Historical Stability vs. Historical Change

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1 Introduction

The study of historical linguistics has almost exclusively been represented by the quest for an understanding of how and why languages change.[1] Due to the meticulous work of the last three centuries, our understanding of language change has advanced considerably. However, it is far from complete. This paper seeks to advance our understanding of language change by posing a question from a rather different point of view: why do languages not change? More precisely, which linguistic aspects remain stable under what conditions? Relative historical stability is attested for languages like Icelandic or Greek, where current speakers of the language can read and understand older (and even ancient) versions of the language to some degree. In addition, a modern speaker of the Indo-Aryan langauges spoken in Pakistan, Bangladesh and North India finds familiar lexical items and reassuringly similar constructions when confronted with Sanskrit, an ancient precursor of these languages. Given the vast body of knowledge we have about the possibilities for phonological, morphological and syntactic language change, why have these language not changed beyond all recognition in the millenia afforded to them?

In this paper, we focus on one particular construction in the Indo-Aryan language familes, namely V-V complex predicates. We document the relative historical stability of this construction over the ages and then contrast it with the development of auxiliaries, which act very much according to the findings established within historical linguistics. The question this paper asks is:

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what makes the difference? Why change in one case but not the other? In order to answer these questions, we show how V-V complex predicates differ from periphrastic constructions and tie this to observable morphological and phonological differences.

Given our findings, we argue that we need to move towards a theory of language change which includes ideas about historical stability as well as historical change. Furthermore, this theory should be based on a theoretically solid syntactic and semantic component which interacts in a sophisticated manner with a phonological and prosodic component. We argue that a good understanding of the interaction between the prosodic structure and the syntax-semantics interface of a language yields insights into the processes governing historical change which were hitherto obscured due to the consideration of only one of several pertinent factors.

2 Theories of Historical Change

2.1 General Discussion

In recent years, several differing strands of thinking have developed with respect to syntactic change. Perhaps the most popular approach is represented by *Grammaticalization* (Hopper and Traugott 1993). The terminology goes back to Meillet (1912), who observed that languages tend to grammaticalize lexical items in the sense that former content words are pressed into service as functional or grammatical elements. In traditional historical linguistic approaches such changes fall under the rubric of reinterpretation or syntactic blending, which are triggered by *analogy*, *extension*, *borrowing* or *reanalysis*.

A very powerful and useful notion introduced by the grammaticalization approach as formulated by Hopper and Traugott is the notion of a cline by which individual lexical items or constructions are grammaticalized. For example, a noun may first be used as a relational noun, then as a preposition, then as a case marker, thus modeling the gradient historical development of a case marker from a noun.

An offshoot of grammaticalization is *Grammaticization*, as represented by Bybee, Perkins and Pagliuca (1994), for example. This approach does not subscribe to a grammar as a fixed and bounded entity and is interested in investigating phenomena which appear to be continually in flux. In particular, this approach seeks to correlate morphological expression directly with semantics, thus circumventing the need to investigate the syntactic or phonological properties of a construction.

Harris and Campbell (1995) argue that the above approaches are inadequate for achieving explanatory adequacy with respect to historical change and propose a primarily syntactic approach which relies heavily on the traditional notions of *reanalysis* and *extension*. We fully support the idea that reanalyis lies at the heart of structural language change, but note that the *triggers* of reanalysis remain to be identified and understood.

Within a Government-and-Binding approach to syntactic change, the notion of parameter-setting has been proposed to elucidate the motivations behind language change (Lightfoot 1991). Here, syntactic change or reinterpretation occurs as the resetting of parameters, governed by general principles of learnability and universal grammar. For the most part, it is assumed that language change takes place across generations as the language learner reconstructs, reinterprets and *reanalyzes* the parent grammar.

In the next sections we present brief summaries of approaches to V-V complexes within the above traditions in order to establish the state of the art in the field as far as we have been able to determine it and as far as it is relevant to the purposes of this paper.[2]

2.2 The Development of Auxiliaries

Most discussions of auxiliary formation assume that auxiliaries, modals and light verbs all essentially belong to the same syntactic class — they are functional elements which fulfill temporal, modal or aspectual needs. However, auxiliaries, modals and light verbs differ considerably in terms of their semantic, syntactic, morphological and phonological properties. There is therefore every reason to assume separate syntactic categories for them.

One very well-known instance of auxiliary development is the Romance future, which developed into an affix from the original Latin verb *habēre* 'to have'. Another is the formation of the Romance periphrastic perfect. Ramat (1987) sketches the general path of development as follows: full verbs develop a more restricted predicative meaning, which then gives rise to periphrastic auxiliary constructions. This in turn may experience further historical change in that independent words are realized as affixes. Furthermore, it is by now well-known that the same kind of verbs are generally implicated in auxiliary formation: *go, come, have, be*, etc. (cf. Bybee, Perkins and Paglucia's 1994 extensive compendium).

[2]We do not take up the discussion of whether historical change is gradual or discrete (e.g., Lightfoot 1979). We assume historical change is gradual in the sense that it tends to be accompanied by variation, even within the idiolect of one speaker. As this issue is not at the heart of our paper, we do not pursue it here.

We add to the existing discussion by providing an analysis of constructions in Bengali and Urdu which have not previously been considered in the literature. The heart of the paper lies in the contrast between auxiliaries and light verbs. In particular, we compare and contrast complex predicates and periphrastic auxiliary constructions formed with the verbs *go* and *be*. The contrast lies in the diachronic development of auxiliaries and temporal affixes as opposed to the relative historical stability of light verbs.

2.3 Particular Approaches: Light Verbs vs. Auxiliaries

This contrast in historical development argues for the need of a better understanding of clauses in which more than one head contributes to the primary predication of the clause. Most approaches do not make a distinction between light verbs and auxiliaries, primarily because they are generally concerned either with auxiliaries or light verbs, but very rarely with both.

Harris and Campbell (1995), for example, seek to account for "clause union" by the Heir-Apparent Principle in (1).

(1) 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.

Close inspection of their examples reveals that this principle must only be intended to account for auxiliary formation, but not for complex predicate formation. As the term clause union was first used by Aissen and Perlmutter (1983) to designate periphrastic causatives in Spanish, i.e., to designate complex predicate formation with light verbs, the failure to clearly distinguish auxiliaries from light verbs (see section 3.2) can lead to some confusion.

The reduction of a biclausal structure to a monclausal structure as a precondition for modal verbs to change to auxiliaries is elaborated among others in Lightfoot (1979), Plank (1984), Warner (1993), Denison (1993).[3] A variety of reasons have been proposed for such a change. Lightfoot (1979) introduced a transparency principle where the newer grammar is more transparent. Plank (1981, 1984) suggested that the loss of inflectional marking for mood led to auxiliary formation of the modals, thereby providing a new grammatical means for marking mood. Roberts and Roussou (1999) and

[3]Plank (1980) suggests that the biclausal construction with the modal in the main clause is reduced in very many ways including the introduction of parentheticals, adverbials, and particlularly for deontic modals, the reduction to auxiliary status.

Roberts (1995) couch the phenomenon of auxiliary development in derivational terms and see their approach as providing a formal framework for the idea that an auxiliary or modal is a grammaticalized version of a full verb. That is, grammaticalization can be expressed as the shift from a lexical to a functional domain and the formation of an auxiliary or modal from a full verb as an instance of structure simplification.

For an illustration of the general idea, couched in Roberts and Roussou's terminology, consider English 'must' in (2). The idea is that *mote* 'must' used to be a full verb which headed a VP and which moved up to a tense position. Over time, this obligatory movement fell prey to economy in the sense that speakers decided to generate it as the head of T, rather than moving it up from within the VP, thus giving rise to *must* as an auxiliary.

(2) a. The kynge mote speken.

b. [$_{\text{TP}}$ The kynge [$_{\text{T}}$ mote] [$_{\text{VP}}$ t_{mote} [$_{\text{TP}}$ **np** speken]]]

c. [$_{\text{TP}}$ The king [$_{\text{T}}$ must [$_{\text{VP}}$ speak]]]

Be that as it may, the change of full verbs (including modals) to auxiliaries is well documented but these, we claim, are not light verbs.

Grammaticalization Theory as formulated by Hopper and Traugott (1993) also sees grammaticalization as a move from a more lexcial to a more functional domain, but they prefer to formulate the historical development in terms of a notion of a cline. The grammaticalization cline relevant for the case of auxiliaries and light verbs is shown in (3).

(3) Grammaticalization Cline (Hopper and Traugott 1993:108)

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

Note that unlike the approaches taken by Roberts or Harris and Campbell, Hopper and Traugott include a clear distinction between auxiliaries and light verbs in that they see vector (light) verbs as an optional precursor to auxiliary formation. The term *vector verb* comes from the Slavic tradition and has been applied to describe light verbs in South Asian languages.

The inclusion of vector verbs in the grammaticalization cline is due to a study on Hindi and Marathi by Hook (1991). Hook sees vector verbs as a subtype of auxiliaries and an instance of aspectogenesis.

In this paper, we argue for a rather different view in that we see the full and light verb variants of a verb as standing in an intimate association. Furthermore, while the light verb is a historical dead end, auxiliaries develop from full verbs and then may develop further into affixes.

(4) full verb > auxiliary > clitic > affix(es)

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light verb

In the next two sections, we first summarize the synchronic properties of the V-V type of complex predicate examined in this paper, and then move on to the historical evidence.

3 South Asian V-V Complex Predicates

Complex predicate formation is an integral part of South Asian languages, and one which spans several language families (see Masica 1976 on South Asia as a linguistic area). Complex predicates include Adjective-Verb, Noun-Verb and Verb-Verb formations. In this paper, we concentrate on V-V complex predicates of the type shown in (5) for Urdu.[4,5]

(5) a. nadya=ne xɑt lɪk^{h} **li-ya**
Nadya.F=Erg letter.M.Nom write take-Perf.M.Sg
'Nadya wrote a letter (completely).' (Urdu)

b. nadya **a** **gɑ-yi**
Nadya.F.Nom come go-Perf.F.Sg
'Nadya has arrived.'
'Having come, Nadya went.' (Urdu)

The form of the first verb is identical to the stem form in Urdu and never carries any inflection. This is the main or full verb. The second verb carries tense/aspect marking and is inflected according to the standard paradigms governing simple verb inflection. This verb is *light* in the sense that although it is form-identical to a main verb (and hence glossed with the main verb meaning in the close gloss), the predicational contribution is not that of a main verb. Rather, it serves to modify the main verb semantics by expressing such notions as completion, inception, benefaction, forcefulness, suddenness or volitionality (see Hook 1974 for a very detailed study). The parameters of completion and inception are responsible for the pervasive notion in the literature that these light verbs are aspectual (e.g., Hook 1991, Singh 1994).

[4]Case is marked in Urdu via case clitics which are derived from former nouns (see Butt and King 2001a). There are two cases which are not marked overtly via clitics. One is the bare locative, which is nevertheless often identifiable via the oblique form of the noun. The other case is the "direct" case found on subjects and direct objects. In this paper, as in others, we consistently gloss this case as the nominative. See Butt and King (2001b).

[5]The list of abbreviations used in this paper is as follows: A=Atmanepadam, Acc=Accusative, Aug=Augment, Caus=Causative, Cl=Classifier, Dat=Dative, Dem=Demonstrative, Emph=Emphatic, Erg=Ergative, F=Feminine, Fut=Future, Gd=Gerund, Gen=Genitive, Imp=Imperative, Impf=Imperfect, Ind=Indicative, Inst=Instrumental, M=Masculine, Nom=Nominative, Obl=Oblique, Obj=Objective, Opt=Optative, P=Parasmaipadam, PP=Past Particple, Perf=Perfect, Pl=Plural, Pres=Present, Prog=Progressive, Pron=Pronoun, Redup=Reduplication, Rel=Relative, Sg=Singular, Top=Topic, Voc=Vocative, W=Weak. A '-' indicates a morpheme boundary, a '=' a clitic boundary.

In this paper we concentrate on the South Asian languages Urdu/Hindi[6] and Bengali in particular (see Zbavitel 1970, Hook 1974, Ramchand 1990, Singh 1994, Butt 1995, among others). Some Bengali examples are shown in (6). The form of the first verb in the sequence carries what has often been dubbed "perfective" morphology. We gloss this morpheme as *Gd* instead, thus reflecting its Old Indo-Aryan origin: the ancestral construction functioned like a participial and was dubbed a gerund in the Western tradition of Sanskrit scholarship.

(6) a. rɑm bɑgʰ-ʈɑ-ke **mer-e pʰel-l-o**
Ram.Nom tiger-Cl-Acc hit-Gd throw-Past-3
'Ram killed the tiger.' (Bengali)

b. rɑm **eʃ-e** **por-l-o**
Ram.Nom come-Gd fall-Past-3
'Ram arrived.'
'Having come, Ram fell.' (Bengali)

The first verb in the sequence is again the main verb. The second verb carries tense marking and is inflected according to the standard paradigms governing simple verb inflection. This light verb functions like the Urdu light verb described above in terms of its syntax and semantics.

The two verbs in the verbal complex are separable (see section 3.2) and form separate prosodic words (Fitzpatrick-Cole 1996). As can be seen in (5b) and (6b), an adverbial construction exists side-by-side with the complex predicate reading for many of the V-V sequences. In principle, each V-V sequence in which the two verbs are adjacent is ambiguous between an adverbial and a complex predicate construction. However, for some V-V sequences the adverbial reading is the only semantically felicitous one, for others the complex predicate reading is the dominant one.

Common light verbs in Urdu and Bengali are shown in (7). Each of these light verbs is form-identical with a main verb of the language. The meaning of the main verb has been used as the gloss.

[6]The South Asian languages Urdu and Hindi are closely related. Both are among the 16 official languages of India and are spoken primarily in the north of India. Urdu is the national language of Pakistan. The data presented in this paper are drawn primarily from the dialect of Urdu spoken in Lahore, Pakistan, as well as from examples cited in the literature on both Urdu and Hindi.

(7)

Common Light Verbs			
Urdu		**Bengali**	
le 'take'	de 'give'	ne- 'take'	de- 'give'
a 'come'	ʤa 'go'	aʃ- 'come'	ǰa- 'go'
bɛʈ^{h} 'sit'	uʈ^{h} 'rise'	bɔʃ 'sit'	oʈ^{h} 'rise'
mar 'hit'	mɑr 'die'	mar- 'hit'	mɔr 'die'
ḍal 'put'		p^{h}æl 'throw'	
pɑṛ 'fall'		pɔr- 'fall'	
kɑr 'do'		kɔr- 'do'	

Butt (1995) contains a detailed discussion of two differing types of V-V complex predicates, one of which is the construction under scrutiny in this paper. In investigating the monoclausal or biclausal status of these constructions, certain diagnostics from the literature can be applied. (cf. Mohanan 1994). Butt shows that with respect to anaphora resolution, control, and verb agreement the V-V constructions examined here are monoclausal. Some of these data are discussed in section 3.1.

The V-V constructions in (5) are also sometimes analyzed as *compound verbs*, thus shifting the burden of verbal composition into the lexicon. However, the two verbs are separable, as shown in the topicalization example in (8). The verbs must therefore be acknowledged to be separate syntactic entities which combine in the syntax to form a single predicational domain.

(8) a. bɑʧʧ^{h}a (**so**)$_{\omega}$ (**gɑ-ya**$_{\omega}$)
child.M.Nom sleep go-Perf.M.Sg
'The child has gone to sleep.' (Urdu)

b. **so** to bɑʧʧ^{h}a **gɑ-ya**
sleep Top child.M.Nom go-Perf.M.Sg
'The child has gone to sleep.' (Urdu)

For a detailed LFG analysis of these constructions, see Butt (1995). The light verb is assumed to have an incomplete argument structure, which seeks to combine with the argument structure of a main verb. The fusion of argument structures results in a monoclausal f(unctional)-structure with a single subject and a complex predicate.[7]

[7]For an analysis of the same facts within a Minimalist approach, see Butt and Ramchand (2001). In this approach, the light verb forms a copredicational domain with a result phrase (RvP).

3.1 Light Verbs vs. Main Verbs

In the context of a discussion of *semi-lexical* elements Butt and Geuder (2001b) explicitly argue that light verbs should constitute a category which is separate from either main verbs or auxiliaries and provide detailed evidence for Urdu. However, Butt and Geuder also maintain that light verbs are primarily lexical elements in the sense that they contribute to the predicational force of the clause. In this section, we provide a few examples which show that light verbs cannot be analyzed as main verbs which enter into some kind of raising or control construction with the other main predicational element in the language.

Consider object agreement and the realization of objects. Agreement is clause bounded Urdu. Both subject and object agreement is possible, though the verb only agrees with one noun phrase at a time. The (pre-theoretical) generalization for agreement is as follows (Mohanan 1994): If the subject is unmarked (nominative), the verb agrees with it ((9a)); if the subject is overtly marked (non-nominative) and the object is unmarked (nominative), then the verb agrees with the object ((9b)); if the subject and the object are both overtly marked (non-nominative), then the verb shows "default" masculine singular agreement ((9c)).

(9) a. **ɑdnan** gari **ʧɑla-ta** hɛı
Adnan.M.Nom car.F.Nom drive-Impf.M.Sg be.Pres.3.Sg
'Adnan drives a car.' (Urdu)

b. ɑdnan=ne **gari** **ʧɑla-yi** hɛı
Adnan.M=Erg car.F.Nom drive-Perf.F.Sg be.Pres.3.Sg
'Adnan has driven a car.' (Urdu)

c. nadya=ne gari=ko **ʧɑla-ya** hɛı
Nadya.F=Erg car.F=Acc drive-Perf.M.Sg be.Pres.3.Sg
'Nadya has driven the car.' (Urdu)

Example (10) shows a V-V complex predicate with an overtly marked ergative subject. In this case, there is object agreement, just as in normal monoclausal structures.

(10) a. nadya=ne **mɑkan** bɑna **di-ya**
Nadya.F=Erg house.M.Nom make give-Perf.M.Sg
'Nadya built a house (completely, for somebody else).' (Urdu)

b. nadya=ne **kʊrsi** bɑna **di**
Nadya.F=Erg chair.F.Sg.Nom make give-Perf.F.Sg
'Nadya built a chair (completely, for somebody else).' (Urdu)

Recall that V-V sequences as in (10) are frequently ambiguous between a complex predicate reading and an embedded adverbial structure. This potential disambiguity is removed when the optional complementizer *kar* 'having' is realized, as in (11).[8]

(11) a. nadya=ne **mɑkan** bɑna **di-ya**
Nadya.F=Erg house.M.Nom make give-Perf.M.Sg
'Nadya built a house (completely, for somebody else).' (Urdu)

b. nadya=ne **mɑkan** bɑna (kɑr) **di-ya**
Nadya.F=Erg house.M.Nom make having give-Perf.M.Sg
'Having built a house, Nadya gave (it).' (Urdu)

It is possible to insert another object in the adverbial construction, but not in the complex predicate one.

(12) a. *nadya=ne **mɑkan** bɑna ɑbu=ko **pɛɪsa**
Nadya.F=Erg house.M.Nom make father=Dat money.M.Nom
di-ya
give-Perf.M.Sg
'Nadya built (her) father a house (completely) money.' (Urdu)

b. nadya=ne [**mɑkan** bɑna kɑr] ɑbu=ko
Nadya.F=Erg house.M.Nom make having father=Dat
pɛɪsa di-ya
money.M.Nom give-Perf.M.Sg
'Having built a house, Nadya gave (her) father money.' (Urdu)

This is because the adverbial construction in (12b) consists of two main verbs, one of which (*bana* 'make') heads an embedded clause whose subject is controlled by the matrix subject. The complex predicate, on the other hand, is an instance of co-predication where both the verbs combine to provide a single predicational head. As such, there is no subject control, no embedded clause and only one possible object.

[8]Example (11b) is well-formed (in the right context) because Urdu is a pro-drop language which allows any and all arguments to be dropped as long as they can be recovered from the discourse (e.g., Butt and King 1997). This type of pro-drop is characteristic of South Asian languages in general.

3.2 Light Verbs vs. Auxiliaries

Light verbs must be acknowledged to have properties which differ from those of main verbs. In this section, we turn to some evidence which shows that light verbs must also be differentiated from auxiliaries. This is an important point as one popular alternative analysis with regard to light verbs has been to regard them as a type of auxiliary. However, we do not see this as a viable analysis. For one, unlike auxiliaries, light verbs always span the entire verbal paradigm. That is, light verbs are not restricted to appear with just one tense or aspectual form. Light verbs also do not display a defective paradigm, which is again unlike what one might expect of an auxiliary. Furthermore, auxiliaries and light verbs show distinct syntactic behaviors with regard to case marking, word order, reduplication and topicalization. In this paper, we restrict ourselves to presenting evidence from word order and reduplication.

For example, auxiliaries and light verbs do not compete for the same positional slot in the verbal complex. The word order in the Urdu/Hindi and Bengali verbal complex is very rigid and can be characterized as in (13) for Urdu.

(13) Main Verb (Light Verb) (Passive) (Progressive) (Be Auxiliary)

As (14) shows, light verbs and auxiliaries are not interchangeable.

(14) a. bɑʧʧʰa so **ʤa rɑh-a** hɛı
child.M.Nom sleep go Prog-M.Sg be.Pres.3.Sg
'The child is going to sleep.' (Urdu)

b. *bɑʧʧʰa so **rɑh gɑ-ya** hɛı
child.M.Nom sleep Prog go-Perf.M.Sg be.Pres.3.Sg
'The child is going to sleep.' (Urdu)

Further evidence for a difference between auxiliaries and light verbs comes from topicalization. As was seen previously, a main verb may be topicalized away from the light verb. However, a main verb may not be similarly topicalized away from an auxiliary, as (15b) illustrates.

(15) a. **so** to bɑʧʧʰa **gɑ-ya**
sleep Top child.M.Nom go-Perf.M.Sg
'The child has gone to sleep.' (Urdu)

b. ***so*** to bɑʧʧʰa **rɑh-a** **hɛɪ**
sleep Top child.M.Nom Prog-M.Sg be.Pres.3.Sg
'The child is sleeping.' (Urdu)

Another difference between light verbs and auxiliaries is found in the possibilities for reduplication. In complex predicates the light verb, the main verb, or both may be reduplicated (see Fitzpatrick-Cole 1994, 1996 for a detailed study on Bengali). Examples (16) and (17) illustrate reduplication of the light verb.

(16) a. vo so **ʤa-ti** tʰ-i
Pron.3.Sg.Nom sleep go-Impf.F.Sg be.Past-Sg.F
'She to used to go to sleep.' (Urdu)

b. vo so **ʤa-ti** **vati** tʰ-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).'

An auxiliary may not be similarly reduplicated, as (17)–(20) show.

(17) a. vo so **rɑh-i** tʰ-i
Pron.3.Sg.Nom sleep Prog-F.Sg be.Past-Sg.F
'She was sleeping.' (Urdu)

b. *vo so **rɑh-i** **vahi** tʰ-i
Pron.3.Sg.Nom sleep Prog-F.Sg Prog.Redup be.Past-Sg.F
'She was sleeping.' (Urdu)

(18) a. vo so-ti **tʰ-i**
Pron.3.Sg.Nom sleep-Impf.F.Sg be.Past-Sg.F
'She used to sleep.' (Urdu)

b. *vo so-ti **tʰ-i** **ʃi**
Pron.3.Sg.Nom sleep-Impf.F.Sg be.Past-Sg.F be.Redup
'She used to sleep.' (Urdu)

3.3 The Issue of Perfectivity and Aspectogenesis

As mentioned previously, Hook (1991) analyzes the existence of these light verbs in terms of a historical process of aspectogenesis. The light verbs are seen as a class of perfective aspectual auxiliaries which have developed from main verbs via a process of grammaticalization.

It does indeed seem to be the case that a common denominator in the use of these light verbs is a boundedness or telicity of the event. However, while the V-V complex predicates do create accomplishments (see Butt and Ramchand 2001, the light verbs cannot be said to be markers of perfectivity. In particular, the accomplishment reading appears to be independent of the particular tense/aspect of the light verb. For example, the action in (19b) describes an accomplishment predicate, but does not entail perfectivity. due to the past continuous/progressive marking on the light verb (see Butt and Geuder 2001b for further discussion).

(19) a. mariam imel lɪkʰ rah-i tʰ-i
Miriam.F.Nom e-mail.F.Nom write Prog-F.Sg be.Past-F.Sg

ʤab vili kamre=mẽ a-ya
when Willi.M.Nom room.M.Obl=in come-Perf.M.Sg
'Miriam was writing an e-mail when Willi came into the room.'

b. mariam imel **lɪkʰ** **mar** rah-i
Miriam.F.Nom e-mail.F.Nom write hit Prog-F.Sg

tʰ-i ʤab vili kamre=mẽ a-ya
be.Past-F.Sg when Willi.M.Nom room.M.Obl=in come-Perf.M.Sg
'Miriam was dashing off an e-mail when Willi came into the room.'

In (19b) the clause containing the light verb (writing an e-mail) provides the frame for an achievement/accomplishment: entering a room. Despite the light verb, the clause cannot be judged as perfective, i.e., as describing a complete situation with a beginning, middle and an end (e.g., Comrie 1976), as the progressive signals that the end has not been reached as yet.

3.4 Summary

The effect of these light verbs is thus not to signal perfectivity, but rather to create a different kind of *aktionsart*, a distinction traditionally taken to be encoded within lexical items, but which in here is formed as part of the syntax/semantics interface (see Butt and Ramchand 2001).

We further posit that aspect in the temporal sense is not signaled by these light verbs at all. That is, the light verbs do not serve to locate an event with regard to reference time. The light verbs contribute lexcially specified predicational material which interacts with the syntax and semantics of the main verb. The interaction of the lexical content of the light verb with

the event semantics of the main verb is what gives rise to such effects as the specification of inception/completion, volitionality, force, benefaction, etc. This interaction is not easy to characterize, which is why the preferred analysis of light verbs has been to treat them as some kind of auxiliary and to assume that they are merely aspectual in nature.

We follow Butt and Geuder (2001b) and view light verbs as a subtype of V. That is, we see light verbs as being primarily lexical in nature (rather than functional). However, while light verbs are part of the lexical domain, they do not function as main verbs, but instead interact with the semantics of a main verb by modifying the main event.

The special syntactic status of light verbs thus goes hand in hand with their special predicational properties. Furthermore, as we show in the next few sections, light verbs appear to be dead ends in terms of historical change. We argue that the diachronic stability of light verbs must be understood in terms of their special synchronic properties. In the next section, we first present some of the available historical data with respect to light verbs in general. In section 6 we contrast the historical stability of light verbs established in section 4 by charting the development of auxiliaries which are derived from the verbs 'go' and 'be' in Urdu and Bengali. The verbs 'go' and 'be' are particularly good examples because they are used as a main verb, a light verb, and an auxiliary in both Urdu/Hindi and Bengali. We show that the type of historical development which has been established for auxiliaries (e.g., Ramat 1987) is followed by 'go' and 'be' in the development of their auxiliary uses. This historical data stands in stark contrast with the observable data for the light verb constructions formed by the verbs 'go' and 'be'. In section 7 we provide an explanation for the historical divergences in terms of a synchronic analysis which draws a clear distinction between light verbs and auxiliaries.

4 Light Verbs: A Case of Stability

4.1 The Ancestral Construction

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 "absolutive" in *-tvā(ya)*, or *-ya/yā*. These suffixes served as derivational morphemes which resulted in an inde-

clinable participle (e.g., Whitney 1889:345–360).[9]

The use of the *tvā* participles was manifold and varied. Tikkanen (1987) uses the following constructed example to illustrate the various possible translations found in the literature with respect to the *tvā* participle.

(20) indram ārabh**ya** cara
Indra-ACC grasp-GD go-IMP.2SG
a. 'Having taken hold of Indra, move!'
b. 'Take hold of Indra and move!'
c. 'Take hold of Indra before moving.'
(d. 'Move by taking hold of Indra!')
(e. 'Go to take hold of Indra!')
f. 'Keep yourself to Indra! (Sanskrit)
(Tikkanen 1987:7)

Note that while the translational possibilities in *a–d* are actually truth-conditionally equivalent,[10] the possibilities in *a* and *f* can be contrasted with one another. These two translational possibilities are reminiscent of a pattern found in the modern languages: the usage in *f* is comparable to the modern V-V complex predicate in (21), while the translation in *a* is comparable to the biclausal adverbial reading found with the same V-V string.

(21) a. nadya **a** **gɑ-yi**
Nadya.F.Nom come go-Perf.F.Sg
'Nadya has arrived.'
'Having come, Nadya went.' (Urdu)

b. rɑm **eʃ-e** **por-l-o**
Ram.Nom come-Perf fall-Past.3
'Ram arrived.'
'Having come, Ram fell.' (Bengali)

4.2 Clause Chaining

The Sanskrit *tvā* is also sometimes referred to as a *conjunctive participle* (CP), presumably in order to reflect the clause chaining effect achieved under the adverbial reading. The sequential linking of clauses via the *tvā* participle was very common in Sanskrit. An example is shown in (22).

[9] This indeclinable participle replaced an older participle formed with *-tvī* and is thought to be a frozen form of an old locative verbal noun in *tu*.

[10] Thanks go to Gillian Ramchand for pointing this out.

(22) ... [up**tvā** keśaśmaśrūṇi] [nakhāni nikṛ**tya**]
shear.Gd hair-of-head-and-beard.Nom.Pl nail.Nom.Pl in.do.Gd

[ājyā{-} bhyaj**ya**] ...
clarified-butter.Nom.Pl smear.Gd
'... having shaved his hair and beard, cut his nails, smeared his eyes and anointed his body, ...' (Sanskrit)
(Jaiminīyabrāhmaṇa, from Tikkannen 1987:187)

This "clause chaining" phenomenon is still common in the modern languages and indeed employs descendents of the original participial affixes (section 4.3). The surviving Bengali form *-e* was already illustrated in (20) above. The same *-e* is used for clause chaining. Chatterji (1926:1011), for example, cites an example with as many as 15 subclauses for Bengali. Just three of the 15 are shown in (23).

(23) bʰore uṭʰ-e, ʃṭeʃane põucʰ-e, ṭikiṭ kor-e, ... col-e jeo
early rise-Gd station reach-Gd ticket buy-Gd walk-Gd go.Imp
'get up early, get to the station, buy a ticket ... and leave'
['having gotten up early, having gone to the station, having bought a ticket ..., leave'] (Bengali, Chatterji 1926:1011)

Note that the final *-e* affix on 'walk' does not signify yet another modificatory adverbial to the main event, but marks the main verb of a V-V complex predicate 'walk go'. This is the main predication of the sentence and is equivalent to 'leave'. Chatterji's example very nicely illustrates the possibilities for ambiguity in interpretation which seem to have come down to the modern language intact from Old Indo-Aryan times. The ambiguity can always be resolved via prosodic factors, as the prosodic phrasing differs in accordance with the syntactic structure. This is illustrated in (24) for Bengali, where (24b) shows the prosodic phrasing for the unlikely reading that Ram first struck the tiger and then threw it.[11]

(24) a. ram bag^{h}-ṭa-ke ((**mer-e**)$_{\omega}$ (**p^{h}el-l-o**)$_{\omega}$)$_{\phi}$
Ram.Nom tiger-Cl-Acc hit-Gd throw-Past-3
'Ram killed the tiger.' (Bengali)

b. ram bag^{h}-ṭa-ke (**mer-e**)$_{\phi}$ (**p^{h}el-l-o**)$_{\phi}$
Ram.Nom tiger-Cl-Acc hit-Gd throw-Past-3
'Having struck the tiger, Ram threw it.' (Bengali)

[11] Native speakers would in fact prefer to disambiguate (24b) even more clearly by adding a light verb: *mer-e p^{h}el-e di-l-o* 'having hit, threw-gave' = 'having hit, threw'.

In the dominant complex predicate reading in (24a) the two verbs form independent prosodic words, but are contained within one phonological phrase. In the unlikely adverbial reading in (24b), on the other hand, the two verbs are contained within separate phonological phrases (see Lahiri and Fitzpatrick-Cole 1999 for details on prosodic phrasing in Bengali complex predicates). The same pattern holds for Urdu as well. In Urdu/Hindi, however, there is no overt remnant of the absolutive/gerundive affixes and in order to avoid too much ambiguity, a form of *kar* 'do' has been grammaticalized, as shown in the Urdu equivalent of (24) below.

(25) sʊbʰa-sʊbʰa ʊṭʰ kar, əʃṭeʃan pahũc kar,
early-early rise having station.Nom reach having

ṭikaṭ xarid kar, ... nɪkal ʤa-o
ticket.Nom buy having emerge go-Imp
'Having gotten up early, reached the station, bought a ticket, ... leave.'

The use of *kar* is sometimes optional, thus leading to the same kinds of possibilities for ambiguity as in Bengali. This is illustrated in (26).

(26) a. nadya **a** (kar) **ga-yi**
Nadya.F.Nom come having go-Perf.F.Sg
'Having come, Nadya went.' (Urdu)

b. nadya (**a** **ga-yi**)$_\phi$
Nadya.F.Nom come go-Perf.F.Sg
'Nadya has arrived.' (Urdu)

4.3 The Ancestral Morphology

The ancestry of the modern forms which participate in both the clause chaining (adverbial) construction as well as the complex predicate construction has been reconstructed in some detail by Chatterji (1926:1006–1011), Kellog (1893:341) and Beames (1872:§73). I have listed those forms which pertain directly to Bengali and Hindi/Urdu in (27).[12]

(27)

Sanskrit	Early MIA (Pāli)	Late MIA	Old		Modern Coll.	
			Bengali	Hindi	Bengali	Hindi
-tvā	-tvā	-ttā, -tā, -cca, -ccā				
-yā	-ya, -iya	-ia, -i	iā, -iyā	-i	-e	∅

[12]Other forms include formations with *-tvī* or *-tu* and the later addition of a *-na*.

Sanskrit shows evidence for a distributional difference between *tvā*, which was commonly dubbed the Absolutive I, and *yā*, the Absolutive II. The *yā* was used whenever there was a preverb or the imperfective augment *a-* (also see Macdonell 1917 for Vedic). Given that the modern light verbs contribute to the predication of the event in much the same elusive way as preverbs did in Sanskrit, this may be a significant factor in the historical development of V-V constructions. That is, it might furnish an explanation for why it was the *yā* and not the *tvā* form which was the ultimate ancestor of the modern forms. On the other hand, Chatterji (1926:1008) and Whitney (1889:§990) assert that a number of exceptions to this strict complementary distribution can already be found in later Sanskrit and that it appears to have been completely ignored in Middle Indo Aryan.

The *-ya* form in early Middle Indo-Aryan already showed signs of assimilation (Chatterji 1926), with the *-i-* of the *-iya* form coming from the preceding material. This short vowel can be found in the writings of medieval (Old) Hindi, but has been altogether lost in modern Urdu/Hindi. As mentioned above, the affix has been replaced by forms of the verb 'do'. Beames (1872) notes that various forms are possible, even reduplicated ones: *ke*, *kar*, *karke*, *karkar*, *karkarke*. As markers of the embedded adverbial, all of these forms correspond to 'having' (no matter how many of them have been stacked together). The forms *ke* and *kar* are both related to the verb *kar* 'do', but were pressed into service at differing times. Apparently the *ke* goes back to a form *kai* used in Braj Bhasa. This form can still be found in some of the modern dialects.

For Bengali, on the other hand, Chatterji (1926:1010) assumes that the short vowel was strengthened by either a "definitive" form *ā*, or by the *ā* from an extended and related form of the participle: *iyāṇā*, which became -iã. The literary form of Bengali retains the Old Bengali, the colloquial form exhibits the short vowel *-e*.

4.4 Identifying Complex Predication in Old Indo-Aryan

We thus see that the ancestral "absolutive" or gerund in *-tvā* or *-yā* has persisted in the modern languages. An unbroken chain of developments can be reconstructed for the form of the New Indo-Aryan affixes. Beyond this morphological continuity, our contention is furthermore that the languages show a continuity in terms of syntactic structure as well: the *-yā* constructions can function either as clause chaining or as complex predicates in Old Indo-Aryan (Sanskrit and Vedic), Middle Indo-Aryan and Modern Indo-Aryan. In the next few sections, we present some supporting evidence.

We begin with classical Sanskrit and Vedic as discussed by Tikkanen (1987), who notes that the constructions formed with *-tvā/yā* displayed some curious syntactic and semantic properties. Syntactically, there is evidence for a kind of "clause union" in the sense that negation and wh-operators appear to be able to take scope over all the verbs in the clause (Tikkanen 1987:16). Example (28) illustrates this with respect to a wh-word which is embedded in the *tvā* clause, but which takes scope over the entire sentence, indicating that the *tvā* participle and the verb 'bow' are engaged in a co-predication, rather than representing a biclausal structure which contains an embedded *tvā* participle.

(28) trinetraṁ kas tyak**tvā**
three-eye.Acc.Sg. who.Nom forsake.Gd

dhana-lava-mada-andhaṁ praṅamati
fortune-gather-be drunk-blind.Acc.Sg bow.3.Sg.Pres
'Who abandons the Three-Eyed one and bows before someone blinded by the intoxication of a trifling fortune?'
['Who abandons the Three-Eyed one to bow before someone blinded by the intoxication of gathering a fortune.'] (Sanskrit)
(Śatakatrayam I.3.97; Böthlingk 1870–1873)

Another indication is the difference between the concrete use of 'sit' in (29) and the more abstract usage in (30), in which the 'sit' combines with 'put on' to yield a meaning of 'dressed' or 'wearing'. Here the literal translation of 'sits having put on' is felt to be inadequate by scholars such as Delbrück (1888).

(29) **āstaṃ** jālma [udaraṁ śraṁśayitvā ...]
sit.3.Sg.Imp villain.Nom.Sg belly.Acc.Sg loosened.Gd
'May the villain sit, having loosened his belly, ...'
(Atharvavedasaṁhitā 4.16.7cd; Tikkanen 1987:175)

(30) tasmān mala-vad-vāssā na saṁ vadeta ||
Pron.Abl spot-with-cloth.Inst.Sg not with talk.3.Sg.Opt.A

na sahāsīta nāsyā annam adyād
not sit.3.Sg.Opt.A not.Pron.Gen food.Acc eat.3.Sg.Opt.P

brahmahatyāyai hy eṣā varṇam
Brahmanmurder.Dat.Sg for this.Nom.Sg color.Acc.Sg

prati-**mucyāste**
surround-put on.Gd.sit.3.Sg.Pres.A
'Therefore one should not talk with a woman wearing (blood-)stained clothes, one should not sit in her company and one should not eat her food, for she is dressed in (lit. sits having put on) the color of brahmin murder.
[Delbrück 1888:408 "sie trägt die Farbe des Brahmanenmordes (eigentlich: sitzt da, nachdem sie angezogen hat)"]
(Taittirīyasaṁhitā 2.5.1.5–6; Tikkanen 1987:175)

Tikkanen (1987:174) also notes that the more abstract usage tends to be accompanied by tighter constraints on word order, yet another indication that complex predication did indeed already take place in Sanskrit.

However, we need to admit at this point that the above pieces of data cannot be seen as unassailable proof of complex predication in Sanskrit. Rather, the irritation of scholars like Delbrück and the lengthy attempts to deal with the rather puzzling range of interpretations and structural properties associated with the *-tvā/ya* participle in both Sanskrit (see Tikkanen 1987 for a summary) and Pāli (Hendriksen 1944), must be taken as indications that construction is not well understood. The preferential translation of the *tvā* participle is one in which the action of the adverbial clause precedes the main clause and thus situates it (e.g., MacDonell 1917:332). However, this default interpretation did not always yield satisfactory results.

This sense of profound puzzlement is a hallmark of complex predicate constructions even in many modern South Asian grammars (where they are variously treated as compound verbs, idioms, adverbials, etc.). For the modern languages, however, various linguistic tests have become available in recent times (e.g., Aissen and Perlmutter 1983, Neeleman 1994, Mohanan 1994, Butt 1995, Alsina 1996, Alsina, Bresnan and Sells 1997) so that complex predicate constructions can be distinguished from other V-V, N-V or Adj-V combinations.

But complex predicates are difficult to identify retrospectively. This is partly because finding the right kinds of contrasts is governed by the limitations of the primary diachronic data. With respect to secondary sources, the discussion and analysis provided by the scholars of the 18th and 19th century is not as clear and precise as it is with regard to phonological, morphological and semantic properties of Old Indo-Aryan because complex predicates as a syntactic construction were not recognized until quite recently.

Thus, while it is relatively easy to come up with and to apply syntactic, semantic and prosodic tests to the modern languages in order to identify

complex predicates and distinguish them from biclausal adverbial readings, we have to rely on more subtle indications for the ancient languages. Some such indications are the discussions about unexpected syntactic and semantics properties, as well as the existence of clauses whose translations are perceived to be strange, unless they are viewed as being an instance of complex predication.

One example of an awkward interpretation under the default "having" reading is a Vedic instantiation of the constructed example in (20). The translation shown here is from Tikkanen, who bases himself on Delbrück's (1888:406) German rendition: *die wir wandern, nachdem wir dich ergriffen, zum Stützpunkt genommen haben* 'we who wander, after we grasped you, took you as our base' or *die wir uns immer an dich halten* 'those who always keep themselves to you'.

(31) ime ta indra te
Pron.Dual Dem.Pron.3.Sg Indra.Voc.Sg Pron.2.Sg.Gen

vayam puruṣṭuta
Pron.1.Pl.Nom much-praise.PP.Voc.Sg

ye tvārabh**ya** carāmasi
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)

Grassmann (1872:437) points out with respect to *car* 'go, move' that when it is used with a participle its meaning is weakened to such an extent that it only seems to express the duration of the action denoted by the participle. This is the case in (31), where any analysis in terms of a biclausal adverbial results in a strange construction. On the other hand, under an analysis which treats the 'go' as a light verb and the 'grasp' as a main verb, a reading as in "we hold on to you (constantly)" (="we constantly keep ourselves to you") becomes possible. This reading would also seem to be much more plausible.

4.5 Complex Predicates Through the Millenia

The Sanskrit and Vedic forms examined above are drawn from different time spans. There is no precise dating of the times when the different languages were spoken, but 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 Prākrit 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.

This section illustrates complex predicate constructions from each of the periods. Old Indo-Aryan was already discussed in the previous section, but to drive the point home, we here include two more examples. The predication in (32), for example, is part of a Sanskrit grammatical rule, whereby the movement of heading rules is equated with a motion that is characteristic of frogs. The sentence would receive a very odd interpretation if the participle were translated with the default meaning adverbial sequencing: "having jumped, having jumped, the frogs go".

(32) yathā maṇḍūkā utplu**tyo**tplu**tya** gacchanti ...
as frog.Pl.Nom up-spring-Gd-up-spring-Gd go.3.Pl.Pres.Ind
'Just like frogs move by jumping and jumping ...' (Sanskrit)
(Māhābhāṣya 1.1.3.2; Tikkanen 1987:21)
['Just like frogs jumping ...']

Instead, the specification of the manner of motion must be interpreted simultaneously with the predication of the main verb. In fact, one could go a step further and agree with Tikkanen that the motion verb in (32) must be seen as "completing" the sense of the finite verb, rather than as heading its own adverbial clause. This is indicative of complex predication. Furthermore, compare the Sanskrit (33) with the modern Urdu (34). In both cases the verb 'go' cannot be seen as the main predication of the sentence. Rather, it modifies the event semantics of the participle 'fly'.

(33) tato makṣikoḍḍīya gatā
then fly-fly.Gd go.PP
'then the fly flew away' (Sanskrit)
(Pañcatantra 1.22 (ed. Kielhorn 1902:91, 1.14); Tikkanen 1987:176)

(34) kabutre ʊṛ gɑ-ye
pigeon.M.Pl.Nom fly go-Perf.M.Pl
'The pigeons flew away.' (Urdu, *Dilwale Dulhania Le Jayenge*)

Complex or joint predication becomes much easier to identify in Middle Indo-Aryan. In particular, the Pāli examples in (35) both involve the verb 'give' as a finite verb which combines with the participle of 'make'. For both the sentences in (35) 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 seems more appropriate.

(35) a. ... assamapadaṃ ānetvā aggiṃ **katvā adāsi**
hermitage.Acc lead.Gd fire.Acc.Sg make.Gd Aug.give.Impf.3.Sg
'... brought her to his hermitage and made a fire for her' (Pāli)
['having brought (her) to the hermitage, made a fire (for her)']
Jatāka Tales I.296.10, Sri Lanka (Hendriksen 1944:134)

b. daruni āharitvā aggiṁ **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)

Hendriksen (1944) provides a detailed discussion of the interpretational difficulties associated with the gerund in Pāli, some of which echoes the discussion for Sanskrit found in Tikkanen (1987). Again, compare the Pāli to the modern Urdu in (36), where the finite light verb 'give' also allows for a benefactive interpretation.

(36) ... apne gʰɑr le kɑr roṭi
self.Obl house.M.Sg.Nom bring having bread.F.Sg.Nom

bɑna d-i
make give-Perf.F.Sg
'... having brought her home, (he/she) made food (for her/him)'
(Urdu)

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' ((37a)) and 'give' ((37b)) cannot be taken in their main verb sense, but must rather be interpreted as light verbs which signal completion, much as is done in the modern language (see section 3).

(37) a. causaṭʰi koṭʰa **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^{h}u **b^{h}aṇ-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)

Also note the separability of the main and light verb in (37b). As was seen in section 3, this property remains a feature in the modern languages.

Finally, we close this section with a few examples of Old Hindi which date to the middle ages. Tulsī Dās' *Rāmāyaṇa* of about 1575 CE contained V-V formations to such an extent that a dissertation on the subject was warranted (Meißner 1964).

(38) ... **cali** **āīṃ** saba rānī
stir.Perf come.Pl all queens
'... eilten alle Königinnen herbei'
'... all the queens hurried over'
(Tulsī Dās *Rāmāyaṇa* (1575) 1.225.1, Meißner 1964:44)

Example (38) and the examples in (39) of Indrajit of Orchā's Braj Bhāṣā prose (ca. 1600 CE) are very close to the modern forms. McGregor (1968:209–213) in his dicussion of these V-V constructions explicitly notes that they 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)

4.6 Summary

This section introduced the ancestor construction of modern V-V complex predicate constructions. The ancestor construction was an indeclinable participle whose morphophonological development has been well documented (e.g., Chatterji 1926, Kellogg 1893). The section then went on to argue that evidence of complex or joint predication can be found at every stage of the

language, including Vedic, the oldest attested stage. The complex predicates become easier to identify as time progresses. However, light verbs remain form-identical to a main verb at every stage of the language.

5 Grappling with Elusiveness

In this section, we discuss some of the crosslinguistic properties of complex predicates and light verbs and attempt to combine that information with the available diachronic data. In the discussion, we hope to be able to come to grips with some of the more elusive properties of complex predication. We present our view of complex predication and discuss some open questions which remain to be investigated.

5.1 Frequency and Ease of Identification

Interestingly, fewer gerunds can be found in Vedic than in Sanskrit. Whitney (1889:358) points out that while the later Nala and Bhagvad-Gītā have only one tenth as many verb forms as the Ṛgveda, more than three times as many examples of the gerund can be found in these (also see Tikkanen 1987 for more facts and figures along these lines). The reason for this could either be attributed to the differing genres (Vedic is represented mainly by hymns), or it could be the result of language change in that the gerund gained greater ground as time went on. The historical process could be seen has having begun within the oldest attested stage of the language, namely Vedic, and as continuing on down to the modern languages, where complex predicates based on the Old Indo-Aryan gerund are an integral part of the system.

We would instead like to defend a stronger view. A very strong version of our view asserts that language change was in no way involved in the availability of complex predicates in South Asian languages. Rather, complex predication is a basic part of universal grammar which languages can choose to exploit in some form or another (e.g., V-V, Adj-V or N-V). As such, complex predication was possible in Sanskrit as well as the older Vedic and continued to be possible throughout the ages.

This very strong view can be challenged in several ways. One challenge is the argument of frequency of use. Vedic uses less gerunds than Sanskrit. This also means that complex predicates are not as readily identifiable in Vedic as in Sanskrit. For the modern languages, Hook (1993) argues that the frequency of V-V complex predicates has increased since the 1600s and uses this to bolster his argument that light verbs are the result of continuing grammaticalization.

However, we find arguments based on frequency not very convincing. For one, differing genres may play a role (as mentioned above). For another, it is not clear whether the differences in frequency that Hook found are actually robustly statistically significant (20% for Marwari, 5% for Hindi/Urdu).

Another argument for the involvement of historical change (whether it be grammaticalization or reanalysis) is the semantic content of the light verb. Hook (1993) argues that the semantic content of the light verbs becomes more and more aspectual (functional) in nature as time goes on and sees this as another argument for continuing grammaticalization (but see section 3.3). In terms of the historical data presented here, it is true that complex predication is easier to identify in Middle Indo-Aryan and medieaval times (New Indo-Aryan) than it is for Old Indo-Aryan (Sanskrit and Vedic). However, as discussed in the previous section, this might also be an artifact of not knowing what to look for in interpreting the diachronic data and we actually are not sure how one could really claim that the semantic contribution of the light verbs in Modern Indo-Aryan is more functional in nature than what was found in Sanskrit. Throughout the ages, this construction seems to be characterized by a somewhat elusive but clearly identifiable semantic contribution that goes beyond the expression of aspect.

5.2 Stability in Form and Construction

Section 4 showed that light verbs are always form-identical with a main verb in the language. This is true not only for the historical time span investigated here, but holds crosslinguistically. If light verbs were really the product of continuing historical change (i.e., grammaticalization), one would expect that the form of the light verb would begin to diverge from that of the main verb, just as has been attested over and over again for the formation of auxiliaries and is attested for Urdu/Hindi and Bengali as well (section 6).

Section 4 also showed that the morphology involved showed an unbroken diachronic pedigree. Although the surface form of the morpheme changed over the ages (or was lost), the morphology characteristic of complex predicate formation in the V-V constructions (*-e/-i*) has not been replaced. This stands in contrast to the *kar* or *kar ke* which has been pressed into service for the embedded adverbial in Urdu/Hindi. Furthermore, the basic syntax of the V-V co-predication appears to have remained stable. The verbs are still separable, as they always have been and the "light" verb carries tense and aspect morphology, as has always been the case. In our view, the theory that the V-V constructions are the product of on-going grammaticalization

therefore finds little support. However, another factor is that complex predication always seems to stand in a parasitic relation to some other basic syntactic structure of the language. This observation potentially argues for a scenario in which historical change took place. On the other hand, it does not argue for on-going grammaticalization because the construction and the light verbs show long-term historical stability, as discussed above.

5.3 Complex Predication as a Parasitic Construction

As evidenced by the discussion in section 4 and as supported by a consideration of what is known about complex predicate formations crosslinguistically, complex predicate constructions can always be associated with a standard type of syntactic construction.

The V-V complex predicates in Urdu and Bengali are related to the embedded adverbial construction, as we have seen. If we take another type of complex predicate, e.g., N-V complex predicates as in (40), these can also be clearly associated with a standard construction in the language: noun-verb complement constructions as in (41).

(40) a. nadya=ne mʊjʰe **fon** **ki-ya**
Nadya.F.Sg=Erg I.Dat phone.M do-Perf.M.Sg
'Nadya called me.' (Urdu)

b. nadya=ko kɑhani **yad** **a-yi**
Nadya.F.Sg=Dat story.F.Sg.Nom memory come-Perf.F.Sg
'Nadya remembered the story (the story came to Nadya).' (Urdu)

c. nadya=ne kɑhani **yad** **k**-i
Nadya.F.Sg=Erg story.F.Sg.Nom memory do-Perf.F.Sg
'Nadya remembered the story (actively).' (Urdu)

(41) nadya=ne ek kam ki-ya
Nadya.F.Sg=Erg one work.M.Nom do-Perf.M.Sg
'Nadya did some/this work.' (Urdu)

This is also true for N-V complex predicates formed with *suru* 'do' in Japanese as well (e.g., Grimshaw and Mester 1988), "light verb" constructions in English such as *take a bath*, *do a Chomsky*, or the so-called *Funktionsverbgefüge* (support verbs) in German (Krenn and Erbach 1994), exemplified here by (42).

(42) a. eine Frage stellen
a.W.F.Sg.Acc question place standing
'to pose a question' (German)

b. in Frage kommen
in.Acc question come
'to come into question (to be a possibility)' (German)

We do not present further examples, but to the best of our knowledge, all of the complex predications we are aware of (e.g., South Asian languages in general, Persian, Korean, Germanic and Australian languages) could be said to be derivative of already existing complementation or adjunction structures in the language.

5.4 The Syntax and Semantics of Event Modification

We would like to maintain that the close relationship between complex predicates and already existing structures in the language is no accident. While complex predicates have syntactic, semantic and phonological properties which sets them off as a distinct construction, the formation of this construction stands in a parasitic relationship to already existing structures. The basic unifying characteristic of complex predicates is that they perform some kind of *event modification* (cf. Butt and Geuder 2001b), which can take either the form of a complementation relation (event augmentation), or of a modificatory relation.

The exact nature of the event modification has so far eluded formalization. However, it is generally acknowledged that in the German *Funktionsverbgefüge* seen above the light verb contributes some kind of aktionsart information to the predication in addition to influencing the argument structure of the predication (e.g., Krenn and Erbach 1994). This is true for the Urdu/Hindi N-V constructions (e.g., Mohanan 1994) in (40b,c) as well. The Urdu/Hindi and Bengali V-V constructions also clearly modify the event semantics of the main predication.

Grimshaw (1990) argues for a class of deverbal nominals which have a complex event structure. We suggest that strategies such as forming predicates out of a combination of a noun and the verb 'do' (e.g., the Urdu (40a) or the Japanese *suru* 'do' construction) create denominal predicates with a complex event structure in which the light verb 'do' serves to license the event (as proposed in Grimshaw and Mester 1988) and also contributes the dimension of agentivity (for a summary of the rather complex discussion with respect to the agentive readings of *suru* 'do', see Butt 1995).

The idea here is thus that complex predicate constructions come into a language via a reanalysis of already existing syntactic complementation or modification patterns. These derivative structures allow for a more subtle modification of the event semantics. Rather than embedding or modifying an event that is in itself complete as in clauses such as *Sandy told Kim to go* (complementation) or *Having eaten, Kim went* (modification), the syntax of the complex predicate construction allows the further specification/modification of an event by adding contextually defeasible information (for a definition and discussion of defeasible entailments see Lascarides and Asher 1993) about suddennes, force, agentivity or benefaction as well as further specifications as to aktionsart (see section 7 for further details).

We posit that this subtle type of event modification is part and parcel of universal grammar, but that languages employ differing strategies in order to realize it. The Slavic strategy of verbal prefixes with aspectual import may be one example of the general availability of event modification. Germanic separable particles may be another. However, if complex predicational structures are always derivative of another syntactic structure in the language, then what triggers the original reanalysis that gives rise to complex predicates? We do not have an answer to this question, though we do engage in some speculations in section 5.6. Another question that must be answered in light of the diachronic data in section 4 is why no further reanalysis takes place, as is the case for auxiliaries, which are often further reanalyzed as inflectional morphemes. We do propose an answer for this question, namely that the special syntax and semantics of complex predication render the construction inaccessible for further reanalysis: complex predicates are a historical dead end.

5.5 Light Verbs as part of Universal Grammar

One common perspective on light verbs is that they are the result of the *semantic bleaching* of a main verb. That is, there is a verb 'take' which has a full-blown argument structure and event semantics. Derivative of this is a light verb 'take' which retains only some of the semantic content of the full verb, the other bits having been "bleached" away over time.

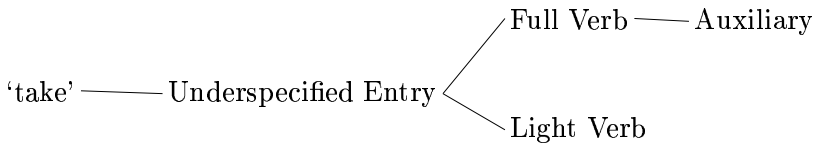
At this point we would like to draw a clear distinction between complex predicate constructions, which must be seen as derivative, and light verbs, which we believe are not.[13] While complex predicates come in a variety of phonological flavors and syntactic forms, light verbs appear to be universally

[13]Thanks go to Wilhelm Geuder for first pushing us towards distinguishing the construction from the lexical element involved.

available in the same way: a light form of 'do' can be found in both Urdu (e.g., 'phone do') and English ('do a favor'), though N-V complex predicates of the Urdu type are phonologically, syntactically and semantically not comparable with N-V formations of the English type.

In order to account for this observation, we posit that a handful of verbs act as *passepartouts* universally. These verbs are always drawn from the lexically "simplest" part of the verbal lexicon (cf. Grimshaw's 1997 idea for English *do*), i.e., mainly motion verbs and basic relations such as 'give', 'take', 'put', 'make' and 'do'. These verbs have a very broad range of application due to the very underspecified nature of their lexical entries. As such, it is precisely these verbs which are able to enter into complex predicate constructions, as well as form the basis for auxiliary or modal uses. The idea here is not that there is a main, fully specified use of these verbs from which the "lighter" versions are derived, but that there is one underspecified entry which allows both full verb and light verb uses. The full verb uses in turn lend themselves nicely for auxiliary formation due to the very basic nature of the predication involved: the precise interpretation of these verbs relies very much on further contextual information that is supplied, in contrast to other, more specified verbs (e.g., compare *go* vs. *perambulate* or *make* vs. *manufacture*, *have* vs. *own*, etc.). Our idea can be represented schematically as in (43).

(43)



The very general nature of the semantics of this handful of verbs thus allows them to interact with the grammar in differing ways. One of the ways is as a light verb in either N-V, V-V or Adj-V constructions.

5.6 Open Questions

A question left open under our account is why some languages employ V-V complex predicates of the type under discussion here, while others show no evidence for this kind of construction. One of the pertinent factors may be the headedness of the language: SOV languages like Urdu/Hindi and Bengali might be more prone to V-V complex predicate formation than others. On the other hand, the SVO Romance languages also allow for V-V complex predicates with causatives (e.g., Aissen and Perlmutter 1983, Rosen 1989, Alsina 1996), so headedness is perhaps not the most pertinent factor.

Another interesting observation is that while Sanskrit employed preverbs like *ati* 'across', *apa* 'away, off', *upa* 'to, toward', *ni* 'down' or *sam* 'along, with' (see e.g., Whitney (1889:§1077) for a complete list with their basic meanings), the modern Indo-Aryan languages have lost them completely. The preverbs in Sanskrit in interaction with the main predicatory force of the clause gave rise to a range of complex range of meanings which prove just as elusive to characterize as the contribution of the light verbs in V-V complex predicates. The preverb in combination with its main verb is often rendered as one dictionary entry because the semantic contribution of the preverb is so opaque. Furthermore, while the Germanic languages show a productive use of separable particles in combination with main verbs, there is no construction really comparable to the V-V complex predicates discussed here. Could the more frequent use of V-V complex predicate constructions in modern Indo-Aryan therefore be tied to the loss of the Sanskrit preverbs? We do not know the answer to this question and leave it as an area of future investigation.

5.7 Summary

In the next section, we contrast the light verb constructions with a look at the development of auxiliaries which are indeed the subject of on-going historical change. We add previously undiscussed cases to the general discussion and also emphasize the phonological factors that should be involved in any consideration of grammaticalization — something that is taken into account surprisingly rarely in discussions of morphosyntactic change. In particular, we point out that the historical change at hand must be seen as a form of reanalysis at the prosodic and syntactic level. Of central relevance to our main point is the contrast between light verbs and auxiliaries: auxiliaries deviate very quickly in form and function from the main verb they originate from. This is unlike light verbs, which always remain form-identical to the main verb throughout the ages. That is, any morphophonological change undergone by the main verb is also undergone by the light verb (or vice versa). The auxiliary, on the other hand, pursues a separate path of development.

6 Auxiliaries: A Case of Reanalysis

Both Urdu/Hindi and Bengali have a mixed periphrastic and inflectional verbal paradigm with a range of auxiliaries. In this paper, we confine ourselves to the verbs 'be' and 'go'. Both of these have main verb, light verb and auxiliary uses.

6.1 The Verb 'be'

The following examples show a main verb ((44)), a light verb ((45)) in a noun-verb complex predicate, and an auxiliary use ((46)–(47)) of 'be' in Bengali and Urdu/Hindi, respectively.

(44) a. ɑmi bʰɑlo ɑʧʰi
I.Nom well be.Pres.1
'I am well.' (Bengali)

b. mɛ̃ɪ ʈʰik hũ
I.Nom well be.Pres.1.Sg
'I am well.' (Urdu)

(45) a. amar mone ɑʧʰe
I.Gen mind.Loc be.Pres.3
'I remember.' (Bengali)

b. mʊjʰə yad hɛ
I.Obl.Dat memory.M.Sg.Nom be.Pres.3.Sg
'I remember.' (Urdu)

(46) a. rɑm ʧitʰi pe-(y)e-ʧʰ-ilo
Ram.Nom letter.Nom receive-Perf-be-Past.3
'Ram had received letters.' (Bengali)

b. rɑm ʧitʰi pɑ-ʧʧʰ-ilo
Ram.Nom letter.Nom receive-be-Past.3
'Ram was receiving letters.' (Bengali)

(47) a. nadya=ko xɑt mɪl-e tʰ-e
Nadya.F=Dat letter.M.Nom receive-Perf.M.Pl be.Past-M.Pl
'Nadya had received letters.' (Urdu)

b. nadya=ko xɑt mɪl-t-e tʰ-e
Nadya.F=Dat letter.M.Nom receive-Impf-M.Pl be.Past-M.Pl
'Nadya used to receive letters.' (Urdu)

With respect to the verb 'be', Urdu shows no signs of morphophonological change that can be said to correlate with the difference in syntactic and semantic function. The only indication that historical change has indeed shaped the distribution of 'be' is that this verb has a suppletive paradigm:

the t^h- is used only in the past and inflects according to gender and number because it is derived from a former past participle. The *ho* form, on the other hand, inflects according to number and person because it is based on the old verbal inflectional forms of Sanskrit. Bengali also exhibits a suppletive paradigm with respect to 'be' in the future and the habitual past. We do not show this here because beyond exhibiting a suppletive paradigm, Bengali shows more interesting signs of reanalysis.

In the Urdu examples, the verb 'be' is always immediately recognizable because it is instantiated as a separate lexical item that is form-identical with the main verb use of 'be'. In Bengali, on the other hand, it is not immediately obvious that the forms glossed as 'be' in (46) are in fact related to the 'be' of (44)–(45). This is because the verb *aʧʰ* 'be' has given rise to an inflectional morpheme in Bengali via a stage in which 'be' formed a periphrastic auxiliary construction with a former participle (Chatterji 1926). A detailed discussion of this reanalysis can be found in Lahiri (2000).

At first glance, the surface forms of the progressive and the perfect look rather similar in (46). But a closer look reveals several differences. For one, the root vowel changes with the addition of the perfect, but not with the progressive. This can be seen in (46), for example, where the perfect of *pa* 'receive' is *peeʧʰ*. In the progressive, on the other hand, the root vowel is preserved (*paʧʧʰ*). Furthermore, the progressive suffix has two allomorphs: /ʧʰ/ and /ʧʧʰ/. The choice of allomorph depends on the shape of the verb root. For instance, in the CVC- verb *par* 'to pick from a higher level, to be able to', the /ʧʰ/ does not geminate, while there is gemination with the CV- verb *pa* (pɑr-ʧʰ-e vs. pɑ-ʧʧʰ-e).

Another difference is brought out by the distribution of the emphatic clitic *o* 'also' (Fitzpatrick-Cole 1996, Lahiri and Fitzpatrick-Cole 1999). As shown in (48), this clitic can be introduced between the stem and the -*ʧʰ* in the perfect, but not in the progressive.

(48)

	Perfect	**Progressive**
pɑ 'receive'	pe-e-ʧʰ-e=o pe-e=o-ʧʰ-e *pe=o-e-ʧʰ-e	pɑ-ʧʧʰ-e=o *pɑ=o-ʧʧʰ-e
pɑr 'be able'	per-e-ʧʰ-e=o per-e=o-ʧʰ-e *per=o-e-ʧʰ-e	pɑr-ʧʰ-e=o *pɑr=o-ʧʰ-e

Note that the suffix /-e/ in the perfect is a true suffix which is the morphophonological remainder of the Old Indo-Aryan past participle -*ta* (Chat-

terji 1926:660). The clitic *o* cannot intrude between a stem and an affix. It can, however, intrude between the stem and the /ʧʰ/ used in the perfect. This indicates that the 'be' in the perfect has the status of a cliticized auxiliary. In the progressive, on the other hand, the 'be' has been reanalyzed as a piece of verbal inflection which signifies the progressive.

We posit the reanalysis in (49) for the progressive and the perfect. Since the progressive behaves like a suffix rather than a clitic, the root+suffix combination plus the person suffixes must be analyzed as a single prosodic word in modern Bengali. The combination of 'be' plus a stem in the perfect, on the other hand, is analyzed as being formed of two separate prosodic words, which are then realized as one via the incorporation of the clitic (e.g., Zec and Inkelas 1990, Bayer and Lahiri 1990, Lahiri 2000).

(49) **Progressive:**

$[\text{Root} + \text{Suffix}_{\text{PART}}]_{\omega} + [\text{be} + \text{Suffix}_{\text{PERS/NUM}}]_{\omega}$
$> [[\text{Root} + \text{Suffix}_{\text{PART}}]+[\text{be} + \text{Suffix}_{\text{PERS/NUM}}]_{\text{CLITIC}}]_{\omega}$
$> [[\text{Root} + \text{Suffix}_{\text{PART}} + \text{be}_{\text{AFF}}] + \text{Suffix}_{\text{PERS/NUM}}]_{\omega}$
$> [[\text{Root} + \text{be}_{\text{AFF}}] + \text{Suffix}_{\text{PERS}}]_{\omega}$

Perfect:

$[\text{Root} + \text{Suffix}_{\text{PERF}}]_{\omega} + [\text{be} + \text{Suffix}_{\text{PERS/NUM}}]_{\omega}$
$> [[\text{Root} + \text{Suffix}_{\text{PERF}}]+[\text{be} + \text{Suffix}_{\text{PERS}}]_{\text{CLITIC}}]_{\omega}$

The progressive was originally formed via a periphrastic construction which consisted of an auxiliary and a participle (attested in Middle Bengali). The participle was formed via a suffix *i* whose precise origin is unclear.[14] The perfect was also formed via a periphrastic construction, but with /-iyɑ/, the descendent of the Old Indo-Aryan past participle *-ta*. This /-iyɑ/ coalesced to give modern Bengali *-e*.

Both of the participles took a form of 'be' which inflected for person and number. Number marking was lost in the course of historical change for unrelated reasons and so modern Bengali only displays person agreement. The abstract schema in (49) can thus be rendered more transparent by considering an actual example with the root *pa* 'be receive'.

[14]In Literary Bengali, this participle is formed with *ite*, a descendent of the Sanskrit present participle affix *-ant*.

(50) **Progressive:**

$[pɑ + i]_\omega + [/ɑʧʰ/ + \text{Suffix}_{\text{PERS/NUM}}]_\omega$
$> [[pɑ + i]+[\ ʧʰ + \text{Suffix}_{\text{PERS/NUM}}]_{\text{CLITIC}}]_\omega$
$> [[pɑ + i + ʧʰ_{\text{AFF}}] + \text{Suffix}_{\text{PERS/NUM}}]_\omega$
$> [[pɑ + ʧʧʰ_{\text{AFF}}] + e]_\omega$

Perfect:

$[pɑ + iyɑ]_\omega + [/ɑʧʰ/ + \text{Suffix}_{\text{PERS/NUM}}]_\omega$
$> [pɑ + e]_\omega + [/ɑʧʰ/ + \text{Suffix}_{\text{PERS/NUM}}]_\omega$
$> [[pɑ + e\ ]+[\ ʧʰ + e]_{\text{CLITIC}}]_\omega$

The observant reader will note that the forms in (50) do not quite reflect the actual forms found in (48). In particular, the reason for the gemination in the progressive is not clear from what has been said so far. Under the assumption of Lexical Phonology (Kiparsky 1982, 1985) a summary of the analysis needed to account for the modern surface forms is shown in (51). A full discussion of the analysis can be found in Lahiri (2000).

(51)

	Perfect		**Progressive**	
Root	pɑ	pɑr	pɑ	pɑr
Deriv. Morph.	pɑ+iyɑ	pɑr+iyɑ	pɑ+i	pɑr+i
Coalescence	pɑ+e	pɑr+e		
V Harmony	pe-e	per-e		
Aux. Clitic	(pe-e ʧʰe)$_\omega$	(per-e ʧʰe)$_\omega$	(pɑ+i ʧʰe)$_\omega$	(pɑr+i ʧʰe)$_\omega$
Reanalyis			[pɑ+i+ʧʰ]+e	[pɑr+i+ʧʰ]+e
Med. *i* Loss			[pɑ+ʧʰ]+e	[pɑr+ʧʰ]+e
Gemination			pɑ+ʧʧʰ	—
Infl. Morph.			pɑʧʧʰ+e	pɑrʧʰ+e

As can be seen, participles are first formed via derivational morphology. /ɑ/ goes to /e/ in Bengali via vowel harmony in the synchronic grammar. This accounts for the surface form of the Bengali perfect. The auxiliary cliticizes to the perfect and nothing more need to be said about that. In the progressive, however, the clitic (without the person/number ending) was reanalyzed as a tense/aspect affix. This was followed by the loss of the original participle marker *i*. The loss of this medial *i* freed a mora in the CV roots, which led to gemination. In the CVC roots no mora is free, so no gemination occurred.

There is evidence that the synchronic progressive marker in modern Bengali is the geminated form /-ʧʧʰ/ (see Lahiri 2000), and that the CVC roots are synchronically formed by degemination. However, the precise nature of the new progressive is not at issue here. What is at issue is that Bengali shows evidence of progressive grammaticalization with respect to the verb 'be', which can be used as a main verb, a light verb and as an auxiliary. While the light verb remains form-identical to the main verb, the auxiliary has cliticized in the perfect and has been reanalyzed as a piece of inflectional morphology in the progressive.

6.2 The Verb 'go'

In the next few sections, we examine reanalysis with respect to the verb 'go'. Just as with 'be', the verb 'go' can be used as a main verb, a light verb and an auxiliary in Bengali and Urdu. Examples are shown in (52)–(54).

(52) a. ɑmi ge-l-am
I.Nom go-Past-1
'I went.' (Bengali)

b. mɛ̃ɪ gɑ-yi
I.Nom go-Perf.F.Sg
'I went.' (Urdu)

(53) a. bɑʧʧʰa por-e gæ-ʧʰ-e
child.M.Nom fall-Gd go-Perf-Sg
'The child fell (down)' (Bengali)

b. bɑʧʧʰa gɪr gɑ-ya
child.M.Nom fall go-Perf.M.Sg
'The child fell (down).' (Urdu)

(54) ʧor (pʊlɪs=se) pɑkṛ-a gɑ-ya
thief.M.Sg.Nom police=Inst catch-Perf.M.Sg go-Perf.M.Sg
'The thief was caught by the police.' (Urdu)

Apart from the uses of 'go' as a passive auxiliary, this verb is generally taken to have given rise to the Urdu future morpheme *-g-*. The next section charts the known facts with respect to the development of the Urdu future morphology and argues that this is yet another example in which reanalysis via the stage of auxiliation gave rise to rapid historical development which

left the the current form a shadow of its former self, just as was seen for the case of 'be' in Bengali in section 6.1.[15]

6.3 The Urdu Future

As already mentioned briefly, Urdu and Bengali have a mixed periphrastic and inflectional system. These systems are descended from an almost exclusively inflectional system in Sanskrit. The Sanskrit future, for example, was formed with *-sya-*, as shown in (55) and is commonly referred to as the *s*-future. This inflectional future has not survived in modern Urdu and Bengali, but is continued in other Indo-Aryan languages such as Gujarati.

(55) dāsyāmi
give.Fut.1.Sg
'I will give.' (Sanskrit)

Interestingly enough, Sanskrit also allowed for the formation of a periphrastic future, which consisted of a nominalized verb in combination with *as* 'be' (only for the first and second persons). An example is shown in (56).

(56) dātāsmi
give.be.1.Sg.Fut
'I will give.' (Sanskrit)

In contrast to the *s*-future, this periphrastic form did not give rise to any modern Indo-Aryan forms (as far as we are aware). This is reminiscent of the other N+V periphrastic formations in Sanskrit, such as the "perfective auxiliaries" formed with *kṛ* 'do', *bhū* 'be' and *as* 'be' (Speijer 1886, Whitney 1879), which also did not give rise to any modern inflectional morphology, as one might have reasonably expected.

While the general diachronic development of the future in Modern Indo-Aryan remains to be investigated in some detail, for the moment we are inclined to follow Butt and Frigeni (2000), who propose that the so-called "perfective auxiliaries" are early examples of N-V complex predicates of the type also found in the modern languages (e.g., Mohanan 1994 for Hindi). This view is supported by the fact that the deverbal Noun+Verb combination in (56) was also possible in other tenses (i.e., the perfect).

A sketch of the basic modern Urdu tense/aspect system is shown in (57). There is no present tense as such, except for the verb *ho* 'be', whose present tense inflections in (58) are descended from Old Indo-Aryan.

[15] The Bengali future morphology derives from a different source: the Old Indo-Aryan participle *-tavya* (Chatterji 1926:676). We therefore do not consider the Bengali future.

(57)

	Pres	Past	Fut	Impf	Perf	Prog
				Pres/Past	Pres/Past	Pres/Past
Urdu	mara	marega		marta + Aux (be)	mara + Aux (be)	mar rɑha + Aux (be)

mar- 'hit' — 3.Sg.M

(58) **Present of Urdu *be***

	Singular	**Plural**	**Respect** (ap)	**Familiar** (tum)
1st	hũ	hɛ̃ĩ		
2nd	hɛı		hɛ̃ĩ	ho
3rd	hɛı	hɛ̃ĩ		

ho- 'be'

Actions that are happening "now" are expressed via the progressive construction illustrated in (60).

(59) nadya ʤa rɑh-i hɛı
Nadya.Nom go stay-Perf.F.Sg be.Pres.3.Sg
'Nadya is leaving/going.'

Habitual readings are expressed via the morphology generally labeled "imperfect" in conjunction with a present or past tense auxiliary. The past tense is formed via the morphology generally labeled "perfect", as shown in (60a). In conjunction with present and past auxiliaries, present and past perfect readings may result ((60b)–(60c)).

(60) a. nadya ga-yi
Nadya.Nom go-Perf.F.Sg
'Nadya went.'

b. nadya=ne gɑ-ya hɛı
Nadya.Nom go-Perf.F.Sg be.Pres.3.Sg
'Nadya has gone.'

c. nadya gɑ-yi tʰ-i
Nadya.Nom go-Perf.F.Sg be.Past-F.Sg
'Nadya had gone.'

Besides the present tense inflections on *ho* 'be', the future would seem to be the only tense which is fully inflectional.[16] It is also the only other tense/aspect which includes person information, as shown in (61).

[16] The present tense inflections function as subjunctives on other verbs in the language, see (64).

(61) **Urdu Future Paradigm**

	Singular M/F	**Plural** M/F	**Respect** (ap) M/F	**Familiar** (tum) M/F
1st	mar-ũ-g-a/i	mar-ẽ-g-e/i		
2nd	mar-e-g-a/i		mar-ẽ-g-e/i	mar-o-g-e/i
3rd	mar-e-g-a/i	mar-ẽ-g-e/i		

mar- 'hit'

All the other forms, including the suppletive *tʰ-* 'be', which is confined to past usages as shown in (60c), inflect for number and gender. This is a direct result of the fact that these forms stem from old deverbal participles which inflected for number and gender (and case) like other adjectives.

The consensus in the available literature is that the future *-g-* morpheme is derived from a Sanskrit participle of the verb *gā* 'go' (Kellog 1893:231, Beg 1988:191, McGregor 1972). The gender and number agreement morphology (*a/i/e*) exhibited by the future is regular synchronically in that exactly this agreement morphology is also found on the perfect, imperfect and progressive forms, all descended from all participles. The appearance of this morphology follows unproblematically if the *-g-* is indeed associated with an old participle of 'go'.

The person/number inflection of the future paradigm in (61) is identical to the inflections found in conjunction with the present tense paradigm of *ho* 'be' in (58). There is some indication that these forms are indeed related.

As part of a discussion of the subjunctive and future in early Braj Bhāṣā prose (ca. 1600 CE), McGregor (1968:161) notes that forms which patterned as in (62) generally expressed futurity, and that forms which patterned as in (63) expressed futurity in conjunction with a "morpheme group" **-gau*. In the prose he examined, the only instantiation was the masculine plural *-ge*, as shown in (63).

(62) 3.Sg verb stem + hai
3.Pl verb stem + haiṃ
(McGregor 1968:161)

(63) 3.Sg active or passive verb stem +hi
1.Pl active stem +hiṃ+ge
3.Pl active stem +hiṃ
(McGregor 1968:161)

The *hi* and *hiṃ* in (63) are associated with subjunctive morphology and very likely represent a continuation of old present morphology which is used

with the force of an immediate future (McGregor 1968:176). The modern person/number morphology in the Urdu/Hindi future paradigm in (61) can thus be associated with old present tense morphology, which could take on both subjunctive and future force (crosslinguistically unremarkable).

Kellog (1893) calls the *-g-* future an *absolute* future. He sees the formation of this future as the addition of *ga/gi/ge* to the *contingent future*, which also has subjunctive force. The relevant paradigm is shown in (64).

(64) **Urdu Subjunctive Paradigm (Contingent Future)**

	Singular	**Plural**	**Respect** (ap)	**Familiar** (tum)
1st	mar-ũ	mar-ẽ		
2nd	mar-e		mar-ẽ	mar-o
3rd	mar-e	mar-ẽ		

mar- 'hit'

A form like *marũ* can mean variously 'May/Should I hit?' (with question intonation) or 'I may hit'. In the second person, a form like *maro* additionally expresses imperative force: 'hit!'. This paradigm shows person/number agreement and is remarkably similar to the present tense of *ho* in (58).

Kellog (1893:§399) further notes that in the Hindi translation of the play *Shakuntala* (originally written in Sanskrit by Kalidasa between 100 BCE and 400–500 CE) several examples can be found in which the emphatic particle *hi* intrudes between the *-g-* suffix and the rest of the verb, as shown in (65).

(65) a. kɑh-ũ-hi-ga
say-1.Sg-Emph-Fut.M.Sg
'I will say (it), of course.' (Hindi, from Kellog 1893:§399)

b. man-e-hi̇̃-gi
heed-3.Sg-Emph-Fut.F
'She will (have to) see reason.' (Hindi, from Kellog 1893:§399)

The emphatic clitic *hi* in Urdu/Hindi is comparable to the emphatic clitic *o* discussed in connection with the Bengali progressive in section 6.1. As in Bengali, this clitic attaches to prosodic words. The existence of examples as in (65) supports the hypothesis that the modern future is formed from an originally periphrastic construction involving the verb 'go'.

Note also that the above examples are only marginally possible in the modern language,[17] indicating that the process of reanalysis is almost complete: the originally prosodically independent participle of 'go' has almost completely been reanalyzed as an inflectional affix indicating future tense.

We posit the stages of reanalysis shown in (66) for the development of the modern Urdu future.

(66) **Future:**
[Stem + $\text{Suffix}_{\text{PERS/NUM}}]_\omega$ [go + $\text{Suffix}_{\text{PART}}]_\omega$
> [[Stem + $\text{Suffix}_{\text{PERS/NUM}}$] + [go + $\text{Suffix}_{\text{PART}}]_{\text{CLITIC}}]_\omega$
> [[Stem + $\text{Suffix}_{\text{PERS/NUM}}$] + [go + $\text{Suffix}_{\text{GEND/NUM}}]_{\text{CLITIC}}]_\omega$
> [Stem + $\text{Suffix}_{\text{PERS/NUM}}$ + go + $\text{Suffix}_{\text{GEND/NUM}}$ $]_\omega$

This abstract schema can be exemplified a little more concretely by using actual lexical items. In (67), for example, the verb *mar* 'hit' inflects normally as any main verb would with person and number inflection, in this case an *ũ*, which signifies first person singular. This main verb is modified by the past participle of *gā* 'go', namely *gatah*. Kellog (1893:§399) citing Monier-Williams (1876:§896) notes that although this was morphologically a past participle, it could be used with present signification, i.e., to mean 'going'.[18] Participles generally functioned as modificatory adjuncts. As such, the literal meaning of (67) at some point would have been 'the going one hits' or 'hits (while) going'. A less concrete meaning then gave rise to a future interpretation.

(67) **Future:**
[mar + ũ]$_\omega$ [ga + tah]$_\omega$
> [[mar + ũ]+[ga + tah]$_{\text{CLITIC}}]_\omega$
> [[mar + ũ]+[g + $\text{Suffix}_{\text{GEND/NUM}}]_{\text{CLITIC}}]_\omega$
> [mar + ũ + g + $\text{Suffix}_{\text{GEND/NUM}}$ $]_\omega$

The person/number morphology cannot be considered a frozen and "trapped" piece of morphology. Rather, it must be part of the regular person/number paradigm. If this were not so, the morphological forms in (64) would not have kept step with the person/number paradigm found in the present and

[17] One of the authors judges these examples to be alright, but not wonderful, whereas several speakers of modern Hindi rejected these and other examples of clitic intrusion as absolutely ungrammatical.

[18] This same past participle could also receive an inceptive interpretation (Katre 1987:341).

the subjunctive. Instead, the forms in the future would have begun to diverge from those found with the present and the subjunctive.

Kellog (1893:§399) notes that the development of the *-g-* future is of relatively recent origin: "The addition of this *gā* (for Sk. *gatah* 'going') to form from the contingent an absolute future appears to have been one of the latest developments of the language." This confirms the central point of the paper: the formation of auxiliaries from main verbs generally feeds into a rapid historical process of reanalysis by which the resulting inflectional morphology loses its original form-identity to the main verb. This type of reanalysis is not encountered with respect to light verbs: light verbs always remain form-identical with a main verb, even over several millenia.

7 Analysis: Stability vs. Change

This paper has contrasted the synchronic and diachronic behavior of light verbs and auxiliaries. Although many synchronic and diachronic approaches treat light verbs and auxiliaries as the same kind of basic phenomenon (to the extent that the terms are sometimes used interchangeably), we have argued that the two phenomena need to be kept apart on both synchronic and diachronic grounds. If this basic point of the paper is granted, the next question which must be answered is how these differences between light verbs and auxiliaries can be explained.

7.1 Semantic Issues

We posit that light verbs are historical dead ends because of the particular nature of their syntax-semantics interface. A systematic characterization of the precise semantic contribution of light verbs in South Asian languages has proved to be elusive. That a notion like "perfectivity" is involved (cf. section 3.3) appears to be a general concensus. In addition, other semantic contributions such as attitude and manner of action (e.g., sudden, difficult, deliberate) have been identified (see Hook 1974, Abbi 1991, Butt 1995, to name just a few).

Butt and Ramchand (2001) 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 eventualties, Bach 1986), but not anything "smaller". On the other hand, work motivated by argument structure concerns 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 (2001) 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 (68) are taken to be primitives of the theory.

(68) 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.

b. $e = < e_i, e_j >$: 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.

The basic idea can be exemplified by the analysis in (69) where the event *e* is seen as consisting of three subevents.

(69) 'build the house' ($e = e_1 \rightarrow < e_2, e_3 >$)
where e_1 = the causing, intentional impulse
e_2 = the process of house-building
e_3 = the state of the house having been built.

Butt and Ramchand (2001) argue that a central factor in understanding the semantics of V-V complex predicate formation in Urdu/Hindi and Bengali of the type discussed in this paper is the formation of an *accomplishment event structure* as defined in (68b). This explains the tendency of many authors to analyze the semantics of light verbs as involving a notion of "perfectivity". However, as argued in section 3.3, perfectivity is not quite the right notion with which to handle the semantics of V-V complex predication.

Butt and Geuder (2001a,b) further take on the more elusive manner and attitudinal readings generally observed with respect to light verbs and propose that these must be identified as a subcase of adverbial event modification, by which the light verb adds information about subcomponents of the main event in the manner of an adverb. The utterance in (70), for example, involves the light verb *de* 'give', which adds (at least) the dimensions of volitionality, forcefulness and completion to the main predication.

(70) ʊs=ne dʊʃmɑn=ko pani=mẽ ḍub-a di-ya
Pron.3.Sg=Erg enemy=Acc water=in drown-Caus give-Perf.M.Sg
'He/She drowned the enemy in the water (forcefully).'

In addition to forming an accomplishment event structure as in (68), the light verb is taken to modify the superordinate event by contributing lexical semantic information which is loosely based on the predicational force of the main verb 'give'. Butt and Geuder (2001a,b) label this adverbial modification GIVE-TYPE(e) and define it approximately as shown in (71).

(71) GIVE-TYPE(e) = e involves force emission
e is agentive/purposeful

This information combines with the event semantics of the main predication as sketched in (72).

(72) V1 = drowned (e; y)
V2 = CAUSE-PROCESS ($e'(=e_1 \rightarrow e_2)$; x, y) & GIVE-TYPE(e')
$\exists e$: $e = e_1 \rightarrow <e_2\ e_3>$[Cause-Process($e_1 \rightarrow e_2$; 'he/she', 'enemy') & drowned(e_3; 'enemy')] & GIVE-TYPE(e)
'He/She instigates a process affecting an enemy which has the result that the enemy comes to be drowned and that the action was purposeful and forceful.'

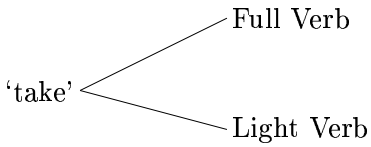
Note that Butt and Ramchand (2001) and Butt and Geuder (2001a,b) make widely differing assumptions about the nature of the syntax/semantics interface. However, the semantics proposed are compatible with one another. While Butt and Ramchand concentrate on the accomplishment/telic aspect of the joint predication, Butt and Geuder attempt to come to grips with the more elusive aspects. The accomplishment reading cannot be overriden, but readings involving forcefulness, purpose, suddenness, difficulty, etc. are highly context dependent. Two differing types of semantic contributions are thus called for.

Our take on the GIVE-TYPE predication is that the light verb represents a highly schematized version of the main verb predication (for an extensive motivation and discussion of what is meant by a *schematic* version of a main verb, see Butt and Geuder (2001a,b); also cf. Dasgupta 1977). That is, the range of event modifications possible for each light verb are ultimately licensed by the main verb predication.

Given this idea, there are at least three possible ways to think about the relationship between main verbs and light verbs. As shown in (73), there could be two entries for each verb: a main verb and a light verb. This possibility cannot be right given the diachronic facts. Contrary to what we have been able to observe, this relationship would predict that the light verb

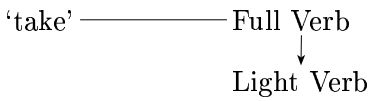
may undergo independent historical change at some point and therefore lose its form-identity with the main verb.

(73)



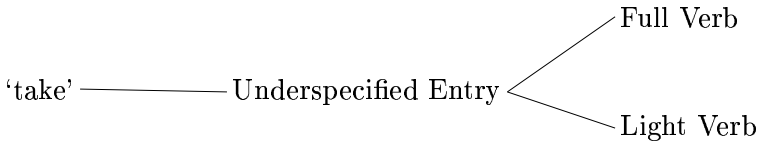
As shown in (74), one could also simply only posit a main verb entry in the lexicon from which the light verb meaning is derived. This is essentially the idea proposed by Grimshaw (1997) for the English auxiliary *do*. Within an Optimality Theoretic account Grimshaw proposes a PARSE constraint. This constraint is violated when the full argument structure of a verb is not parsed, as is the case with the auxiliary uses of *do*. One could also imagine a general mechanism by which schematized or light versions of a verb are similarly obtained from the main verb entry.

(74)



Another option is shown in (75), where one underlying underspecified entry is posited from which both light and full verb versions may be derived dynamically. We consider this to be the most interesting possibility by far as it has been shown in other, independent, work that underspecification plays a large role in the representation of the mental lexicon (cf. Lahiri and Reetz 2002).

(75)



Under both (74) and (75), historical change could never affect the light verb without also affecting the main verb, something that is consonant with the diachronic facts. Auxiliaries, on the other hand, must be derived from main verbs via diachronic processes. There is no synchronic relation in the lexicon which connects auxiliaries with main verbs in the same intimate fashion posited in (74) and (75).

7.2 Prosodic Issues

Complex predicates are known to have special prosodic properties in Urdu and Bengali (Bayer and Lahiri 1990, Hayes and Lahiri 1991, Lahiri and Fitzpatrick-Cole 1997, Fitzpatrick-Cole 1996, Butt and King 1998) in that the two members of the joint predication are contained within one phonological phrase. This is in contrast to other verb-verb sequences such as the adverbial 'having' construction also discussed in the course of this paper. Relevant contrasts from Urdu and Bengali are shown in (76) and (77), respectively.

(76) a. nadya=ne xɑt (lɪk^{h} di-ya)$_{\phi}$
Nadya.F=Erg letter.M.Nom write give-Perf.M.Sg
'Nadya wrote a letter (completely).' (Urdu)

b. nadya=ne xɑt (lɪk^{h} (kɑr))$_{\phi}$ (di-ya)$_{\phi}$
Nadya.F=Erg letter.M.Nom write having give-Perf.M.Sg
'Having written a letter, Nadya gave (it).' (Urdu)

(77) a. ʃæmoli ɑrʃola-ʈa-ke (mer-e p^{h}el-e-ʧ^{h}-e)$_{\phi}$
Shamoli.F.Nom coakroach-Cl-Acc hit-Gd throw-Perf-be-3
'Shamoli killed the coakroach.' (Bengali)

b. ʃæmoli ɑrʃola-ʈa-ke (mer-e)$_{\phi}$ (p^{h}el-e di-e-ʧ^{h}-e)$_{\phi}$
S.F.Nom coakroach-Cl-Acc hit-Gd throw-Gd give-Perf-be-3
'Having killed the coakroach, Shamoli threw it (away).' (Bengali)

Light verbs and auxiliaries exhibit contrasting properties with respect to phonological phrasing. As discussed briefly in section 3.2, light verbs allow reduplication (Fitzpatrick-Cole 1994, Fitzpatrick-Cole 1996) while auxiliaries do not.

7.3 The Syntax of Complex Predication vs. Auxiliation

Unsurprisingly, the special semantic and prosodic properties of complex predicates go hand in hand with special syntactic properties. The light verb and main verb combine to form a joint predication.

In this section, we couch our analyses in terms of Lexical-Functional Grammar (LFG) because the complex interrelationship between argument structure, predicational force, syntactic constituency and word order displayed by complex predicates have been described most perspicuously in

terms of this framework.[19] For an in-depth LFG analysis of the V-V constructions examined here, see Butt (1995).

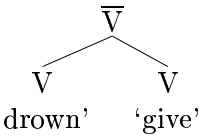
LFG posits several mutually constraining projections (representations). The most centrally relevant ones are c(onstituent)-structure and f(unctional)-structure. The c-structure encodes linear precedence and constituency while the f-structure encodes basic predicate-argument relationships and is used for the analysis of phenomena like control, agreement and anaphora. LFG is in principle compatible with any semantic theory — the semantics are represented at the projection of s(emantic)-structure. In recent years, linear logic has gained much ground as the semantic representation of choice within LFG. However, the event semantics discussed above are just as compatible with LFG. For recent overviews of LFG, see Bresnan (2001) and Dalrymple (2001).

The main verb and the light verb in (78) are analyzed as co-heads of one another. An abbreviated c-structure analysis is shown in (79).

(78) nadya=ne dʊʃmɑn=ko pani=mẽ ḍub-a di-ya
Nadya=Erg enemy=Acc water=in drown-Caus give-Perf.M.Sg
'Nadya drowned the enemy in the water (forcefully).'

The syntactic relationship of co-headedness goes hand-in-hand with the joint semantic predicational power discussed in section 7.1. The f-structure analysis shows a flat predicate-argument relationship in which there is only one main predication. At this level, the contribution of the light verb is as good as invisible. The c-structure in (79) goes hand in hand with the phonological phrasing of the two verbs as one phrase and the event modification semantics discussed above.

(79)



[19] The general separability of the two verbs (cf. the topicalization example in section 3.2) and the matter of joint predication via the sort of θ-role sharing which often violates the θ-Criterion pose interesting difficulties for standard GB/Minimalism approaches (Butt 1995, Neeleman 1994). Going into those here would take us too far afield.

(80)

$$\begin{bmatrix} \text{PRED} & \text{`drown} < __ , __ > \text{'} \\ \text{SUBJ} & \begin{bmatrix} \text{PRED} & \text{`Nadya'} \\ \text{CASE} & \text{ERG} \end{bmatrix} \\ \text{OBJ} & \begin{bmatrix} \text{PRED} & \text{`enemy'} \\ \text{CASE} & \text{NOM} \end{bmatrix} \\ \text{TENSE} & \text{PAST} \end{bmatrix}$$

The type of co-predication exhibited by complex predicates contrasts sharply with the embedding relation which commonly gives rise to auxiliary constructions. The syntax and semantics of co-predication is not conducive to further historical development, whereas the embedding relationship characteristic of auxiliary formation does.

Our analysis of auxiliary formation does not differ significantly from other syntactic proposals in the literature. We here sketch an analysis of the Bengali progressive in order to provide a contrast with the complex predicate analysis in (79) and (80).

As was seen in section 6.1, the Bengali progressive morphology /-ʧʧʰ/ can be traced to the verb *aʧʰ* 'be' in combination with a participial form of the verb formed with *-ite/-i*. This participle is derived from the Sanskrit active present participle in *-ant* (Chatterji 1926:999). We therefore posit that the original construction was a predicative one along the lines of "Ram is an apple eating one."[20] and that the current progressive morphology as exemplified by (81) is derived from a copular usage of 'be' (cf. Ramat 1987).

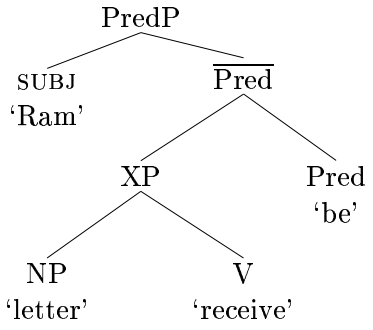
(81) rɑm ʧʰitʰi pɑ-ʧʧʰ-il-o
Ram.Nom letter.Nom receive-be-Past-3
'Ram was receiving letters.' (Bengali)

This predicational structure could be realized as in (82) in conjunction with the f-structure in (83), where the PREDLINK corresponds to the material predicated of the subject.[21] In this structure one verb-based predication is embedded in another.

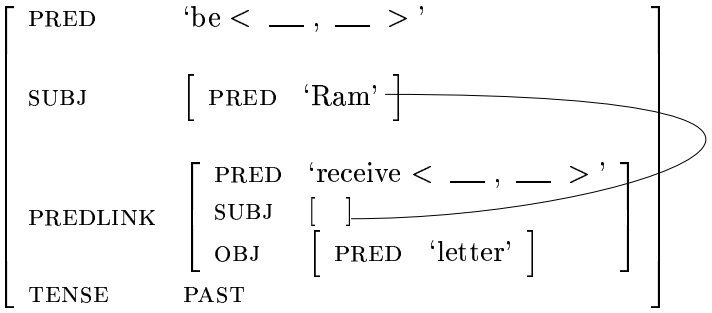
[20] The Sanskrit participle in *-ant* is related to the general Indo-European *-nd* as in German *Die Apfel essende Frau* 'The apple eating woman'.

[21] The traditional LFG analysis of copular constructions is via an embedded XCOMP. The alternative analysis used here was first proposed in Butt, King, Niño and Segond (1999) and is more in line with current ideas on predicational phrases.

(82)

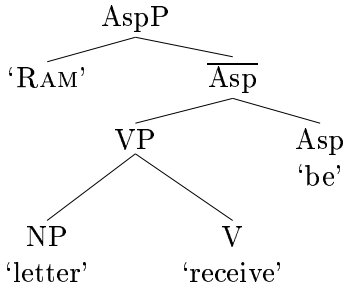


(83)



This awkward predicational structure is prone to reanalysis. When the former copula 'be' is reanalyzed as a functional category at the level of c-structure, as shown in (84), the f-structure representation concomitantly is realized as a flat predicational structure in which the sole contribution of the functional category is the specification of an aspectual feature.

(84)



(85)

$$\begin{bmatrix} \text{PRED} & \text{`receive} < __ , __ > \text{'} \\ \text{SUBJ} & \begin{bmatrix} \text{PRED} & \text{`Ram'} \end{bmatrix} \\ \text{OBJ} & \begin{bmatrix} \text{PRED} & \text{`letter'} \end{bmatrix} \\ \text{TENSE} & \text{PAST} \\ \text{ASPECT} & \text{PROG} \end{bmatrix}$$

This analysis presupposes only a simple reanalysis at the level of c-structure. The reclassification at this rather "surfacy" level has deeper repercussions in terms of the type of tree which is projected and in terms of the deeper f-structural syntactic analysis of the clause. The copula case gives rise to an embedding structure. The reanalysis of a lexical item into a functional one ultimate results in a simple (non-embedding) predicational structure as shown in (85), in which the formerly embedded predication has been "elevated" to provide the main predicational force.

No notion of progressive grammaticalization with a concomitant loss of phonetic material is assumed. Indeed, an analysis along those lines would not provide the right description of the diachronic and synchronic data: the Bengali progressive has not really lost any phonetic material: the material that is there has been reanalyzed and has given rise to differing phonological processes over the ages.

8 Conclusion

Grammars change and grammatical systems undergo change—this is an established truism. We have argued that certain aspects of grammar are rather stable and unlikely to be subject to reanalysis or restructuring. This is the case for light verbs. We do not see the existence of light verbs as the result of historical process of semantic bleaching, but instead view light verbs as a universal part of grammar. Under this assumption, light forms of verbs exist for those verbs which denote very basic relations and which thus function as passepartouts: they are handy for a wide variety of occasions, leading to a wide variety of uses. One of these uses is to add to the predication of a clause by interacting with the event semantics of the main verb, rather than heading an independent predication. The existence of the light verbs

may be dormant in some languages and may be put to use by native speakers if necessary. Once in use, however, light verbs remain stable. Under our assumption, the light and full verb maintains a single underspecified entry. Any change affecting the verb will affect both the main and the light verb. Auxiliaries, on the other hand, are derived from main verbs by various processes, but are not linked synchronically to the main verb by a single representation. The use of the light form of a verb may get lost, but unlike auxiliaries, they do not become reanalyzed as grammatical morphemes. The stability of the light verb is predicted by its very status.

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