

The Light Verb Jungle

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1 Introduction to the Jungle

The study of light verbs and complex predicates is fraught with dangers and misunderstandings that go beyond the merely terminological. This paper attempts to pick through the terminological, theoretical and empirical jungle in order to arrive at a novel understanding of the role of light verbs crosslinguistically. In particular, this paper addresses how light verbs and complex predicates can be identified crosslinguistically, what the relationship between the two is, and whether light verbs must always be associated with uniform syntactic and semantic properties. Finally, the paper proposes a novel view of how light verbs are situated in the lexicon by addressing some historical data and their relationship with preverbs and verb particles.

Jespersen (1965, Volume VI:117) is generally credited with first coining the term *light verb*, which he applied to English V+NP constructions as in (1).

- (1) *have* a rest, a read, a cry, a think
 take a sneak, a drive, a walk, a plunge
 give a sigh, a shout, a shiver, a pull, a ring

The intuition behind the term “light” is that although these constructions respect the standard verb complement schema in English, the verbs *take*, *give*, etc. cannot be said to be predicating fully. That is, one does not actually physically “take” a “plunge” but rather one “plunges”. The verbs therefore seem to be more of a verbal licenser for nouns. However, the verbs are clearly not entirely devoid of semantic predicative power either: there is a clear difference between *take a bath* and *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. However, exactly what this component is is relatively difficult to characterize.

From a diachronic perspective, 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 (but see section 4).

Since Jespersen’s original coinage, the term light verb has been adopted for analyses in a number of languages. Some (fairly) recent examples are Grimshaw and Mester’s (1988) analysis of Japanese *suru* ‘do’ (N+V constructions), Rosen’s (1989) analysis of Romance periphrastic causatives with ‘make’ (V+V), Mohanan’s (1994) analysis of Hindi N+V complex predicates and my own analysis of Urdu V+V complex predicates (Butt 1995). In these papers, the term complex

predicate is used to designate a construction that involves two or more predicational elements (such as nouns, verbs and adjectives) which predicate as a single element, i.e., their arguments map onto a monoclausal syntactic structure.

The above cited pieces of work represent just a subset of the vast literature on light verbs and complex predicates and the dizzying diversity of analyses and terminology. One person's complex predicate or compound verb is another person's serial verb, composite predicate, auxiliary construction, or even a control construction. Sorting through the various analyses, languages and terms is thus not trivial.

My approach to complex predicates and light verbs is colored by the types of constructions found in South Asian languages. While I focus mainly on Urdu, these constructions can be found in most of the South Asian languages (cf. Masica 1976 on South Asia as a language area). A typical example of a Noun-Verb complex predicate is shown in (2), an example of a Verb-Verb complex predicate can be seen in (3).

- (2) a. *nadya=ne* *kahani* **yad** **k-i**
 Nadya.M.Sg=Erg story.F.Sg memory.F do-Perf.F.Sg
 'Nadya remembered the story.' (Urdu)
- a. *nadya=ko* *kahani* **yad** **a-yi**
 Nadya.M.Sg=Erg story.F.Sg=Acc memory.F come-Perf.F.Sg
 'Nadya remembered the story (the memory of the story came to Nadya).' (Urdu)
- (3) a. *nadya=ne* *xat* **lk^h** **li-ya**
 Nadya.F=Erg letter.M.Nom write take-Perf.M.Sg
 'Nadya wrote a letter (completely).' (Urdu)
- b. *nadya=ne* *makān* **bana di-ya**
 Nadya.F=Erg house.M.Nom make give-Perf.M.Sg
 'Nadya built a house (completely, for somebody else).' (Urdu)

Urdu is an SOV language with fairly free word order. The light verb in the examples above is always the inflected verb. While the N-V complex predicate is consistent with the general verb-complement pattern of the language, the V-V construction has a more subtle syntax (see section 5, Butt and Geuder 2001) which goes hand-in-hand with the rather subtle semantics evidenced in (3). The light verb in V-V constructions generally affects the aktionsart of the joint predication. In (3) the light verb renders the event bounded, but other subtle modifications such as benefactive readings, forcefulness, suddenness or inception are also possible (Hook 1974). In (2) the light verb determines whether the action was volitional or not.

As is the case for the English N-V constructions, the inflected verbs in (2) and (3) are clearly not predicating “fully” though they are form-identical to a main verb in the language. Neither can they be said to be semantically empty because the choice of light verb lends a slightly different sense to the construction.

This “semilexical” status has led to a variety of analyses ranging from assuming a semantically empty predicate-licenser (e.g., Grimshaw and Mester 1998, Cattell 1984), to seeing light verbs as a subtype of auxiliary (e.g., Hacker 1958 and Hook 1974, 1991, 1993 for Hindi; Abeillé, Godard and Sag (1998) analyze both tense auxiliaries and causative *faire* constructions in French as complex

predicates) to analyzing them as a variation on control/raising constructions (e.g., Huang 1992 for Chinese *ba* and *de*).

Other approaches see light verbs 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 or predication. That is, the light verb is in some way incomplete and depends on the predicative power of the main verb/predicate. Within this general approach, again a variety of analyses can be found. Rosen 1989, for example, differentiates between *light* (empty), *partial*, and *complete merger* for restructuring verbs and causatives in Romance. Alsina (1996), Mohanan (1994), Butt (1995) respectively propose the notions of *Predicate Composition*, *Argument Merger* and *Argument Fusion* in order to account for Romance, Hindi and Urdu complex predicates.

Another possible idea within generative syntax is that light verbs are actually instantiations of *v* (Adger 2003:134). 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 (MP), *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 (some semantic information, but predicationally dependent), *v* would actually seem to be quite a good candidate for a light verb analysis and this is an option I explore in section 5.

However, it should be noted that most analyses with Government-Binding (GB) or MP tend to conflate the distinction between auxiliaries/modals and light verbs as in *take a bath*. In what follows, I attempt to draw a very sharp distinction between the auxiliaries and light verbs, providing crosslinguistically relevant diagnostics along the way. The paper first examines the predicational syntax of light verbs and complex predicates (section 2), then moves on to establishing criteria for the identification of light verbs (section 3) takes a look at some diachronic evidence (section 4), and finally proposes an analysis which ties light verbs very closely to their main verb counterparts and which sees them as elements which serve to modulate the main predication in a subtle manner (section 5).

To anticipate the conclusions and to make my own particular views on light verbs quite clear from the outset, I here summarize the salient properties of light verbs as I have come to identify them over the years (the insights are partly supported in this paper, however, not all of the pertinent discussions and data can be reproduced here so the reader is referred to previous work where relevant).

For one, I see light verbs as always forming a part of a complex predication. The defining characteristics of complex predicates are that the argument structure is complex in the sense that two or more semantic heads contribute arguments or influence the argument structure as part of primary predication. Because the predication is primary and hence monoclausal, the grammatical functional structure is that of a simple predicate: there is only a **single subject** and no embedding (no control/raising).¹

Light verbs have certain characteristics by which they may be identified. One central property is that they are always form-identical with a main verb (Butt and Lahiri 2003). In addition, they

¹It should be noted that complex predicates may be formed either morphologically (lexically) or syntactically. An example of a morphologically formed complex predicate is furnished by morphological causatives. The constructions discussed in this paper are formed syntactically.

tend to have a “funny” syntax in that they can be distinguished syntactically (and phonologically) from both auxiliaries and main verbs. Arguably, they form a separate “semilexical” syntactic class (Butt and Geuder 2001).

This funny syntax goes hand-in-hand with a funny semantics: the systematic semantic contribution of a light verb is hard to characterize, as becomes abundantly clear upon any reading of a descriptive grammar of a language which contains complex predicates to a degree that they could not be overlooked by the grammar writer (South Asian languages are a case in point).

The basic idea behind the analysis presented in this paper is that light verbs serve to further *structure* or *modulate* the event described by the main verb/predicator in a manner that is quite distinct from auxiliaries, modals or other main verbs. Light verbs straddle the divide between the functional and lexical in that they are essentially lexical elements but do not predicate like main verbs.

2 Establishing Monoclausality

One of the central characteristics of complex predication is that two or more predicational elements combine to predicate as a single element. That is, they differ from control or raising constructions as in (4) and (5), which encompass two syntactically separate domains of predication, but where some arguments (*her/she*) are shared across the domains.

(4) I ordered her to play soccer.

(5) She seems to play soccer.

One crucial step in the identification of complex predication therefore is the establishment of monoclausality.² Whether a given structure is monoclausal or not can only be determined on the basis of language dependent tests. That is to say, tests for monoclausality may vary across languages, depending on the internal structure and organization of the language in question.

Some of the earliest work on complex predication stems from analyses of Romance languages within Relational Grammar (RG). Aissen and Perlmutter (1983) show that Clause Union (i.e., complex predication) in Spanish and Italian can be identified by phenomena such as clitic climbing: clitics “climb” to the higher verb in complex predicates, but not in biclausal constructions, as shown in (6) and (7) for French. Other tests include passivization and reflexivization (see Rosen 1989 for further discussion and tests, primarily for French and Italian).

(6) a. Jean a fait partir Marie.
Jean has made go Marie
'Jean made Marie go.' (French, Rosen 1989:22)

b. Jean l'a fait partir.
Jean her has made go
'Jean made her go.' (French, Rosen 1989:23)

²Note that within the class of monoclausal complex predicates, a further distinction can be made, namely between *primary* and *secondary* predication. The complex predicates examined in this paper are all examples of primary predication. Standard examples of secondary monoclausal predication are furnished by resultatives in languages like English, German and Dutch: *Paul painted the door green*.

- (7) a. Marie a entendu Pierre réciter les poèmes.
 Marie has listened Pierre recite the poems
 ‘Marie heard Pierre recite the poems.’ (French, Rosen 1989:25)
- b. *Marie les a entendu Pierre réciter.
 Marie them has listened Pierre recite
 ‘Marie heard Pierre recite them.’ (French, Rosen 1989:25)

Korean is an SOV language that does not have clitic climbing (let alone pronominal clitics). It does, however, contain a number of constructions that look like V-V complex predicates. How can one establish that these constructions are indeed complex predicates? Choi (2002) examines V-V constructions of the kind shown in (8) in terms of how they behave with respect to negative polarity items (NPI), negation and the (non-)separability of the two verbs.

- (8) Chelswu-Ka namwunip-ul **ssel-E chiw-ess-ta**
 Chelswu-Nom leaves-Acc sweep-E clean-Past-Decl
 ‘Chelswu has **swept up** the leaves.’ (Korean)

In Korean the NPI items *anwu-to* ‘nobody’ and *an* ‘not’ together mean ‘nobody’. These items must cooccur in the same clause. If they do not, the NPI meaning is not licensed and the sentence is ungrammatical, as shown in (9).

- (9) *Chelswu-nun [**anwu-to** pam-ul ilk-ess-ta]-ko **an** malha-ess-ta.
 Chelswu-Top nobody chestnut-Acc eat-Past-Decl-Comp Neg say-Past-Decl
 ‘Chelswu did not say that nobody ate the chestnut.’ (Korean)

In contrast, when the NPI items are distributed across the kind of V-V construction illustrated in (8), the NPI reading is well-formed, indicating that the construction must be monoclausal and therefore a complex predicate.

- (10) **anwu-to** pam-ul **an** mek-E chiw-ess-ta.
 nobody chestnut-Acc Neg eat-E clean-Past-Decl
 ‘Nobody (children) has eaten up the chestnut.’ (Korean)

The second (inflected) verb in the construction is the one that can be identified as a light verb, given its “diminished” predicational impact. Again, this light verb is always form-identical with a main verb in the language and has been glossed with the meaning of the main verb.

Urdu is an SOV language like Korean, but is not genetically related to it. For Urdu, Butt (1995) shows that V-V constructions as shown in (11) and (12) are monoclausal by testing for object agreement, anaphora and control. All these tests indicate that there is only a single subject in the clause (no embedded clause, no embedded subject) and that therefore these constructions must be monoclausal.

- (11) nadya=ne saddaf=ko cıtt^hi **lk^h-ne di**
 Nadya.F.Sg=Erg Saddaf.F.Sg=Dat letter.F.Nom write-Inf.Obl give-Perf.F.Sg
 ‘Nadya let Saddaf write a letter.’ (Urdu)

- (12) *nadya=ne xat lk^h li-ya*
 Nadya.F=Erg letter.M.Nom write take-Perf.M.Sg
 ‘Nadya wrote a letter (completely).’ (Urdu)

As this data has already been reproduced in various places (e.g., Butt 1994, Butt and Geuder 2001, Butt and Ramchand 2003), I do not repeat it here, but simply note that the light verbs in these cases are the second (inflected) verb. These always have a main verb counterpart in the language, but are clearly not predicating like a main verb in.

This section has shown that monoclausality can be established conclusively, but that it must be done so on a language internal basis. That is, a test like clitic climbing will not apply to languages without pronominal clitics, the Urdu object agreement test will not work for a language which does not allow object agreement, and the Korean NPI test will not work for a language that does not allow the separation of NPI items. The identification of complex predicates and light verbs therefore presupposes a very careful scrutiny of the syntax of a given language.

3 Light Verbs as a Separate Syntactic Class

Complex predicates allow two or more predicational elements to “co-predicate” in a monoclausal structure. This entails that at least one of these elements should be of a type that does not contribute its own event argument to the main predication, but instead provides supplementary information. This type of semantic contribution lies somewhere between the lexical and the functional (see section 5 for some further discussion). It should therefore not come as a surprise that light verbs show a syntactic distribution which lies somewhere between the functional and the lexical. That is, they have distinct distributional properties which place them neither in the fully verbal, nor the fully functional domain. This section shows that light verbs are identifiable as a separate syntactic class, but again, that language particular syntactic factors must be taken into account in establishing this. The evidence presented in this section goes through some data from Northern Australian languages, Mandarin Chinese, and Urdu.

3.1 Northern Australian

Some Australian languages exhibit complex predicates which consist of a coverb or preverb and an inflecting verb. The coverb and inflecting verb can be shown to be part of a monoclausal complex predication (see Wilson 1999 for Wagiman, Bower 2002 for Bardi, Schultze-Berndt 2000 for Jaminjung). In the northern Australian languages, the coverbs are drawn from an open class, do not inflect and in general seem to share characteristics with both adverbials and verbs. The inflecting verbs, on the other hand, are drawn from a closed class that is generally quite small (Bower 2002 lists a core class of about 10 verbs). The inflecting verbs can be used to predicate as a main verb, but when they are used in combination with a coverb, their predicational power is *light*. An example from Jaminjung is shown in (13) where the main predicational power is carried by the coverb ‘race’.

- (13) *burdurdubba=biya ga-ngga ngayin thanthu*
 race=now 3Sg-go.Pres animal(Abs) Dem(Abs)
 ‘It is racing off now that animal.’ (Jaminjung, Schultze-Berndt 2002)

Besides their unique syntactic distribution, these inflecting verbs also play a unique semantic role within the language. As the examples in (14) and (15) show, the inflecting (light) verbs are able to influence the aktionsart of the joint predication: while the coverb stays constant in each of these examples, the choice of the light verb modulates the event predication in a subtle way.

- (14) a. walthub ga-jga-ny
 inside 3Sg-go-Past
 ‘go in’ (Jaminjung, Schultze-Berndt 2002)
- b. walthub ga-rdba-ny
 inside 3Sg-fall-Past
 ‘get in’ (Jaminjung, Schultze-Berndt 2002)
- (15) a. bul ga-ruma-ny
 appear 3Sg-come-Past
 ‘appear’ (Jaminjung, Schultze-Berndt 2002)
- b. bul gani-ma
 appear 3Sg-hit.Past
 ‘appear (suddenly)’ (Jaminjung, Schultze-Berndt 2002)

Bowern (2002) provides a host of arguments that identify inflected verbs of this type in Bardi as light verbs of the type found in Urdu (Butt and Geuder 2001). Schultze-Berndt (2002) further offers an analysis of these light verbs as *classifiers* of events. In (13), for example, the coverb denotes the manner, while the light verb supplies the event predication. In (16), the coverb supplies a path and the light verb supplies information about the type of motion on that path. The coverb in (17) denotes a result and the light verb supplies the cause.

- (16) buru ga-ruma-ny
 back 3Sg-come-Past
 ‘s/he came back’ (Jaminjung, Schultze-Berndt 2002)
- (17) ning burr-wa-na
 break.off 3Pl:3Sg-bite-Impf
 ‘They were biting something off.’ (Jaminjung, Schultze-Berndt 2002)

The available evidence from northern Australian thus points to a distinct syntactic class of light verbs which serve to modulate or modify the joint event predication. Another such example comes from Mandarin Chinese, as is shown in the next section.

3.2 Mandarin Chinese

Mandarin Chinese contains a class of directional verbs which are usually classed together with resultatives because both take the potential infix (*de/bu* for positive and negative, respectively). An example of a typical directional is shown in (18), an example of a resultative in (19).

(18) *duan de shang* (Directional)
 serve POT_{pos} ascend
 ‘can be served up’ (Mandarin Chinese)

(19) *da bu po* (Resultative)
 hit POT_{neg} break
 ‘cannot be broken/unbreakable’ (Mandarin Chinese)

The discussion of directionals in this section is based on materials and insights taken from Scott (1996) and on further recent joint work with Biljana Scott (Butt and Scott 2002). As illustrated in (20), the Mandarin directionals are drawn from a closed set of verbs of direction. Typical examples of usage are shown in (21).

(20) **Directional Etymons**

<i>shang</i>	ascend/up	<i>hui</i>	return/back
<i>xia</i>	descend/down	<i>qi</i>	rise
<i>jin</i>	enter/in	<i>kai</i>	open/apart
<i>chu</i>	exit/out	<i>lai</i>	come/hither
<i>guo</i>	cross/over	<i>qu</i>	go/thither
<i>dao</i>	reach/to		

(21) **Examples of Usage**

<i>pao jin</i>	run enter	=‘to enter running’
<i>na chu</i>	take exit	=‘to take/extract’
<i>fang xia</i>	put descend	=‘to put down’
<i>pa shang</i>	climb ascend	=‘to climb up’
<i>tong guo</i>	traverse cross	=‘to go through/cross’
<i>zhuan hui</i>	turn return	=‘to turn back/return’
<i>lai dao</i>	come reach	=‘to arrive, come to’
<i>zhan qi</i>	stand rise	=‘to stand up’
<i>zou kai</i>	walk open	=‘to walk away’

A cursory examination of the directional construction reveals some of the hallmarks of light verbs identified previously: the second verb (the directional) is form-identical to a full verb in the language (‘descend’ in (22)) but is not predicating fully. Rather, the directional appears to have what has been termed a “quasi-aspectual” meaning. Indeed other hallmarks of directionals of the type illustrated in (22) are that they always denote a bounded event and they do not in fact allow the potential infix ((22) thus contrasts with (18) in this respect) or the deictic *lai* ‘come’ and *qu* ‘go’, which the other resultatives and directionals do.

(22) *qing ni liu xia nide ming-pian*
 please you leave descend your name card
 ‘Please leave your name card.’ (Mandarin Chinese)

Several Sinologists have therefore suggested that a third class must exist in addition to resultatives ((19)) and what we shall term lexical V2 directionals ((18)). This class has often been referred to as “phase” complements (following Chao 1968). Scott (1996) furthermore shows that these directional light verbs can be distinguished clearly from the lexical V2 directional usage ((18)) and from a fully functional aspectual usage via a number of differing diagnostics. Just some of these diagnostics are summarized in (23).

(23)

<i>guo</i> ‘cross’				
	Main Verb	V2 Directional	V2 Light Verb	Aspect Marker
I	[+tone] free form no S.R.	[±tone] (pref.) constrained strong S.R. LOC/THEME	[±tone] (dispref.) adjacency requirement some S.R. THEME	[–tone] bound affix few S.R. none
II		*BA ASP POT <i>lai/qu</i> AUX	BA *Durative *POT * <i>lai/qu</i> *AUX	BA (rare) *Durative*perf
III		NEG NOM V-C	*NEG *NOM *V-C optional	NEG NOM V-C obligatory

S.R. = selectional restrictions

ASP = verbal aspects

POT = Potential Construction

BA = Object Marker Construction

V-C = Verbal Classifiers

NOM = Nominalizing Particle DENOM

The verb *guo* ‘cross’ has been used to exemplify the distributional pattern that is found in (23). When *guo* is used as a main verb, it receives tone and is not subject to selectional restrictions. When it is used as a lexical V2 directional as in (18), tone is preferred but not obligatory, and the directional may take either a locative or a theme argument. The light use in (22), on the other hand, disprefers tone, must be adjacent to the main verb (‘leave’) and cannot take a locative argument, only a theme. Finally, as a pure aspect marker, *guo* receives no tone and licenses no independent arguments.

There are thus four distinct identifiable uses of *guo*. The main verb use and the lexical V2 use fall most clearly on the lexical divide: neither allow the use of the *ba*-construction, both allow the use of potential infixes. The light verb and the aspectual use are less lexical; however, the light verb does not pattern with the aspectual use as clearly: the tests in II and III in (23) reveal stark differences.

We thus again have a case of a syntactically distinct category which goes hand-in-hand with a distinct semantics. The light use of *guo* is similar to other light verbs crosslinguistically in that it affects the aktionsart of the joint predication: by contributing a telic component. However, the precise semantic contribution is difficult to characterize formally. This is one hallmark of light verbs. The tendency to show selectional restrictions is another such hallmark: not all light verbs are willing to combine with all main verbs (see Butt 1995 for a discussion). The examples in (24) illustrate this for Mandarin Chinese.

- (24) a. *guan diao*/**shang shouyinji*
 shut fall/ascend radio
 ‘switch off the radio’ (Mandarin Chinese)
- b. *guan shang*/?*diao men*
 shut ascend/fall door
 ‘close the door’ (Mandarin Chinese)

Mandarin Chinese thus also provides evidence for a set of light verbs which are identified by a set of distinct properties (phonological, syntactic, semantic). The light verbs interact with the main event predication by specifying more information about the type of event (for a more detailed analysis see Butt and Scott 2002).

3.3 Urdu

This section takes a closer look at V-V complex predicates in Urdu of the type already illustrated in (3). The light verbs in these constructions can again be characterized in terms of a distinct set of syntactic properties, thus leading to the conclusion that light verbs crosslinguistically should be acknowledged as a real syntactic category.

Urdu is an SOV language with fairly free word order among constituents, but a relatively rigid order within the verbal complex. As shown in (25), the light verb fits into a distinct slot in the verbal complex and no other order is licit.

- (25) Main Verb (Light Verb) (Passive) (Progressive) (Be Auxiliary)

Like the other main members of the verbal complex, namely the passive, progressive and be auxiliaries, the light verbs are independent syntactic elements. The verbal complex in Urdu is contained within one phonological phrase (cf. Lahiri and Fitzpatrick-Cole 1999 for Bengali), but the light verbs still form their own prosodic words, unlike auxiliaries. This is evident from phenomena like reduplication: light verbs can be reduplicated ((26)), auxiliaries cannot ((27)) (cf. Fitzpatrick-Cole 1994 for Bengali).

- (26) a. *vo* *so* **ɟa-ti** *t^h-i*
 Pron.3.Sg.Nom sleep go-Impf.F.Sg be.Past-Sg.F
 ‘She used to go to sleep.’ (Urdu)
- b. *vo* *so* **ɟa-ti** **vati** *t^h-i*
 Pron.3.Sg.Nom sleep go-Impf.F.Sg go.Redup be.Past-Sg.F
 ‘She used to keep going to sleep (at inopportune moments).’ (Urdu)
- (27) a. *vo* *so* **rah-i** *t^h-i*
 Pron.3.Sg.Nom sleep Prog-F.Sg be.Past-Sg.F
 ‘She was sleeping.’ (Urdu)
- b. **vo* *so* **rah-i** **vahi** *t^h-i*
 Pron.3.Sg.Nom sleep Prog-F.Sg Prog.Redup be.Past-Sg.F
 ‘She was sleeping.’ (Urdu)

As already mentioned, the predicational power of the light verb in Urdu lies somewhere between that of a lexical and a functional element. In Urdu (as well as Hindi and other South Asian languages), light verbs are often associated with boundedness (Hook 1991, 1993, Singh 1994) or inception/completion (Butt 1995) and various other more vague semantic dimensions such as suddenness, forcefulness, volitionality, benefaction, etc. (Hook 1974). This is illustrated in (28)–(30).

(28) nadya=ne xat=ko lik^h mar-a
 Nadya.F.Sg=Erg letter.M.Sg=Acc write hit-Perf.M.Sg
 ‘Nadya dashed off the letter (forcefully).’ (Urdu)

(29) nadya=ne xat lik^h di-ya
 Nadya.F.Sg=Erg letter.M.Sg.Nom write give-Perf.M.Sg
 ‘Nadya wrote the letter (for somebody else).’ (Urdu)

(30) nadya has paṛ-i
 Nadya.F.Sg.Nom laugh fall-Perf.F.Sg
 ‘Nadya burst out laughing.’ (Urdu)

Furthermore, Urdu light verbs are subject to selectional restrictions (see Butt 1995 for more discussion) in that not every light verb is compatible with every main verb. The unaccusative ‘go’, for example can only combine with unaccusatives. The verb for ‘take’ will combine with most transitives and unergatives, but not unaccusatives. Note also that the light verbs determine the case of the subject. This is illustrated quite clearly by the contrast between (31c) and (31d).

(31) a. nadya=ne xat lik^h li-ya
 Nadya.F=Erg letter.M.Nom write take-Perf.M.Sg
 ‘Nadya wrote a letter (completely).’ (Urdu)

b. *nadya xat lik^h ga-yi
 Nadya.F.Nom letter.M.Nom write go-Perf.M.Sg
 ‘Nadya wrote a letter (completely).’ (Urdu)

(32) a. nadya gır ga-yi
 Nadya.F.Nom fall go-Perf.F.Sg
 ‘Nadya fell (down).’ (Urdu)

b. *nadya=ne gır li-ya
 Nadya.F=Erg fall take-Perf.M.Sg
 ‘Nadya fell (completely).’ (Urdu)

c. nadya=ne ro li-ya
 Nadya.F=Erg cry take-Perf.M.Sg
 ‘Nadya cried (has finished and did it on purpose).’ (Urdu)

d. nadya ro paṛ-i
 Nadya.F cry fall-Perf.F.Sg
 ‘Nadya fell to crying (involuntarily).’ (Urdu)

The example in (33a) shows that the compatibility issues between main and light verbs go beyond structural argument matching. Intransitives which are not unergative can in principle combine with transitives, but not all light verbs are equally felicitous, as is shown by the contrast between (33a) and (33b).

- (33) a. nadya makan **bana paṛ-i**
 Nadya.F.Nom house.M.Nom make fall-Perf.F.Sg
 ‘Nadya fell to building a house.’ (Urdu)
- b. ??nadya makan **bana uṭh-i**
 Nadya.F.Nom house.M.Nom make rise-Perf.F.Sg
 ‘Nadya fell to building a house.’ (Urdu)

In conclusion, in Urdu we again have a set of light verbs which can be identified by a number of distinct distributional properties (phonological, syntactic, semantic) and whose semantics interact with the main event predication by specifying more information about the aktionsart and the manner of the event. For more discussion on the precise syntax and semantics of these light verbs, see Butt (1995), Butt and Geuder (2001), and Butt and Ramchand (2003).

3.4 Summary

Light verbs can thus clearly be established as a distinct syntactic category in a number of languages. As was the case with the tests for monoclausality, the relevant tests differed from language to language, but a close look at the language internal structure brought out very precise criteria for differentiating light verbs from main verbs or aspectual auxiliaries.

4 Light Verbs and Change

The previous sections have established that light verbs are syntactically distinct and that they contribute to a monoclausal event predication in a subtle manner. This section takes a look at some of the available diachronic evidence and at what it suggests about the relationship between main verbs, light verbs and auxiliaries.

A quick survey of the recent literature on syntactic change with respect to light verbs reveals a dearth of relevant discussions. Most approaches to change involving verbs have focused on auxiliaries and/or modals (e.g., Lightfoot 1979, Plank 1984, Warner 1993, Denison 1993, Roberts 1993, Roberts and Roussou 1999, Roberts and Roussou 2003). Harris and Campbell (1996), for example, formulate the principle in (34), which at first sight would appear to apply to light verbs. However, a closer inspection of the material cited in support of the principle shows that the data set only pertains to auxiliary formation.

- (34) The Heir-Apparent Principle (Harris and Campbell 1995:193)

When the two clauses are made one by diachronic processes, the main verb governs the syntax of the reflex clause.

One approach which takes light verbs into account explicitly is Grammaticalization Theory. As shown in (35), Hopper and Traugott (1993:108) include vector or light verbs as an optional stage on the grammaticalization cline.³

(35) full verb > (vector verb) > auxiliary > clitic > affix

The inclusion of light verbs is due to a study on Hindi and Marathi by Hook (1991, 1993) who analyzes the light verbs as a stage in aspectogenesis which will ultimately give rise to a type of aspectual auxiliary (see also Hook 2001 for a broader examination of the diachrony of light verbs in the South Asian context).

However, there are several problems with this assumption. For one, rather than constituting a subclass of the existing auxiliaries, the light verbs interact with all of the other auxiliaries of the verbal paradigm (Butt and Geuder 2001). For another, the semantic contribution goes beyond that of the purely functional tense/aspect kind. While light verbs generally do signal some kind of boundedness or telicity or causation (crosslinguistically), they also go beyond that and signal volitionality, benefaction, forcefulness, surprise, etc. The degree to which they signal this differs from language to language, but this component always seems to be present (again, see Butt and Geuder 2001 for more discussion).

Furthermore, the notion of aspectogenesis runs counter to an observable diachronic fact, which is that light verbs always remain form-identical to a main verb in the language. This is very much unlike what is found with auxiliaries (and modals to some extent), which start out as a version of a main verb (e.g., the English *going* future) but then quickly develop away from the main verb in form, function and meaning (e.g., English past tense *-d* from *do*). This contrast is discussed in some detail in Butt and Lahiri (2003) with respect to data from Urdu and Bengali ‘be’ and ‘go’ and is confirmed by the discussions in Brinton and Akimoto (1999), which examine the origin and use of English N-V complex predicates as *take a bath*.

The conclusion Traugott (1999) reaches on the basis of the available evidence is that English N-V complex predicates have been native to the language at least since Old English (the furthest one can look back) and that though the middle ages saw a marked increase in their use, no other concomittant signs of grammaticalization can be identified: the light verbs do not diminish in form (e.g., become auxiliaries or affixes) and they do not lead to the development of functional categories (Traugott 1999:257). Indeed, the overall system appears to be quite stable given that the number and type of light verbs involved remains relatively constant and given that their ranking in terms of frequency of use remains stable with respect to each other (e.g., *give* consistently comes third in terms of frequency of use since early modern English). As is crosslinguistically typical, the light verbs are shown to contribute aspectual nuances as well as other types of semantic information. For example, the use of *give an answer* as opposed to the simple verb *answer* appears to signal that the action was done deliberately (Traugott 1999:253).

4.1 Tracing Light Verbs through the Ages

In order to drive the point home that light verbs do not appear to be subject to historical change in the same way that auxiliaries are, this section traces light verbs through some of the available historical evidence for Indo-Aryan. This language family has an unbroken historical record of about

³The term *vector verb* is due to Pray (1970) and has been applied to describe light verbs in South Asian languages.

3000 years. The discussion on this section is based on Butt and Lahiri (2003), who investigate Urdu and Bengali V-V complex predicates of the type discussed in section 3.3 and contrast the available diachronic data with that of auxiliaries based on ‘be’ and ‘go’ in the modern languages.

There is no precise dating for Indo-Aryan. However, the oldest attested form of the language is thought to go back to 1200 BCE. Vedic is generally dated until about 600 BCE. Epic and Classical Sanskrit fall into the time from 600 BCE to 200 CE. Together with Vedic, these are referred to as Old Indo-Aryan. Middle Indo-Aryan includes Pāli (mainly preserved in the form of Buddhist texts), several Prākṛit languages (which include non-standard dialects of Sanskrit), Apabhramśa, and inscriptions of the Emperor Aśoka (270–232 BCE). The Middle Indo-Aryan period stretches from about 200 BCE to 1100 CE. The languages of the period from then on are commonly referred to as New Indo-Aryan. As of 1100 CE distinct ancestors of the modern languages such as Old Hindi, Old Bengali or Old Marathi are readily identifiable.

It is generally agreed (e.g., Hook 1991, Tikkanen 1987, Hendriksen 1944, Chatterji 1926) that the ancestral construction of the modern V-V complex predicate is the Sanskrit “gerund” or “absolute” in *-tvā(ya)*, or *-ya/yā*. These suffixes served as derivational morphemes which resulted in an indeclinable participle (e.g., Whitney 1889:345–360). In the more modern literature, this participle has also sometimes been referred to as a *conjunctive participle* (CP).

The use of the *tvā* participles was manifold and varied. Tikkanen (1987) uses the constructed example in (36) to illustrate the various possible translations found in the literature with respect to the *tvā* participle. (37) shows an actual example from Vedic (an older stage of the language). One of the uses Tikkanen lists is comparable with the modern complex predicate in that the literal meaning of ‘go’ is not expressed.

- (36) a indram ārabhya cara
 Indra-ACC grasp-GD go-IMP.2SG
 ‘Having taken hold of Indra, move!’
 ‘Keep yourself to Indra!’
 (Sanskrit, Tikkanen 1987:7)

- b. ime ta indra te vayam
 Pron.Dual Dem.Pron.3.Sg Indra.Voc.Sg Pron.2.Sg.Gen Pron.1.Pl.Nom
 puruṣṭuta ye tvārabhya carāmasi
 much-praise.PP.Voc.Sg Rel.Pron Pron.2.Sg.Acc-grasp.Gd go.Pres.1.Pl
 ‘We here are yours, O ever-praised Indra, who wander about having taken hold of you/who constantly keep ourselves to you.’ (Vedic)
 (Ṛgveda I.57.4; Tikkanen 1987:175)

In contrast to Vedic and Sanskrit, which provide hints of a light verb use, but no conclusive evidence, complex predication is clearly identifiable in Middle Indo-Aryan (Hendriksen 1944, Hook 1991, 1993, 2001). In particular, the Pāli examples in (37) both involve the verb ‘give’ as a finite verb which combines with the participle of ‘make’. For both the sentences in (37) it would be strange to assume that the meaning should be rendered as: “having led her to the hermitage, having made a fire, he gave (it) (to her)”. Rather, the complex predicate benefactive reading given in the glosses is more appropriate.

- (37) a. ... assamapadaṃ ānetvā aggim **katvā adāsi**
hermitage.Acc lead.Gd fire.Acc.Sg make.Gd give.Impf.3.Sg
‘... brought her to his hermitage and made a fire for her’
[‘having brought (her) to the hermitage, made a fire (for her)’]
Pāli, Jātaka Tales, Sri Lanka (Hendriksen 1944:134)
- b. daruni āharitvā aggim **katvā dassati**
sticks bring.Gd fire.Acc.Sg make.Gd give.Fut.3.Sg
‘Bringing wood he’ll make a fire (benefactive use).’
(Pāli, Trenckner 1879:77, cited by Hook 1993:97)

Turning to more modern times, examples of complex predicates can be found in Old Bengali in the Caryapad (950–1550 CE), which consists of 46 complete songs and one incomplete song of 6 lines by 24 different poets. Here the finite verbs ‘take’ ((38a)) and ‘give’ ((38b)) cannot be interpreted in their main verb sense, but must rather be analyzed as light verbs which signal completion, much as is done in the modern language.

- (38) a. caṣat^{hi} koṭ^{ha} **guṇ-iā lehu**
sixty-four rooms count-Gd take
‘count sixty-four rooms (for yourself)’
(Caryapad 12, Mojunder 1973:248) (Old Bengali)
- b. bājule **dila** moha-kak^{hu} **b^haṇ-iā**
Bajula.Obl give.Past.3.Sg rooms of illusion count-Gd
‘Bajula counted the rooms of illusion (for his disciple).’
(Caryapad 35, Mojunder 1973:248) (Old Bengali)

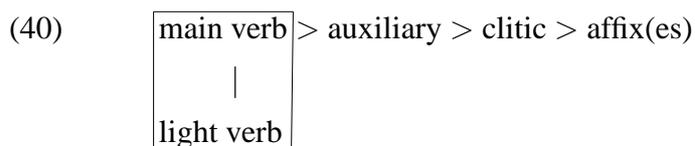
Examples from Old Hindi are illustrated by (39) and (40). McGregor (1968:209–213) explicitly notes that the V-V constructions in (40), which are found in Braj Bhāṣā prose from around 1600 CE, were used much as in modern Hindi.

- (39) a. ... **cori letu** hai
steal.Gd take.Impf be.Pres.3.Sg
‘... (he) steals’ (Old Hindi)
- b. **kāḍhi lei**
pull out.Gd take.Perf
‘(he) pulled out (with effort)’ (Old Hindi)
- c. samudrahiṃ **nāṣi jāta** haiṃ
ocean.Obj cross.Gd go.Impf be.Pres.1/3.Pl
‘(They/We) cross oceans (completely).’ (Old Hindi)

Light verb constructions can thus be identified clearly and continually over thousands of years. As was observed for N-V complex predicates in English (Traugott 1999), the syntactic construction itself is relatively stable. While the overt form of the gerundive morphology has changed, the syntactic co-occurrence of a main predicate and an inflected light verb remains constant, as does the choice of light verbs involved (e.g., ‘go’, ‘give’, ‘take’). Just as in English the light verb is

always form-identical to a main verb in the language. Light verbs thus appear to be historically stable, very much unlike what has been documented for auxiliaries.

The available evidence thus points to the idea that light verbs do not enter the grammaticalization cline, i.e., they are not main verbs which have been reanalyzed as light verbs and which are now prone to further reanalysis. Section 5 therefore explores an alternative notion which posits that light verbs are intimately connected to their main verb counterpart in the lexicon. They are so intimately connected that we assume just one lexical entry which can give rise to both light and main verb meanings. This is illustrated in (40).⁴



Whether a given verb predicates as a light or as a main verb is determined by the syntactic environment (section 5). In addition, as discussed in Butt and Lahiri (2003), we assume that auxiliaries are derived from the main verb, not the light verb. That is, we assume that light verbs are inert for the purposes of historical change. This idea accounts for the fact that a light verb always corresponds to a form-identical main verb in the language and that light verb constructions do not give rise to auxiliaries and modals.⁵

4.2 The Connection to Preverbs/Particles

Before proceeding on to a formal analysis of light verbs, this section explores the relationship between light verbs and preverbs/particles. This issue is often raised in connection with South Asian light verbs, as the semantics that are described are reminiscent of the semantics associated with Germanic preverbs/particles like German *auf* in *aufessen* ‘eat up’ or English *out* as in *throw out*.

Old Indo-Aryan employed a set of preverbs which in combination with the main verb gave rise to a complex range of meanings. These meanings are similar in nature to the contribution of the light verbs in V-V complex predicates and to that found with Germanic verb particles. (41) provides a fairly complete list of Sanskrit preverbs (see e.g., Whitney 1889:§1077 for a complete list with their basic meanings), (42) provides some examples of usage.

⁴Note that I assume one underlying lexical entry that can give rise to distinct syntactic elements. This is similar to the idea that deverbal nominalization operates on the same lexical entry which gives rise to inflected main verbs, except that derivational morphology tends to be involved with nominalization. In the case of light verbs, no derivational morphology is involved, rather the difference in syntax and semantic interpretation arises out of the complex predicate construction.

⁵Light verbs may, however, be prone to lexicalization or idiomaticization along with the main predicate. This issue is also addressed in Brinton and Akimoto (1999) where it is noted that some N-V complex predicates in English have been reanalyzed as idioms.

(41)	Sanskrit Preverb	Rough Meaning
	<i>ati</i>	across, beyond, past, over, to excess
	<i>adhi</i>	above, over, on, on to
	<i>anu</i>	after, along, toward
	<i>antar</i>	between, among, within
	<i>apa</i>	away, forth, off
	<i>api</i>	unto, close upon, on
	<i>abhi</i>	to, unto, against (often with implied violence)
	<i>ava</i>	down, off
	<i>ā</i>	to, unto, at
	<i>ud</i>	up, up forth, out
	<i>upa</i>	to, unto, toward
	<i>ni</i>	down, in, into
	<i>nis</i>	out, forth
	<i>parā</i>	to a distance, away, forth
	<i>pari</i>	round about, around
	<i>pra</i>	forward, onward, forth, fore
	<i>prati</i>	in reversed direction, back to, back against, against, in return
	<i>vi</i>	apart, asunder, away, out
	<i>sam</i>	along, with, together

- (42) a. pariṇīya
around.lead.Gd
'having led around' (Sanskrit)
- b. vi-kṛ
apart-do
'scatter' (Sanskrit)

The modern Indo-Aryan languages, among them Urdu/Hindi and Bengali have lost these preverbs completely. Hook (1991, 1993, 2001) and Hook and Pardeshi (2001) furthermore document an increase in light verb use in South Asian languages since the middle ages. These two observations taken together raise the immediate question whether these developments are related: could the more frequent use of V-V complex predicates in modern Indo-Aryan be tied to the loss of preverbs?

Deo (2002) provides a partial answer to this question by tracing the development of preverbs in Indo-Aryan. She shows that in Vedic (the oldest form of the language), the preverbs are associated with canonical directional or adpositional meanings. However, for some preverbs, the meanings are less transparent (non-compositional) and the use of these preverbs is associated with semantic notions of forcefulness, completion, inception, etc. This is immediately reminiscent of the semantics associated with the modern light verbs.

In Sanskrit, the preverbs can be divided into two categories: those that have a literal prepositional (directional) semantics and those that have a non-transparent semantics. Interestingly enough, the former are all multisyllabic, while the latter are monosyllabic. This is consonant with general trends observed in grammaticalization: forms which are less substantial are more prone to grammaticalization.

In Middle Indo-Aryan (Prākṛit), the preverbs are reanalyzed as either verbal prefixes or part of a monomorphemic root. There is a marked decline of preverbs which have a strictly directional or prepositional semantics. In the modern languages, the only surviving preverbs are those that have been reanalyzed as a part of the verbal root. For the native speaker, these are not identifiable as separate preverbs: they simply appear to be a part of the root.

Deo's (2002) study thus makes a plausible case for the idea that the use of light verbs increased as preverbs fell out of the language. An explicit connection between the semantics of light verbs and the semantics of preverbs/particles is made by Ramchand (2002, 2003) and is discussed in section 5.

5 The Semantics of Light Verbs

The paper so far has surveyed what I see as central properties which must be accounted for in any analysis of light verbs. For one, a light verb is always form-identical with a main verb in the language. This form-identical light verb generally contributes a non-transparent meaning to a monoclausal (primary) complex predication. The crosslinguistic generalization seems to be that light verbs modulate or structure a given event predication and do so in a manner similar to that of modifiers with respect to semantic notions such as benefaction, suddenness, etc. (Butt and Geuder 2001). The light verbs also tend to add further information about the aktionsart of the complex predication. In particular, there is often a telic/boundedness or a causation component (see below).

The proposal sketched here (for more details on various parts of the analysis, see Butt and Geuder 2001, Butt and Lahiri 2003 and Butt and Ramchand 2003) attempts to account for the central properties listed via a radically different perspective on the relationship that is generally assumed to hold between a light verb and a main verb. Recall from the introduction that one common way to view light verbs is that they are *semantically bleached* versions of main verbs. This implies a historical relationship in which one is derived from the other, or, at the very least, a synchronic derivative relationship. The proposal presented here in contrast assumes that the lexical specification of a handful of verbs (somewhere between 5 and 20) crosslinguistically allows for a use as *either* a main verb *or* a light verb. Some common examples crosslinguistically are the verbs for 'come', 'go', 'take', 'give', 'hit', 'throw', 'give', 'rise', 'fall' and 'do/make'. One can think of this set of verbs as *passepertouts*: their lexical semantic specifications are so general that they can be used in multitude of contexts, that is, they "fit" many constellations.

When such a verbal *passepertout* enters the syntax as a main verb, it is able to predicate like a main verb (e.g., *take the book*). However, when another verb is already acting as a main verb and if the language allows for complex predication, then the lexical semantic specification of this same set of verbal *passepertouts* allows a "light" predication which enters into a syntactic dependency with the main predicate and interacts with it semantically. This interaction generally results in the further specification of the aktionsart and the manner of the event. The more subtle semantic notions such as benefaction, force etc., are derived from the collection of entailments usually associated with the lexical semantics of the main verb (Butt and Geuder 2001).

The essence of this idea can already be found in Butt (1995), however an articulation in terms of recent ideas (e.g., Borer 1998, Borer 2003) on the relationship between the lexicon and syntactic structure allows a better take on the proposal and also leads to an unexpected result with respect to understanding the structure of V-V complex predicates. The remainder of this section is based

on Butt and Ramchand (2003), which assumes Ramchand's (2003) recent ideas on the syntax and semantics of subevents.

5.1 The Syntax of Event Structure

Butt and Ramchand (2003) argue that a central key to understanding the special semantics of V-V complex predication is the recognition of *subevents*. Davidsonian (and Neo-Davidsonian) event semantics (Davidson 1967, Parsons 1990) for example, allow one to manipulate events (or eventualities, Bach 1986), but not anything “smaller”. On the other hand, work on argument structure has assumed the need for lexical decomposition or a relationship between subevents (e.g., Hale and Keyser's 1993 notion of subordinate events which are implicated by another event, Levin and Rappaport Hovav's 1998 notion of template augmentation and Diesing's 1998 notion of “diminutivized events”).

Ramchand (2003) proposes to take this notion seriously. In a Post-Davidsonian take on event semantics she argues for the need of a notion of subevents at the syntax/semantics interface. The notions in (43) are taken to be primitives of the theory.

- (43) a. $e = e_i \rightarrow e_j$: e consists of two subevents, e_i, e_j such that e_i leads to or causes e_j (see Hale and Keyser 1993).
- b. $e = \langle e_i, e_j \rangle$: e consists of two subevents, e_i, e_j such that e_i and e_j form an accomplishment event structure where e_i is the process portion and e_j is a state interpreted as the result state of the process (see Parsons 1990 and Higginbotham 1999, cf. also Levin and Rappaport-Hovav's 1998 notion of template augmentation).

The basic idea can be exemplified by the analysis in (44) where the event e is seen as consisting of three subevents.

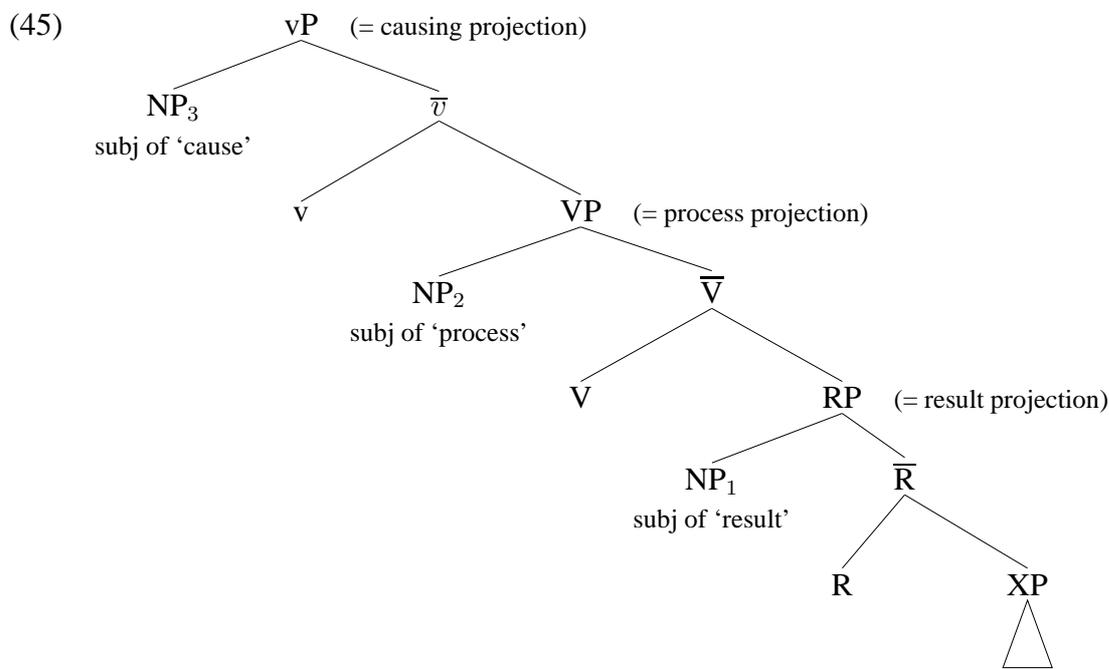
- (44) ‘build the house’ ($e = e_1 \rightarrow \langle e_2, e_3 \rangle$)
where e_1 = the causing, intentional impulse
 e_2 = the process of house-building
 e_3 = the state of the house having been built.

The semantics of events are assumed to be closely connected to syntactic structure. This results in a very tight mapping between syntax and semantics at the syntax-semantic interface. In Minimalist terms, primary predication is assumed to take place within the “first phase” of the syntax. Ramchand (2003) assumes the syntactic decomposition of event structure shown in (45).

It is important to note that under this view an event can only be decomposed into a maximum of *three* potential subevents: causing event (e_1), caused process (e_2) and caused result state (e_3).⁶ The

⁶In addition a macro event position e is assumed to exist which interacts with external processes of modification and tense interpretation and certain higher level adverbials. Subevents themselves are not of a different ontological type from macro events—out of combination they are of the same order as simple processes or states. Consider something like an individual ‘apple’ which can have systematic and relevant subparts (skin, core seeds etc.) which could be labelled as individuals in their own right; this does not mean that ‘apple’ is anything other than an ordinary individual within the semantics. Similarly, the macro-event corresponding to a predication is just an event which happens to have sub-parts. For some linguistic purposes (anchoring to tense, adverbs and intersentential effects) this event is the only event variable manipulated or ‘seen’ by the logical relations.

vast majority of the literature on aspect, arguments and event structure assumes some sort of lexical or semantics decomposition, however, Ramchand's approach stands out in allowing exactly these three subevents. For further discussion, justification and details of this approach, see Ramchand (2003) and Butt and Ramchand (2003).



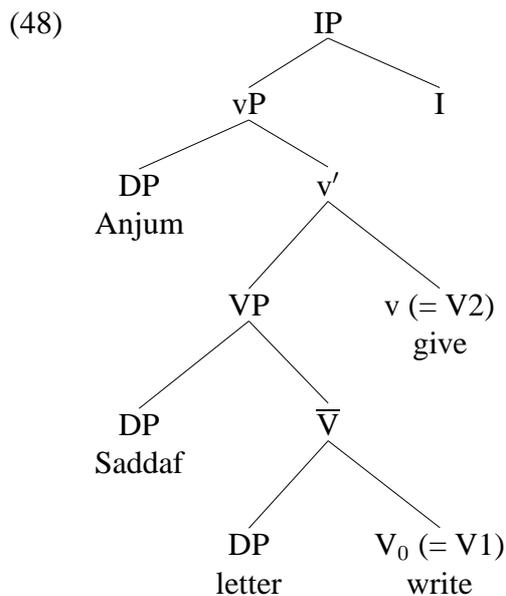
With this basic machinery in place, a formal analysis of light verbs can now be undertaken. Light verbs are seen as contributing to the structuring of events within primary predication (first phase syntax). A look at the Urdu permissive (briefly discussed in section 2) serves to illustrate the basic idea. An example is shown in (46).

- (46) nadya=ne saddaf=ko xat **lik^h-ne** **di-ya**
 Nadya.F.Sg=Erg Saddaf.F.Sg=Dat letter.M.Nom write-Inf.Obl give-Perf.M.Sg
 'Nadya let Saddaf write a letter.'

The light verb 'give' licenses a permissive reading in which the subject (Anjum) allows a certain event to happen (Saddaf writing a letter). The predication is monoclausal and primary (Butt 1995), hence the event which was allowed to happen must be a subevent. The same applies to the permitting event. The permissive 'give' in fact is a natural *v* in that its semantics are consonant with the causal semantics posited for *v*. The syntax and semantics for (46) are presented in (47) and (48).

The permissive light verb instantiates the causing/allowing subevent of the complex predication. The process subevent is instantiated by the subevent which is permitted. This process phrase (VP) is a direct complement of *v*, which means that there is only one clausal nucleus (primary predication). Because permissives have no telic readings, there is no result portion to the structure in (48)

- (47) $V1=V=write(e; y, z)$ $V2=v=Cause_{allow}(e'; x, e'')$
 $\exists e: e = e_2 \rightarrow e_1 [write(e_1; 'Saddaf', 'letter') \& Cause_{allow}(e_2; 'Anjum', e_1)]$
 'Anjum is the causer/allower of a subevent of Saddaf writing a letter.'



5.2 Light Verbs with Telic Readings

In contrast to the permissive light verb analyzed in the previous section, the light verbs discussed in this section are implicated in the construction of telic readings within the complex predication. A typical example of this type of V-V complex predicate is shown in (49). Recall from section 3.3 that the light verbs play a role in the determination of subject case ((32)). The relevant semantic parameter is in fact volitionality (Butt 1995). Volitionality can be seen as falling within the more general causal semantics associated with *v*, thus the light verb is instantiated in *v*.

- (49) *nadya=ne xat lk^h li-ya*
 Nadya.F=Erg letter.M.Nom write take-Perf.M.Sg
 ‘Nadya wrote a letter (completely).’

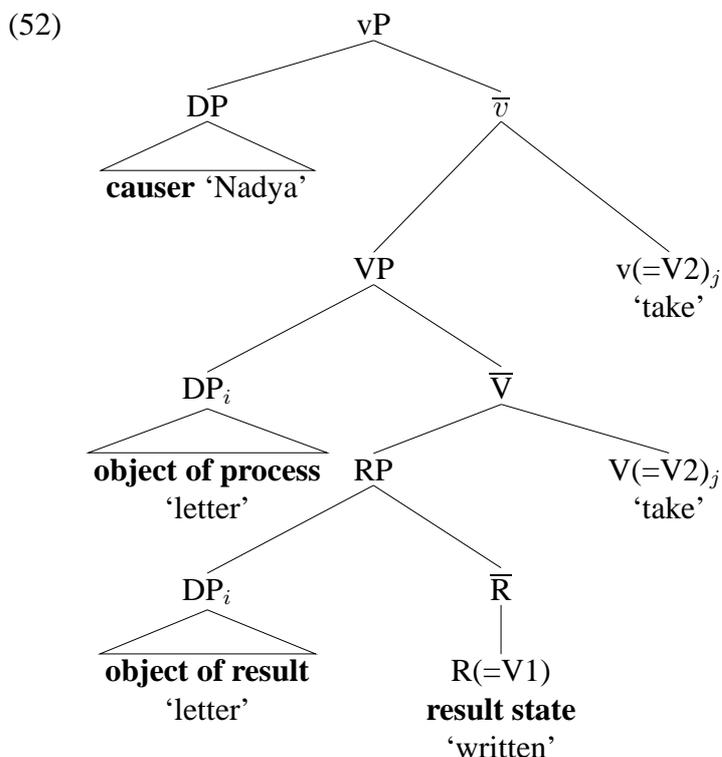
However, the light verb must primarily be licensed in *V* because the main verb and the light verb exhibit a greater cohesion than what is observable for the permissive construction: the permissive light verb can be scrambled away relatively freely from the main verb, but this is not the case for the light verb discussed here (Butt 1995). Further considerations are negation, which can only have scope over the *V'*, but not over the individual verbs, and the fact that the permissive can stack on top of the light verb, but not the other way around, as illustrated in (50).

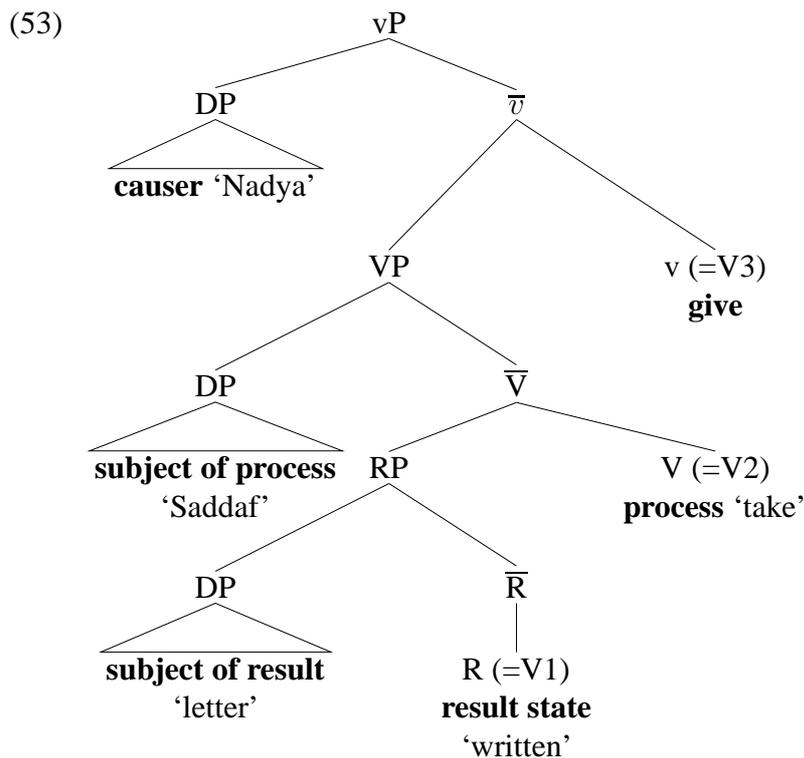
- (50) a. *nadya=ne saddaf=ko xat lk^h le-ne di-ya*
 Nadya.F.Sg=Erg Saddaf.F.Sg=Dat letter.M.Nom write take-Inf.Obl give-Perf.M.Sg
 ‘Nadya let Saddaf write a letter (completely).’
- b. **/???nadya=ne saddaf=ko xat lk^hne de di-ya*
 Nadya.F.Sg=Erg Saddaf.F.Sg=Dat letter.M.Nom write-Inf.Obl give give-Perf.M.Sg
 ‘Nadya completely let Saddaf write a letter.’

The idea behind the analysis shown in (51) and (52) thus is that the light verb is primarily licensed in *V* and denotes the process part of the predication. If there is another light verb (or

morpheme) in the clause which explicitly instantiates the causation subevent in *v*, then the light verb is restricted to *V*. This is illustrated in (53), which is the analysis for (50a). However, if the causation subevent is not explicitly instantiated, then the light verb also instantiates *v* (and determines the case of the subject), as shown in (52). The analysis is consonant with the view that these verbs have very flexible lexical semantics: they could predicate as main verbs or as light verbs. When they predicate as light verbs, not all of the semantic entailments allowed for by their lexical semantic specification must necessarily be realized. For example, the verb ‘give’ tends to entail a benefactive reading, but it is not required to do so in Urdu (Butt and Geuder 2001). Similarly, these light verbs potentially have causal (volitional/non-volitional) semantics, but this meaning component does not necessarily have to be instantiated.

- (51) $V1 = R = \text{written} (e; y)$ $V2 = v = \text{CAUSE} (e' (=e_1 \rightarrow e_2); x, y)$
 $\exists e: e = e_1 \rightarrow \langle e_2 e_3 \rangle [\text{Cause}(e_1 \rightarrow e_2; \text{‘Nadya’}, \text{‘letter’}) \& \text{written}(e_3; \text{‘letter’})]$
 ‘Nadya instigates a process affecting a letter which has the result that the letter comes to be written.’





The syntactic analyses above result in an interesting take on these “aspectual” complex predicates. Under the analysis presented here, the main verb (V1) actually provides the result component of the predication, not the light verb. This is a relatively surprising result and goes against much of the intuition in the literature, where it is assumed that the light verbs provide the telic/bounded component (e.g., Butt 1995, Hook 1991, Singh 1994). Under this view, the light verb does not contribute the telic/bounded component directly, instead, the construction is such that the main verb instantiates the predicated result, while the light verb instantiates the process (and potentially the cause) subevents. This view is supported by morphological evidence from Bengali, where the main verb carries a morpheme which is generally glossed as “perfective”. As this morpheme is in fact the direct descendent of the indeclinable gerundive morpheme discussed in section 4 (see Butt and Lahiri 2003 for more details), the *-e* is glossed as a participle in (54).

- (54) ruma ciṭ^hi-ṭa lik^h-e p^hello
 Ruma.Nom letter-Classifier write-PerfPart throw.3.Past
 ‘Ruma wrote the letter completely.’ (Bengali)

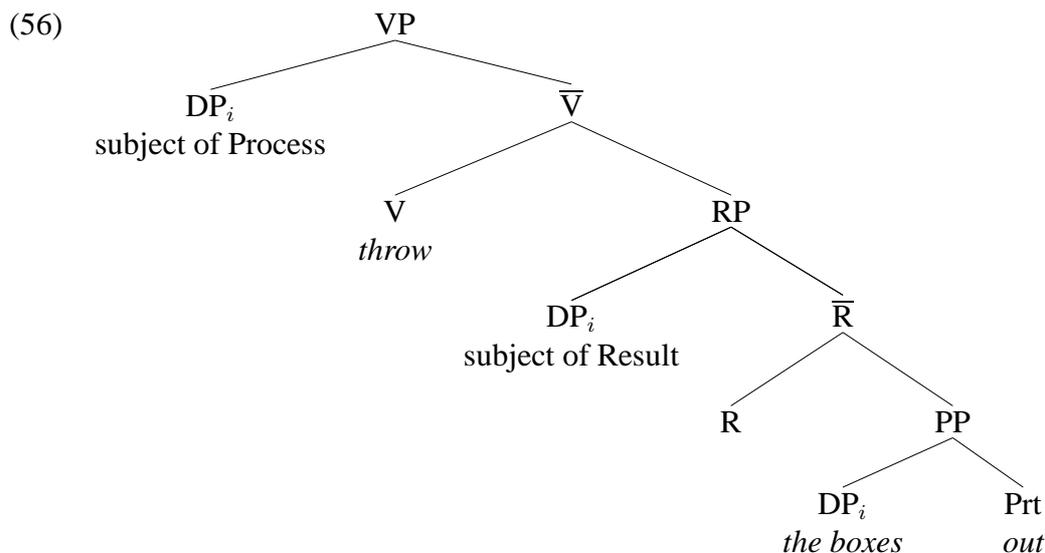
The morpheme has disappeared in modern Urdu/Hindi, but did still exist in Old Hindi as *-i* (cf. the Old Hindi examples in section 4). The analysis suggested by this view of the syntax-semantics interface thus seems to be right and provides an interesting alternative to the dominant intuition in the literature.

To summarize, the available evidence points to the conclusion that light verbs are not simply functional heads that encode ‘viewpoint aspect’ (unlike auxiliaries). Instead, light verbs contribute to the structure of the event within the domain of primary predication.

5.3 Preverbs/Particles vs. Light Verbs

This final section returns to the question of preverbs and particles. Ramchand (2002) draws a very strong connection between particles and light verbs and claims that a theory of particles can immediately account for the syntax and semantics of light verbs. The structure in (56) provides an idea of the analysis, for more details and discussion see Ramchand (2002, 2003).

(55) Throw the boxes out.



The commonality between light verbs and preverbs/particles is that both involve a contribution to the event semantics of a monoclausal predication at the subeventual level. However, they do so in different ways. Note that the particle in (56) is confined to the result portion. Particles (and preverbs) are not verbs and therefore do not enter the syntax as a little *v* or *V*. The result portion of the event predication, in contrast, can be instantiated by a wide variety of syntactic objects, including noun phrases, prepositional phrases, adjectives and adverbs. Given the original directional (prepositional) semantics of preverbs and particles, the result portion of the predication is thus a natural location.

Thus, while particles and light verbs appear to have the same kind of overall semantic effect on the event predication, the actual underlying structure is different. The overall event semantics arises out of the *construction* the light verbs or particles enter into with a main verb.

6 Conclusion

This paper has surveyed a number of differing complex predicates and light verbs across languages. Complex predicates were defined as containing two or more predicational elements which jointly predicate within a monoclausal structure. The evidence for monoclausality was seen to be language dependent. Similarly, the paper argued that light verbs must be acknowledged as a separate syntactic category crosslinguistically, but that the precise syntax of light verbs differs across languages. The category light verb must be established according to language internal tests.

The function of light verbs is to modulate the (sub)evental semantics. Different light verbs will do so in different ways and some of the semantic contributions are quite subtle. This is in part because of the flexible interpretation of the underlying lexical semantics. The verbs which allow light verb readings have lexical semantic specifications that are of a very general nature. This allows them to appear in a wide variety of syntactic contexts. The idea that light verbs and their corresponding main verbs are derived from one and the same underlying representation accounts for the fact that light verbs are always form-identical to a main verb counterpart in the language and that they are inert with respect to historical change.

References

- Abeillé, Anne, Danièle Godard, and Ivan A. Sag. 1998. Two Kinds of Composition in French Complex Predicates. In *Complex Predicates in Nonderivational Syntax*, ed. Erhard Hinrichs, Andreas Kathol, and Tsuneko Nakazawa. San Diego: Academic Press. Syntax and Semantics Volume 30.
- Aissen, Judith, and David Perlmutter. 1983. Clause Reduction in Spanish. In *Studies in Relational Grammar 1*, ed. David Perlmutter. 360–403. Chicago: The University of Chicago Press.
- Alsina, Alex. 1996. *The Role of Argument Structure in Grammar*. Stanford, California: CSLI Publications.
- Bach, Emmon. 1986. The Algebra of Events. *Linguistics and Philosophy* 9:5–16.
- Borer, Hagit. 2003. *Structuring Sense: An Exo-Skeletal Trilogy*. Oxford: Oxford University Press. Book Manuscript.
- Bowern, Claire. 2002. How light are North Australian ‘Light Verbs’? Talk given at the *Light Verb Workshop*, Harvard University, November 2002.
- Brinton, Laurel J., and Minoji Akimoto (ed.). 1999. *Collocational and Idiomatic Aspects of Composite Predicates in the History of English*. Amsterdam: John Benjamins.
- Butt, Miriam. 1994. Complex Predicate Scrambling in Urdu. In *Theoretical Perspectives on Word Order in South Asian Languages*, ed. Miriam Butt, Tracy Holloway King, and Gillian Ramchand. 67–90. Stanford, California: CSLI Publications.
- Butt, Miriam. 1995. *The Structure of Complex Predicates in Urdu*. Stanford, California: CSLI Publications.
- Butt, Miriam, and Wilhelm Geuder. 2001. On the (Semi)Lexical Status of Light Verbs. In *Semi-lexical Categories: On the content of function words and the function of content words*, ed. Norbert Corver and Henk van Riemsdijk. 323–370. Berlin: Mouton de Gruyter.
- Butt, Miriam, and Aditi Lahiri. 2003. Verbal Passepartouts. Unpublished Ms.
<http://mull.ccl.umist.ac.uk/staff/mutt/>.

- Butt, Miriam, and Gillian Ramchand. 2003. Complex Aspectual Structure in Hindi/Urdu. In *The Syntax of Aspect*, ed. Nomi Ertishik-Shir and Tova Rappaport. Oxford: Oxford University Press. To appear.
- Butt, Miriam, and Biljana Scott. 2002. Chinese Directionals. Talk given as part of the Workshop *Complex Predicates, Particles and Subevents*, Konstanz, September.
- Cattell, R. 1984. *Composite Predicates in English*. Sydney: Academic Press Australia.
- Chao, Y.-R. 1968. *A Grammar of Spoken Chinese*. Berkeley, California: The University of California Press.
- Choi, Seongsook. 2002. Complex Aspectual Structure in Korean. Talk given as part of the Workshop *Complex Predicates, Particles and Subevents*, Konstanz, September.
- Chomsky, Noam. 1957. *Syntactic Structures*. The Hague: Mouton de Gruyter.
- Davidson, Donald. 1967. The Logical Form of Action Sentences. In *The Logic of Decision and Action*, ed. N. Resher. 81–95. Pittsburgh: University of Pittsburgh Press. Reprinted in Davidson, Donald. 1980. *Essays on Actions and Events*, 105–123. Clarendon Press, Oxford.
- Denison, David. 1993. *English Historical Syntax: Verbal Constructions*. London: Longman.
- Deo, Ashwini. 2002. A Diachronic Perspective on Complex Predicates in Indo-Aryan. Talk given as part of the Workshop *Complex Predicates, Particles and Subevents*, Konstanz, September.
- Diesing, Molly. 1998. Light Verbs and the Syntax of Aspect in Yiddish. *The Journal of Comparative Germanic Linguistics* 1:119–156.
- Fitzpatrick-Cole, Jennifer. 1994. *The Prosodic Domain Hierarchy in Reduplication*. Doctoral dissertation, Stanford University.
- Grimshaw, Jane, and Armin Mester. 1988. Light Verbs and Θ -Marking. *Linguistic Inquiry* 19(2):205–232.
- Hacker, Paul. 1958. *Zur Funktion einiger Hilfsverben im modernen Hindi*. Mainz: Akademie der Wissenschaften und der Literatur.
- Hale, Kenneth, and Jay Keyser. 1993. Argument Structure. In *The View from Building 20*, ed. Kenneth Hale and Jay Keyser. 53–109. Cambridge, Massachusetts: The MIT Press.
- Harris, Alice C., and Lyle Campbell. 1995. *Historical Syntax in Cross-Linguistic Perspective*. Cambridge: Cambridge University Press.
- Hendriksen, Hans. 1944. *Syntax of the Infinite Verb Forms of Pali*. Copenhagen: Einar Munksgaard.
- Higginbotham, James. 1999. Accomplishments. Paper presented at GLOW, Japan.
- Hook, Peter Edwin. 1974. *The Compound Verb in Hindi*. Center for South and Southeast Asian Studies: The University of Michigan.

- Hook, Peter Edwin. 1991. The Emergence of Perfective Aspect in Indo-Aryan Languages. In *Approaches to Grammaticalization*, ed. Elizabeth Traugott and B. Heine. 59–89. Amsterdam: Benjamins.
- Hook, Peter Edwin. 1993. Aspectogenesis and the Compound Verb in Indo-Aryan. In *Complex Predicates in South Asian Languages*, ed. Manindra Verma. 97–113. Delhi: Manohar Publishers & Distributors.
- Hook, Peter Edwin. 2001. Where to Compound Verbs come from? (and where are they going?). In *The Yearbook of South Asian Languages and Linguistics*, ed. Peri Bhaskararao and K.V. Subbarao. 102–130. New Delhi: Sage Publications.
- Hopper, Paul J., and Elizabeth C. Traugott. 1993. *Grammaticalization*. Cambridge: Cambridge University Press.
- Huang, Charles T.-J. 1992. Complex Predicates in Control. In *Control and Grammar*, ed. Ricgard Larson, Sabine Iatridou, and Utpal Lahiri. 109–147. Kluwer Academic Publishers.
- Jespersen, Otto. 1965. *A Modern English Grammar on Historical Principles, Part VI, Morphology*. London: George Allen and Unwin Ltd.
- Lahiri, Aditi, and Jennifer Fitzpatrick-Cole. 1999. Emphatic Clitics and Focus Intonation in Bengali. In *Phrasal Phonology*, ed. René Kager and Wim Zonneveld. 119–144. Dordrecht: Foris Publications.
- Levin, Beth, and Malka Rappaport Hovav. 1998. Building Verb Meanings. In *The Projection of Arguments: Lexical and Compositional Factors*, ed. Miriam Butt and Wilhelm Geuder. 97–134. Stanford, California: CSLI Publications.
- Lightfoot, David. 1979. *Principles of Diachronic Syntax*. Cambridge: Cambridge University Press.
- Masica, Colin. 1976. *Defining a Linguistic Area: South Asia*. Chicago: The University of Chicago Press.
- McGregor, R.S. 1968. *The Language of Indrajit of Orchā*. Cambridge: Cambridge University Press.
- Mohanan, Tara. 1994. *Argument Structure in Hindi*. Stanford, California: CSLI Publications.
- Mojunder, Atindra. 1973. *Bengali Language Historical Grammar, Part II*. Calcutta: K.L. Mukhopadhyay.
- Parsons, Terence. 1990. *Events in the Semantics of English*. Cambridge, Massachusetts: The MIT Press.
- Plank, Frans. 1984. The modals story retold. *Studies in Language* 8(3):305–364.
- Pray, Bruce. 1970. *Topics in Hindi-Urdu Grammar*. Berkeley, California: Center for South and Southeast Asia Studies.

- Ramchand, Gillian. 2002. A Particle Theory of Light Verbs. Talk given as part of the Workshop *Complex Predicates, Particles and Subevents*, Konstanz, September.
- Ramchand, Gillian. 2003. First Phase Syntax. Unpublished Ms., Oxford University, <http://users.ox.ac.uk/~gcram/research/>.
- Roberts, Ian. 1993. A formal account of grammaticalisation in the history of Romance Futures. *Folia Linguistica Historica* 13:219–258.
- Roberts, Ian, and Anna Roussou. 1999. A formal approach to “grammaticalization”. *Linguistics* 37(6):1011–1041.
- Roberts, Ian, and Anna Roussou. 2003. *Syntactic Change: A Minimalist Approach to Grammaticalisation*. Cambridge: Cambridge University Press. In Press.
- Rosen, Sara. 1989. *Argument Structure and Complex Predicates*. Doctoral dissertation, Brandeis University.
- Schultze-Berndt, Eva. 2000. *Simple and Complex Verbs in Jaminjung: A Study of Event Categorisation in an Australian Language*. MPI Series in Psycholinguistics.
- Schultze-Berndt, Eva. 2002. Neither noun nor verb nor particle. Talk given as part of the Workshop *Complex Predicates, Particles and Subevents*, Konstanz, September.
- Scott, Biljana. 1996. *Aspectogenesis and the Categorisation of Directionals in Chinese*. Doctoral dissertation, Oxford University.
- Singh, Mona. 1994. *Perfectivity, Definiteness, and Specificity: A Classification of Verbal Predicates Hindi*. Doctoral dissertation, University of Texas, Austin.
- Tikkanen, Bertil. 1987. *The Sanskrit Gerund: A Synchronic, Diachronic and Typological Analysis*. Helsinki: Finnish Oriental Society. Studia Orientalia.
- Traugott, Elizabeth Closs. 1999. A Historical Overview of Complex Predicates. In *Collocational and Idiomatic Aspects of Composite Predicates in the History of English*, ed. Laurel J. Brinton and Minoji Akimoto. 239–260. Amsterdam: John Benjamins.
- Trenckner, V. 1879. *Pali Miscellany*. London: Williams & Norgate.
- Warner, Anthony. 1993. *English Auxiliaries: Structure and History*. Cambridge: Cambridge University Press.
- Whitney, William D. 1889. *Sanskrit Grammar*. Cambridge, Massachusetts: Harvard University Press. Ninth Issue of the Second Edition (1960).
- Wilson, Stephen. 1999. *Coverbs and complex predicates in Wagiman*. Stanford, California: CSLI Publications.