquisition of light verbs [Conwell 2006]. However, the hypothesis that light verbs appear early in child speech due to their high frequency in adult speech would predict that children's use of light verbs should be best predicted by adult light verb use. In support of this hypothesis, child light verb use was most strongly correlated with the patterns of adult verb use in the data from 6 of 8 children [Conwell 2006]. Therefore, it seems to be the high frequency of light verbs in the linguistic environment of a child, rather than a special semantic status, that underlies the early acquisition of these verbs.

10. Conclusion

This paper is intended to describe light verbs in English and Persian, and the problems they cause for linguistic analysis and acquisition. The so-called LVCs, a class of complex predicates consisting of a verbal noun or a non-verbal element (NV) and LVs appear in clauses with different numbers and types of arguments, and form various identical transitive, unergative, and unaccusative sentences. The LVs are characterized as lacking argument structure but capable of case-marking and hosting verbal features while the verbal nouns are described as predicative nominals with the same argument structure as their lexical verb equivalents. It is argued that while LVs are semantically bleached throughout the history, they are not fully meaningless; rather, they contribute to the event structure, aspect, and temporal characteristics. Also the issue whether it is the LV or the NV element which plays the major role in CPr constructions was evaluated with reference to different studies. It was concluded that LVs are syntactically separate from the main verbs. In Persian LVCs, it is observed that syntactic operations cannot be considered productive unless semantic restrictions are considered in forming such constructions. As for the acquisition, the few studies covered here indicated that children learn LVCs quite early in language development processes as a unit of meaning rather than as a multi-lexical construction. Also, it was observed that the acquisition of light verbs is associated with the acquisition of argument structure through parental input, which usually keeps one central LV at the focus and introduces other verbs step by step while the child develops into higher learning stages. Finally, researchers have seen that LVs are among the first to appear in children's spontaneous speech due to their high frequency in the adult speech.

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